

City of Steamboat Springs
Attn: Ben Beall, City Engineer
136 10th Street
Steamboat Springs, CO 80477

March 16, 2021

Re: **Village Drive Townhomes – Trip Generation Letter**
Steamboat Springs, Colorado

**Reviewed for
Code Compliance**

11/01/2021

Project Description:

Village Drive Townhomes is a seven-unit development to be located on the property at the southeast corner of Village Drive and Walton Creek Road in Steamboat Springs. The site is shown in the vicinity map in *Figure 1*. The property on which the Village Drive Townhomes will be constructed is currently vacant.

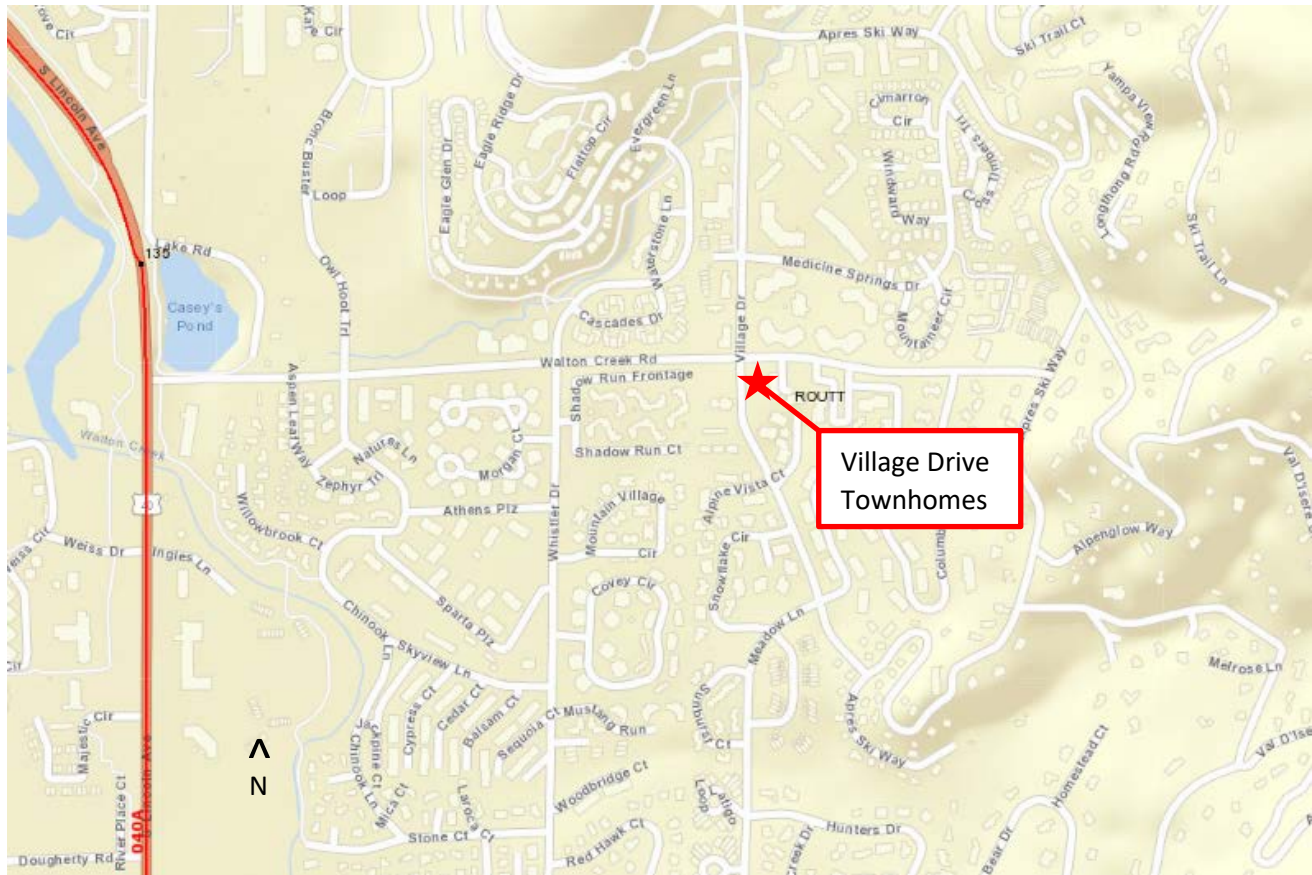


Figure 1: Vicinity Map

Village Drive Townhomes will consist of one five-plex and one duplex. The site plan for this development is shown in *Figure 2*.

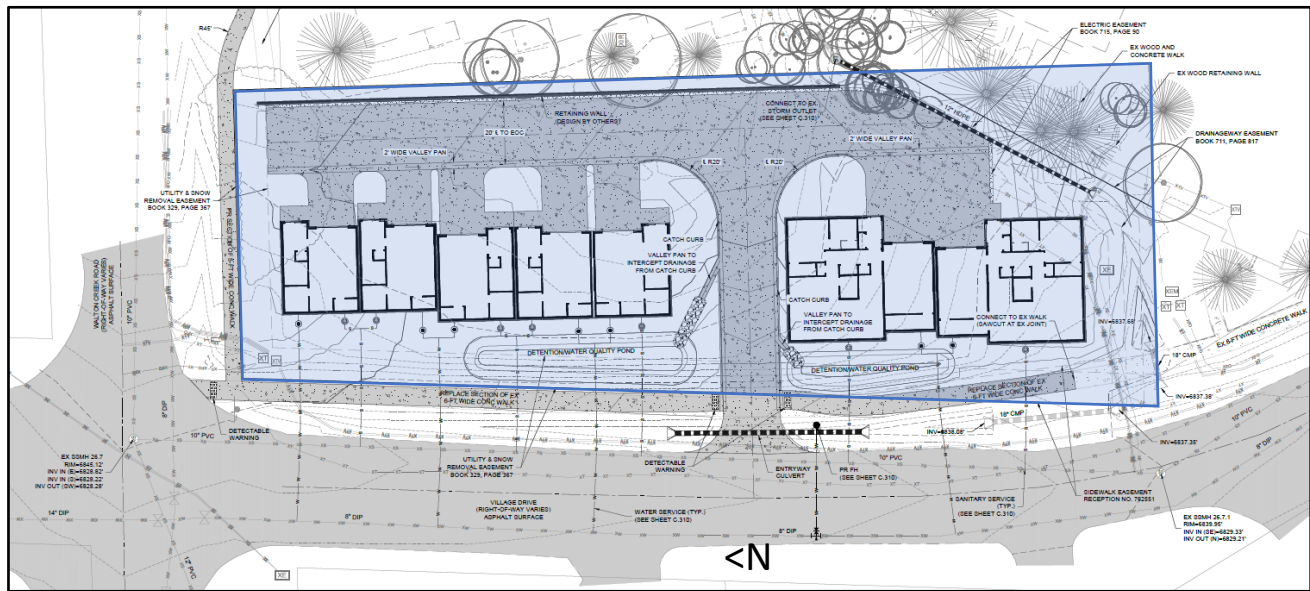


Figure 2: Village Drive Townhomes Site Plan

Trip Generation:

The *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition*¹, was used to estimate the volume of traffic that will be going to and from the Village Drive Townhomes on a daily basis and during the morning and afternoon peak traffic volume hours. ITE Land Use Category 210: Single Family Detached Housing was used for the duplex and ITE Land Use Category 220: Multifamily Housing (Low-Rise) was used for the five-plex.

A five percent multimodal reduction was applied to this site. This site has access to both the Steamboat Springs Transit's Green Line at Trappeur's Crossing and Orange Line at Shadow Run. Both are within 800 feet of the project.

Table 1: Estimated Project-Generated Traffic
Village Drive Townhomes
Steamboat Springs, Colorado

M1447			March 20, 2020			Average Weekday [2]			AM Peak Hour of Generator [2]			PM Peak Hour of Generator [2]			Saturday Peak Hour of Gen. [2]		
ITE Code	Land Use Description	Units	Average Rate	Enter	Exit	Average Rate	Enter	Exit	Average Rate	Enter	Exit	Average Rate	Enter	Exit	Average Rate	Enter	Exit
			Fitted Curve Equation	(vpd)	(vpd)	Fitted Curve Equation	(vph)	(vph)	Fitted Curve Equation	(vph)	(vph)	Fitted Curve Equation	(vph)	(vph)	Fitted Curve Equation	(vph)	(vph)
210	Proposed Single-Family Detached Housing	Dwelling Units		50%	50%		26%	74%		64%	36%					54%	46%
		2	Average Rate = 9.44	10	10	$\ln(T) = 0.91\ln(X) + 1$	1	2	$\ln(T) = 0.94\ln(X) + 2$	2	1	Average Rate = 0.93	2	1			
220	Multifamily Housing (Low-Rise)	Dwelling Units		50%	50%		28%	72%		59%	41%					54%	46%
		5	Average Rate = 7.32	19	19	Average Rate = 0.56	1	3	Average Rate = 0.67	2	2	Average Rate = 0.70	2	2			
	Multimodal Reduction	-5%	Multimodal	-1	-1		0	0		0	0					0	0
Total traffic from proposed Land Uses				28	28		2	5		4	3					4	3

[1] Data obtained from *Trip Generation Manual, 10th Edition*, Institute of Transportation Engineers, 2017

[2] The Average Rate or the Fitted Curve Equation is used based on the procedures in *ITE Trip Generation Handbook §4.4*.

As shown in *Table 1*, on a typical day the development is projected to generate 56 vehicle trips, 28 entering and 28 exiting. During the weekday morning peak hour, the projected vehicular traffic volumes are anticipated to include 2 inbound vehicles and 5 outbound vehicles. During the weekday evening peak hour, the anticipated volumes is 4 entering vehicles and 3 exiting vehicles. During the Saturday peak hour, the project traffic is anticipated to include 4 inbound vehicles and 3 outbound vehicles.

Existing and Total Traffic:

For analysis purposes it is anticipated that all the site-generated traffic will be to and from the north on Village Drive, as the area to the south of Walton Creek Road is primarily residential. Traffic volumes were counted at the intersection of Walton Creek Road and Village Drive on Thursday, March 14, 2019, and Saturday, March 16, 2019. The percentages of the additional traffic this development will add to Village Drive are shown in *Table 2*.

Table 3: Site Traffic Contribution to Total Traffic on Village Drive

	Dir.	Existing	New	% of Total
Weekday AM	NB	133	5	3.6%
	SB	62	2	3.1%
Weekday PM	NB	96	3	3.0%
	SB	114	4	3.4%
Saturday	NB	105	3	2.8%
	SB	101	4	3.8%

Walton Creek Road and Village Drive Intersection Improvements:

The Village Drive Townhomes will be contributing traffic to the intersection of Village Drive and Walton Creek Road. This is a four-legged intersection where Walton Creek Road is the major street with a through movement and Village Drive is the minor street with stop signs.

The *Manual of Uniform Traffic Control Devices (MUTCD)* provides guidance on when it may be appropriate to implement multi-way stop control at an intersection (Section 2B.07). One of the criteria is the minimum traffic volumes at the intersection. Those minimums were met when the traffic volumes were counted on Saturday, March 16, 2019. Meeting the minimum volumes does not impose a requirement to make the conversion.

Additional considerations in the decision on whether to install an all-way stop include the grade of the roads entering the intersection. Walton Creek Road has a grade of approximately 7.6% downward into the intersection. With the snowy conditions, adding a stop on this steep road would likely result in more intersection-related crashes.

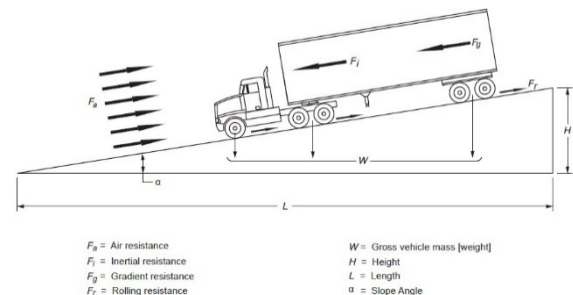


Figure 3: AASHTO Rolling Resistance on Grade Image

An asphalt roadway typically provides a rolling resistance of 12lbs per 1,000lbs gross vehicle weight of a vehicle³. Comparatively, hard-packed snow and ice provide a rolling resistance of 0.20 and 0.10lbs per 1,000lbs gross vehicle weight⁴, respectively. This results in a much more difficult stop on a 7.6% grade under snow and ice conditions. Therefore, the installation of an all-way stop at the intersection of Walton Creek Road and Village Drive is not recommended.

If the City decides to make other improvement to the intersection of Village Drive and Walton Creek Road, Village Drive Townhomes will be required to make an improvement contribution. The City of Steamboat Springs Engineering Standards §6.4.9 states:

Intersection Improvements – Calculate the percent site traffic of the total intersection traffic. The maximum percentage between the AM peak hour and PM peak hour shall be used to determine the site contribution.

Based on the traffic counts from Thursday, March 14, 2019, and Saturday, March 16, 2019, the contribution percentage from the Village Drive Townhomes will be 1.3% of the intersection improvement costs.

	Existing	New	Total	%
Weekday AM	518	7	525	1.3%
Weekday PM	632	7	639	1.1%
Saturday	625	7	632	1.1%

Village Drive Queuing Analysis:

The City of Steamboat Springs requested analysis of the northbound queue length on Village Drive at Walton Creek Road. Synchro 10 software was used to determine the northbound queue length during the weekday and Saturday peak hours. Northbound traffic is less than 50' and does not exceed two car lengths. The distance from the intersection of Walton Creek Road and Village Drive to the project driveway exceeds 150'. Therefore, traffic generated from the project site will not have any conflicts with northbound traffic on Village Drive at Walton Creek Road.

Conclusions:

The proposed Village Drive Townhomes is a seven-unit residential development to be located on the property at the southeast corner of Village Drive and Walton Creek Road in Steamboat Springs. The projected traffic volume to be generate by the development is 54 vehicle trips per day with peak hour volumes of 7 vehicles per hour. The volumes will be accommodated within the City's existing street system. The intersection improvements contribution requirement will be 1.3% of the intersection improvement costs for modifications to the intersection of Village Drive and Walton Creek Road.

Please call if you would like any additional information or have any questions regarding this matter.

Sincerely,

McDowell Engineering, LLC



Kari J. McDowell Schroeder, PE, PTOE

Traffic Engineer

References

¹*Trip Generation Manual, 10th Edition.* Institute of Transportation Engineers, 2017.

² *Manual of Uniform Traffic Control Devices.* Federal Highways Administration, 2009.

³*A Policy on Geometric Design of Highways and Streets*, Chapter 3. American Association of State Highway and Transportation Officials, 2011.

⁴*Theory of Ground Vehicles, 2nd Edition.* J.Y. Wong, 1993.

Enclosures

Approved Traffic Analysis Scoping Form

SST Bus Route Map & Schedule

Traffic Data from Village Drive and Walton Creek Road Intersection

Traffic Count exhibits

Synchro Reports with 95th Percentile Queues

CITY OF STEAMBOAT SPRINGS ENGINEERING STANDARDS
Attachment A
TRAFFIC IMPACT STUDY – SCOPE APPROVAL FORM

Prior to starting a traffic impact study, a Scope Approval Form must be submitted for review and signed by the City Public Works Director. It shall be included in every traffic study submittal as Attachment A. This Scope Approval Form is for City requirements only. Consultants must contact CDOT to determine requirements related to access permits and work in CDOT right-of-way.

Project Information

Project Name:	Village Drive Townhomes
Project Location:	Steamboat Springs, CO
Developer Name/ Contact Number:	Landmark Consultants, Inc. (attention: Ryan Spaustat) 970-871-9494
Traffic Engineer Name/ Contact Number:	Kari Schroeder 970-623-0788

Study Parameters

Type of Study Required: ☒ Trip Generation Letter ☐ Long-term Traffic Study
 ☐ Short-term Traffic Study ☐ Trip Evaluation Letter

Traffic Counts

☐ Winter Zone ☐ Summer Zone
☒ Counts w/in last 2 years are available
☐ New counts will be collected on _____
☐ Existing counts will be estimated based on:
☐ Future counts will be estimated based on a _____ growth rate.

Peak Hours Analyzed

☒ AM Peak Hour ☒ PM peak hour ☐ Other _____

Trip Generation Rates

☒ From ITE ☐ Other (cite) _____
☐ No passby or mode split (typical)
☒ Passby or mode split (describe) 5% multimodal reduction

Trip Distribution – Attach sketch A-1

Study Parameters

List of Study Area Intersections

1.	Village Drive and Walnut Creek Road	
2.	Village Drive at Walton Creek Road	
3.		
4.		
5.		
6.		
7.		

Key Analysis items

- ☐ Peak Hour LOS at study intersections
☐ % Site contribution to signal at _____
☐ Auxiliary lane evaluation at ___study area intersections_____
☐ Traffic signal warrants at _____
☒ Queuing Analysis at Analysis of northbound Village Drive queue length and possible conflicts with driveway traffic.
☐ Other_ped, bike, and transit facility analysis

Approvals

Kari McDowell Schroeder, PE, PTOE; McDowell Engineering 3/3/2021 970-623-0788

Prepared By: _____ Date _____ Phone _____
 (insert traffic engineer name, firm)

Approved By:

Stuart King for BB 3/16/2021
 Ben Beall Date _____ Phone _____
 City Engineer

SST Operations
970.879.3717

Live Map & Times
www.steamboatsprings.net/sst

SST App
www.RouteShout.com

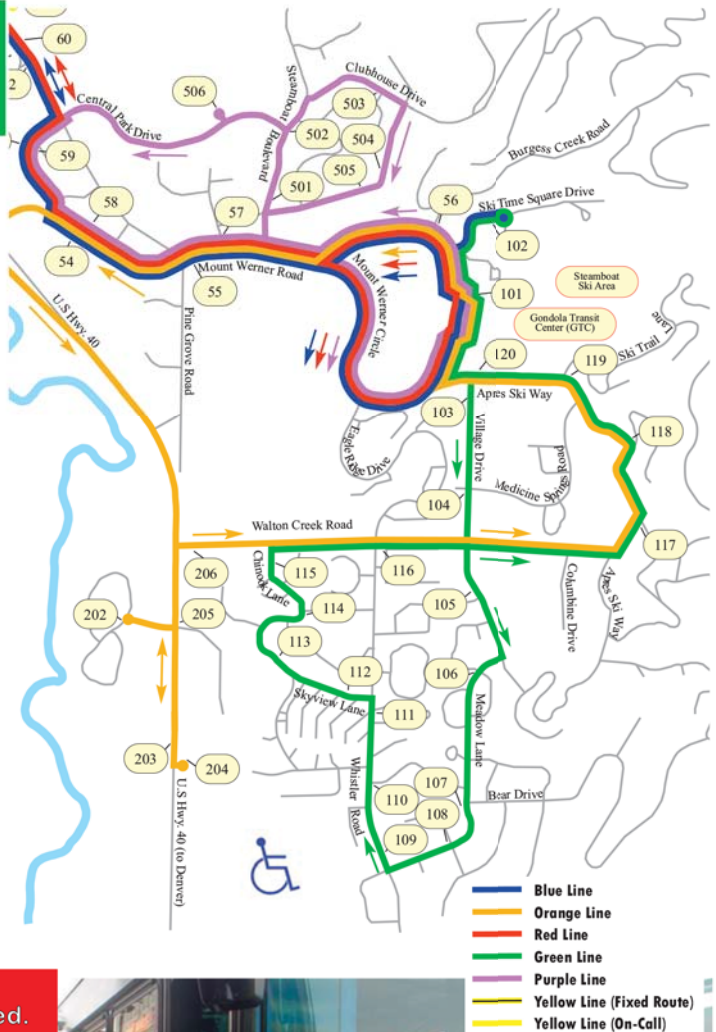
Emergency
Dial 9.1.1.

Green Line

No transfer is needed between the Green Line and the Red Line.

Green Line (including first and last buses) To the Condominiums

Stop No. Stop Name	1st Buses	Times Past the Hour	Last Green Line
101 Gondola Transit Center	6:10 am 6:50 am	:10 :30 :50	8:10 pm
102 Ski Times Square	6:12 am 6:52 am	:12 :32 :52	8:12 pm
103 Highmark	5:54 am 6:14 am 6:54 am	:14 :34 :54	8:14 pm
104 Trappeur's Crossing	5:54 am 6:14 am 6:54 am	:14 :34 :54	8:14 pm
105 Alpine Ridge/Meadowlark	5:55 am 6:15 am 6:55 am	:15 :35 :55	8:15 pm
106 Sunray Meadows/Sunburst	5:55 am 6:15 am 6:55 am	:15 :35 :55	8:15 pm
107 Bear Drive	5:56 am 6:16 am 6:56 am	:16 :36 :56	8:16 pm
108 Timothy Drive	5:57 am 6:17 am 6:57 am	:17 :37 :57	8:17 pm
109 Whistler Park	5:57 am 6:17 am 6:57 am	:17 :37 :57	8:17 pm
110 Creekside/Woodbridge	5:58 am 6:18 am 6:58 am	:18 :38 :58	8:18 pm
111 Mustang Run	5:58 am 6:18 am 6:58 am	:18 :38 :58	8:18 pm
112 Whistler Village	6:00 am 6:20 am 7:00 am	:20 :40 :00	8:20 pm
113 Chinook Townhomes	6:00 am 6:20 am 7:00 am	:20 :40 :00	8:20 pm
114 Walton Village	6:01 am 6:21 am 7:01 am	:21 :41 :01	8:21 pm
115 Walton Creek/Deer Creek	6:02 am 6:22 am 7:02 am	:22 :42 :02	8:22 pm
116 Shadow Run	6:05 am 6:25 am 7:05 am	:25 :45 :05	8:25 pm
117 Herbage	6:06 am 6:26 am 7:06 am	:26 :46 :06	8:26 pm
118 Sunrise/Yampa View	6:06 am 6:26 am 7:06 am	:26 :46 :06	8:26 pm
119 La Casa	6:07 am 6:27 am 7:07 am	:27 :47 :07	8:27 pm
120 Dulany/Snowflower	6:07 am 6:27 am 7:07 am	:27 :47 :07	8:27 pm

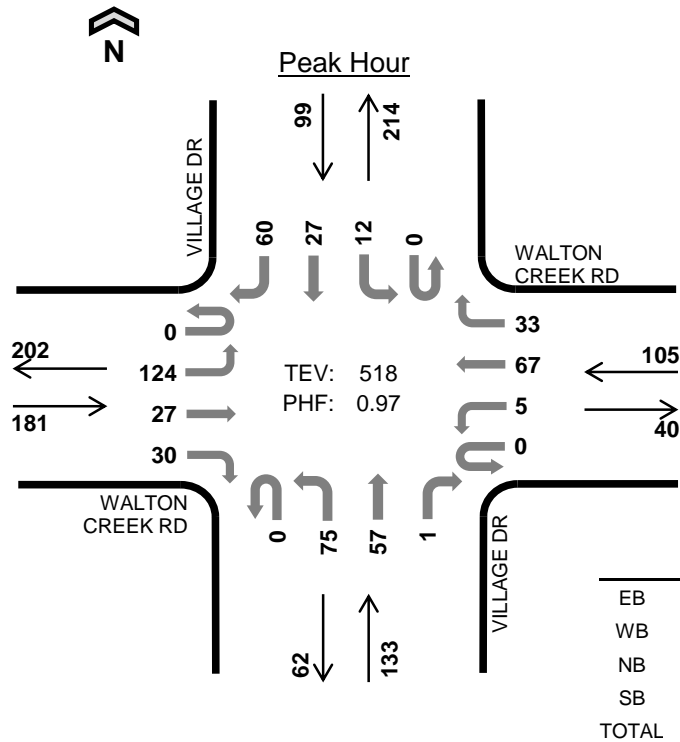


The Green Line, Condo bound bus continues as the Red Line, Downtown & West Steamboat bound bus. No transfer is needed.

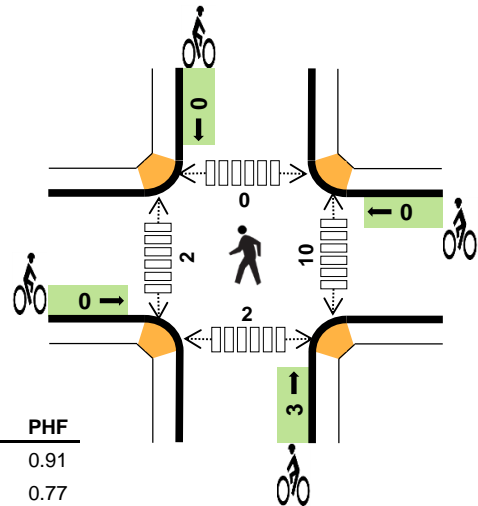
FOR LATE NIGHT SERVICE - SEE NIGHT LINE



VILLAGE DR WALTON CREEK RD



Date: Thu, Mar 14, 2019
Count Period: 7:00 AM to 11:00 AM
Peak Hour: 7:45 AM to 8:45 AM



Four-Hour Count Summaries

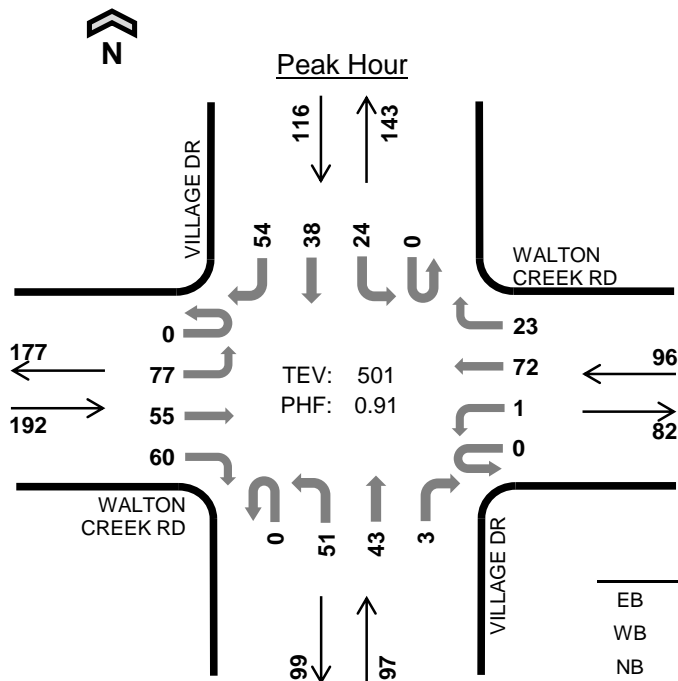
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM	0	33	4	8	0	1	25	8	0	17	16	0	0	1	8	12	133	0
8:00 AM	0	34	9	7	0	1	16	5	0	24	13	1	0	2	4	13	129	0
8:15 AM	0	29	5	7	0	0	13	12	0	17	15	0	0	3	5	16	122	0
8:30 AM	0	28	9	8	0	3	13	8	0	17	13	0	0	6	10	19	134	518
Peak Hour	0	124	27	30	0	5	67	33	0	75	57	1	0	12	27	60	518	0

Note: For all three-hour count summary, see next page.

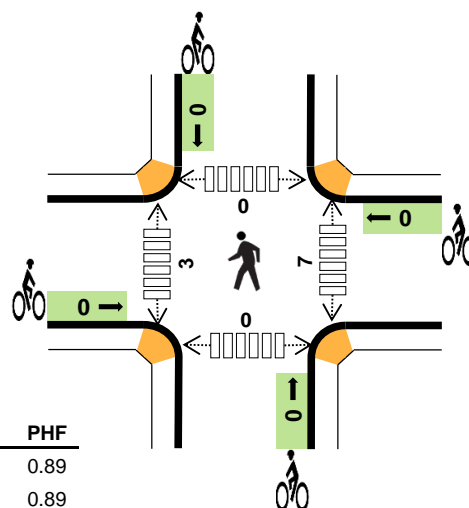
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:45 AM	2	2	0	3	7	0	0	1	0	1	2	1	0	2	5
8:00 AM	3	3	0	1	7	0	0	1	0	1	3	0	0	0	3
8:15 AM	3	4	0	3	10	0	0	1	0	1	5	1	0	0	6
8:30 AM	4	2	2	7	15	0	0	0	0	0	0	0	0	0	0
Peak Hour	12	11	2	14	39	0	0	3	0	3	10	2	0	2	14

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	15	6	11	0	0	8	1	0	4	8	0	0	3	3	6	65	0
7:15 AM	0	17	7	5	0	0	10	7	0	8	6	0	0	0	4	5	69	0
7:30 AM	0	28	9	2	0	2	16	4	0	12	12	1	0	2	6	8	102	0
7:45 AM	0	33	4	8	0	1	25	8	0	17	16	0	0	1	8	12	133	369
8:00 AM	0	34	9	7	0	1	16	5	0	24	13	1	0	2	4	13	129	433
8:15 AM	0	29	5	7	0	0	13	12	0	17	15	0	0	3	5	16	122	486
8:30 AM	0	28	9	8	0	3	13	8	0	17	13	0	0	6	10	19	134	518
8:45 AM	0	29	6	9	0	0	24	4	0	15	12	1	0	5	4	19	128	513
9:00 AM	0	23	15	7	0	0	15	8	0	16	11	0	0	5	11	20	131	515
9:15 AM	0	21	4	6	0	1	10	6	0	15	3	1	0	6	5	20	98	491
9:30 AM	0	13	8	6	0	0	16	3	0	12	8	0	0	4	4	10	84	441
9:45 AM	0	24	10	8	0	0	16	9	0	16	9	2	0	3	4	24	125	438
10:00 AM	0	23	12	10	0	2	13	7	0	14	10	0	0	2	3	19	115	422
10:15 AM	0	10	11	9	0	0	13	2	0	19	11	0	0	7	11	12	105	429
10:30 AM	0	13	16	10	0	1	13	7	0	12	4	4	0	3	9	9	101	446
10:45 AM	0	13	11	12	0	2	19	5	0	12	11	2	0	6	6	13	112	433
Count Total	0	353	142	125	0	13	240	96	0	230	162	12	0	58	97	225	1,753	0
Peak Hour	0	124	27	30	0	5	67	33	0	75	57	1	0	12	27	60	518	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
7:00 AM	2	1	0	1	4	0	0	0	0	0	1	0	1	0	2			
7:15 AM	4	3	0	1	8	0	0	0	0	0	1	0	0	0	1			
7:30 AM	3	3	1	4	11	0	0	2	0	2	2	0	0	0	2			
7:45 AM	2	2	0	3	7	0	0	1	0	1	2	1	0	2	5			
8:00 AM	3	3	0	1	7	0	0	1	0	1	3	0	0	0	3			
8:15 AM	3	4	0	3	10	0	0	1	0	1	5	1	0	0	6			
8:30 AM	4	2	2	7	15	0	0	0	0	0	0	0	0	0	0			
8:45 AM	4	3	1	3	11	0	0	0	0	0	2	1	0	0	3			
9:00 AM	4	3	1	3	11	0	0	0	1	1	3	0	0	0	3			
9:15 AM	0	2	0	8	10	0	0	1	0	1	0	0	0	0	0			
9:30 AM	4	1	0	3	8	0	0	0	0	0	1	0	3	0	4			
9:45 AM	2	3	1	2	8	0	0	0	0	0	0	0	0	0	0			
10:00 AM	4	2	0	2	8	0	0	0	0	0	1	0	0	1	2			
10:15 AM	4	2	0	7	13	0	0	0	1	1	2	0	0	0	2			
10:30 AM	3	3	1	4	11	0	0	0	0	0	3	2	0	1	6			
10:45 AM	4	2	1	2	9	0	0	0	1	1	2	1	0	0	3			
Count Total	50	39	8	54	151	0	0	6	3	9	28	6	4	4	42			
Peak Hour	12	11	2	14	39	0	0	3	0	3	10	2	0	2	14			

VILLAGE DR WALTON CREEK RD



Date: Thu, Mar 14, 2019
Count Period: 11:00 AM to 3:00 PM
Peak Hour: 1:30 PM to 2:30 PM



	HV %:	PHF
EB	8.3%	0.89
WB	9.4%	0.89
NB	2.1%	0.69
SB	12.9%	0.78
TOTAL	8.4%	0.91

Four-Hour Count Summaries

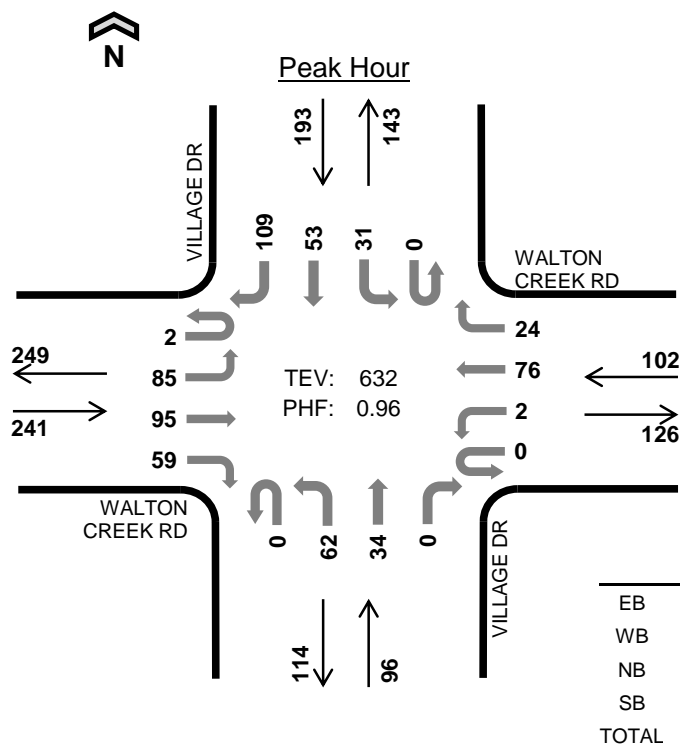
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:30 PM	0	21	17	16	0	0	22	5	0	19	15	1	0	5	9	7	137	0
1:45 PM	0	15	11	16	0	0	16	9	0	7	11	1	0	6	12	15	119	0
2:00 PM	0	22	12	13	0	1	15	2	0	14	12	1	0	5	8	12	117	0
2:15 PM	0	19	15	15	0	0	19	7	0	11	5	0	0	8	9	20	128	501
Peak Hour	0	77	55	60	0	1	72	23	0	51	43	3	0	24	38	54	501	0

Note: For all three-hour count summary, see next page.

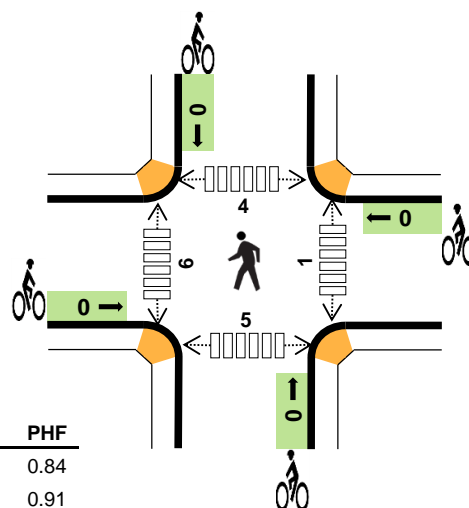
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
1:30 PM	3	1	0	4	8	0	0	0	0	0	2	1	0	0	3
1:45 PM	3	3	1	5	12	0	0	0	0	0	3	0	0	0	3
2:00 PM	4	1	0	4	9	0	0	0	0	0	2	2	0	0	4
2:15 PM	6	4	1	2	13	0	0	0	0	0	0	0	0	0	0
Peak Hour	16	9	2	15	42	0	0	0	0	0	7	3	0	0	10

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	18	22	11	0	2	10	6	0	6	11	0	0	4	8	17	115	0
11:15 AM	0	19	14	15	0	0	14	3	0	14	8	1	0	6	9	15	118	0
11:30 AM	0	14	19	7	0	1	14	8	0	18	7	1	0	5	7	21	122	0
11:45 AM	0	23	17	15	0	0	21	5	0	10	9	1	0	7	9	11	128	483
12:00 PM	0	17	11	6	0	0	18	1	0	15	9	1	0	6	14	14	112	480
12:15 PM	0	20	9	7	0	1	14	8	0	10	9	0	0	5	8	18	109	471
12:30 PM	0	11	16	15	0	0	14	3	0	13	14	1	0	3	9	13	112	461
12:45 PM	0	17	10	19	0	0	17	5	0	13	6	0	0	10	10	17	124	457
1:00 PM	0	15	20	10	0	1	17	3	0	8	6	1	0	8	5	15	109	454
1:15 PM	0	11	13	13	0	1	13	3	0	12	5	0	0	8	8	6	93	438
1:30 PM	0	21	17	16	0	0	22	5	0	19	15	1	0	5	9	7	137	463
1:45 PM	0	15	11	16	0	0	16	9	0	7	11	1	0	6	12	15	119	458
2:00 PM	0	22	12	13	0	1	15	2	0	14	12	1	0	5	8	12	117	466
2:15 PM	0	19	15	15	0	0	19	7	0	11	5	0	0	8	9	20	128	501
2:30 PM	0	22	13	10	0	0	18	4	0	12	7	1	0	7	14	15	123	487
2:45 PM	0	30	14	7	0	0	18	10	0	11	8	1	0	6	4	12	121	489
Count Total	0	294	233	195	0	7	260	82	0	193	142	11	0	99	143	228	1,887	0
Peak Hour	0	77	55	60	0	1	72	23	0	51	43	3	0	24	38	54	501	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
11:00 AM	5	4	2	4	15	0	0	0	0	0	3	0	2	0	5			
11:15 AM	2	3	0	3	8	1	0	0	0	1	4	2	0	0	6			
11:30 AM	3	1	0	4	8	0	0	0	0	0	2	2	0	0	4			
11:45 AM	5	3	2	3	13	0	0	1	0	1	2	0	0	0	2			
12:00 PM	4	2	1	1	8	0	0	1	0	1	4	0	0	0	4			
12:15 PM	2	2	0	7	11	0	0	0	0	0	1	0	0	1	2			
12:30 PM	4	0	0	2	6	0	0	0	0	0	3	1	1	0	5			
12:45 PM	3	4	1	7	15	0	0	0	0	0	2	0	0	0	2			
1:00 PM	3	2	2	3	10	0	0	0	0	0	2	3	0	0	5			
1:15 PM	1	4	0	2	7	0	0	0	1	1	1	5	1	1	8			
1:30 PM	3	1	0	4	8	0	0	0	0	0	2	1	0	0	3			
1:45 PM	3	3	1	5	12	0	0	0	0	0	3	0	0	0	3			
2:00 PM	4	1	0	4	9	0	0	0	0	0	2	2	0	0	4			
2:15 PM	6	4	1	2	13	0	0	0	0	0	0	0	0	0	0			
2:30 PM	1	2	0	5	8	0	0	0	0	0	3	0	0	0	3			
2:45 PM	5	3	0	4	12	0	0	0	0	0	2	1	0	2	5			
Count Total	54	39	10	60	163	1	0	2	1	4	36	17	4	4	61			
Peak Hour	16	9	2	15	42	0	0	0	0	0	7	3	0	0	10			

VILLAGE DR WALTON CREEK RD



Date: Thu, Mar 14, 2019
Count Period: 3:00 PM to 7:00 PM
Peak Hour: 4:45 PM to 5:45 PM



Four-Hour Count Summaries

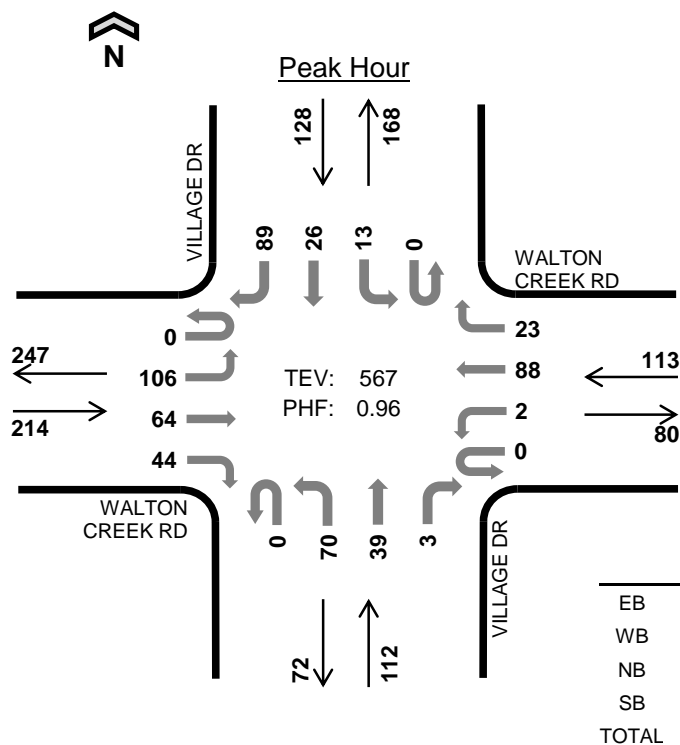
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:45 PM	0	22	18	14	0	0	20	8	0	18	8	0	0	10	8	27	153	0
5:00 PM	0	17	25	11	0	0	14	7	0	14	6	0	0	9	14	33	150	0
5:15 PM	1	24	20	17	0	1	21	6	0	16	10	0	0	4	16	28	164	0
5:30 PM	1	22	32	17	0	1	21	3	0	14	10	0	0	8	15	21	165	632
Peak Hour	2	85	95	59	0	2	76	24	0	62	34	0	0	31	53	109	632	0

Note: For all three-hour count summary, see next page.

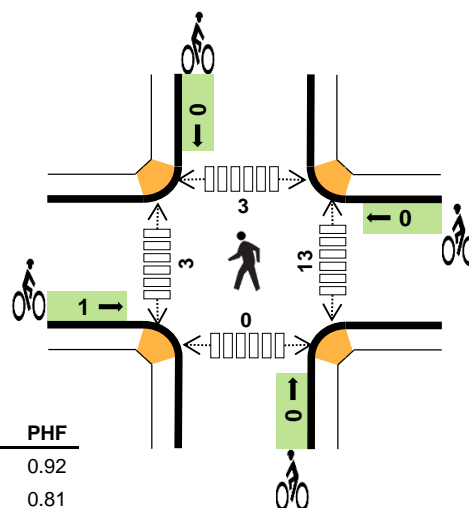
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:45 PM	3	1	0	5	9	0	0	0	0	0	1	1	2	0	4
5:00 PM	2	2	1	4	9	0	0	0	0	0	0	4	0	3	7
5:15 PM	2	2	0	2	6	0	0	0	0	0	0	1	2	2	5
5:30 PM	2	1	0	4	7	0	0	0	0	0	0	0	0	0	0
Peak Hour	9	6	1	15	31	0	0	0	0	0	1	6	4	5	16

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	21	18	12	0	1	12	5	0	13	4	3	0	4	15	18	126	0
3:15 PM	0	17	19	13	0	2	11	5	0	11	7	0	0	9	12	19	125	0
3:30 PM	0	21	19	7	0	0	13	8	0	13	11	0	0	6	10	20	128	0
3:45 PM	0	21	17	12	0	0	18	5	0	18	6	0	0	7	15	27	146	525
4:00 PM	0	20	19	13	0	0	14	5	0	14	10	1	0	11	12	30	149	548
4:15 PM	0	25	24	21	0	0	11	7	0	15	7	0	0	5	15	25	155	578
4:30 PM	0	23	16	17	0	0	18	8	0	9	7	1	0	7	17	27	150	600
4:45 PM	0	22	18	14	0	0	20	8	0	18	8	0	0	10	8	27	153	607
5:00 PM	0	17	25	11	0	0	14	7	0	14	6	0	0	9	14	33	150	608
5:15 PM	1	24	20	17	0	1	21	6	0	16	10	0	0	4	16	28	164	617
5:30 PM	1	22	32	17	0	1	21	3	0	14	10	0	0	8	15	21	165	632
5:45 PM	0	21	21	20	0	1	14	4	0	11	10	3	0	4	11	23	143	622
6:00 PM	0	19	20	15	0	1	18	2	0	18	6	0	0	4	14	29	146	618
6:15 PM	0	16	20	17	0	0	12	6	0	14	6	0	0	5	14	10	120	574
6:30 PM	0	18	23	8	0	0	12	5	0	8	6	0	0	7	6	14	107	516
6:45 PM	0	14	18	13	0	1	11	1	0	10	5	0	0	5	16	16	110	483
Count Total	2	321	329	227	0	8	240	85	0	216	119	8	0	105	210	367	2,237	0
Peak Hour	2	85	95	59	0	2	76	24	0	62	34	0	0	31	53	109	632	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
3:00 PM	4	3	0	3	10	0	0	0	1	1	1	1	0	0	2			
3:15 PM	2	2	0	4	8	0	0	0	2	2	2	5	0	0	7			
3:30 PM	1	4	0	3	8	0	0	0	1	1	2	1	0	0	3			
3:45 PM	2	4	0	9	15	0	0	0	1	1	3	3	1	0	7			
4:00 PM	6	1	1	2	10	0	0	0	0	0	0	0	0	1	1			
4:15 PM	2	4	0	4	10	0	0	0	1	1	2	0	0	0	2			
4:30 PM	2	3	1	4	10	0	0	0	0	0	2	1	2	0	5			
4:45 PM	3	1	0	5	9	0	0	0	0	0	1	1	2	0	4			
5:00 PM	2	2	1	4	9	0	0	0	0	0	0	4	0	3	7			
5:15 PM	2	2	0	2	6	0	0	0	0	0	0	1	2	2	5			
5:30 PM	2	1	0	4	7	0	0	0	0	0	0	0	0	0	0			
5:45 PM	7	3	0	4	14	0	0	0	1	1	0	0	0	0	0			
6:00 PM	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0			
6:15 PM	2	0	0	1	3	0	0	0	0	0	5	0	2	0	7			
6:30 PM	6	3	0	2	11	0	0	0	0	0	0	1	0	3	4			
6:45 PM	1	1	0	3	5	0	0	0	0	0	4	3	1	0	8			
Count Total	47	37	3	54	141	0	0	0	7	7	22	21	10	9	62			
Peak Hour	9	6	1	15	31	0	0	0	0	0	1	6	4	5	16			

VILLAGE DR WALTON CREEK RD



Date: Sat, Mar 16, 2019
Count Period: 7:00 AM to 11:00 AM
Peak Hour: 9:45 AM to 10:45 AM



Four-Hour Count Summaries

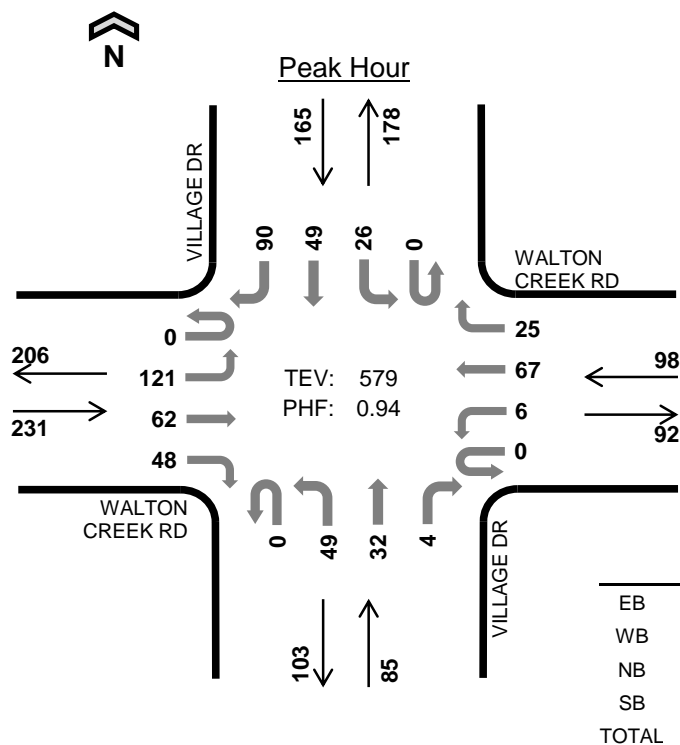
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
9:45 AM	0	29	11	8	0	1	28	6	0	29	9	0	0	1	6	19	147	0
10:00 AM	0	26	17	12	0	1	19	10	0	15	10	0	0	6	5	27	148	0
10:15 AM	0	23	17	13	0	0	22	5	0	12	10	0	0	2	7	19	130	0
10:30 AM	0	28	19	11	0	0	19	2	0	14	10	3	0	4	8	24	142	567
Peak Hour	0	106	64	44	0	2	88	23	0	70	39	3	0	13	26	89	567	0

Note: For all three-hour count summary, see next page.

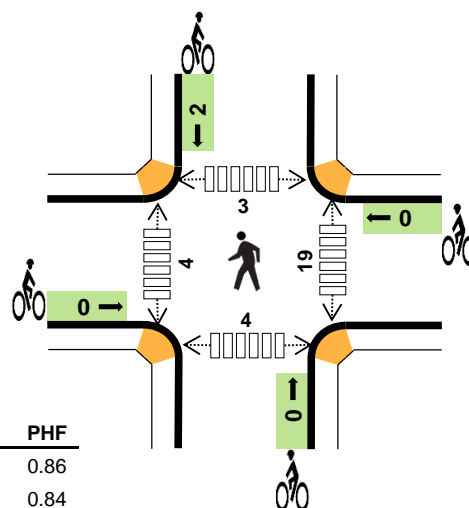
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
9:45 AM	5	0	0	2	7	0	0	0	0	0	2	0	2	0	4
10:00 AM	5	2	0	2	9	0	0	0	0	0	4	0	0	0	4
10:15 AM	6	3	0	2	11	0	0	0	0	0	3	3	0	0	6
10:30 AM	5	1	1	3	10	1	0	0	0	1	4	0	1	0	5
Peak Hour	21	6	1	9	37	1	0	0	0	1	13	3	3	0	19

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	14	3	3	0	0	9	3	0	3	3	0	0	0	1	7	46	0
7:15 AM	0	11	2	0	0	0	5	1	0	4	7	1	0	1	3	9	44	0
7:30 AM	0	20	5	0	0	1	8	4	0	3	7	0	0	1	3	9	61	0
7:45 AM	0	40	6	4	0	0	16	8	0	15	8	0	0	1	6	17	121	272
8:00 AM	0	32	9	9	0	0	8	7	0	9	6	1	0	2	4	17	104	330
8:15 AM	0	31	13	5	0	0	10	8	0	11	14	1	0	1	3	21	118	404
8:30 AM	0	23	4	7	0	0	13	4	0	10	12	0	0	3	10	18	104	447
8:45 AM	0	32	17	4	0	0	13	10	0	6	13	1	0	5	12	17	130	456
9:00 AM	1	28	7	4	0	1	17	5	0	10	11	2	0	6	5	19	116	468
9:15 AM	0	23	7	6	0	1	17	8	0	11	13	1	0	2	8	22	119	469
9:30 AM	0	18	11	8	0	1	17	6	0	9	9	0	0	4	7	20	110	475
9:45 AM	0	29	11	8	0	1	28	6	0	29	9	0	0	1	6	19	147	492
10:00 AM	0	26	17	12	0	1	19	10	0	15	10	0	0	6	5	27	148	524
10:15 AM	0	23	17	13	0	0	22	5	0	12	10	0	0	2	7	19	130	535
10:30 AM	0	28	19	11	0	0	19	2	0	14	10	3	0	4	8	24	142	567
10:45 AM	0	16	10	13	0	2	19	2	0	18	7	2	0	2	8	12	111	531
Count Total	1	394	158	107	0	8	240	89	0	179	149	12	0	41	96	277	1,751	0
Peak Hour	0	106	64	44	0	2	88	23	0	70	39	3	0	13	26	89	567	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total			
7:00 AM	3	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	1	0	0	0	1	0	0	2	0	2	1	0	0	0	0	1		
7:30 AM	2	0	0	1	3	0	0	0	0	0	1	0	1	0	0	2		
7:45 AM	2	2	0	3	7	0	0	0	0	0	5	0	0	3	0	8		
8:00 AM	3	2	0	2	7	0	0	0	0	0	2	1	1	0	0	4		
8:15 AM	1	1	0	3	5	0	0	0	0	0	6	2	0	1	0	9		
8:30 AM	1	1	0	3	5	0	0	1	0	1	6	0	1	0	0	7		
8:45 AM	5	2	0	4	11	0	0	0	0	0	8	0	2	0	0	10		
9:00 AM	4	2	1	7	14	0	0	0	0	0	2	0	2	0	0	4		
9:15 AM	2	1	0	4	7	0	0	0	0	0	2	1	2	0	0	5		
9:30 AM	3	1	0	4	8	0	0	0	0	0	2	0	0	0	0	2		
9:45 AM	5	0	0	2	7	0	0	0	0	0	2	0	2	0	0	4		
10:00 AM	5	2	0	2	9	0	0	0	0	0	4	0	0	0	0	4		
10:15 AM	6	3	0	2	11	0	0	0	0	0	3	3	0	0	0	6		
10:30 AM	5	1	1	3	10	1	0	0	0	1	4	0	1	0	0	5		
10:45 AM	1	1	0	5	7	0	0	0	0	0	1	0	1	0	0	2		
Count Total	49	19	2	46	116	1	0	3	0	4	49	7	13	4	0	73		
Peak Hour	21	6	1	9	37	1	0	0	0	1	13	3	3	0	0	19		

VILLAGE DR WALTON CREEK RD



Date: Sat, Mar 16, 2019
Count Period: 11:00 AM to 3:00 PM
Peak Hour: 2:00 PM to 3:00 PM



	HV %:	PHF
EB	6.9%	0.86
WB	8.2%	0.84
NB	2.4%	0.89
SB	13.3%	0.83
TOTAL	8.3%	0.94

Four-Hour Count Summaries

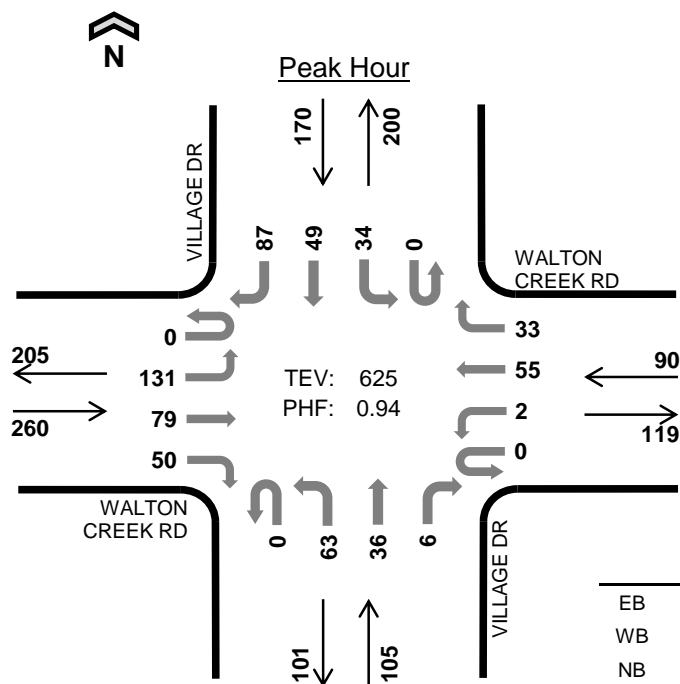
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	33	7	5	0	2	13	7	0	14	7	1	0	13	8	29	139	0
2:15 PM	0	27	17	16	0	2	18	6	0	10	14	0	0	6	16	22	154	0
2:30 PM	0	29	16	14	0	0	15	6	0	12	6	2	0	3	13	19	135	0
2:45 PM	0	32	22	13	0	2	21	6	0	13	5	1	0	4	12	20	151	579
Peak Hour	0	121	62	48	0	6	67	25	0	49	32	4	0	26	49	90	579	0

Note: For all three-hour count summary, see next page.

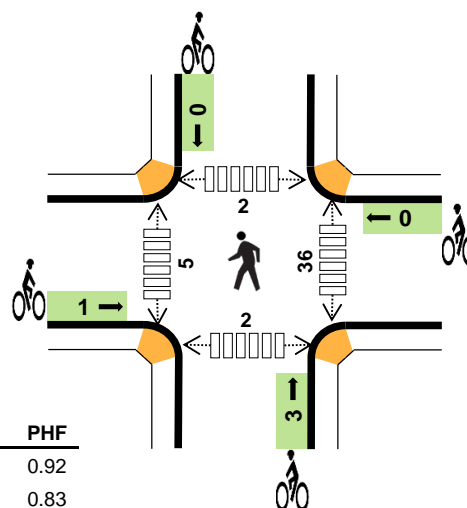
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	3	3	1	8	15	0	0	0	0	0	6	0	0	2	8
2:15 PM	2	3	0	6	11	0	0	0	2	2	5	1	0	0	6
2:30 PM	5	1	1	4	11	0	0	0	0	0	2	2	3	0	7
2:45 PM	6	1	0	4	11	0	0	0	0	0	6	1	0	2	9
Peak Hour	16	8	2	22	48	0	0	0	2	2	19	4	3	4	30

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	25	14	13	0	0	11	4	0	11	10	1	0	1	6	21	117	0
11:15 AM	0	17	17	3	0	1	9	9	0	13	15	1	0	4	10	19	118	0
11:30 AM	0	14	18	16	0	1	15	5	0	14	11	0	0	5	3	12	114	0
11:45 AM	0	24	10	11	0	1	21	7	0	15	9	1	0	3	10	12	124	473
12:00 PM	0	21	23	17	0	2	11	6	0	11	7	0	0	4	9	15	126	482
12:15 PM	0	23	14	14	0	0	14	5	0	10	10	1	0	9	11	11	122	486
12:30 PM	0	17	13	12	0	1	14	4	0	13	12	1	1	4	6	17	115	487
12:45 PM	0	16	18	6	0	1	18	5	0	15	9	0	0	4	10	15	117	480
1:00 PM	0	17	13	10	0	1	14	8	0	7	8	2	0	4	8	12	104	458
1:15 PM	0	17	21	11	0	0	15	6	0	13	5	2	0	7	10	17	124	460
1:30 PM	0	24	13	14	0	1	13	3	0	12	6	1	0	5	15	13	120	465
1:45 PM	0	25	19	8	0	1	16	9	0	15	7	1	0	1	15	15	132	480
2:00 PM	0	33	7	5	0	2	13	7	0	14	7	1	0	13	8	29	139	515
2:15 PM	0	27	17	16	0	2	18	6	0	10	14	0	0	6	16	22	154	545
2:30 PM	0	29	16	14	0	0	15	6	0	12	6	2	0	3	13	19	135	560
2:45 PM	0	32	22	13	0	2	21	6	0	13	5	1	0	4	12	20	151	579
Count Total	0	361	255	183	0	16	238	96	0	198	141	15	1	77	162	269	2,012	0
Peak Hour	0	121	62	48	0	6	67	25	0	49	32	4	0	26	49	90	579	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
11:00 AM	4	2	1	3	10	0	0	0	0	0	11	0	4	2	17			
11:15 AM	2	1	0	4	7	0	0	0	0	0	2	1	0	0	3			
11:30 AM	3	1	0	3	7	0	0	0	0	0	3	0	1	0	4			
11:45 AM	1	1	0	2	4	0	0	0	0	0	1	0	1	0	2			
12:00 PM	5	1	0	2	8	0	0	0	0	0	4	2	0	0	6			
12:15 PM	5	3	0	4	12	0	0	0	0	0	2	0	0	0	2			
12:30 PM	1	1	0	3	5	0	1	0	0	1	5	1	1	0	7			
12:45 PM	2	1	0	2	5	0	0	1	0	1	7	0	1	0	8			
1:00 PM	2	1	0	2	5	0	0	1	0	1	4	3	1	0	8			
1:15 PM	3	3	0	4	10	1	0	0	0	1	0	0	0	0	0			
1:30 PM	3	1	0	3	7	0	0	2	0	2	4	0	0	0	4			
1:45 PM	3	2	0	2	7	0	0	0	0	0	3	0	1	0	4			
2:00 PM	3	3	1	8	15	0	0	0	0	0	6	0	0	2	8			
2:15 PM	2	3	0	6	11	0	0	0	2	2	5	1	0	0	6			
2:30 PM	5	1	1	4	11	0	0	0	0	0	2	2	3	0	7			
2:45 PM	6	1	0	4	11	0	0	0	0	0	6	1	0	2	9			
Count Total	50	26	3	56	135	1	1	4	2	8	65	11	13	6	95			
Peak Hour	16	8	2	22	48	0	0	0	2	2	19	4	3	4	30			

VILLAGE DR WALTON CREEK RD



Date: Sat, Mar 16, 2019
Count Period: 3:00 PM to 7:00 PM
Peak Hour: 3:00 PM to 4:00 PM



	HV %:	PHF
EB	5.4%	0.92
WB	12.2%	0.83
NB	1.9%	0.94
SB	10.6%	0.89
TOTAL	7.2%	0.94

Four-Hour Count Summaries

Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	32	16	18	0	0	13	4	0	17	9	0	0	8	9	17	143	0
3:15 PM	0	34	18	11	0	0	15	8	0	13	11	2	0	8	13	25	158	0
3:30 PM	0	30	20	10	0	1	13	13	0	18	8	2	0	10	13	19	157	0
3:45 PM	0	35	25	11	0	1	14	8	0	15	8	2	0	8	14	26	167	625
Peak Hour	0	131	79	50	0	2	55	33	0	63	36	6	0	34	49	87	625	0


















Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	4	3	0	4	11	0	0	0	0	0	12	2	0	0	14
3:15 PM	2	3	0	5	10	1	0	1	0	2	8	2	1	0	11
3:30 PM	2	3	1	6	12	0	0	2	0	2	10	0	0	2	12
3:45 PM	6	2	1	3	12	0	0	0	0	0	6	1	1	0	8
Peak Hour	14	11	2	18	45	1	0	3	0	4	36	5	2	2	45

Four-Hour Count Summaries																		
Interval Start	WALTON CREEK RD				WALTON CREEK RD				VILLAGE DR				VILLAGE DR				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	32	16	18	0	0	13	4	0	17	9	0	0	8	9	17	143	0
3:15 PM	0	34	18	11	0	0	15	8	0	13	11	2	0	8	13	25	158	0
3:30 PM	0	30	20	10	0	1	13	13	0	18	8	2	0	10	13	19	157	0
3:45 PM	0	35	25	11	0	1	14	8	0	15	8	2	0	8	14	26	167	625
4:00 PM	0	29	16	12	0	2	14	10	0	9	11	0	0	6	10	22	141	623
4:15 PM	0	25	33	12	0	1	14	5	0	10	13	1	0	7	16	13	150	615
4:30 PM	0	25	20	7	0	2	20	9	0	14	6	0	0	8	14	32	157	615
4:45 PM	0	25	30	17	0	0	18	7	0	14	7	0	0	7	2	25	152	600
5:00 PM	0	29	17	15	0	0	22	3	0	15	5	1	0	8	11	23	149	608
5:15 PM	0	27	22	12	0	0	14	4	0	16	4	0	0	4	13	33	149	607
5:30 PM	0	26	20	14	0	1	15	5	0	11	11	1	0	7	15	31	157	607
5:45 PM	0	22	22	5	0	0	25	7	0	14	5	3	0	3	12	29	147	602
6:00 PM	0	26	22	18	0	1	14	6	0	10	8	1	0	9	9	19	143	596
6:15 PM	0	26	17	13	0	2	17	4	0	12	6	2	0	3	16	23	141	588
6:30 PM	0	21	19	18	0	1	18	3	0	13	7	1	0	6	13	23	143	574
6:45 PM	0	16	25	12	0	0	9	5	0	7	7	0	0	9	8	21	119	546
Count Total	0	428	342	205	0	12	255	101	0	208	126	16	0	111	188	381	2,373	0
Peak Hour	0	131	79	50	0	2	55	33	0	63	36	6	0	34	49	87	625	0
Note: Four-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																		
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)					Total		
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
3:00 PM	4	3	0	4	11	0	0	0	0	0	12	2	0	0	14			
3:15 PM	2	3	0	5	10	1	0	1	0	2	8	2	1	0	11			
3:30 PM	2	3	1	6	12	0	0	2	0	2	10	0	0	2	12			
3:45 PM	6	2	1	3	12	0	0	0	0	0	6	1	1	0	8			
4:00 PM	2	3	0	2	7	0	0	0	0	0	9	7	2	4	22			
4:15 PM	3	1	0	6	10	0	0	0	1	1	2	3	1	0	6			
4:30 PM	6	3	1	6	16	0	0	0	2	2	9	2	2	0	13			
4:45 PM	3	5	0	4	12	0	0	0	0	0	7	3	0	0	10			
5:00 PM	3	2	0	5	10	0	0	0	1	1	7	4	11	4	26			
5:15 PM	3	2	0	3	8	0	0	0	0	0	17	6	0	0	23			
5:30 PM	4	1	0	2	7	0	0	0	0	0	18	1	2	0	21			
5:45 PM	4	5	0	5	14	0	0	1	0	1	3	0	0	0	3			
6:00 PM	5	1	0	3	9	0	0	0	1	1	10	5	0	0	15			
6:15 PM	4	1	0	5	10	0	0	0	0	0	5	2	0	1	8			
6:30 PM	2	1	0	4	7	0	1	0	0	1	2	9	3	0	14			
6:45 PM	5	1	0	3	9	0	0	0	1	1	4	1	1	0	6			
Count Total	58	37	3	66	164	1	1	4	6	12	129	48	24	11	212			
Peak Hour	14	11	2	18	45	1	0	3	0	4	36	5	2	2	45			


















Weekday AM.syn

1: Village Drive & Walton Creek Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	27	30	5	67	33	75	51	1	12	27	60
Future Volume (Veh/h)	124	27	30	5	67	33	75	51	1	12	27	60
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)	135	29	33	5	73	36	82	55	1	13	29	65
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	109			62			496	434	46	445	433	91
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	109			62			496	434	46	445	433	91
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			100			79	88	100	97	94	93
cM capacity (veh/h)	1481			1541			400	466	1024	442	467	967
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	197	114	138	42	65							
Volume Left	135	5	82	13	0							
Volume Right	33	36	1	0	65							
cSH	1481	1541	426	459	967							
Volume to Capacity	0.09	0.00	0.32	0.09	0.07							
Queue Length 95th (ft)	8	0	35	8	5							
Control Delay (s)	5.5	0.3	17.5	13.6	9.0							
Lane LOS	A	A	C	B	A							
Approach Delay (s)	5.5	0.3	17.5	10.8								
Approach LOS			C	B								
Intersection Summary												
Average Delay			8.4									
Intersection Capacity Utilization			37.0%		ICU Level of Service				A			
Analysis Period (min)			15									


















Weekday PM.syn

1: Village Drive & Walton Creek Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	95	59	2	76	24	62	34	0	31	53	109
Future Volume (Veh/h)	87	95	59	2	76	24	62	34	0	31	53	109
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)	95	103	64	2	83	26	67	37	0	34	58	118
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	109			167			572	438	135	444	457	96
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	109			167			572	438	135	444	457	96
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			100			79	92	100	93	88	88
cM capacity (veh/h)	1481			1411			325	479	914	469	467	960
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	262	111	104	92	118							
Volume Left	95	2	67	34	0							
Volume Right	64	26	0	0	118							
cSH	1481	1411	367	468	960							
Volume to Capacity	0.06	0.00	0.28	0.20	0.12							
Queue Length 95th (ft)	5	0	29	18	10							
Control Delay (s)	3.1	0.1	18.6	14.6	9.3							
Lane LOS	A	A	C	B	A							
Approach Delay (s)	3.1	0.1	18.6	11.6								
Approach LOS			C	B								
Intersection Summary												
Average Delay	7.6											
Intersection Capacity Utilization	38.6%			ICU Level of Service					A			
Analysis Period (min)	15											


















Saturday AM.syn

1: Village Drive & Walton Creek Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	64	44	2	88	23	70	39	3	13	26	89
Future Volume (Veh/h)	106	64	44	2	88	23	70	39	3	13	26	89
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)	115	70	48	2	96	25	76	42	3	14	28	97
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	121			118			548	449	94	460	460	108
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	121			118			548	449	94	460	460	108
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	92			100			79	91	100	97	94	90
cM capacity (veh/h)	1467			1470			360	465	963	446	458	945
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	233	123	121	42	97							
Volume Left	115	2	76	14	0							
Volume Right	48	25	3	0	97							
cSH	1467	1470	397	454	945							
Volume to Capacity	0.08	0.00	0.30	0.09	0.10							
Queue Length 95th (ft)	6	0	32	8	9							
Control Delay (s)	4.1	0.1	18.0	13.7	9.2							
Lane LOS	A	A	C	B	A							
Approach Delay (s)	4.1	0.1	18.0	10.6								
Approach LOS			C	B								
Intersection Summary												
Average Delay			7.5									
Intersection Capacity Utilization			38.0%		ICU Level of Service				A			
Analysis Period (min)			15									

Saturday PM.syn

1: Village Drive & Walton Creek Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	79	50	2	55	33	63	36	6	34	49	87
Future Volume (Veh/h)	131	79	50	2	55	33	63	36	6	34	49	87
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)	142	86	54	2	60	36	68	39	7	37	53	95
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			140			600	497	113	506	506	78
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	96			140			600	497	113	506	506	78
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			100			78	91	99	91	87	90
cM capacity (veh/h)	1498			1443			313	429	940	409	424	983
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total	282	98	114	90	95							
Volume Left	142	2	68	37	0							
Volume Right	54	36	7	0	95							
cSH	1498	1443	361	418	983							
Volume to Capacity	0.09	0.00	0.32	0.22	0.10							
Queue Length 95th (ft)	8	0	33	20	8							
Control Delay (s)	4.2	0.2	19.5	16.0	9.1							
Lane LOS	A	A	C	C	A							
Approach Delay (s)	4.2	0.2	19.5	12.4								
Approach LOS			C	B								
Intersection Summary												
Average Delay			8.4									
Intersection Capacity Utilization			40.2%		ICU Level of Service				A			
Analysis Period (min)			15									