
Traffic Impact Study

Prepared For:

121 E. Main St

Mixed Use Development

Frisco, CO



August 13, 2025

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1 Introduction & Executive Summary

This report documents the traffic impact study for the proposed “121 E. Main St.” mixed use development (Project). The Project would be located on the northwest corner of E. Main St. & 2nd Ave. in Frisco, Colorado. The Project Access would connect to Galena St. Alley.

1.1 Study Area & Analysis Periods

The Study Area included two intersections.

- Int. #1: Galena St. Alley & N. 1st Ave.
- Int. #2: Galena St. Alley & N. 3rd Ave.

The analysis years were 2026 (assumed build out year) and 2046 (20-yr condition). The analysis focused on the weekday AM & PM peak hours.

1.2 Project Development Plan

Figure 1 shows the Project location and Figure 2 shows the Study Area. The current development plan included

- 5 new DU of townhome housing,
- 1,000 sf of new retail (assume apparel store),
- 1 existing restaurant with 1 DU of employee housing for restaurant manager – all to remain.

Figure 1 – Project Site Vicinity Map in Frisco

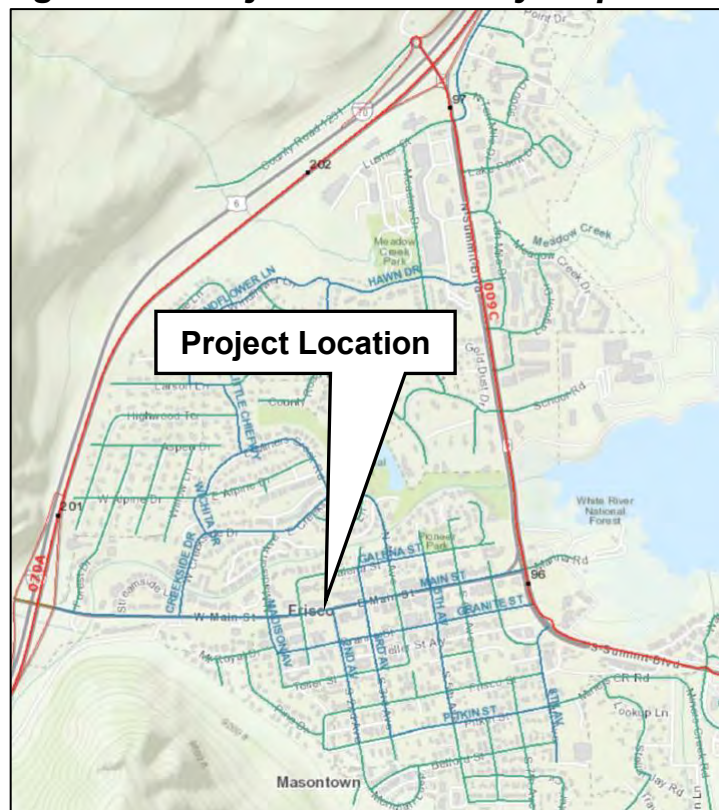


Figure 2 – Study Area

1.3 Conclusions

The existing intersections operate at the best level of service “A” with very low delay in all analysis conditions. The Project would generate very low trip generation (<10 vph), which would have no impact to the intersections on Galena St. Alley. The proposed Project Access location would meet Town criteria.

2 Project Trips

This section includes Project trip generation, distribution, and assignment to the roadway network. Project trips were identified by calculating the number of trips and then calculating how they would be distributed by direction, and then assigned to the site access points and the roadway network.

2.1 New Project Trip Generation

The existing restaurant and manager housing has been open and generating vehicle trips on the roadway, so it would not be considered a new trip generator. The Project’s new land uses would have very low trip generation per the attached trip calculations. Given the residential project, there was not any trip reduction for pass-by capture or internal capture in the trip generation calculations. The following table shows the new housing

trips based on Institute of Transportation Engineers (ITE) trip rate database for “single family attached housing,” land use code 215.

Table 1 – New Project Trip Generation – Residential (5 DU)

Period	Inbound	Outbound	Total
Weekday (vpd)	18	18	36
AM Peak Hour (vph)	1	1	2
PM Peak Hour (vph)	2	1	3

The following table shows the new retail trips based on ITE trip rate database for “apparel store,” land use code 876. There would not be any dedicated parking for the retail area in the Project parking lot on Galena St. Alley, and patrons or employees would need to park on Main St. or elsewhere. But to be conservative, this calculation assumed the retail trips would park in the Project parking lot.

Table 2 – New Project Trip Generation – Retail (1 KSF)

Period	Inbound	Outbound	Total
Weekday (vpd)	33	33	66
AM Peak Hour (vph)	1	0	1
PM Peak Hour (vph)	2	2	4

The following table shows the total new project trips.

Table 3 – New Project Trip Generation – Total

Period	Inbound	Outbound	Total
Weekday (vpd)	51	51	102
AM Peak Hour (vph)	2	1	3
PM Peak Hour (vph)	4	3	7

2.2 Project Trip Distribution & Assignment Assumptions

The Project Access would be located on Galena St. Alley and there wouldn't be any direct access to Main St. Given the Project location, it was reasonable to assume that Project trips would split evenly as follows for both the AM & PM peak hours. When applied to an odd number of trips, the values were rounded up to the nearest whole number.

- 50% to/from the east on Galena St. Alley.
- 50% to/from the west on Galena St. Alley.

From there, Project trips would travel to/from the south on N. 1st Ave. and N. 3rd Ave. and then to/from the two intersections on Main St.

The following table shows the Project trip assignments by intersection and movement.

Table 4 – Project Trip Assignments by Intersection & Movement

INT 1 Galena St Alley & N. 1st Ave.

Description	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	1	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	1	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	0	1	0	0	0	0	1	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	1	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	1	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	0	1	0	0	0	0	1	0	0	0

Description	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 1	0	0	0	2	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	0	2	0	0	0	0	2	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	0	0	2	0	0	0
Project Trip Volume Outbound - Period 2	0	0	0	2	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	0	2	0	0	0	0	2	0	0	0

INT 2 Galena St Alley & N. 3rd ave.

Description	Weekday AM Condition											
	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	1	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	1	0	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	1	0	0	0	1	0	0	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	1	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	1	0	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	1	0	0	0	1	0	0	0	0	0

Description	Weekday PM Condition											
	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Trip Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Trip Distribution % Outbound Period 1 & 2	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Project Trip Volume Inbound - Period 1	0	0	0	0	0	0	2	0	0	0	0	0
Project Trip Volume Outbound - Period 1	0	0	2	0	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 1	0	0	2	0	0	0	2	0	0	0	0	0
Project Trip Volume Inbound - Period 2	0	0	0	0	0	0	2	0	0	0	0	0
Project Trip Volume Outbound - Period 2	0	0	2	0	0	0	0	0	0	0	0	0
Project Trip Volume Total - Period 2	0	0	2	0	0	0	2	0	0	0	0	0

3 Existing Roadway Conditions

This section describes the existing roadways and planned/programmed roadway improvements.

3.1 Existing Road & Intersection Configurations

There were two existing intersections within the Study Area. The following images show the existing intersection lane geometry and configurations.

Figure 3 - Existing Lane Geometry at Galena St. Alley & N. 1st Ave.



Figure 4 - Existing Lane Geometry at Galena St. Alley & N. 3rd Ave.



Planned & Programmed Road Improvements

There aren't any roadway improvements planned for the Study Area, so the evaluation was based on the existing lane geometry and configurations.

3.2 Existing Peak Hour Traffic Volumes

TurnKey Consulting obtained AM & PM peak period traffic counts at the two intersections on 8/5/25. Since these counts were obtained during the peak summer season, they were used as-is with no adjustment for peak season. The Appendix shows all the count data.

4 Future Peak Hour Traffic Volumes

There were two parts of this calculation: future background traffic and total traffic.

Future Background Traffic Growth Rates

The intersections in the Study Area are located in a part of town that is built out and there would be little chance that traffic would grow over time. Neither 1st Ave. nor 3rd Ave. cross the river to the north, which limits the possibility of future traffic growth. Therefore, the traffic growth factor for local roads was 1.0.

Total Future Traffic Volumes (Background + Project)

Future total traffic is the sum of Project trips and background traffic. The following Figures show the future total traffic volumes at each intersection for years 2026 and 2046. The Appendix includes the entire traffic set of volume calculations.

Figure 5 - Total Future Traffic Volumes – 2026 & 2046 AM

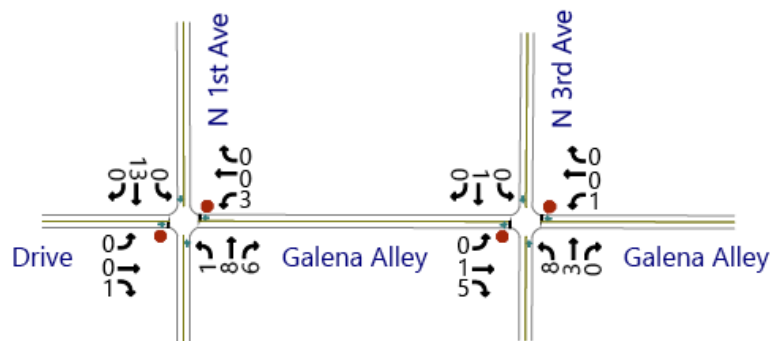


Figure 6 - Total Future Traffic Volumes – 2026 & 2046 PM



Traffic Volume Changes at Two Intersections on Main St.

The two following intersections were not evaluated in this study:

- E. Main St. & 1st Ave.
- E. Main St. & 3rd Ave.

They were not evaluated because the proposed increase in traffic volumes at these intersections would be insignificant. CDOT defines “significant” as a 20% increase in two-way traffic volumes on the approach to the mainline (the north legs of these two intersections). The traffic volume calculations show the following increase in traffic volumes at these two locations:

- E. Main St. & 1st Ave. – traffic increase on north leg due to Project trips = 8%
- E. Main St. & 3rd Ave. – traffic increase on north leg due to Project trips = 13%

5 Peak Hour Safety & Traffic Operations Analysis

This analysis included turn lane warrant evaluations, traffic operations calculations, and sight distance evaluation.

5.1 Turn Lane Warrant Evaluation

The intersections in the Study Area were evaluated to determine if turn lanes would be warranted to reduce vehicle conflicts points and crash potential.

5.1.1 Turn Lane Warrants and Requirements

The Town of Frisco doesn't have specific design criteria for turn lane warrants. The following tables show the deceleration turn lane warrants for the City of Grand Junction, which is generally similar in other communities. The City of Grand Junction does not have warrant criteria for acceleration lanes.

Table 5 – Turn Lane Warrant Criteria

Warrants for Right Turn Lanes

Two Lane Roadways					
Number of Peak Hour Turning Vehicles					
DDHV (vph)	35 MPH or less	40 MPH	45 MPH	50 MPH	55 MPH
200				73	35
300			120	41	24
400	200	200	50	30	19
500	150	125	35	25	16
600	75	50	25	20	14
800	50	30	15	15	11
1000	25	25	15	11	9
1200	20	20	15	9	8

DDHV – Directional Design Hourly Volume; volume of vehicles in the design hour using the through lane adjacent to which the right lanes is to be constructed.

Warrants for Left Turn Lanes		
Number of Peak Hour Turning Vehicles		
DDHV	30-35 MPH	40 + MPH
100	30	14
200	15	12
300 +	12	12

5.1.2 Intersection Turn Lane Evaluation

This section describes the turn lane evaluation for each intersection. The design speed was 25 mph.

Int. #1: Galena St. Alley & N. 1st Ave.

The alley is stop-controlled, and N. 1st Ave. is the mainline. Left turn and right turn lanes would not be warranted unless the northbound or southbound through movements had a peak hour volume above 100 DDHV (vph). In this case the highest through movement volume would be 20 vph. Therefore, turn lanes would not be warranted at this intersection.

Int. #2: Galena St. Alley & N. 3rd Ave.

The alley is stop-controlled, and N. 3rd Ave. is the mainline. Left turn and right turn lanes would not be warranted unless the northbound or southbound through movements had a peak hour volume above 100 DDHV (vph). In this case the highest through movement volume would be 8 vph. Therefore, turn lanes would not be warranted at this intersection.

5.2 Traffic Operations Analysis

The analysis used the latest version of Synchro Software to evaluate the existing and future traffic operations at the intersections and driveways within the study area. The concept of Level of Service (LOS) is used as a basis for computing combinations of roadway operating conditions and delay, which accommodate various level of traffic activity. By definition, six different LOS are used - A, B, C, D, E, and F. LOS "A" represents free-flow conditions with little to no delay. LOS "E" represents the maximum capacity of an intersection or roadway, where delay and/or congestion are severe.

- The peak hour factor was 0.92.
- This area is flat, so grade adjustments were not necessary.
- Truck percentages were 2%.

The following table shows the operation analysis results for the existing lane configurations at each intersection. The existing intersections operate at LOS A now with minimal vehicle delay and queuing. This continues for both intersections in the total traffic conditions.

Table 6 – Intersection LOS Summary for Peak Hours – 2026 & 2046

Location	Traffic Control	New Lane Geometry	Background	Total
Int 1 – Galena St. Alley & N. 1st Ave. – AM	<u>2-way Stop Control</u>			
Eastbound	Stop		A	A
Westbound	Stop		A	A
Northbound			A	A
Southbound			A	A
Critical Movement Delay (ave. sec/veh)			WB (8.9)	WB (8.9)
Int 1 – Galena St. Alley & N. 1st Ave. – PM	<u>2-way Stop Control</u>			
Eastbound	Stop		A	A
Westbound	Stop		A	A
Northbound			A	A
Southbound			A	A
Critical Movement Delay (ave. sec/veh)			WB (9.0)	WB (9.0)
Int 2 – Galena St. Alley & N. 3rd Ave. – AM	<u>2-way Stop Control</u>			
Eastbound	Stop		A	A
Westbound	Stop		A	A
Northbound			A	A
Southbound			A	A
Critical Movement Delay (ave. sec/veh)			WB (8.9)	WB (8.9)
Int 2 – Galena St. Alley & N. 3rd Ave. – PM	<u>2-way Stop Control</u>			
Eastbound	Stop		A	A
Westbound	Stop		A	A
Northbound			A	A
Southbound			A	A
Critical Movement Delay (ave. sec/veh)			WB (9.0)	WB (9.1)

5.3 Intersection Sight Distance and Spacing

Both of the north/south roads in the Study Area are straight and flat in the segments near the Galena St. Alley intersections. The design criteria was based on AASHTO requirements. At 20 mph, the required intersection sight distance is 325-ft. The sight views from the Galena St. Alley stop signs at both intersections are blocked by on-street parking, which is common in central business districts. However, drivers are allowed to move forward enough to see past parked vehicles, and then the sight distance to the adjacent intersections is clear.

Town design criteria indicate that 35-ft of clearance is required between driveways and adjacent roads. The proposed Project access would provide more than 35-ft spacing. Town design criteria indicate that 30-ft of clearance is required between adjacent driveways, and 15-ft from property lines. The proposed Project access would provide more than these spacing requirements.

6 Conclusions

The existing intersections operate at the best level of service “A” with very low delay in all analysis conditions. The Project would generate very low trip generation (<10 vph), which would have no impact to the intersections on Galena St. Alley. The proposed Project Access location would meet Town criteria.

Appendix

Project Trip Generation Calculations

Existing Traffic Count Summary

Traffic Volume Calculation Tables

Intersection Operational Analysis

Project Trip Generation Calculations

Graph Look Up

ITETripGen Web-based App

DATA SOURCE
 Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE

LAND USE GROUP
 (200-299) Residential

LAND USE
 215 - Single Family Attached Housing

LAND USE SUBCATEGORY
 All Sites

SETTING/LOCATION
 General Urban/Suburban

INDEPENDENT VARIABLE (IV)
 Dwelling Units

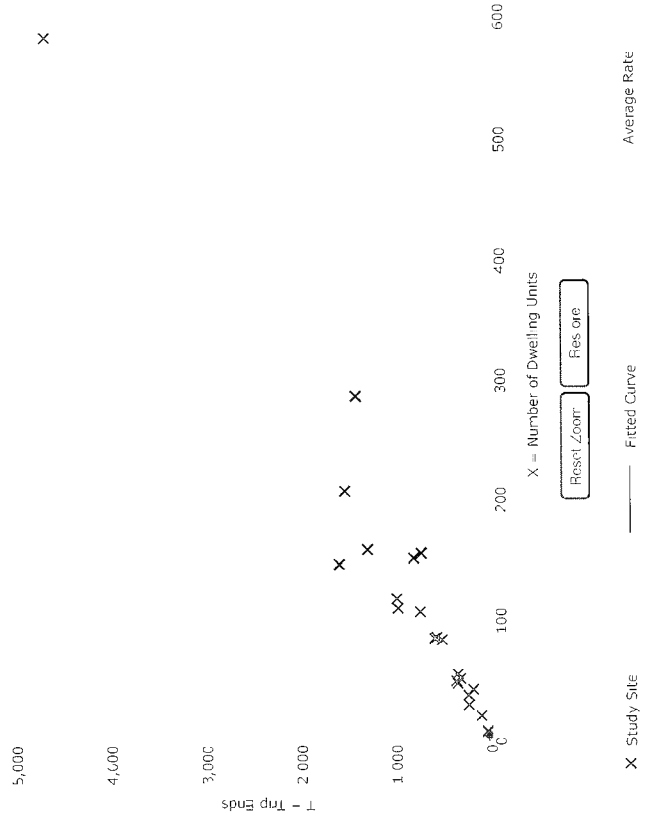
TIME PERIOD
 Weekday

TRIP TYPE
 Vehicle

ENTER IV VALUE TO CALCULATE TRIPS

Trip values are not estimations for so no methods are it y axis negative values

Data Plot and Equation



DATA STATISTICS

Land Use	Single Family Attached Housing (215) Click for Description and Data Plots
Independent Variable	Dwelling Units
Time Period	Weekday
Setting/Location	General Urban/Suburban
Trip Type	Vehicle
Number of Studies	22
Avg Num of Dwelling Units	120
Average Rate	7.20
Range of Rates	4.70 - 10.97
Standard Deviation	1.61
Fitted Curve Equation	$T = 7.62(X) - 0.48$
R^2	0.94
Directional Distribution	50% entering 50% exiting
Calculated Trip Ends	Average Rate 36 (Total) 18 (Entry) 18 (Exit)
Fitted Curve	No Available

Use the mouse wheel to Zoom Out or Zoom In
 Hover the mouse pointer on data points to view X and T values

SFR - weekday

Project Trip Generation Calculations



Graph Look Up

ITETripGen Manual 11th Ed

Data Plot and Equation

DATA STATISTICS

Query Filter

DATA SOURCE
Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE
215

LAND USE GROUP
(200-299) Residential

LAND USE
215 - Single-Family Attached Housing

LAND USE SUBCATEGORY
All Sites

SETTING/LOCATION
General Urban/Suburban

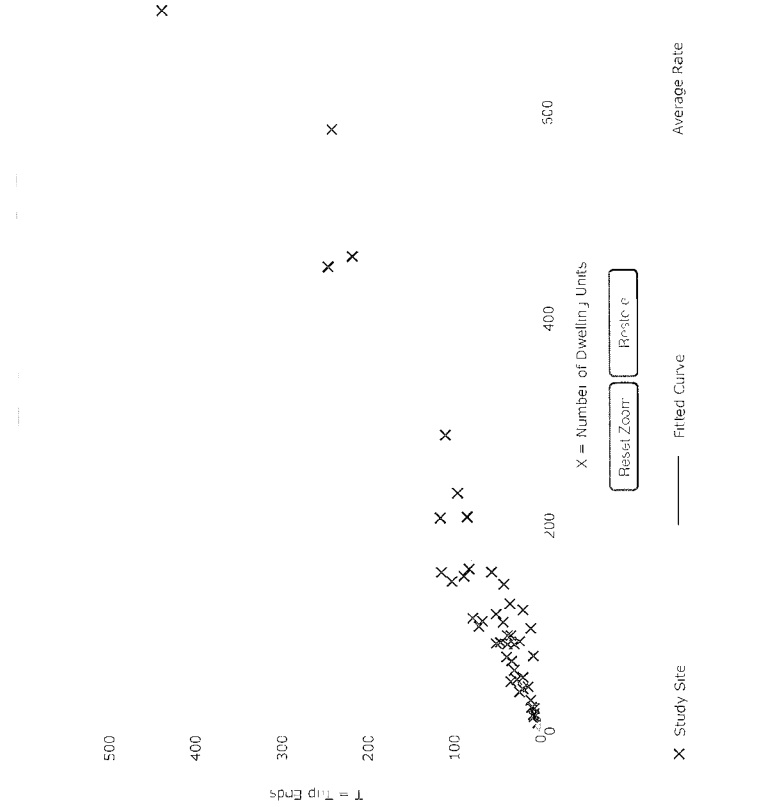
INDEPENDENT VARIABLE (IV)
Dwelling Units

TIME PERIOD
Weekday, Peak Hour of Adjacent St

TRIP TYPE
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS
5 Calculate

Trip ends are not estimated for some methods as it yields negative values



Land Use	Single-Family Attached Housing (215), Click for Description and Data Plots
Independent Variable	Dwelling Units
Time Period	Weekday Peak Hour of Adjacent Street Traffic One-Hour Between 7 and 9 a.m.
Setting/Location	General Urban/Suburban
Trip Type	Vehicle
Number of Studies	46
Avg. Num. of Dwelling Units	135
Average Rate	0.48
Range of Rates	0.12 - 0.74
Standard Deviation	0.14
Fitted Curve Equation	$T = 0.52(X^{0.70})$
R ²	0.92
Directional Distribution	25% entering, 75% exiting
Calculated Trip Ends	Average Rate 2 (Total) 1 (Entry) 1 (Exit)
Fitted Curve	Not Available

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

SFR - AM PK Hr.

Graph Look Up

11/11/2019 10:00:00 AM

Query

DATA SOURCE

SEARCH BY LAND USE CODE

LAND USE GROUP

LAND USE

LAND USE SUBCATEGORY

SETTING/LOCATION

INDEPENDENT VARIABLE (IV)

TIME PERIOD

TRIP TYPE

ENTER IV VALUE TO CALCULATE TRIPS

Trip ends are not used for some methods as it yields negative values

Data Plot and Equation

DATA STATISTICS

Land Use: Single-Family Attached Housing (215) (Click for Description and Data Points)

Independent Variable: Dwelling Units

Time Period: Weekday, Peak Hour of Adjacent St

Setting/Location: General Urban/Suburban

Trip Type: Vehicle

Number of Studies: 51

Avg Num of Dwelling Units: 136

Average Rate: 0.57

Range of Rates: 0.17 - 1.25

Standard Deviation: 0.18

Fitted Curve Equation: Y = 0.50(X) - 3.89

R-squared: 0.91

Directional Distribution: 55% entering, 45% exiting

Calculated Trip Ends: 3 (Total), 2 (Entry), 1 (Exit)

Average Rate: 3 (Total), 2 (Entry), 1 (Exit)

Fitted Curve: Not Available

Use the mouse wheel to Zoom Out or Zoom In
Hover the mouse pointer on data points to view X and T values

SFR - PM Peak hr

Query Filter

DATA SOURCE
Trip Generation Manual 1th Ed

SEARCH BY LAND USE CODE

876

LAND USE GROUP

800 830 Retail

LAND USE

876 Apparel Store

LAND USE SUBCATEGORY

Al Sites

SETTING/LOCATION

General Urban/Suburban

INDEPENDENT VARIABLE (IV)

1000 Sq Ft GFA

TIME PERIOD

Weekday

TRIP TYPE

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS

1

Calculate

Data Plot and Equation

Caution - Small Sample Size

DATA STATISTICS

Land Use
Apparel Store (876) General Description and Data

Plots

Independent Variable

1000 Sq Ft GFA

Time Period

Weekday

Setting/Location

General Urban/Suburban

Trip Type

Vehicle

Number of Studies

1

Avg 1000 Sq Ft GFA

5

Average Rate

66.40

Range of Rates

66.40 66.40

Standard Deviation

...

Fitted Curve Equation

Not Curve 1

R²

...

Directional Distribution

50% entering 50% exiting

Calculated Trip Ends

Average Rate 66.40 Total 33 (E trip) 33 (L trip)

Average Rate

X Study Site

Y = 1000 Sq Ft GFA

Reset Zoom

Reset X/Y

Use the mouse wheel to Zoom Out or Zoom In
Hover the mouse pointer on data points to view X and Y values

Retail - Weekday

DATA SOURCE: Trip Generation Manual 1 n Eq

SEARCH BY LAND USE CODE: 876

LAND USE GROUP: (800 899) Retail

LAND USE: 876 Apparel Store

LAND USE SUBCATEGORY: All Cities

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): 000 Sq Ft GFA

TIME PERIOD: Weekday Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 1

Calculate

Data Plot and Equation

10

9

6

4

2

0

Trip Ends

X Study Site

$$Y = 1000 \text{ Sq Ft GFA}$$

Reset Zoom

History

Average Rate

Caution - Small Sample Size

DATA STATISTICS

Land Use	Apparel Store (876)	Click for Description and Data
Peak	Independent Variable	1000 Sq Ft GFA
Time Period	Weekday	One Hour Between 7 and 8 a.m.
Setting/Location	General Urban/Suburban	
Trip Type	Vehicle	
Number of Studies	1	
Avg	1000 Sq Ft GFA	
Average Rate	1.00	
Range of Rates	1.00 - 1.00	
Standard Deviation	...	
Fitted Curve Equation	Not Given	
R ²	...	
Directional Distribution	80% entering, 20% exiting	
Calculated Trip Ends	Average Rate: 1 (Total) 1 (Entry) 0 (Exit)	

Use the mouse wheel to Zoom Out or Zoom In
Hover the mouse pointer on data points to view X and T values

Retail - AM Peak hr.

Graph Look Up

ITETripGen Web-based App

Filter

DATA SOURCE
Trip Generation Manual 1 th Ed

SEARCH BY LAND USE CODE
876

LAND USE GROUP
(800-699) Retail

LAND USE
876 Apparel Store

LAND USE SUBCATEGORY
All Sites

SETTING/LOCATION
General Urban/Suburban

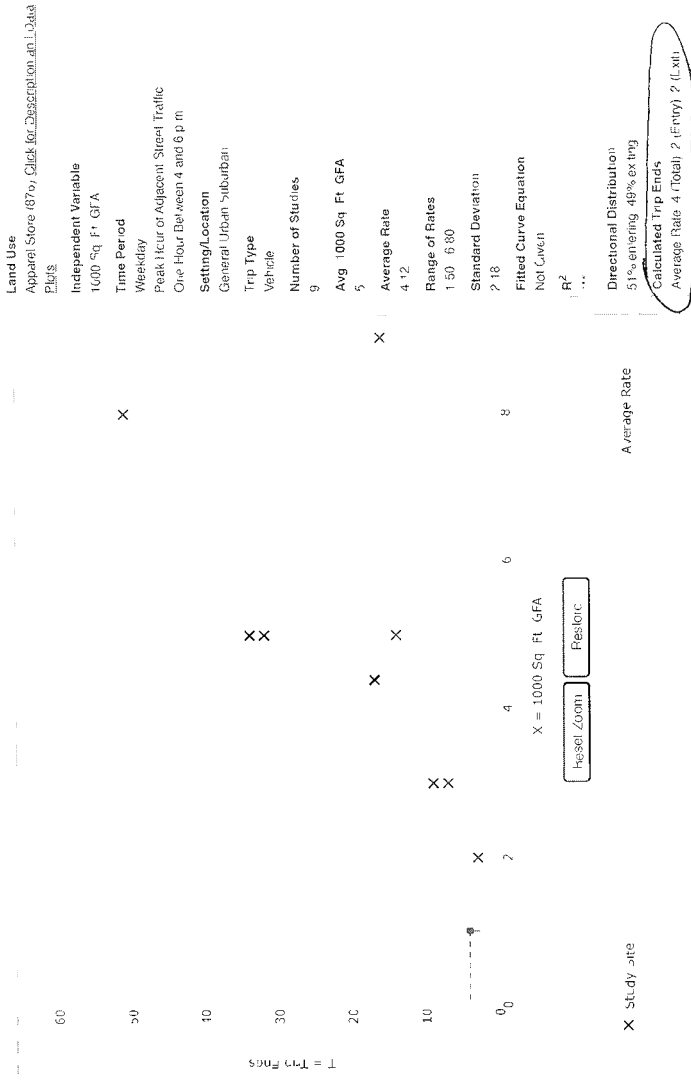
INDEPENDENT VARIABLE (IV)
1000 Sq Ft GFA

TIME PERIOD
Weekday Peak Hour of Adjacent Street Traffic

TRIP TYPE
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS
1 Calculate

Data Plot and Equation



Retail - PM peak

Existing Traffic Count Summary



ALL TRAFFIC DATA SERVICES

(303) 216 2439

www.alltrafficdata.net

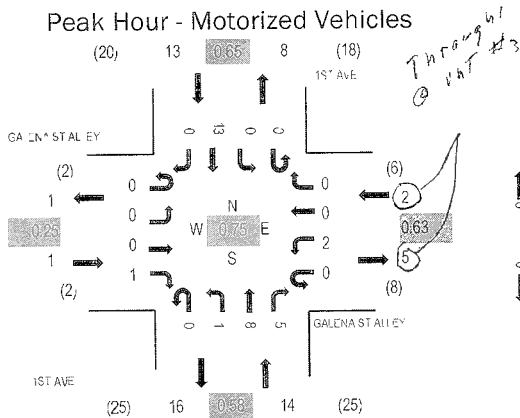
Location: 1 1ST AVE & GALENA ST ALLEY AM

Date: Tuesday, August 5, 2025

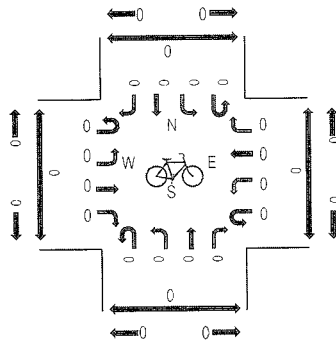
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:30 AM - 08:45 AM

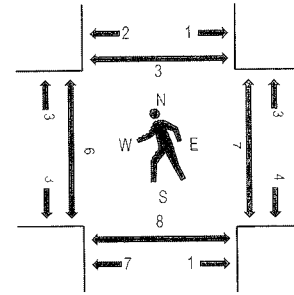
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses

Traffic Counts - Motorized Vehicles

Interval Start Time	GALENA ST ALLEY Eastbound				GALENA ST ALLEY Westbound				1ST AVE Northbound				1ST AVE Southbound				Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		Total	West	East	South	North	
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	0	7	23	2	1	2	0
7:15 AM	0	0	1	0	0	0	1	1	0	0	1	1	0	0	0	1	0	6	24	4	3	4	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	3	0	7	22	0	2	2	0
7:45 AM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	3	25	5	1	2	2
Count Total	0	0	1	1	0	4	1	1	0	1	17	7	0	0	20	0	53		17	14	18	6	
Peak Hour	0	0	0	1	0	2	0	0	0	1	8	5	0	0	13	0	30		6	7	8	3	

Existing Traffic Counts



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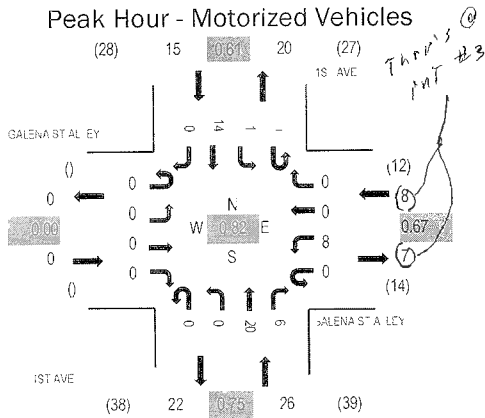
Location: 1 1ST AVE & GALENA ST ALLEY PM

Date: Tuesday, August 5, 2025

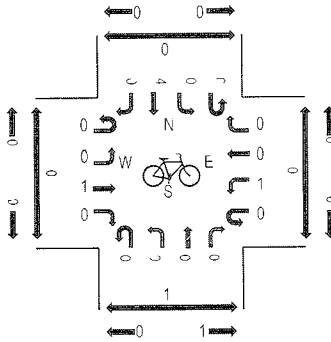
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:15 PM - 04:30 PM

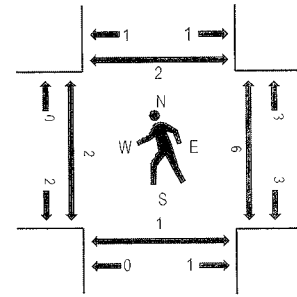
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses

Traffic Counts - Motorized Vehicles

Interval Start Time	GALENA ST ALLEY Eastbound				GALENA ST ALLEY Westbound				1ST AVE Northbound				1ST AVE Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right	U Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	2	0	5	47	1	2	1	0
5:15 PM	0	0	0	0	0	2	0	0	0	0	2	3	0	0	7	0	14		0	0	0	1
5:30 PM	0	0	0	0	0	0	0	1	0	0	3	1	0	0	1	0	6		0	2	3	0
5:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	5		0	0	0	1
Count Total	0	0	0	0	0	11	0	1	0	0	26	13	0	1	27	0	79		3	10	5	4
Peak Hour	0	0	0	0	0	8	0	0	0	0	20	6	0	1	14	0	49		2	6	1	2



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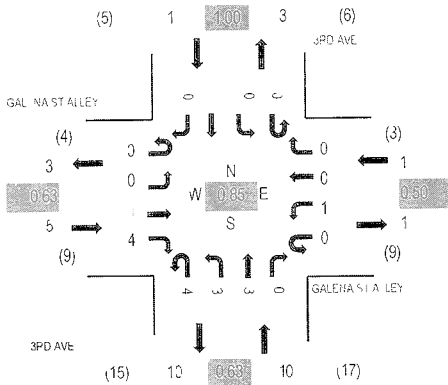
Location: 2 3RD AVE & GALENA ST ALLEY AM

Date: Tuesday, August 5, 2025

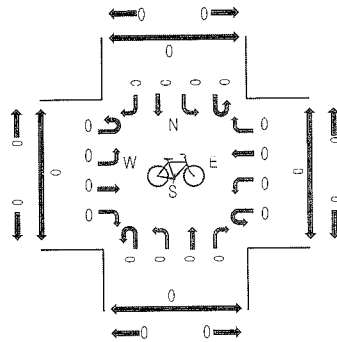
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:00 AM - 07:15 AM

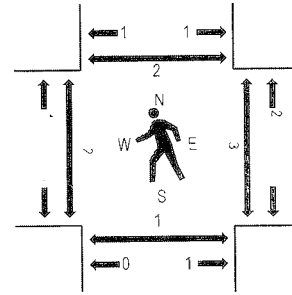
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses

Traffic Counts - Motorized Vehicles

Interval Start Time	GALENA ST ALLEY Eastbound				GALENA ST ALLEY Westbound				3RD AVE Northbound			3RD AVE Southbound				Rolling Hour	Pedestrian Crossings					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru		Right	Total	West	East	South	North
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	17	2	1	0	0
8:15 AM	0	0	1	1	0	1	0	0	0	0	0	1	0	0	1	0	5		2	1	3	0
8:30 AM	0	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	4		0	3	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	3	2	0	0	1	0	6		0	6	0	0
Count Total	0	0	4	5	0	3	0	0	4	3	6	4	0	1	3	1	34		6	14	4	2
Peak Hour	0	0	1	4	0	1	0	0	4	3	3	0	0	0	1	0	17		2	3	1	2



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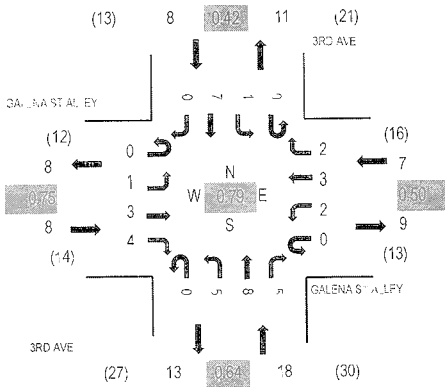
Location: 2 3RD AVE & GALENA ST ALLEY PM

Date: Tuesday, August 5, 2025

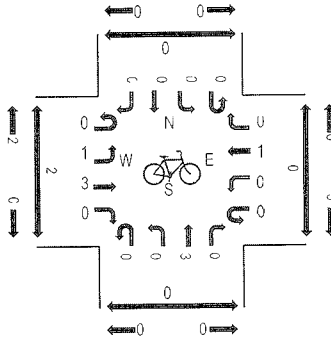
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

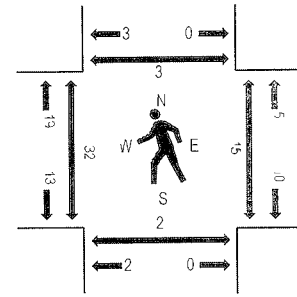
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses

Traffic Counts - Motorized Vehicles

Interval Start Time	GALENA ST ALLEY Eastbound				GALENA ST ALLEY Westbound				3RD AVE Northbound				3RD AVE Southbound				Rolling		Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North	
4:00 PM	0	0	0	2	0	2	0	0	0	0	3	1	0	0	0	0	8	39	1	2	1	0	
4:15 PM	0	1	0	0	0	3	2	0	0	0	2	0	0	0	2	0	10	38	6	1	1	0	
5:30 PM	0	0	1	1	0	1	1	0	0	1	1	1	0	0	2	0	9		3	4	2	0	
5:45 PM	0	0	1	0	0	0	0	0	0	0	3	0	0	0	1	0	5		3	6	3	0	
Count Total	0	2	5	7	0	8	6	2	0	6	17	7	0	1	12	0	73		45	28	9	3	
Peak Hour	0	1	3	4	0	2	3	2	0	5	8	5	0	1	7	0	41		32	15	2	3	

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Traffic Volume Calculation Tables

General Inputs

Version 8/12/25
Smoothing (yes/no)

Project 121 E Main Mixed Use

Trip Generation - Phase 1

Driveway	Weekday	AM	Weekday	PM	Sat
Enter in	2		4		
Exit out	1		3		
Off Site intersection non-driveway					
Enter in	AM		PM		Sat
Exit out	2		4		
	1		3		

Trip Generation - Phase 2

Driveway	Weekday	AM	Weekday	PM	Sat
Enter in	2		4		
Exit out	1		3		
Off Site intersection non-driveway					
Enter in	AM		PM		Sat
Exit out	2		4		
	1		3		

Growth Factors

Period	Year	Factor
1	2026	varies
2	2046	varies
3		

Intersection Names

INT 1	Galena St Alle & N 1st Ave	0	0
INT 2	Galena St Alle & N 3rd ave	2	0
INT 3	Galena St Alle & Proect Access	0	0
INT 4		0	0
INT 5		0	0
INT 6		0	0
INT 7		0	0
INT 8		0	0
INT 9		0	0
INT 10		0	0
INT 11		0	0
INT 12		0	0
INT 13		0	0
INT 14		0	0
INT 15		0	0

Study Times

Condition	Weekday AM	Weekday PM	Not used
Condition 1			
Condition 2			
Condition 3			

Traffic Volume Calculation

INT 1 Galena St Alley & N. 1st Ave. 121 E. Main Mixed Use

Weekday AM Condition

Description	Eastbound				Westbound				Northbound				Southbound			
	L	TH	R	L	TH	R	L	TH	TH	R	L	TH	L	TH	R	
Existing Volumes Au 2025 for Period 1 & 2	0	0	1	2	0	0	1	8	8	5	0	13	0	13	0	
Adjusted volumes - seasonal Period 1 & 2	0	0	1	2	0	0	1	8	8	5	0	13	0	13	0	
Tri Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	
Tri Distribution % Outbound Period 1 & 2	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Drawn Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Project Tri Volume Inbound - Period 1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Project Tri Volume Outbound - Period 1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Project Tri Volume Total - Period 1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	
Project Tri Volume Inbound - Period 2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Project Tri Volume Outbound - Period 2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Project Tri Volume Total - Period 2	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	
Future Back round Volume - Period 1	0	0	1	2	0	0	1	8	8	5	0	13	0	13	0	
Future Back round Volume - Period 2	0	0	1	2	0	0	1	8	8	5	0	13	0	13	0	
Total Future Volume - Period 1	0	0	1	3	0	0	1	8	8	6	0	13	0	13	0	
Total Future Volume - Period 2	0	0	1	3	0	0	1	8	8	6	0	13	0	13	0	

Weekday PM Condition

Description	Eastbound				Westbound				Northbound				Southbound			
	L	TH	R	L	TH	R	L	TH	TH	R	L	TH	L	TH	R	
Existing Volumes Au 2025 for Period 1 & 2	0	0	0	8	0	0	0	20	20	6	1	14	0	14	0	
Adjusted volumes - seasonal Period 1 & 2	0	0	0	8	0	0	0	20	20	6	1	14	0	14	0	
Tri Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	
Tri Distribution % Outbound Period 1 & 2	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Project Tri Volume Inbound - Period 1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
Project Tri Volume Outbound - Period 1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
Project Tri Volume Total - Period 1	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	
Project Tri Volume Inbound - Period 2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
Project Tri Volume Outbound - Period 2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
Project Tri Volume Total - Period 2	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	
Future Back round Volume - Period 1	0	0	0	8	0	0	0	20	20	6	1	14	0	14	0	
Future Back round Volume - Period 2	0	0	0	8	0	0	0	20	20	6	1	14	0	14	0	
Total Future Volume - Period 1	0	0	0	10	0	0	0	20	20	8	1	14	0	14	0	
Total Future Volume - Period 2	0	0	0	10	0	0	0	20	20	8	1	14	0	14	0	

2/2

INT 2 Galena St Alley & N. 3rd ave. 121 E. Main Mixed Use

Description	Weekday AM Condition									
	Eastbound					Westbound				
	L	TH	R	L	TH	R	L	TH	R	TH
Existin Volumes Au 2025 for Period 1 & 2	0	1	4	1	0	0	7	3	0	1
Adjusted volumes - seasonal Period 1 & 2	0	1	4	1	0	0	7	3	0	1
Tri Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Tri Distribution % Outbound Period 1 & 2	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%
Drvevwa Enter "1" Yes, or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0
Pro'ect Tn Volume Inbound - Period 1	0	0	0	0	0	0	1	0	0	0
Pro'ect Tn Volume Outbound - Period 1	0	0	1	0	0	0	0	0	0	0
Pro'ect Tn Volume Total - Period 1	0	0	1	0	0	0	1	0	0	0
Pro'ect Tn Volume Inbound - Period 2	0	0	0	0	0	0	1	0	0	0
Pro'ect Tn Volume Outbound - Period 2	0	0	1	0	0	0	0	0	0	0
Pro'ect Tn Volume Total - Period 2	0	0	1	0	0	0	1	0	0	0
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Future Back round Volume - Period 1	0	1	4	1	0	0	7	3	0	1
Future Back round Volume - Period 2	0	1	4	1	0	0	7	3	0	1
Total Future Volume - Period 1	0	1	5	1	0	0	8	3	0	1
Total Future Volume - Period 2	0	1	5	1	0	0	8	3	0	1

Description	Weekday PM Condition									
	Eastbound					Westbound				
	L	TH	R	L	TH	R	L	TH	R	TH
Existin Volumes Au 2025 for Period 1 & 2	1	3	4	2	3	2	5	8	5	7
Adjusted volumes - seasonal Period 1 & 2	1	3	4	2	3	2	5	8	5	7
Tri Distribution % Inbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%
Tri Distribution % Outbound Period 1 & 2	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%
Pro'ect Tn Volume Inbound - Period 1	0	0	0	0	0	0	2	0	0	0
Pro'ect Tn Volume Outbound - Period 1	0	0	2	0	0	0	0	0	0	0
Pro'ect Tn Volume Total - Period 1	0	0	2	0	0	0	2	0	0	0
Pro'ect Tn Volume Inbound - Period 2	0	0	0	0	0	0	2	0	0	0
Pro'ect Tn Volume Outbound - Period 2	0	0	2	0	0	0	0	0	0	0
Pro'ect Tn Volume Total - Period 2	0	0	2	0	0	0	2	0	0	0
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Future Back round Volume - Period 1	1	3	4	2	3	2	5	8	5	7
Future Back round Volume - Period 2	1	3	4	2	3	2	5	8	5	7
Total Future Volume - Period 1	1	3	6	2	3	2	7	8	5	7
Total Future Volume - Period 2	1	3	6	2	3	2	7	8	5	7

W/4

INT 3 Galena St Alley & Project Access 121 E. Main Mixed Use

Weekday AM Condition

Descri tion	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existin Volumes Au 2025 for Period 1 & 2	0	5	0	0	2	0	0	0	0	0	0	0
Ad usted volumes - seasonal Period 1 & 2	0	5	0	0	2	0	0	0	0	0	0	0
Tn Distribution % Inbound Period 1 & 2	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Tn Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%	0%
Dnvewa Enter "1" Yes or "0" No Period 1 & 2	0	0	0	0	0	0	0	0	0	0	0	0
Pro ect Tn Volume Inbound - Period 1	0	0	1	1	0	0	0	0	0	0	0	0
Pro ect Tn Volume Outbound - Period 1	0	0	0	0	0	0	1	0	1	0	0	0
Pro ect Tn Volume Total Period 1	0	0	1	1	0	0	1	0	1	0	0	0
Pro ect Tn Volume Inbound - Period 2	0	0	1	1	0	0	0	0	0	0	0	0
Pro ect Tn Volume Outbound - Period 2	0	0	0	0	0	0	1	0	1	0	0	0
Pro ect Tn Volume Total - Period 2	0	0	1	1	0	0	1	0	1	0	0	0
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Future Back round Volume - Period 1	0	5	0	0	2	0	0	0	0	0	0	0
Future Back round Volume - Period 2	0	5	0	0	2	0	0	0	0	0	0	0
Total Future Volume - Period 1	0	5	1	1	2	0	1	0	1	0	0	0
Total Future Volume - Period 2	0	5	1	1	2	0	1	0	1	0	0	0

Weekday PM Condition

Descri tion	Eastbound			Westbound			Northbound			Southbound		
	L	TH	R	L	TH	R	L	TH	R	L	TH	R
Existin Volumes Au 2025) for Period 1 & 2	0	7	0	0	8	0	0	0	0	0	0	0
Ad usted volumes - seasonal Period 1 & 2	0	7	0	0	8	0	0	0	0	0	0	0
Tn Distribution % Inbound Period 1 & 2	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%
Tn Distribution % Outbound Period 1 & 2	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%	0%
Pro ect Tn Volume Inbound - Period 1	0	0	2	2	0	0	0	0	0	0	0	0
Pro ect Tn Volume Outbound - Period 1	0	0	0	0	0	0	2	0	2	0	0	0
Pro ect Tn Volume Total Period 1	0	0	2	2	0	0	2	0	2	0	0	0
Pro ect Tn Volume Inbound - Period 2	0	0	2	2	0	0	0	0	0	0	0	0
Pro ect Tn Volume Outbound - Period 2	0	0	0	0	0	0	2	0	2	0	0	0
Pro ect Tn Volume Total Period 2	0	0	2	2	0	0	2	0	2	0	0	0
Growth Factor Period 1	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Growth Factor Period 2	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Future Back round Volume - Period 1	0	7	0	0	8	0	0	0	0	0	0	0
Future Back round Volume - Period 2	0	7	0	0	8	0	0	0	0	0	0	0
Total Future Volume - Period 1	0	7	2	2	8	0	2	0	2	0	0	0
Total Future Volume - Period 2	0	7	2	2	8	0	2	0	2	0	0	0

Intersection Operational Analysis

Intersection

Int Delay, s/veh 1 1

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations												
Traffic Vol, veh/h	0	0	1	2	0	0	1	8	5	0	13	0
Future Vol, veh/h	0	0	1	2	0	0	1	8	5	0	13	0
Conflicting Peds, #/hr10	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	2	0	0	1	9	5	0	14	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	45	50	34	48	48	31	24	0	0	24	0	0
Stage 1	24	24	-	24	24	-	-	-	-	-	-	-
Stage 2	21	26	-	24	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5184	0.183	3.183	5.184	0.183	3.3182	2.18	-	-	2.218	-	-
Pot Cap-1 Maneuve	957	841	1039	953	844	1043	1591	-	-	1591	-	-
Stage 1	994	875	-	994	876	-	-	-	-	-	-	-
Stage 2	998	873	-	994	875	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuve	938	824	1019	933	827	1023	1575	-	-	1575	-	-
Mov Cap-2 Maneuve	938	824	-	933	827	-	-	-	-	-	-	-
Stage 1	984	867	-	984	867	-	-	-	-	-	-	-
Stage 2	988	864	-	983	867	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Ctrl Dly, s/v	8.54		8.87		0.52		0
HCM LOS	A		A				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	119	-	-	1019	933	1575	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.002	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	8.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

INT #1

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Intersection

Int Delay, s/veh 1.6

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	0	0	20	6	1	14	0
Future Vol, veh/h	0	0	0	8	0	0	0	20	6	1	14	0
Conflicting Peds, #/hr	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	9	0	0	0	22	7	1	15	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	59	66	35	62	62	45	25	0	0	38	0	0
Stage 1	27	27	-	35	35	-	-	-	-	-	-	-
Stage 2	32	38	-	27	27	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5184	0.183	3.5184	0.183	3.5184	0.183	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	937	825	1038	932	828	1025	1589	-	-	1572	-	-
Stage 1	990	872	-	981	866	-	-	-	-	-	-	-
Stage 2	985	863	-	990	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	919	809	1018	914	812	1005	1574	-	-	1557	-	-
Mov Cap-2 Maneuver	919	809	-	914	812	-	-	-	-	-	-	-
Stage 1	980	863	-	971	858	-	-	-	-	-	-	-
Stage 2	975	855	-	980	863	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	0		8.98		0		0.49	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1574	-	-	-	914	120	-	-
HCM Lane V/C Ratio	-	-	-	-	0.010	0.001	-	-
HCM Ctrl Dly (s/v)	0		-	0	9	7.3	0	-
HCM Lane LOS	A		-	A	A	A	A	-
HCM 95th %tile Q(veh)	0		-	-	0	0	-	-

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Intersection

Int Delay, s/veh 1.3

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations	↕			↕			↕			↕		
Traffic Vol, veh/h	0	0	1	3	0	0	1	8	6	0	13	0
Future Vol, veh/h	0	0	1	3	0	0	1	8	6	0	13	0
Conflicting Peds, #/hr10	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	3	0	0	1	9	7	0	14	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	45	52	34	48	48	32	24	0	0	25	0	0
Stage 1	24	24	-	24	24	-	-	-	-	-	-	-
Stage 2	21	27	-	24	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	957	840	1039	952	843	1042	1591	-	-	1589	-	-
Stage 1	994	875	-	994	875	-	-	-	-	-	-	-
Stage 2	998	872	-	994	875	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	938	823	1019	933	827	1022	1575	-	-	1574	-	-
Mov Cap-2 Maneuver	938	823	-	933	827	-	-	-	-	-	-	-
Stage 1	984	867	-	984	866	-	-	-	-	-	-	-
Stage 2	988	863	-	983	867	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8.54		8.87		0.49		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	111	-	-	1019	933	1574	-	-
HCM Lane V/C Ratio	0.001	-	-	0.001	0.003	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.5	8.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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Synchro 12 Light Report

Intersection

Int Delay, s/veh 1 8

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	0	0	20	8	1	14	0
Future Vol, veh/h	0	0	0	10	0	0	0	20	8	1	14	0
Conflicting Peds, #/hr	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage-#	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	11	0	0	0	22	9	1	15	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	59	68	35	63	63	46	25	0	0	40	0	0
Stage 1	27	27	-	36	36	-	-	-	-	-	-	-
Stage 2	32	40	-	27	27	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5184	0.183	3.5184	0.183	3.5184	0.183	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	937	823	1038	931	827	1023	1589	-	-	1569	-	-
Stage 1	990	872	-	979	865	-	-	-	-	-	-	-
Stage 2	985	861	-	990	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	919	807	1018	913	811	1004	1574	-	-	1554	-	-
Mov Cap-2 Maneuver	919	807	-	913	811	-	-	-	-	-	-	-
Stage 1	980	863	-	970	857	-	-	-	-	-	-	-
Stage 2	975	853	-	980	863	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Ctrl Dly, s/v	0		8.99		0		0.49
HCM LOS	A		A				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1574			-	-	913	120	-
HCM Lane V/C Ratio	-			-	-	0.012	0.001	-
HCM Ctrl Dly (s/v)	0			-	0	9	7.3	0
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

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Synchro 12 Light Report

Intersect on

Int Delay, s/veh 6 1

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	4	1	0	0	7	3	0	0	1	0
Future Vol, veh/h	0	1	4	1	0	0	7	3	0	0	1	0
Conflicting Peds, #/hr10	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	4	1	0	0	8	3	0	0	1	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	40	40	21	40	40	23	11	0	0	13	0	0
Stage 1	11	11	-	28	28	-	-	-	-	-	-	-
Stage 2	28	28	-	12	11	-	-	-	-	-	-	-
Critical Hdwy	7 12	6 52	6 22	7.12	6.52	6.22	4 12	-	-	4 12	-	-
Critical Hdwy Stg 1	6.12	5 52	-	6 12	5 52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6 12	5 52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3 5184	0183	3.183	5184	0183	3182	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	965	853	1056	964	853	1053	1608	-	-	1605	-	-
Stage 1	1010	886	-	989	871	-	-	-	-	-	-	-
Stage 2	989	871	-	1009	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	942	832	1036	936	832	1033	1593	-	-	1590	-	-
Mov Cap-2 Maneuver	942	832	-	936	832	-	-	-	-	-	-	-
Stage 1	1000	878	-	974	859	-	-	-	-	-	-	-
Stage 2	974	859	-	994	878	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	8 66		8.85		5 09		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1260	-	-	988	936	1590	-	-
HCM Lane V/C Ratio	0.005	-	-	0.006	0.001	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.7	8.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

INT #2

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Synchro 12 Light Report

Intersection

Int Delay, s/veh 4.4

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	4	2	3	2	5	8	5	1	7	0
Future Vol, veh/h	1	3	4	2	3	2	5	8	5	1	7	0
Conflicting Peds, #/hr10	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt F ow	1	3	4	2	3	2	5	9	5	1	8	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	51	55	28	54	52	31	18	0	0	24	0	0
Stage 1	20	20	-	32	32	-	-	-	-	-	-	-
Stage 2	31	35	-	21	20	-	-	-	-	-	-	-
Critical Hdwy	7 12	6.52	6 22	7 12	6.52	6 22	4 12	-	-	4 12	-	-
Critical Hdwy Stg 1	6 12	5 52	-	6.12	5 52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5 52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3 5184	0.0183	3 3183	5184	0.0183	3.3182	2.218	-	-	2 218	-	-
Pot Cap-1 Maneuver	848	836	1048	945	839	1043	1599	-	-	1591	-	-
Stage 1	999	879	-	984	868	-	-	-	-	-	-	-
Stage 2	985	866	-	997	879	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	821	817	1028	915	820	1023	1584	-	-	1575	-	-
Mov Cap-2 Maneuver	821	817	-	915	820	-	-	-	-	-	-	-
Stage 1	989	870	-	971	857	-	-	-	-	-	-	-
Stage 2	967	855	-	979	870	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB
HCM Ctrl Dly, s/v	8.93		9 05		2.02		0 91
HCM LOS	A		A				

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	464	-	-	925	898	225	-	-
HCM Lane V/C Ratio	0 003	-	-	0 009	0 008	0 001	-	-
HCM Ctrl Dly (s/v)	7.3	0		8 9	9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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Synchro 12 Light Report

Intersection

Int Delay, s/veh 6.3

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR

Lane Configurations	↕			↕			↕			↕		
Traffic Vol, veh/h	0	1	5	1	0	0	8	3	0	0	1	0
Future Vol, veh/h	0	1	5	1	0	0	8	3	0	0	1	0
Conflicting Peds, #/hr	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	5	1	0	0	9	3	0	0	1	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	42	42	21	42	42	23	11	0	0	13	0	0
Stage 1	11	11	-	31	31	-	-	-	-	-	-	-
Stage 2	31	31	-	12	11	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5184	0.183	3.5184	0.183	3.5184	0.183	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	962	850	1056	961	850	1053	1608	-	-	1605	-	-
Stage 1	1010	886	-	986	870	-	-	-	-	-	-	-
Stage 2	986	870	-	1009	886	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	938	830	1036	931	830	1033	1593	-	-	1590	-	-
Mov Cap-2 Maneuver	938	830	-	931	830	-	-	-	-	-	-	-
Stage 1	1000	878	-	971	857	-	-	-	-	-	-	-
Stage 2	971	857	-	993	878	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	8.64			8.87			5.29			0		
HCM LOS	A			A								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	995	931	1590	-	-
HCM Lane V/C Ratio	0.005	-	-	0.007	0.001	-	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.6	8.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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Intersection

Int Delay, s/veh 4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	3	6	2	3	2	7	8	5	1	7	0
Future Vol, veh/h	1	3	6	2	3	2	7	8	5	1	7	0
Conflicting Peds, #/hr10	0	10	10	0	10	10	0	10	10	0	10	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	3	7	2	3	2	8	9	5	1	8	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	55	59	28	58	56	31	18	0	0	24	0	0
Stage 1	20	20	-	37	37	-	-	-	-	-	-	-
Stage 2	36	39	-	21	20	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	942	832	1048	938	835	1043	1599	-	-	1591	-	-
Stage 1	999	879	-	979	864	-	-	-	-	-	-	-
Stage 2	980	862	-	997	879	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	814	812	1028	906	814	1023	1584	-	-	1575	-	-
Mov Cap-2 Maneuver	814	812	-	906	814	-	-	-	-	-	-	-
Stage 1	989	870	-	965	852	-	-	-	-	-	-	-
Stage 2	960	850	-	977	870	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	8.87	9.07	2.55	0.91
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	585	-	-	941	892	225	-	-
HCM Lane V/C Ratio	0.005	-	-	0.012	0.009	0.001	-	-
HCM Ctrl Dly (s/v)	7.3	0	-	8.9	9.1	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

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