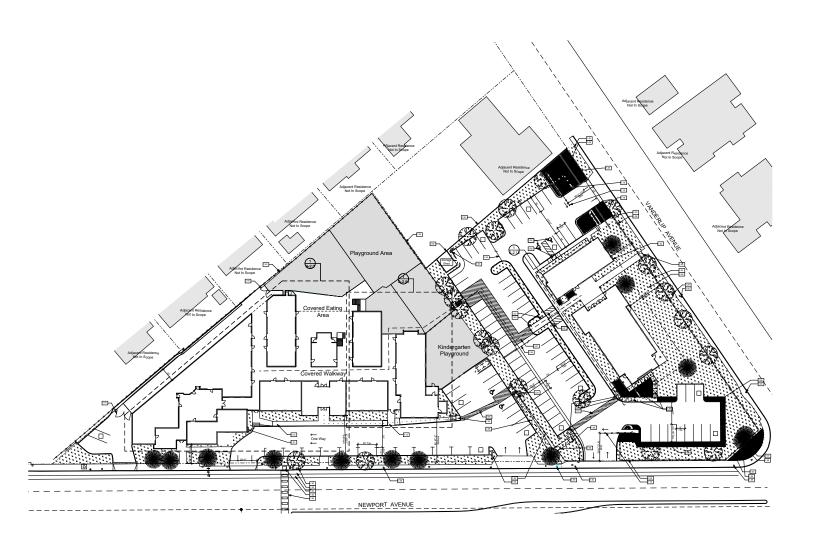
## FAIRMONT PRIVATE SCHOOL NORTH TUSTIN CAMPUS EXPANSION TRAFFIC IMPACT ANALYSIS County of Orange, California







# FAIRMONT PRIVATE SCHOOL NORTH TUSTIN CAMPUS EXPANSION TRAFFIC IMPACT STUDY County of Orange, California

#### **Prepared for:**

FAIRMONT PRIVATE SCHOOLS 157 W. Mable Street Anaheim, CA 92802

#### Prepared by:

RK ENGINEERING GROUP, INC. 1401 Dove Street, Ste. 540 Newport Beach, CA 92660

> Justin Tucker, P.E. Michael Torres, E.I.T.



October 3, 2023

## **Table of Contents**

Sect	tion		Page
1.0	Intro	oduction	1-1
	1.1	Purpose of Report & Study Objectives	1-1
	1.2	Site Location & Project Description	1-1
	1.3	Traffic Study Area & Analysis Scenarios	1-2
2.0		lysis Methodologies, Performance Criteria, & esholds of Significance	2-1
	2.1	Study Intersection Peak Hour Level of Service Analysis Methodology	2-1
		2.1.1 Signalized Study Intersections	2-1
		2.1.2 Unsignalized Study Intersections	2-2
	2.2	Analysis Parameters	2-3
	2.3	LOS Performance Criteria & Thresholds for Requiring LOS Improvements	2-4
		2.3.1 Signalized Study Intersections	2-4
		2.3.2 Unsignalized Study Intersections	2-4
3.0	Exist	ting Conditions & Circulation System	3-1
	3.1	Existing Traffic Controls & Intersection Geometrics	3-1
	3.2	Existing Traffic Volumes	3-1
4.0	Proje	ect Traffic Volumes	4-1
	4.1	Project Traffic Conditions	4-1
		4.1.1 Project Trip Generation	4-1
		4.1.2 Project Trip Distribution & Assignment	4-2
		4.1.3 Modal Split	4-2
		4.1.4 Project Peak Hour Traffic Volumes	4-2
	4.2	Existing Plus Project Conditions Traffic Volumes	4-3
	4.3	Background Traffic	4-3
		4.3.1 Method of Projection	4-3
		4.3.2 Cumulative Projects Traffic Volumes	4-3



## **Table of Contents**

Sect	tion		Page
	4.4	Project Opening Year (2025) Without Project Conditions Traffic Volumes	4-4
	4.5	Project Opening Year (2025) With Project Conditions Traffic Volumes	4-4
5.0	CA N	ЛUTCD Signal Warrant Analysis	5-1
6.0	Stud	ly Intersection Peak Hour LOS Analysis	6-1
	6.1	Existing Conditions Level of Service	6-1
	6.2	Existing Plus Project Conditions Level of Service	6-1
	6.3	Project Opening Year (2025) Without Project Conditions Level of Service	6-2
	6.4	Project Opening Year (2025) With Project Conditions Level of Service	6-3
7.0	CEQ	A Vehicle Miles Traveled (VMT) Analysis	7-1
	7.1	Vehicle Miles Traveled (VMT) Screening Criteria	7-1
8.0	Sum	mary of Findings and Recommendations	8-1
	8.1	Site Location & Project Description	8-1
	8.2	Traffic Study Area & Analysis Scenarios	8-1
	8.3	Project Trip Generation	8-1
	8.4	CA MUTCD Signal Warrant Analysis Summary	8-2
	8.5	Study Intersection Peak Hour LOS Analysis Summary	8-2
	8.6	CEOA Vehicle Miles Traveled (VMT) Analysis Summary	8-3



## **List of Exhibits**

#### **Exhibits**

Location Map	1-1
Site Plan	1-2
Typical Drop-Off/Pick-Up Circulation Plan	1-3
Existing Traffic Controls & Intersection Geometrics	3-1
Existing Peak Hour Traffic Volumes	3-2
Outbound Project Trip Distribution	4-1
Inbound Project Trip Distribution	4-2
Project Peak Hour Traffic Volumes	4-3
Existing Plus Project Peak Hour Traffic Volumes	4-4
Cumulative Projects Location Map	4-5
Cumulative Projects Peak Hour Traffic Volumes	4-6
Project Opening Year (2025) Without Project Peak Hour Traffic Volumes	4-7
Project Opening Year (2025) With Project Peak Hour Traffic Volumes	4-8

## **List of Tables**

### **Tables**

ICU Intersection LOS & V/C Ratio Ranges	2-1
HCM Intersection LOS & Delay Ranges	2-2
Existing Project Trip Generation Rates & Proposed Trip Generation Forecast	4-1
CA MUTCD Peak Hour Signal Warrant Analysis Summary	5-1
Study Intersection LOS Analysis Summary – Existing & Existing Plus Project Conditions	6-1
Study Intersection LOS Analysis Summary – Opening Year (2025) Without & With Project Conditions	6-2

## **List of Appendices**

## **Appendices**

Traffia Carret Marilala arta	٨
Traffic Count Worksheets	А
24-Hour Driveway Counts	В
Detailed CA MUTCD Traffic Signal Warrant Analysis Worksheets	C
Existing Conditions Level of Service Calculation Worksheets	D
Existing Plus Project Conditions Level of Service Calculation Worksheets	Ε
Project Opening Year (2025) Without Project Conditions Level of Service Calculation Worksheets	F
Project Opening Year (2025) With Project Conditions  Level of Service Calculation Worksheets	G

#### 1.0 Introduction

#### 1.1 Purpose of Report & Study Objectives

The purpose of this traffic impact analysis and report is to evaluate and assess the proposed expansion of the Fairmont Private School's North Tustin Campus Project (hereinafter referred to as "project") from a traffic and circulation perspective. Furthermore, this analysis will determine whether the proposed project will significantly impact the environment.

This study has been conducted pursuant to the *County of Orange Transportation Implementation Manual*, dated September 2021, and the California Environmental Quality Act (CEQA) requirements. This study evaluates the potential traffic and vehicle miles traveled (VMT) impacts associated with the proposed project in accordance with the thresholds of significance.

#### 1.2 Site Location & Project Description

The Fairmont Private School's North Tustin Campus is located at 12381-12561 Newport Avenue, Santa Ana. Representatives of Fairmont Private School aim to enhance its facilities by integrating the First Church of Christ Scientist Church and Sunday School buildings which Fairmont has recently purchased and are situated at the northern end of the property. The expansion plans entail converting the existing church into a performing arts use, remodeling existing buildings into six (6) additional classrooms, and accommodating approximately 100 more students, equivalent to a 31% increase in enrollment. Consequently, the maximum student enrollment will reach 420 students.

Furthermore, a fence will be added around the perimeter of the entire school & church site with two (2) gates, one (1) within the parking lot at Vanderlip Avenue entrance and one (1) within the parking lot at Newport Avenue Entrance. These new entry gates will be continuously open during peak drop-off and pick-up times to prevent cars from queuing on Vanderlip Avenue or Newport Avenue and closed during school instruction hours.

Under a previous parking license agreement, Fairmont Private School shared the existing parking lot with the adjacent church to utilize the church's parking lot for parking, and as an alternative, student drop-off/pick-up during weekdays when school is in session.

Hence, vehicular access to the project site is currently provided, and will continue to be provided, via the following:

#### School Driveway #1

o Right-in/Right-out unsignalized driveway located slightly south of the Newport Avenue at La Colina Drive intersection.



#### • School Driveway #2

 Full-egress only signalized driveway located at the intersection of Newport Avenue at La Colina Drive.

#### School Driveway #3

 Right-in only unsignalized driveway located along Newport Avenue, slightly north of the Newport Avenue at La Colina Drive intersection.

#### • <u>Church Driveway #1</u>

o Right-in/Right-out unsignalized driveway located along Newport Avenue, slightly north of School Driveway #3.

#### Church Driveway #2

o Full-Access unsignalized driveway along Vanderlip Avenue.

Exhibit 1-1 shows the location map of the proposed project and identifies all project access driveways. Exhibit 1-2 shows the proposed site plan.

Exhibit 1-3 shows the existing drop-off/pick-up circulation plan per the previous parking license agreement between the Fairmont campus and church. The circulation plan for student drop-off/pick-up is not expected to change.

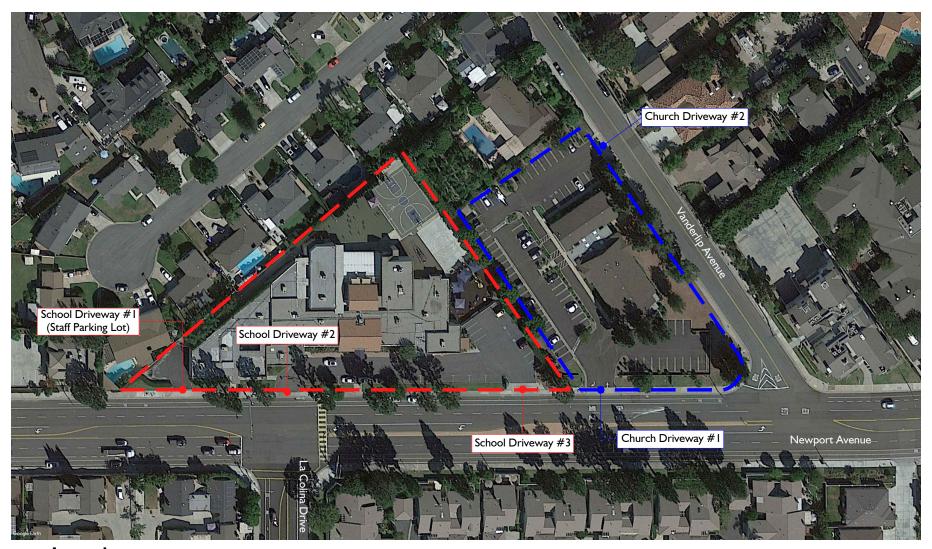
#### 1.3 Traffic Study Area & Analysis Scenarios

The County of Orange TIA Guidelines do not provide criteria for establishing study area intersections. As such, the following six (6) study intersections have been selected for evaluation:

- 1. Newport Avenue (NS) at School Driveway No. 1 (EW);
- 2. Newport Avenue (NS) at School Driveway No. 2 / La Colina Drive (EW);
- 3. Newport Avenue (NS) at School Driveway No. 3 (EW);
- 4. Newport Avenue (NS) at Church Driveway No. 1 (EW);
- 5. Newport Avenue (NS) at Vanderlip Avenue (EW);
- 6. Church Driveway No. 2 (NS) at Vanderlip Avenue (EW).



## Exhibit 1-1 **Location Map**



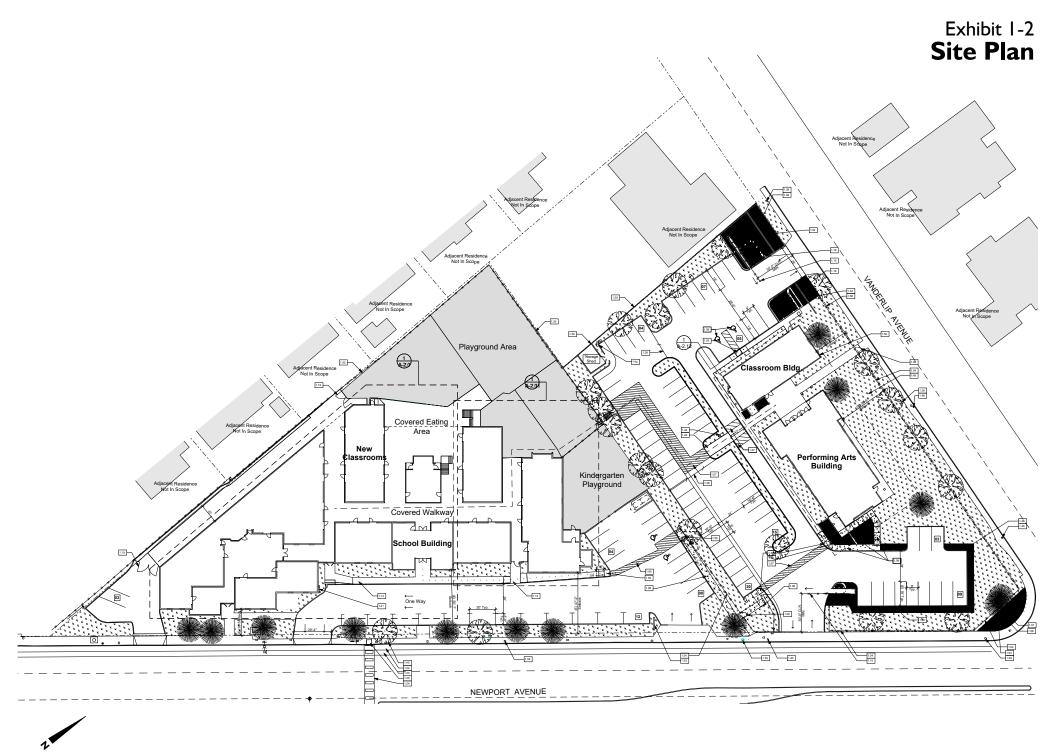
#### Legend:



= = Existing School Site

= = Existing Church Site (Proposed School Expansion)







## **Typical Drop-Off/Pick-Up Circulation Plan**



#### Legend:



= Ingress Circulation Path

= Drop-Off/Pick-Up Zone

= Egress Circulation Path



The analysis evaluates traffic conditions of the study area under the following scenarios during the weekday drop-off (AM) (7:00 AM to 9:00 AM) and weekday pick-up (PM) (2:00 PM to 4:00 PM) peak hours:

- Existing Conditions;
- Existing Plus Project Conditions;
- Project Opening Year (2025) Without Project Conditions; and
- Project Opening Year (2025) With Project Conditions.

# 2.0 Analysis Methodologies, Performance Criteria, & Thresholds of Significance

This section of the report presents the methodologies utilized to perform the traffic analyses summarized in this report in accordance with the County of Orange requirements. This section also discusses the agency-established applicable performance criteria and thresholds of significance for the study facilities

#### 2.1 Study Intersection Peak Hour Level of Service Analysis Methodology

In accordance with the *County of Orange Transportation Implementation Manual*, dated September 2021, the Intersection Capacity Utilization (ICU) and Highway Capacity Manual 7th Edition (HCM 7) methodologies are utilized as the technical guides in the evaluation of signalized and unsignalized intersection traffic operations, respectively.

#### 2.1.1 Signalized Study Intersections

The methodology used to assess the operation of signalized study area intersections is the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the traffic volume experienced by the intersection to the capacity of the intersection. The resulting volume-to-capacity (V/C) ratio represents the portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

Table 2-1 below shows the level of service (LOS) criteria based on the ICU methodology.

Table 2-1
ICU Intersection LOS & V/C Ratio Ranges

LOS	V/C Ratio					
LOS	Signalized Intersections					
А	0.000 – 0.600					
В	0.601 – 0.700					
С	0.701 – 0.800					
D	0.801 – 0.900					
E	0.901 – 1.000					
F	> 1.000					

#### 2.1.2 Unsignalized Study Intersections

The methodology used to assess the operation of unsignalized study area intersections is the Highway Capacity Manual 7th Edition (HCM 7) methodology. The HCM defines level of service (LOS) as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

The definitions of level of service for interrupted flow (flow regulated by the existence of traffic control devices) are:

- LOS A (Free Flow / Insignificant Delays) describes traffic operations in which progression is
  exceptionally favorable or the cycle length is extremely short. Generally, LOS A operations for
  signalized intersections tend to result in most vehicles arriving during the green phase and
  traveling through the intersection without stopping.
- **LOS B** (Stable Operation / Minimal Delays) describes traffic operations in which progression slightly diminishes but is still considered highly favorable and the cycle length is short. Vehicles stop more often causing a marginal increase in average delay.
- **LOS C** (Stable Operation / Acceptable Delays) describes traffic operations in which progression is favorable and the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Many vehicles still past through the intersection but a significant number of vehicles are stopping. Average delay is fair.
- **LOS D** (Approaching Unstable / Tolerable Delays) describes traffic operations in which progression is ineffective and/or cycle length is long. Considerable amount of vehicles stop and individual cycle failures are noticeable. Average delay is adequate.
- **LOS E** (Unstable Operation / Significant Delays) describes traffic operations in which progression is unfavorable and the cycle length is exceedingly long. Individual cycle failures are frequent. Average delay is high.
- **LOS F** (Forced Flow / Excessive Delays) describes traffic operations in which progression is extremely poor and the cycle length is extremely long. Most cycles fail to clear the queue. Average delay is vast.



For intersections with stop control on the minor approach only, the calculation of LOS is dependent on the occurrence of gaps in the free-flow traffic movement of the major street, and the LOS is determined based on the worst stop-controlled approach from the minor street or an individual movement from the major street, whichever is worse.

Table 2-2 shows the level of service criteria based on the HCM 7 methodology.

Table 2-2
HCM Intersection LOS & Delay Ranges

LOS	Control Delay per Vehicle (Seconds)					
	Unsignalized Intersections					
А	0.00 - 10.00					
В	10.01 - 15.00					
С	15.01 - 25.00					
D	25.01 - 35.00					
Е	35.01 - 50.00					
F	>50.00					

#### 2.2 Analysis Parameters

The levels of service of the study area intersections are evaluated utilizing the PTV Vistro analysis software. The ICU analysis for signalized intersections utilizes the following parameters:

- Saturation Flow Rate: A saturation flow value of 1,700 vehicles per lane per hour for all lanes.
- <u>Clearance Interval Factor</u>: A clearance interval factor of 5% (0.05).
- Peak Hour Factor: A peak hour factor of 1.00.

Existing peak hour factors for the five (5) unsignalized study intersections have been calculated based upon the manual turning movement counts collected at the project driveway intersections.

#### 2.3 LOS Performance Criteria & Thresholds for Requiring LOS Improvements

Per the County of Orange Transportation Implementation Manual, dated September 2021, the minimum acceptable LOS for the six (6) study intersections is LOS D or better.

The following subsections identify when intersection improvements measures are required for signalized and unsignalized study intersections.

#### 2.3.1 Signalized Study Intersections

Signalized study intersections identified to operate deficiently (i.e., LOS E or worse) will require feasible improvement measures to restore traffic operations to acceptable levels of service (i.e., LOS D or better).

#### 2.3.2 Unsignalized Study Intersections

An operational improvement would be required if the study determines that either section a) or sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an LOS D or better to an LOS E or worse.

#### OR

b) The project adds delay to an intersection that is already projected to operate deficiently under without project traffic conditions (LOS E or worse).

#### AND

c) The intersection meets the peak hour traffic signal warrants outlined in the Manual of Uniform Traffic Control Devices (CA MUTCD).

#### 3.0 Existing Conditions & Circulation System

This section of the report provides a discussion on existing study area conditions and traffic volumes.

#### 3.1 Existing Traffic Controls & Intersection Geometrics

A field review of the study area was conducted. Exhibit 3-1 identifies the existing roadway conditions within the study area. The number of through traffic lanes for existing roadways and the existing intersection controls are identified. The type of traffic control and number of lanes at an intersection are key inputs for the calculation of level of service (LOS).

#### 3.2 Existing Traffic Volumes

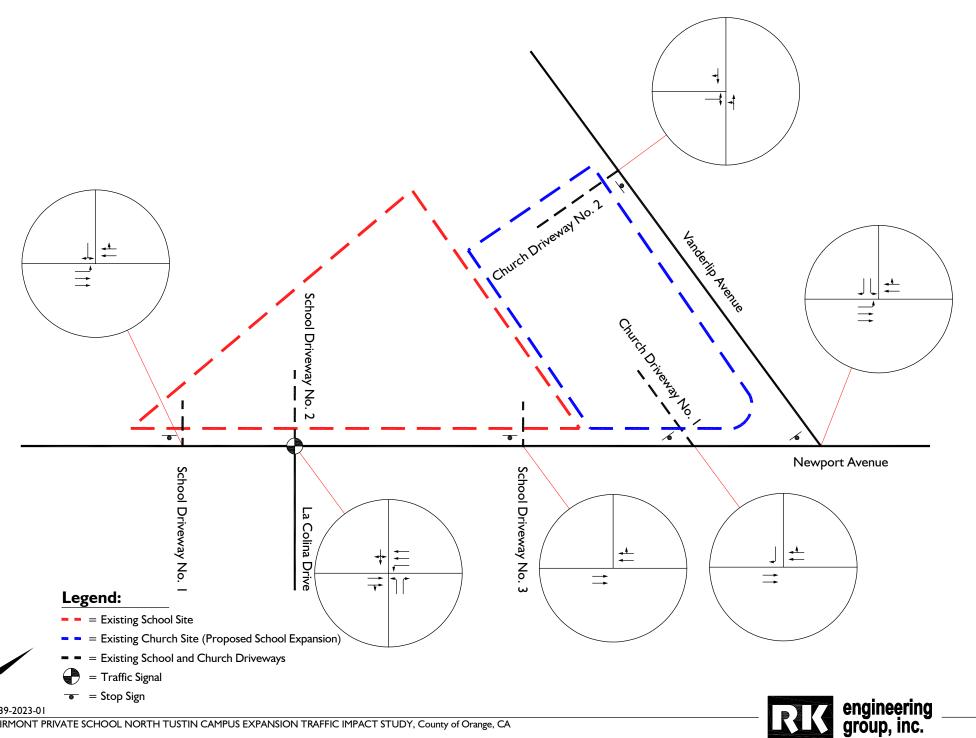
Existing Conditions intersection LOS calculations are based upon manual peak period turning movement counts collected in August 2023 during typical weekday conditions. The traffic counts were collected during typical dry weather conditions and typical non-holiday times. The specific peak hour (4 consecutive 15-minute intervals) traffic volumes were determined by counting each two-hour peak period and using the highest hour within each two-hour peak period. The peak periods evaluated as part of this study are the following:

- Weekday drop-off (AM) peak period: 7:00 AM to 9:00 AM on a typical weekday.
- Weekday pick-up (PM) peak period: 2:00 PM to 4:00 PM on a typical weekday.

Existing weekday AM and PM peak hour traffic volumes at the study intersections are shown on Exhibit 3-2.

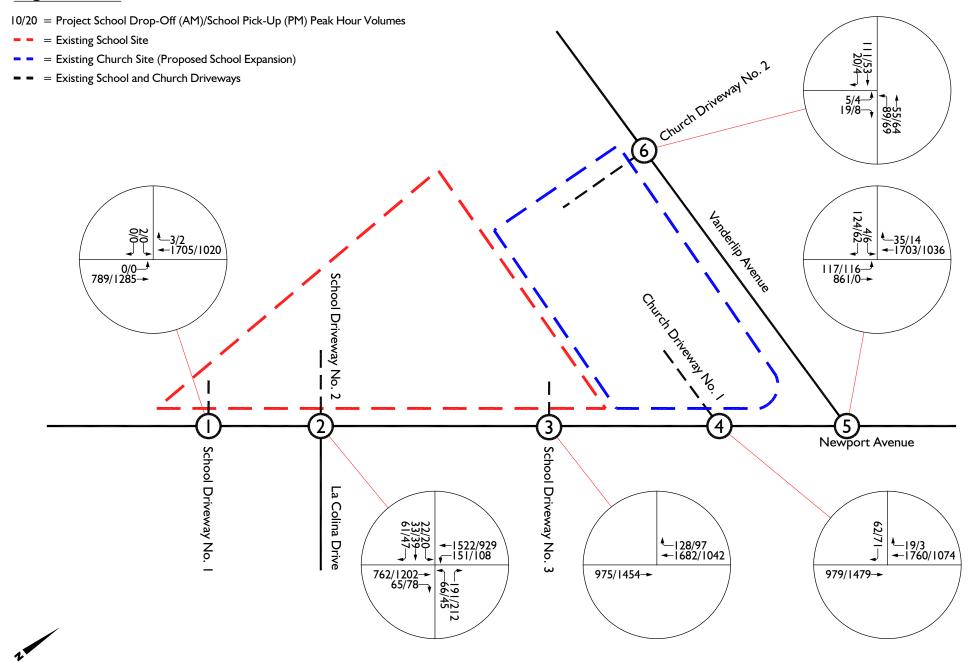
The traffic count worksheets are included in Appendix A.

## **Existing Traffic Control & Intersection Geometrics**



## **Existing Peak Hour Traffic Volumes**

#### Legend:





#### 4.0 Project Traffic Volumes

This section of the report provides a discussion on methodologies utilized to derive future traffic volumes for the study area.

#### 4.1 Project Traffic Conditions

#### 4.1.1 Project Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a development. The trip generation for the project is based upon the specific land uses that have been planned for this development.

Trip generation is typically estimated based on the trip generation rates from the latest Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). This publication provides a comprehensive evaluation of trip generation rates for a variety of land uses. However, since the project site is currently operational, the trip generation rates utilized for the proposed project have been derived based upon existing 24-hour driveway counts collected at both project site driveways on a typical Thursday (May 18, 2023).

The derived trip generation rates are based on the inbound and outbound driveway trips from the highest hour (4 consecutive 15-minute intervals) within the peak periods counted. The specific peak hours which generated the most traffic from the existing site and were utilized to derive the trip rates are the following:

7:30 AM – 8:30 AM Weekday School Drop-Off (AM) Peak Hour

• 2:45 PM – 3:45 PM Weekday School Pick-Up (PM) Peak Hour

The top portion of Table 4-1 shows the existing peak hour and daily trip generation of the site as well as the calculated existing trip generation rates based on the existing student enrollment of 320 students, which have been based upon the existing 24-hour driveway counts collected.

The bottom portion of Table 4-1 shows the trip generation for the proposed student enrollment increase utilizing the aforementioned existing trip generation rates. The proposed enrollment expansion of 100 students is forecast to generate approximately 394 weekday daily trips which include approximately 138 (77 inbound and 61 outbound) weekday drop-off (AM) peak hour trips and approximately 107 (53 inbound and 54 outbound) weekday pick-up (PM) peak hour trips. The total future enrollment of 420 students is forecast to generate approximately 1,655 weekday daily trips which include approximately 579 weekday drop-off (AM) peak hour trips and approximately 450 weekday pick-up (PM) peak hour trips.



Table 4-1
Existing Project Trip Generation Rates & Proposed Trip Generation Forecast<sup>1</sup>

	Quantity <sup>2</sup>	Units <sup>3</sup>	Weekday							
Land Use			AM Drop-Off			PM Pick-Up			Deile	
			In	Out	Total	In	Out	Total	Daily	
	Existing Trip Generation Forecast									
Private School [a]	320	STU	245	196	441	171	172	343	1,261	
Existing Trip Generation Rates										
Private School	320	STU	0.77	0.61	1.38	0.53	0.54	1.07	3.94	
Proposed Trip Generation Forecast of 100 Student Increase										
Private School [b]	100	STU	77	61	138	53	54	107	394	
Proposed Trip Generation Forecast of Full Future Enrollment (After 100 Student Increase)										
Private School [a] + [b]	420	STU	322	257	579	224	226	450	1,655	

<sup>&</sup>lt;sup>1</sup> Source: 24-hour driveway counts collected on Thursday, May 18, 2023 at all existing school and church driveways.

<sup>&</sup>lt;sup>2</sup> Existing trip rates are based on the current enrollment of 320 students during the 2022-2023 school year.

 $<sup>^{3}</sup>$  STU = Students.

It should be noted that the 138 weekday drop-off (AM) peak hour trips and 107 weekday pick-up (PM) peak hour trips represent total two-way trips (i.e. inbound and outbound trips). Only 77 new vehicles are expected to arrive during the weekday drop-off (AM) peak hour) and only 53 new vehicles are expected to arrive during the weekday pick-up (PM) peak hour.

The existing 24-hour driveway counts are included in Appendix B.

#### 4.1.2 Project Trip Distribution & Assignment

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site and the proximity to the regional freeway system. The directional orientation of traffic was determined by evaluating existing and proposed land uses and highways within the study area. The inbound/outbound splits at each driveway was determined based on the existing traffic counts.

The outbound and inbound project trip distributions for the proposed project have been developed and are shown in Exhibit 4-1 and Exhibit 4-2, respectively.

#### 4.1.3 Modal Split

Modal split denotes the proportion of traffic generated by a project that would use any of the transportation modes, namely buses, cars, bicycles, motorcycles, trains, carpools, etc. The traffic-reducing potential of public transit and other modes is significant. However, the traffic projections in this study are conservative as modal split reductions to the traffic volumes via the use of public transit and alternative transportation are not applied to the projections. With the implementation of transit services and provision of alternative transportation ideas and incentives, the automobile traffic demand can be reduced significantly.

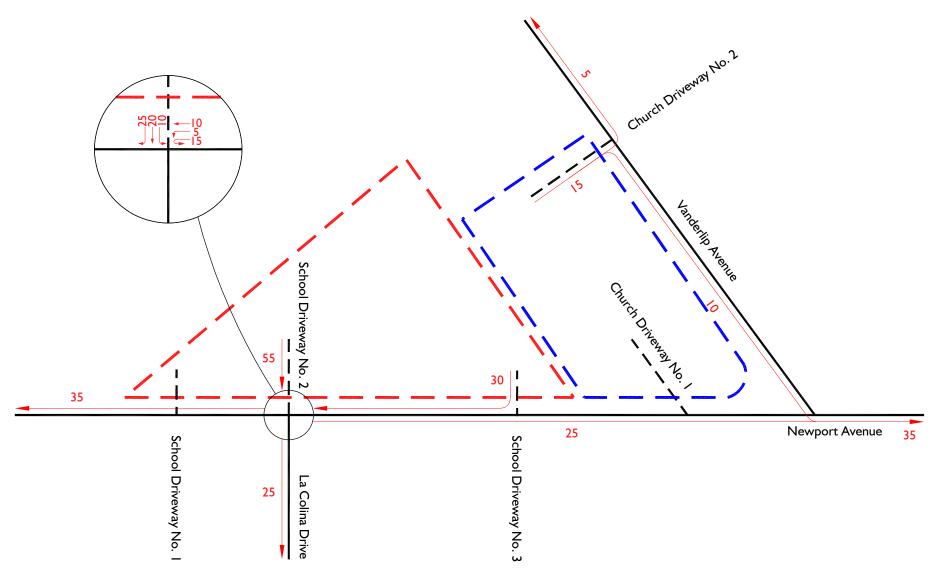
#### 4.1.4 Project Peak Hour Traffic Volumes

The assignment of project traffic to the adjoining roadway system is based upon the project's trip generation, trip distribution, and arterial highway and local street systems that would be in place by the time of initial occupancy of the site.

Project school drop-off (AM) and school pick-up (PM) peak hour traffic volumes at the study intersections are shown on Exhibit 4-3.

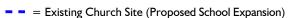


## **Outbound Project Trip Distribution**



#### Legend:

= = Existing School Site

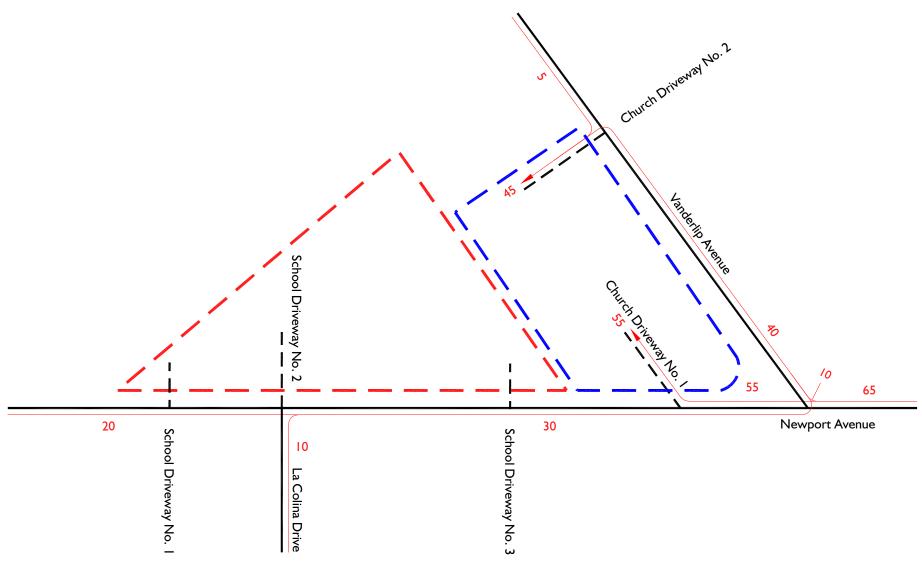


■ ■ Existing School and Church Driveways

10 = Percent From Project



## **Inbound Project Trip Distribution**



#### Legend:



= = Existing Church Site (Proposed School Expansion)

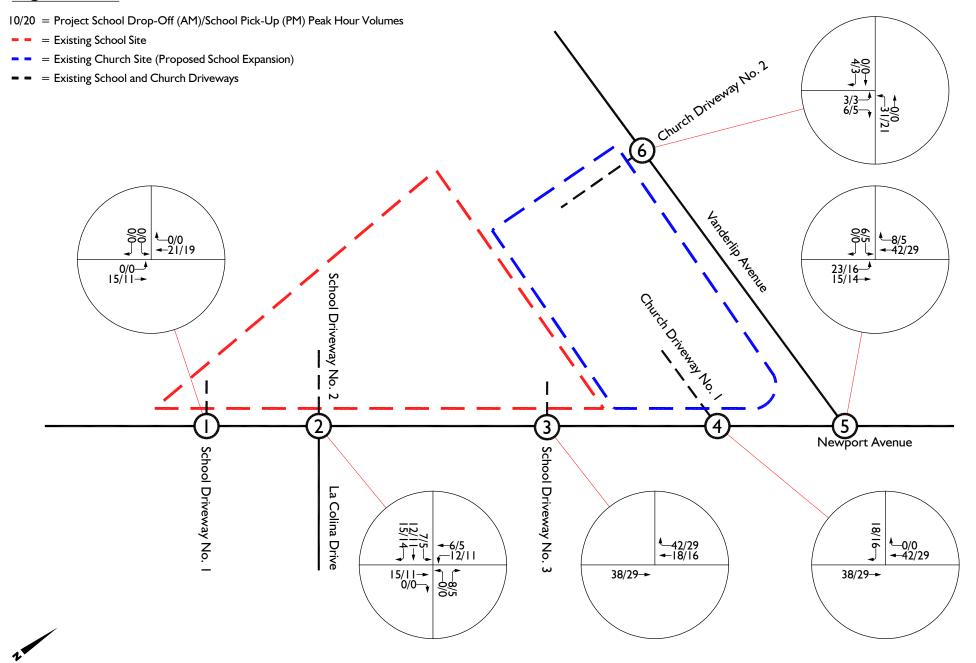
■ ■ Existing School and Church Driveways

10 = Percent to Project



## **Project Peak Hour Traffic Volumes**

#### Legend:



#### 4.2 Existing Plus Project Conditions Traffic Volumes

Existing Plus Project Conditions traffic volumes consist of the summation of existing traffic volumes and project traffic volumes. Existing Plus Project Conditions school drop-off (AM) and school pick-up (PM) peak hour traffic volumes at the study intersections are shown on Exhibit 4-4.

#### 4.3 Background Traffic

#### 4.3.1 Method of Projection

To assess future conditions, project traffic is combined with existing traffic and area-wide/ambient growth. As directed by County of Orange staff, to account for area-wide/ambient growth in the study area, a linear annual growth rate of one percent (1%) per year has been applied to the existing (2023) traffic volumes over a 2-year period to opening year (2025) conditions (i.e., 2% total growth).

#### 4.3.2 Cumulative Projects Traffic Volumes

Information on future projects in the vicinity of the study area has been provided by the County of Orange staff respectively for inclusion in this analysis and is shown in Table 4-2.

Table 4-2 shows the land uses, and daily and peak hour trip generation for the nearby cumulative projects provided by the County of Orange.

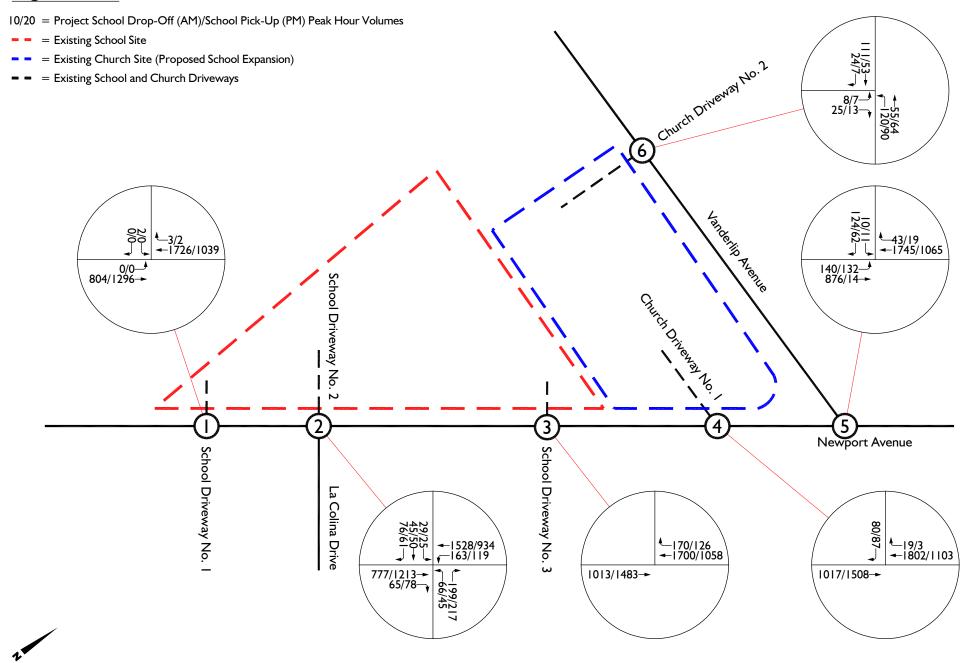
A location map of the cumulative projects is shown in Exhibit 4-5. Cumulative projects traffic volumes are shown in Exhibit 4-6.

In reality, some of the cumulative projects may be downsized, may have already been partially constructed, or may not be developed by project opening year 2025. In addition, many of the related projects have been or will be subject to a variety of mitigation measures that will reduce the potential environmental impacts associated with those projects. However, those mitigation measures have not been taken into account in projecting the environmental impact of the related projects.

Therefore, the cumulative analyses set forth below are conservative and could result in greater impacts than anticipated. Additionally, the analysis utilizes a growth rate of one percent (1%) per year for project opening year (2025) conditions, which would already capture and account for most projects in the area. The growth rate methodology is considered conservative since it is applied to all movements in all the study intersections.

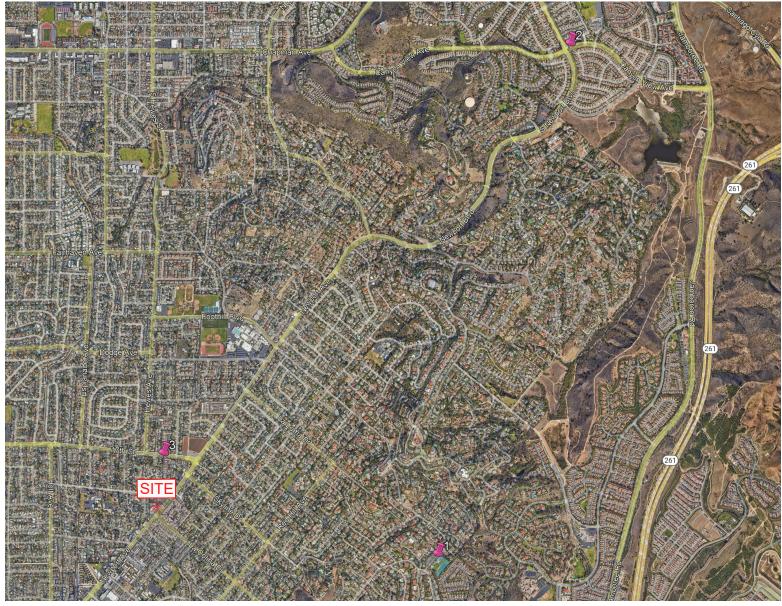
## **Existing Plus Project Peak Hour Traffic Volumes**

#### Legend:





## **Cumulative Projects Location Map**



Legend:

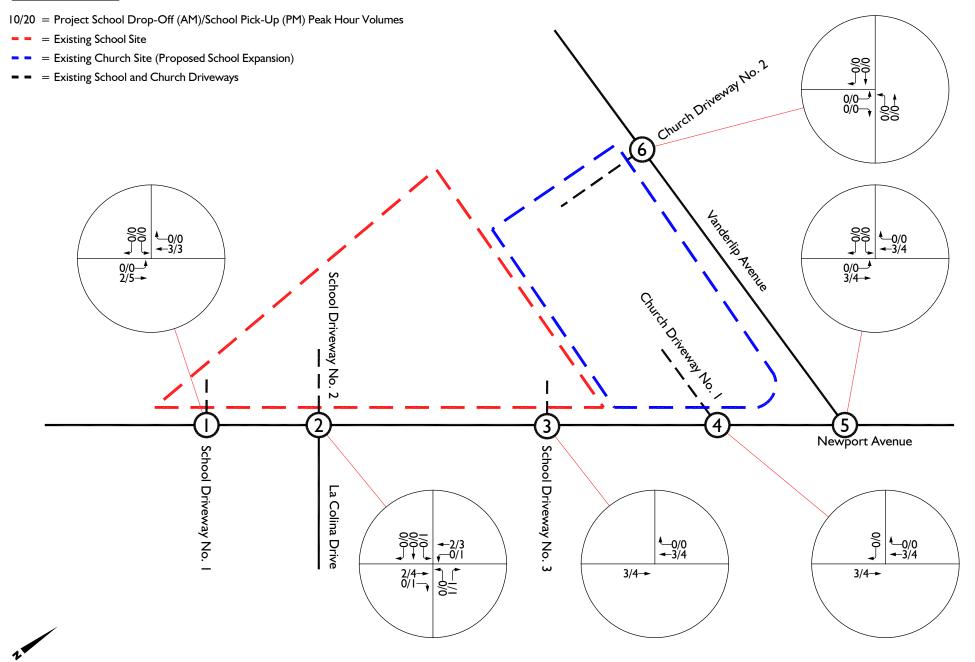
Note: Additional information and detail about the cumulative projects is provided in Table 4-2.

\* = Project Site

Orange County Cumulative Projects

## **Cumulative Projects Peak Hour Traffic Volumes**

#### Legend:





#### 4.4 Project Opening Year (2025) Without Project Conditions Traffic Volumes

Project Opening Year (2025) Without Project Conditions traffic volumes consist of one (1) year of linear annual growth on top of existing (2023) traffic volumes at one percent (1%) per year (i.e., 2% total growth), plus traffic generated by the cumulative projects.

Project Opening Year (2025) Without Project Conditions school drop-off (AM) and school pick-up (PM) peak hour traffic volumes at the study intersections are shown on Exhibit 4-7.

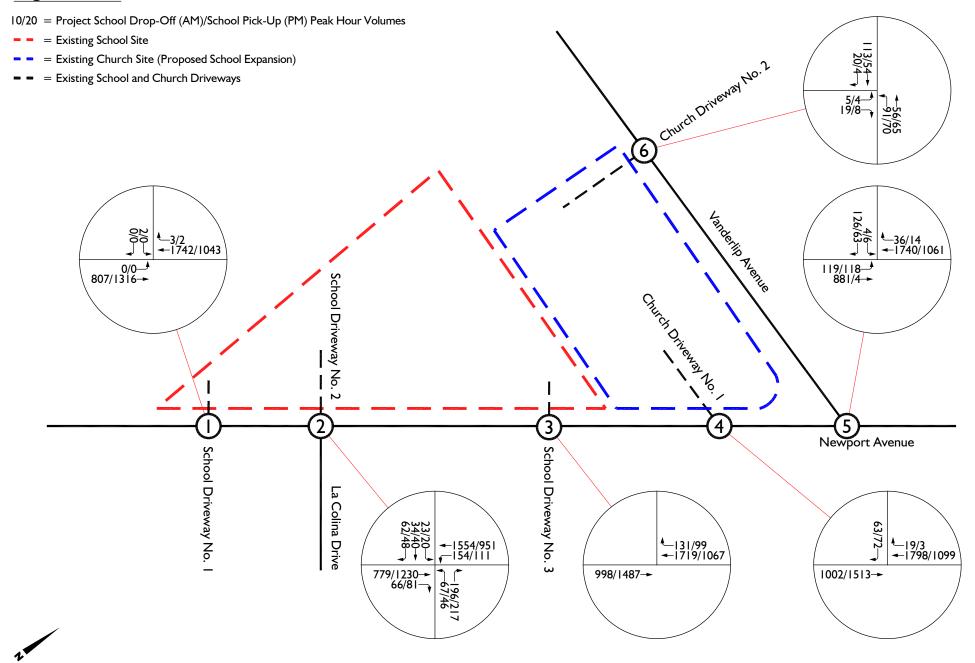
#### 4.5 Project Opening Year (2025) With Project Conditions Traffic Volumes

Project Opening Year (2025) With Project Conditions traffic volumes consist of the summation of Project Opening Year (2025) Without Project Conditions traffic volumes and project traffic volumes.

Project Opening Year (2025) With Project Conditions school drop-off (AM) and school pick-up (PM) peak hour traffic volumes at the study intersections are shown on Exhibit 4-8.

## Project Opening Year (2025) Without Project Peak Hour Traffic Volumes

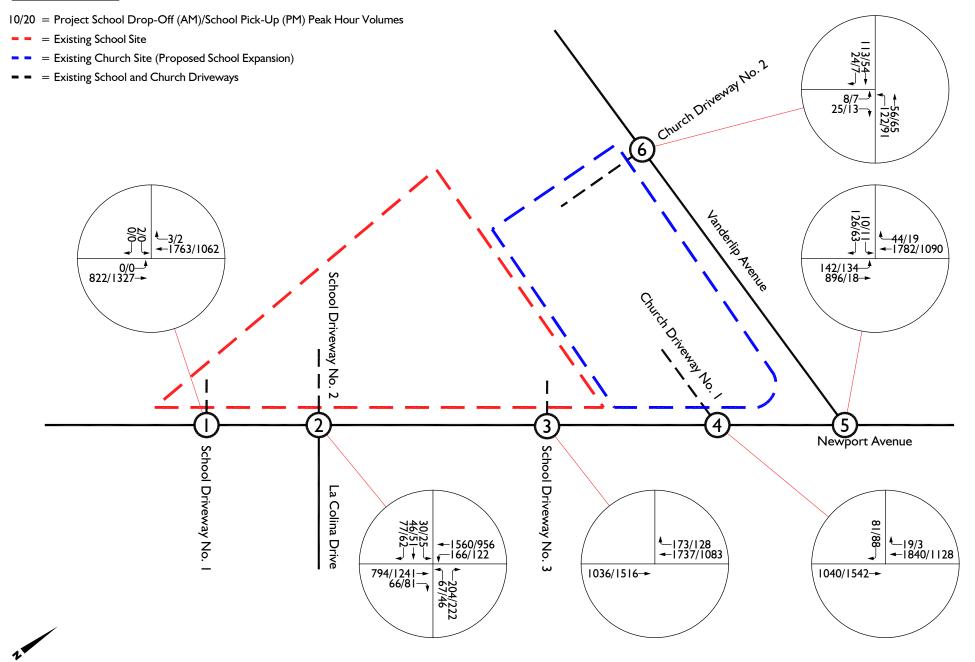
#### Legend:





## Project Opening Year (2025) With Project Peak Hour Traffic Volumes

#### Legend:





#### 5.0 CA MUTCD Signal Warrant Analysis

This section of the report evaluates the unsignalized study intersection of Newport Avenue at Vanderlip Avenue (Study Intersection #5) against the peak hour signal warrants and procedures defined in the California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014 Edition, Revision 4 (March 29, 2019).

Table 5-1 summarizes the results of the CA MUTCD peak hour traffic signal warrant analysis at the unsignalized study intersection of Newport Avenue at Vanderlip Avenue (Study Intersection #5) for all analysis scenarios evaluated as part of this study.

As shown in Table 5-1, the peak hour traffic signal warrants are not satisfied for the unsignalized study intersection of Newport Avenue at Vanderlip Avenue under any of the study's analysis scenarios and time periods.

Detailed CA MUTCD traffic signal warrant analysis worksheets are included in Appendix C.

Table 5-1
CA MUTCD Peak Hour Signal Warrant Analysis Summary

		Peak Hour Signal Warrant Met?								
	Study Intersection		Existing Conditions		Existing Plus Project Conditions		Project Opening Year (2025) Without Project Conditions		ng Year (2025) t Conditions	
			PM Pick-Up	AM Drop-Off	PM Pick-Up	AM Drop-Off	PM Pick-Up	AM Drop-Off	PM Pick-Up	
5.	Newport Avenue (N/S) at Vanderlip Avenue (E/W)	NO	NO	NO	NO	NO	NO	NO	NO	

#### 6.0 Study Intersection Peak Hour LOS Analysis

This section of the report provides a discussion on the study intersection peak hour level of service (LOS) analysis and findings.

#### 6.1 Existing Conditions Level of Service

Existing school drop-off (AM) and school pick-up (PM) peak hour level of service (LOS) calculations for the six (6) study intersections are shown in Table 6-1 and are based upon the existing traffic volumes shown on Exhibit 3-2 and the existing geometry shown on Exhibit 3-1.

As shown in Table 6-1, all study intersections are currently operating at an acceptable LOS (LOS D or better) during the school drop-off (AM) and school pick-up (PM) peak hours for Existing Conditions with the exception of the following study intersection, which is currently operating at a deficient LOS:

#### • Int. #5 – Newport Avenue at Vanderlip Avenue

School Drop-Off (AM) Peak Hour Only (36.4 seconds / vehicle; LOS E)

Detailed LOS analysis worksheets for Existing traffic conditions are included in Appendix D.

#### 6.2 Existing Plus Project Conditions Level of Service

Existing Plus Project school drop-off (AM) and school pick-up (PM) peak hour level of service (LOS) calculations for the six (6) study intersections are also shown in Table 6-1 and are based upon the Existing Plus Project Conditions weekday traffic volumes shown on Exhibit 4-4 and the existing geometry shown on Exhibit 3-1.

As shown in Table 6-1, all study intersections are forecast to continue to operate at an acceptable LOS (LOS D or better) during the school drop-off (AM) and school pick-up (PM) peak hours for Existing Plus Project Conditions, with the exception of the following study intersection, which is forecast to operate at a deficient LOS:

#### • Int. #5 – Newport Avenue at Vanderlip Avenue

School Drop-off (AM) Peak Hour (41.6 seconds / vehicle; LOS E)

Detailed LOS analysis worksheets for Existing Plus Project traffic conditions are included in Appendix E.



Table 6-1 Study Intersection LOS Analysis Summary Existing & Existing Plus Project Conditions

							Existing C	Conditions									Existi	ng Plus Pr	oject Cond	ditions					
			Z		нс	M 7			IC	:U				нс	M 7					le le	CU				
	Study Intersection	Traffic Control <sup>1</sup>	thodola	De (sec/v		Level of	f Service	V/C R	atio <sup>2,3</sup>	Level of	Service	De (sec/v			ase in lay	Level of	f Service	V/C R	tatio <sup>2,3</sup>		ase in //C	Level o	f Service		res LOS vement?
			gу	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off
1.	Newport Avenue at School Driveway No.1	CSS	HCM 7	31.8	0.0	D	А					32.6	0.0	0.8	0.0	D	А							No	No
2.	Newport Avenue at School Driveway No.2 / La Colina Drive	TS	ICU					0.605	0.579	А	А							0.626	0.606	0.021	0.027	В	А	No	No
3.	Newport Avenue at School Driveway No.3	CSS	HCM 7	0.0	0.0	А	А					0.0	0.0	0.0	0.0	А	А							No	No
4.	Newport Avenue at Church Driveway No.1	CSS	HCM 7	23.6	14.5	С	В					26.8	15.2	3.2	0.7	D	C							No	No
5.	Newport Avenue at Vanderlip Avenue	CSS	HCM 7	36.4	14.9	E	В					41.6	15.9	5.2	1.1	E	С							No <sup>4</sup>	No
6.	Church Driveway No.2 at Vanderlip Avenue	CSS	HCM 7	10.3	9.4	В	А					10.9	9.8	0.6	0.4	В	А							No	No

<sup>&</sup>lt;sup>1</sup> TS = Traffic Signal;

CSS = Cross-Street Stop.

<sup>&</sup>lt;sup>2</sup> Deficient operation shown in **Bold**.

<sup>&</sup>lt;sup>3</sup> HCM 7 and ICU Analysis Software: PTV Vistro, Version 2023.

ICU methodology determines the level of service at signalized intersctions utilizing the volume of the intersection compared with the capacity of the intersection, expressed as a ratio.

HCM 7 methodology determines the level of service at cross-street stop-controlled intersections based on the movement with the worst (highest) delay or the approach delay for movements sharing a single lane.

<sup>4</sup> Although this intersection is forecast to operate deficiently under with project traffic conditions, the performance criteria is not met (i.e., does not satisy peak hour signal warrant). As such, no operational improvements are recommended or required.

The intersection of Newport Avenue and Vanderlip Avenue experiences unacceptable delays under existing conditions during the school drop-off (AM) peak hour. This is primarily attributable to the substantial volume of vehicles making an eastbound right-turn from Vanderlip Avenue onto southbound Newport Avenue. During the existing school drop-off (AM) peak hour, a total of 124 vehicles make this eastbound right-turn, leading to a deficiency in intersection operations.

It's worth noting, as shown in Exhibits 4-1 & 4-2, traffic to/from the Fairmont Private School is not anticipated to contribute to this particular eastbound right-turn movement at all. The overwhelming majority, if not all, of these 124 existing vehicles are associated with the adjacent Guin Foss Elementary School, Beyond Blindness organization, nearby residences, or are a result of cut-through traffic from Holt Avenue.

Furthermore, the Newport Avenue at Vanderlip Avenue intersection was assessed for signal warrants in Section 5.0 of this report. The analysis concluded that the peak hour traffic signal warrants were not met for this unsignalized study intersection under any of the study's analysis scenarios and time periods.

In summary, the study intersection currently operates deficiently due to traffic associated with nearby land uses rather than traffic from the Fairmont Private School. Additionally, it has been concluded that a traffic signal is not warranted at this intersection.

Hence based on Section 2.3.2 of this report, the traffic associated with the project (i.e., 100 student enrollment increase) will not directly impact this intersection. As such, no operational improvements are recommended or required.

### 6.3 Project Opening Year (2025) Without Project Conditions Level of Service

Weekday Project Opening Year (2025) Without Project school drop-off (AM) and school pick-up (PM) peak hour level of service (LOS) calculations for the six (6) study intersections are shown in Table 6-2 and are based upon the Project Opening Year (2025) Without Project Conditions weekday traffic volumes shown on Exhibit 4-7 and the existing geometry shown on Exhibit 3-1.

As shown in Table 6-2, all study intersections are forecast to continue to operate at an acceptable LOS (LOS D or better) during the school drop-off (AM) and school pick-up (PM) peak hours for Project Opening Year (2025) Without Project Conditions with the exception of the following study intersection, which is forecast to operate at a deficient LOS:

### • Int. #5 – Newport Avenue at Vanderlip Avenue

School Drop-Off (AM) Peak Hour Only (39.1 seconds / vehicle; LOS E)



Table 6-2 Study Intersection LOS Analysis Summary Opening Year (2025) Without & With Project Conditions

					Ope	ning Year	(2025) Wi	thout Proj	ect Condi	tions						01	ening Ye	ar (2025) V	Vith Proje	ct Conditio	ons				
			Z		НС	M 7			IC	CU				нс	M 7					IC	U				
	Study Intersection	Traffic Control <sup>1</sup>	∍thodola	De (sec/v	elay veh) <sup>2,3</sup>	Level o	f Service	V/C R	atio <sup>2,3</sup>	Level of	Service	De (sec/v			ase in lay	Level o	f Service	V/C R	atio <sup>2,3</sup>		ase in /C	Level of	f Service		res LOS vement?
			gy	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off	AM Drop-Off	PM Drop-Off
1.	Newport Avenue at School Driveway No.1	CSS	HCM 7	33.1	0.0	D	А					33.9	0.0	0.8	0.0	D	А							No	No
2.	Newport Avenue at School Driveway No.2 / La Colina Drive	TS	ICU					0.616	0.591	В	А							0.638	0.619	0.022	0.028	В	В	No	No
3.	Newport Avenue at School Driveway No.3	CSS	HCM 7	0.0	0.0	А	А					0.0	0.0	0.0	0.0	А	А							No	No
4.	Newport Avenue at Church Driveway No.1	CSS	HCM 7	24.5	14.8	C	В					28.0	15.5	3.5	0.7	D	C							No	No
5.	Newport Avenue at Vanderlip Avenue	CSS	HCM 7	39.1	15.2	E	С					44.9	16.3	5.8	1.1	E	С							No <sup>4</sup>	No
6.	Church Driveway No.2 at Vanderlip Avenue	CSS	HCM 7	10.3	9.4	В	А					11.0	9.8	0.7	0.4	В	А							No	No

<sup>&</sup>lt;sup>1</sup> TS = Traffic Signal;

CSS = Cross-Street Stop.

<sup>&</sup>lt;sup>2</sup> Deficient operation shown in **Bold**.

<sup>&</sup>lt;sup>3</sup> HCM 7 and ICU Analysis Software: PTV Vistro, Version 2023.

ICU methodology determines the level of service at signalized intersctions utilizing the volume of the intersection compared with the capacity of the intersection, expressed as a ratio.

HCM 7 methodology determines the level of service at cross-street stop-controlled intersections based on the movement with the worst (highest) delay or the approach delay for movements sharing a single lane.

<sup>4</sup> Although this intersection is forecast to operate deficiently under with project traffic conditions, the performance criteria is not met (i.e., does not satisy peak hour signal warrant). As such, no operational improvements are recommended or required.

Detailed LOS analysis worksheets for Project Opening Year (2025) Without Project traffic conditions are included in Appendix F.

### 6.4 Project Opening Year (2025) With Project Conditions Level of Service

Weekday Project Opening Year (2025) With Project school drop-off (AM) and school pick-up (PM) peak hour level of service (LOS) calculations for the six (6) study intersections are also shown in Table 6-2 and are based upon the Project Opening Year (2025) With Project Conditions weekday traffic volumes shown on Exhibit 4-8 and the existing geometry shown on Exhibit 3-1.

As shown in Table 6-2, all study intersections are forecast to continue to operate at an acceptable LOS (LOS D or better) during the school drop-off (AM) and school pick-up (PM) peak hours for Project Opening Year (2025) With Project Conditions with the exception of the following study intersection, which is forecast to operate at a deficient LOS:

### • Int. #5 – Newport Avenue at Vanderlip Avenue

School Drop-Off (AM) Peak Hour (44.9 seconds / vehicle; LOS E)

Detailed LOS analysis worksheets for Project Opening Year (2025) With Project traffic conditions are included in Appendix G.

As similarly concluded in Section 6.2, the study intersection is forecast to operate deficiently due to traffic associated with nearby land uses rather than traffic from the Fairmont Private School. Additionally, a traffic signal is not warranted at this intersection. Hence based on Section 2.3.2 of this report, the traffic associated with the project (i.e., 100 student enrollment increase) will not directly impact this intersection. As such, no operational improvements are recommended or required.

## 7.0 CEQA Vehicle Miles Traveled (VMT) Analysis

The following section provides a discussion of the vehicle miles traveled (VMT) analysis and findings.

The proposed project is subject to a VMT analysis and will adhere to the methodologies and practices described in the *County of Orange Transportation Implementation Manual*, dated September 2021.

## 7.1 Vehicle Miles Traveled (VMT) Screening Criteria

As per the County of Orange Guidelines, land development projects that have one or more of the following attributes may be presumed to have a less than significant impact on transportation and thereby screen out of a full VMT analysis:

- Project in High-Quality Transit Area (HQTA)
- Neighborhood Retail Project
- Affordable Housing Project
- Low VMT Are Project
- Small Project (<500 ADT)</li>
- Public Facilities

As described in the County of Orange guidelines, small projects that generate 500 or fewer average daily trips (ADT) may be presumed to have a less than significant impact on VMT. Because the proposed project is forecasted to generate less than 500 daily trips (i.e., 394 daily trips), the project thus meets the small project screening criterion.

Because the proposed project meets the "Small Project" screening criteria, the project may be presumed to have a less than significant impact to VMT and no further VMT analysis would be required.

## 8.0 Summary of Findings and Recommendations

## 8.1 Site Location & Project Description

The Fairmont Private School's North Tustin Campus is located at 12381-12561 Newport Avenue, Santa Ana. Representatives of Fairmont Private School aim to enhance its facilities by integrating the First Church of Christ Scientist Church and Sunday School buildings which Fairmont has recently purchased and are situated at the northern end of the property. The expansion plans entail converting the existing church into a performing arts use, remodeling existing buildings into six (6) additional classrooms, and accommodating approximately 100 more students, equivalent to a 31% increase in enrollment. Consequently, the maximum student enrollment will reach 420 students.

### 8.2 Traffic Study Area & Analysis Scenarios

The following six (6) study intersections have been evaluated under Existing, Existing Plus Project, Project Opening Year (2025) Without Project, and Project Opening Year (2025) With Project traffic conditions:

- 1. Newport Avenue (NS) at School Driveway No. 1 (EW);
- 2. Newport Avenue (NS) at School Driveway No. 2/La Colina Drive (EW);
- 3. Newport Avenue (NS) at School Driveway No. 3 (EW);
- 4. Newport Avenue (NS) at Church Driveway No. 1 (EW);
- 5. Newport Avenue (NS) at Vanderlip Avenue (EW); and
- 6. Church Driveway No. 2 (NS) at Vanderlip Avenue (EW).

### 8.3 Project Trip Generation

The proposed enrollment expansion of 100 students is forecast to generate approximately 394 weekday daily trips which include approximately 138 (77 inbound and 61 outbound) weekday dropoff (AM) peak hour trips and approximately 107 (53 inbound and 54 outbound) weekday pick-up (PM) peak hour trips. The total future enrollment of 420 students is forecast to generate approximately 1,655 weekday daily trips which include approximately 579 weekday drop-off (AM) peak hour trips and approximately 450 weekday pick-up (PM) peak hour trips.



### 8.4 CA MUTCD Signal Warrant Analysis Summary

The unsignalized study intersection of Newport Avenue at Vanderlip Avenue (Study Intersection #5) has been evaluated against the peak hour signal warrants and procedures defined in the California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014 Edition, Revision 4 (March 29, 2019).

In summary, The CA MUTCD peak hour traffic signal warrants are not satisfied for the unsignalized study intersection of Newport Avenue at Vanderlip Avenue under any of the study's analysis scenarios and time periods.

### 8.5 Study Intersection Peak Hour LOS Analysis Summary

All study intersections are currently operating at an acceptable LOS (LOS D or better) during the school drop-off (AM) and school pick-up (PM) peak hours under all traffic scenarios analyzed in this study with the exception of the following:

#### **Existing Traffic Conditions**

- Int. #5 Newport Avenue at Vanderlip Avenue
  - o School Drop-Off (AM) Peak Hour Only (36.4 seconds / vehicle; LOS E)

### **Existing Plus Project Traffic Conditions**

- Int. #5 Newport Avenue at Vanderlip Avenue
  - School Drop-off (AM) Peak Hour (41.6 seconds / vehicle; LOS E)

### Project Opening Year (2025) Without Project Traffic Conditions

- Int. #5 Newport Avenue at Vanderlip Avenue
  - School Drop-Off (AM) Peak Hour Only (39.1 seconds / vehicle; LOS E)

#### Project Opening Year (2025) With Project Traffic Conditions

- Int. #5 Newport Avenue at Vanderlip Avenue
  - o School Drop-Off (AM) Peak Hour (44.9 seconds / vehicle; LOS E)



In summary, the study intersection currently operates and is forecast to continue operating deficiently due to traffic associated with nearby land uses rather than traffic from the Fairmont Private School. Additionally, it has been concluded that a traffic signal is not warranted at this intersection.

Hence based on Section 2.3.2 of this report, the deficient unsignalized study intersection of Newport Avenue and Vanderlip Avenue will not be required to identify operational improvements.

### 8.6 CEQA Vehicle Miles Traveled (VMT) Analysis Summary

As described in the County of Orange guidelines, small projects that generate 500 or fewer average daily trips (ADT) may be presumed to have a less than significant impact on VMT. Because the proposed project is forecasted to generate less than 500 daily trips (i.e., 394 daily trips), the project thus meets the small project screening criterion.

Because the proposed project meets the "Small Project" screening criteria, the project may be presumed to have a less than significant impact to VMT and no further VMT analysis would be required.

Appendices



# **Appendix A**

**Traffic Count Worksheets** 

County of Orange N/S: Newport Avenue E/W: School Driveway 1

Weather: Clear

File Name : 01\_ORC\_New\_Sc DW1 Wed AM Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

						<u>tea- rotal v</u>					
		ay 1	ool Drivew	Sch	nue	ewport Aver	N	nue	lewport Ave	N	
			Eastbound		b	Northbound		d	Southbour		
Total	Int.	App. Total	Right	Left	App. Total	Thru	Left	App. Total	Right	Thru	Start Time
385		0	0	0	119	119	0	266	0	266	07:00 AM
372		0	0	0	101	101	0	271	0	271	07:15 AM
498		0	0	0	147	147	0	351	0	351	07:30 AM
600		1	0	1	221	221	0	378	0	378	07:45 AM
1855		1	0	1	588	588	0	1266	0	1266	Total
675		2	0	2	202	202	0	471	2	469	08:00 AM
604		0	0	0	174	174	0	430	1	429	08:15 AM
597		0	0	0	221	221	0	376	0	376	08:30 AM
623		0	0	0	192	192	0	431	0	431	08:45 AM
2499		2	0	2	789	789	0	1708	3	1705	Total
4354		3	0	3	1377	1377	0	2974	3	2971	Grand Total
			0	100		100	0		0.1	99.9	Apprch %
		0.1	0	0.1	31.6	31.6	0	68.3	0.1	68.2	Total %
18 6 5 6 24		0 0 0 2 3	0 0 0 0	0 0 0 2 2 3 100	588 202 174 221 192 789	588 202 174 221 192 789 1377 100	0 0 0 0 0 0	1266 471 430 376 431 1708	0 2 1 0 0 3 3 3 0.1	1266 469 429 376 431 1705 2971 99.9	Total  08:00 AM 08:15 AM 08:30 AM 08:45 AM Total  Grand Total Apprch %

	Ne	ewport Aver	nue	N	ewport Ave	nue	Sch	nool Drivew	ay 1	
		Southbound	d		Northboun	d		Eastbound	ŀ	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 Al	M to 08:45 A	AM - Peak 1 d	of 1						
Peak Hour for Entire Ir	tersection E	Begins at 08	:00 AM							
08:00 AM	469	2	471	0	202	202	2	0	2	675
08:15 AM	429	1	430	0	174	174	0	0	0	604
08:30 AM	376	0	376	0	221	221	0	0	0	597
08:45 AM	431	0	431	0	192	192	0	0	0	623
Total Volume	1705	3	1708	0	789	789	2	0	2	2499
% App. Total	99.8	0.2		0	100		100	0		
PHF	.909	.375	.907	.000	.893	.893	.250	.000	.250	.926

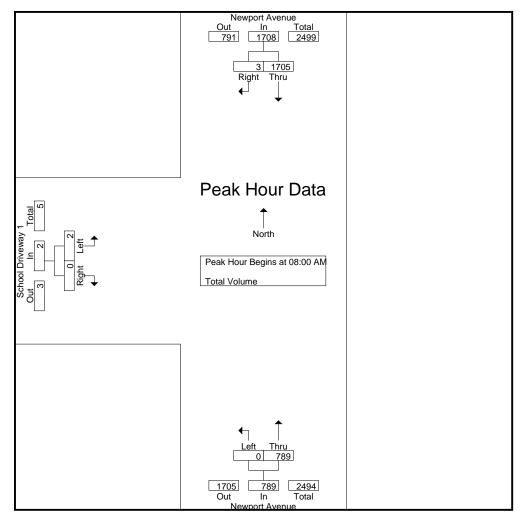
County of Orange N/S: Newport Avenue E/W: School Driveway 1

Weather: Clear

File Name: 01\_ORC\_New\_Sc DW1 Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

I dak Hoar for Each / k									
	08:00 AM			07:45 AM			07:15 AM		
+0 mins.	469	2	471	0	221	221	0	0	0
+15 mins.	429	1	430	0	202	202	0	0	0
+30 mins.	376	0	376	0	174	174	1	0	1
+45 mins.	431	0	431	0	221	221	2	0	2
Total Volume	1705	3	1708	0	818	818	3	0	3
% App. Total	99.8	0.2		0	100		100	0	
PHF	.909	.375	.907	.000	.925	.925	.375	.000	.375

County of Orange N/S: Newport Avenue E/W: School Driveway 1

Weather: Clear

File Name : 01\_ORC\_New\_Sc DW1 Wed MD Site Code : 10523777

Start Date : 8/30/2023

Page No : 1

 				Froups Prin	tea- rotai v	olume				
	Ne	wport Aver	nue	N	ewport Aver	nue	Sch	ool Drivew	ay 1	
	5	Southbound	b		Northbound	b		Eastbound		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
02:00 PM	181	0	181	0	244	244	0	0	0	425
02:15 PM	140	0	140	0	262	262	0	0	0	402
02:30 PM	251	0	251	0	259	259	0	0	0	510
 02:45 PM	269	0	269	0	291	291	0	0	0	560
Total	841	0	841	0	1056	1056	0	0	0	1897
03:00 PM	252	0	252	0	303	303	0	0	0	555
03:15 PM	221	0	221	0	316	316	0	0	0	537
03:30 PM	245	0	245	0	355	355	0	0	0	600
03:45 PM	302	2	304	0	311	311	0	0	0	615
 Total	1020	2	1022	0	1285	1285	0	0	0	2307
Grand Total	1861	2	1863	0	2341	2341	0	0	0	4204
Apprch %	99.9	0.1		0	100		0	0		
Total %	44.3	0	44.3	0	55.7	55.7	0	0	0	

		wport Ave		N	ewport Aver		Sch	nool Drivew Eastbound	,	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 02:00 PM	1 to 03:45 I	PM - Peak 1 c	of 1	·					
Peak Hour for Entire In	tersection Be	egins at 03	3:00 PM							
03:00 PM	252	0	252	0	303	303	0	0	0	555
03:15 PM	221	0	221	0	316	316	0	0	0	537
03:30 PM	245	0	245	0	355	355	0	0	0	600
03:45 PM	302	2	304	0	311	311	0	0	0	615
Total Volume	1020	2	1022	0	1285	1285	0	0	0	2307
% App. Total	99.8	0.2		0	100		0	0		
PHF	.844	.250	.840	.000	.905	.905	.000	.000	.000	.938

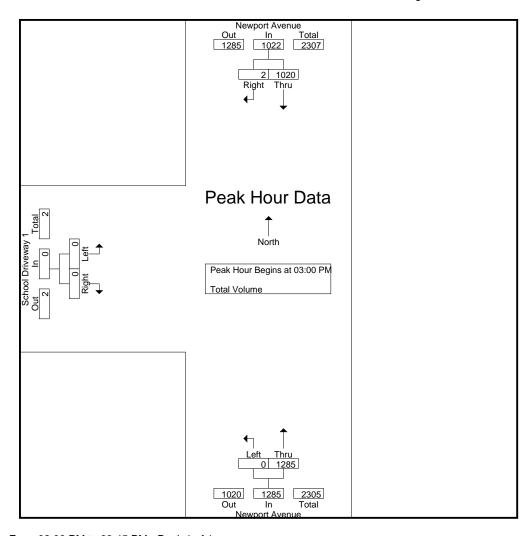
County of Orange N/S: Newport Avenue E/W: School Driveway 1

Weather: Clear

File Name: 01\_ORC\_New\_Sc DW1 Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

Cak Hour for Lacit Ap	proden Bogn	10 at.							
	03:00 PM			03:00 PM			02:00 PM		
+0 mins.	252	0	252	0	303	303	0	0	0
+15 mins.	221	0	221	0	316	316	0	0	0
+30 mins.	245	0	245	0	355	355	0	0	0
+45 mins.	302	2	304	0	311	311	0	0	0
Total Volume	1020	2	1022	0	1285	1285	0	0	0
% App. Total	99.8	0.2		0	100		0	0	
PHF	.844	.250	.840	.000	.905	.905	.000	.000	.000

County of Orange N/S: Newport Avenue E/W: School Driveway 2/La Colina Drive

Weather: Clear

File Name : 02\_ORC\_New\_Sc DW2 Wed AM Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

							<u>squoic</u>	Printed-	otal ve	Jiuille							
		Newpor	t Avenu	ıe		La Coli	na Driv	'e		Newpor	t Avenu	e	S	chool D	)rivewa	y 2	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	251	0	270	8	0	10	18	0	109	9	118	3	1	2	6	412
07:15 AM	19	259	0	278	12	0	19	31	1	85	9	95	1	2	1	4	408
07:30 AM	23	341	0	364	11	0	25	36	0	131	11	142	0	3	3	6	548
07:45 AM	54	337	0	391	19	0	59	78	0	207	20	227	7	13	21	41	737
Total	115	1188	0	1303	50	0	113	163	1	532	49	582	11	19	27	57	2105
08:00 AM	50	444	0	494	16	0	40	56	1	181	21	203	10	10	19	39	792
08:15 AM	22	383	0	405	21	0	48	69	0	163	12	175	4	9	18	31	680
08:30 AM	25	358	0	383	10	0	44	54	0	211	12	223	1	1	3	5	665
08:45 AM	48	406	0	454	22	0	38	60	0	177	10	187	1	2	5	8	709
Total	145	1591	0	1736	69	0	170	239	1	732	55	788	16	22	45	83	2846
Grand Total	260	2779	0	3039	119	0	283	402	2	1264	104	1370	27	41	72	140	4951
Apprch %	8.6	91.4	0		29.6	0	70.4		0.1	92.3	7.6		19.3	29.3	51.4		
Total %	5.3	56.1	0	61.4	2.4	0	5.7	8.1	0	25.5	2.1	27.7	0.5	8.0	1.5	2.8	

		Newpor	t Avenu	ıe		La Coli	na Driv	'e	١	Vewpoi	t Avenu	ie	S	chool D	Privewa	y 2	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour And	alysis F	rom 07	:00 AM	to 08:45	AM - P	eak 1 d	f 1					· ·					
Peak Hour for	Entire I	ntersec	tion Be	gins at 0	7:45 AN	1											
07:45 AM	54	337	0	391	19	0	59	78	0	207	20	227	7	13	21	41	737
08:00 AM	50	444	0	494	16	0	40	56	1	181	21	203	10	10	19	39	792
08:15 AM	22	383	0	405	21	0	48	69	0	163	12	175	4	9	18	31	680
08:30 AM	25	358	0	383	10	0	44	54	0	211	12	223	1	1	3	5	665
Total Volume	151	1522	0	1673	66	0	191	257	1	762	65	828	22	33	61	116	2874
% App. Total	9	91	0		25.7	0	74.3		0.1	92	7.9		19	28.4	52.6		
PHF	.699	.857	.000	.847	.786	.000	.809	.824	.250	.903	.774	.912	.550	.635	.726	.707	.907

County of Orange N/S: Newport Avenue

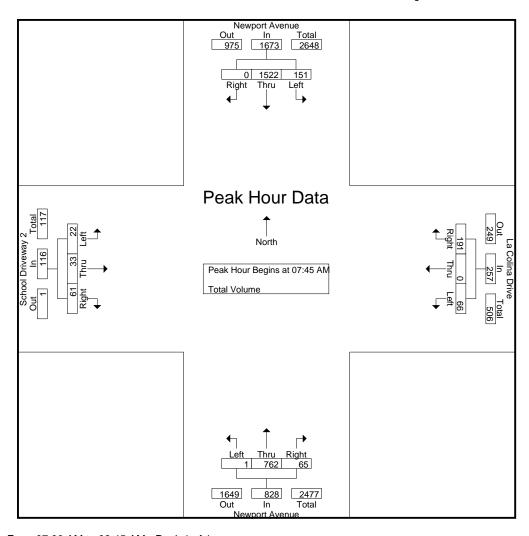
E/W: School Driveway 2/La Colina Drive

Weather: Clear

File Name: 02\_ORC\_New\_Sc DW2 Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

08:00 AM				07:45 AM				07:45 AM	1			07:30 AM	I		
50	444	0	494	19	0	59	78	0	207	20	227	0	3	3	6
22	383	0	405	16	0	40	56	1	181	21	203	7	13	21	41
25	358	0	383	21	0	48	69	0	163	12	175	10	10	19	39
48	406	0	454	10	0	44	54	0	211	12	223	4	9	18	31
145	1591	0	1736	66	0	191	257	1	762	65	828	21	35	61	117
8.4	91.6	0		25.7	0	74.3		0.1	92	7.9		17.9	29.9	52.1	
.725	.896	.000	.879	.786	.000	.809	.824	.250	.903	.774	.912	.525	.673	.726	.713
_	50 22 25 48 145 8.4	50 444 22 383 25 358 48 406 145 1591 8.4 91.6	50     444     0       22     383     0       25     358     0       48     406     0       145     1591     0       8.4     91.6     0	50         444         0         494           22         383         0         405           25         358         0         383           48         406         0         454           145         1591         0         1736           8.4         91.6         0	50         444         0         494         19           22         383         0         405         16           25         358         0         383         21           48         406         0         454         10           145         1591         0         1736         66           8.4         91.6         0         25.7	50         444         0         494         19         0           22         383         0         405         16         0           25         358         0         383         21         0           48         406         0         454         10         0           145         1591         0         1736         66         0           8.4         91.6         0         25.7         0	50         444         0         494         19         0         59           22         383         0         405         16         0         40           25         358         0         383         21         0         48           48         406         0         454         10         0         44           145         1591         0         1736         66         0         191           8.4         91.6         0         25.7         0         74.3	50         444         0         494         19         0         59         78           22         383         0         405         16         0         40         56           25         358         0         383         21         0         48         69           48         406         0         454         10         0         44         54           145         1591         0         1736         66         0         191         257           8.4         91.6         0         25.7         0         74.3	50         444         0         494         19         0         59         78         0           22         383         0         405         16         0         40         56         1           25         358         0         383         21         0         48         69         0           48         406         0         454         10         0         44         54         0           145         1591         0         1736         66         0         191         257         1           8.4         91.6         0         25.7         0         74.3         0.1	50         444         0         494         19         0         59         78         0         207           22         383         0         405         16         0         40         56         1         181           25         358         0         383         21         0         48         69         0         163           48         406         0         454         10         0         44         54         0         211           145         1591         0         1736         66         0         191         257         1         762           8.4         91.6         0         25.7         0         74.3         0.1         92	50         444         0         494         19         0         59         78         0         207         20           22         383         0         405         16         0         40         56         1         181         21           25         358         0         383         21         0         48         69         0         163         12           48         406         0         454         10         0         44         54         0         211         12           145         1591         0         1736         66         0         191         257         1         762         65           8.4         91.6         0         25.7         0         74.3         0.1         92         7.9	50         444         0         494         19         0         59         78         0         207         20         227           22         383         0         405         16         0         40         56         1         181         21         203           25         358         0         383         21         0         48         69         0         163         12         175           48         406         0         454         10         0         44         54         0         211         12         223           145         1591         0         1736         66         0         191         257         1         762         65         828           8.4         91.6         0         25.7         0         74.3         0.1         92         7.9	50         444         0         494         19         0         59         78         0         207         20         227         0           22         383         0         405         16         0         40         56         1         181         21         203         7           25         358         0         383         21         0         48         69         0         163         12         175         10           48         406         0         454         10         0         44         54         0         211         12         223         4           145         1591         0         1736         66         0         191         257         1         762         65         828         21           8.4         91.6         0         25.7         0         74.3         0.1         92         7.9         17.9	50         444         0         494         19         0         59         78         0         207         20         227         0         3           22         383         0         405         16         0         40         56         1         181         21         203         7         13           25         358         0         383         21         0         48         69         0         163         12         175         10         10           48         406         0         454         10         0         44         54         0         211         12         223         4         9           145         1591         0         1736         66         0         191         257         1         762         65         828         21         35           8.4         91.6         0         25.7         0         74.3         0.1         92         7.9         17.9         29.9	50         444         0         494         19         0         59         78         0         207         20         227         0         3         3           22         383         0         405         16         0         40         56         1         181         21         203         7         13         21           25         358         0         383         21         0         48         69         0         163         12         175         10         10         19           48         406         0         454         10         0         44         54         0         211         12         223         4         9         18           145         1591         0         1736         66         0         191         257         1         762         65         828         21         35         61           8.4         91.6         0         25.7         0         74.3         0.1         92         7.9         17.9         29.9         52.1

County of Orange N/S: Newport Avenue E/W: School Driveway 2/La Colina Drive

Weather: Clear

File Name : 02\_ORC\_New\_Sc DW2 Wed MD Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

	Groups Printed- Total Volume																
	ı	Newpor	t Avenu	ıe		La Coli	ina Driv	'e		Newpor	t Avenu	ıe	S	chool D	)rivewa	y 2	
		South	bound			West	tbound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:00 PM	14	171	0	185	11	0	27	38	0	232	10	242	0	0	0	0	465
02:15 PM	12	128	0	140	7	0	36	43	0	257	10	267	0	0	1	1	451
02:30 PM	25	233	0	258	9	0	31	40	0	239	12	251	2	3	5	10	559
02:45 PM	33	256	0	289	9	0	37	46	0	273	18	291	1	5	5	11	637
Total	84	788	0	872	36	0	131	167	0	1001	50	1051	3	8	11	22	2112
03:00 PM	21	226	0	247	13	0	48	61	1	276	25	302	3	8	8	19	629
03:15 PM	28	197	0	225	11	0	52	63	0	293	19	312	3	7	11	21	621
03:30 PM	22	222	0	244	9	0	60	69	1	339	19	359	6	16	17	39	711
03:45 PM	37	284	0	321	12	0	52	64	0	294	15	309	8	8	11	27	721
Total	108	929	0	1037	45	0	212	257	2	1202	78	1282	20	39	47	106	2682
Grand Total	192	1717	0	1909	81	0	343	424	2	2203	128	2333	23	47	58	128	4794
Apprch %	10.1	89.9	0		19.1	0	80.9		0.1	94.4	5.5		18	36.7	45.3		
Total %	4	35.8	0	39.8	1.7	0	7.2	8.8	0	46	2.7	48.7	0.5	1	1.2	2.7	

	ı	Newport Avenue Southbound				La Coli	na Driv	е		Newpoi	rt Avenu	ıe	School Driveway 2				
		South	bound			Westbound				North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 02:	00 PM	to 03:45	PM - P	eak 1 o	f 1										
Peak Hour for	Entire I	ntersec	tion Be	gins at 0	3:00 PM	1											
03:00 PM	21	226	0	247	13	0	48	61	1	276	25	302	3	8	8	19	629
03:15 PM	28	197	0	225	11	0	52	63	0	293	19	312	3	7	11	21	621
03:30 PM	22	222	0	244	9	0	60	69	1	339	19	359	6	16	17	39	711
03:45 PM	37	284	0	321	12	0	52	64	0	294	15	309	8	8	11	27	721
Total Volume	108	929	0	1037	45	0	212	257	2	1202	78	1282	20	39	47	106	2682
% App. Total	10.4	89.6	0		17.5	0	82.5		0.2	93.8	6.1		18.9	36.8	44.3		
PHF	.730	.818	.000	.808	.865	.000	.883	.931	.500	.886	.780	.893	.625	.609	.691	.679	.930

County of Orange N/S: Newport Avenue

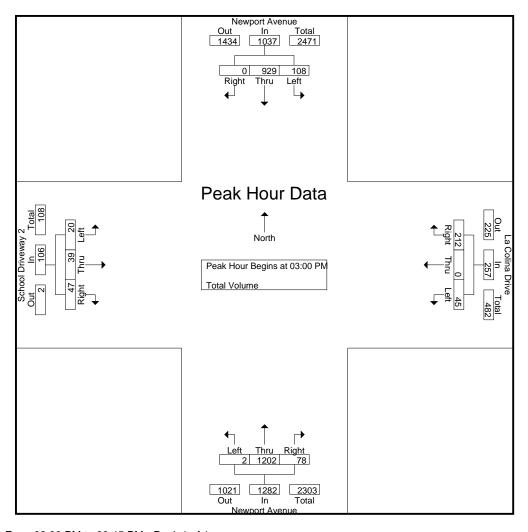
E/W: School Driveway 2/La Colina Drive

Weather: Clear

File Name: 02\_ORC\_New\_Sc DW2 Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for E	Each Approach	Begins at:

I Cak Hour lor	Luoii / t	pprodoi	1 Dogini	<i>,</i> u												
	03:00 PM	1			03:00 PM	1			03:00 PM	И			03:00 PM	1		
+0 mins.	21	226	0	247	13	0	48	61	1	276	25	302	3	8	8	19
+15 mins.	28	197	0	225	11	0	52	63	0	293	19	312	3	7	11	21
+30 mins.	22	222	0	244	9	0	60	69	1	339	19	359	6	16	17	39
+45 mins.	37	284	0	321	12	0	52	64	0	294	15	309	8	8	11	27
Total Volume	108	929	0	1037	45	0	212	257	2	1202	78	1282	20	39	47	106
% App. Total	10.4	89.6	0		17.5	0	82.5		0.2	93.8	6.1		18.9	36.8	44.3	
PHF	.730	.818	.000	.808	.865	.000	.883	.931	.500	.886	.780	.893	.625	.609	.691	.679

County of Orange N/S: Newport Avenue E/W: School Driveway 3

Weather: Clear

File Name : 03\_ORC\_New\_Sc DW3 Wed AM Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

					ieu- Totai v					
	Ne	wport Aver	nue	N	ewport Ave	nue	Sch	ool Drivew	ay 3	
	;	Southbound	d		Northbound	d		Eastbound	k	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	275	10	285	0	122	122	0	0	0	407
07:15 AM	276	3	279	0	104	104	0	0	0	383
07:30 AM	364	8	372	0	158	158	0	0	0	530
07:45 AM	401	43	444	0	261	261	0	0	0	705
Total	1316	64	1380	0	645	645	0	0	0	2025
MA 00:80	485	58	543	0	237	237	0	0	0	780
08:15 AM	411	23	434	0	216	216	0	0	0	650
08:30 AM	385	4	389	0	261	261	0	0	0	650
 08:45 AM	458	5	463	0	220	220	0	0	0	683
Total	1739	90	1829	0	934	934	0	0	0	2763
<b>Grand Total</b>	3055	154	3209	0	1579	1579	0	0	0	4788
Apprch %	95.2	4.8		0	100		0	0		
Total %	63.8	3.2	67	0	33	33	0	0	0	

		Newport Avenue Southbound			ewport Ave Northboun		Sch	ay 3		
						-		Eastbound		
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 AM	1 to 08:45	AM - Peak 1 c	of 1						
Peak Hour for Entire In	tersection Be	egins at 07	:45 AM							
07:45 AM	401	43	444	0	261	261	0	0	0	705
08:00 AM	485	58	543	0	237	237	0	0	0	780
08:15 AM	411	23	434	0	216	216	0	0	0	650
08:30 AM	385	4	389	0	261	261	0	0	0	650
Total Volume	1682	128	1810	0	975	975	0	0	0	2785
% App. Total	92.9	7.1		0	100		0	0		
PHF	.867	.552	.833	.000	.934	.934	.000	.000	.000	.893

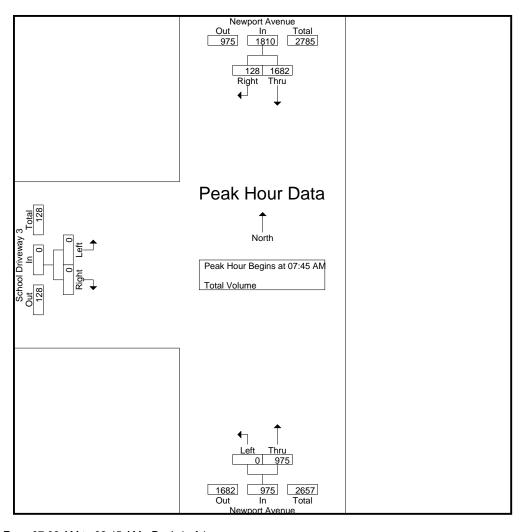
County of Orange N/S: Newport Avenue E/W: School Driveway 3

Weather: Clear

File Name: 03\_ORC\_New\_Sc DW3 Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

. oan									
	08:00 AM			07:45 AM			07:00 AM		
+0 mins.	485	58	543	0	261	261	0	0	0
+15 mins.	411	23	434	0	237	237	0	0	0
+30 mins.	385	4	389	0	216	216	0	0	0
+45 mins.	458	5	463	0	261	261	0	0	0
Total Volume	1739	90	1829	0	975	975	0	0	0
% App. Total	95.1	4.9		0	100		0	0	
PHF	.896	.388	.842	.000	.934	.934	.000	.000	.000

County of Orange N/S: Newport Avenue E/W: School Driveway 3

Weather: Clear

File Name : 03\_ORC\_New\_Sc DW3 Wed MD Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

					ieu- Tolai v					
	Ne	wport Aver	nue	N	ewport Ave	nue	Sch	nool Drivew	ay 3	
	Ç	Southbound	d		Northboun	d		Eastbound	d	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
02:00 PM	184	1	185	0	260	260	0	0	0	445
02:15 PM	141	8	149	0	301	301	0	0	0	450
02:30 PM	261	8	269	0	276	276	0	1	1	546
02:45 PM	282	19	301	0	306	306	0	1	1	608
Total	868	36	904	0	1143	1143	0	2	2	2049
03:00 PM	248	19	267	0	329	329	0	0	0	596
03:15 PM	227	27	254	0	349	349	0	0	0	603
03:30 PM	245	36	281	0	415	415	0	0	0	696
03:45 PM	322	15	337	0	361	361	0	0	0	698
 Total	1042	97	1139	0	1454	1454	0	0	0	2593
Grand Total	1910	133	2043	0	2597	2597	0	2	2	4642
Apprch %	93.5	6.5		0	100		0	100		
Total %	41.1	2.9	44	0	55.9	55.9	0	0	0	

	N	Newport Avenue Southbound			ewport Ave	nue	School Driveway 3			
		Southboun	ıd		Northboun	d		Eastbound	k	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 02:00 PI	M to 03:45	PM - Peak 1 o	of 1						
Peak Hour for Entire Ir	tersection E	Begins at 03	3:00 PM							
03:00 PM	248	19	267	0	329	329	0	0	0	596
03:15 PM	227	27	254	0	349	349	0	0	0	603
03:30 PM	245	36	281	0	415	415	0	0	0	696
03:45 PM	322	15	337	0	361	361	0	0	0	698
Total Volume	1042	97	1139	0	1454	1454	0	0	0	2593
% App. Total	91.5	8.5		0	100		0	0		
PHF	.809	.674	.845	.000	.876	.876	.000	.000	.000	.929

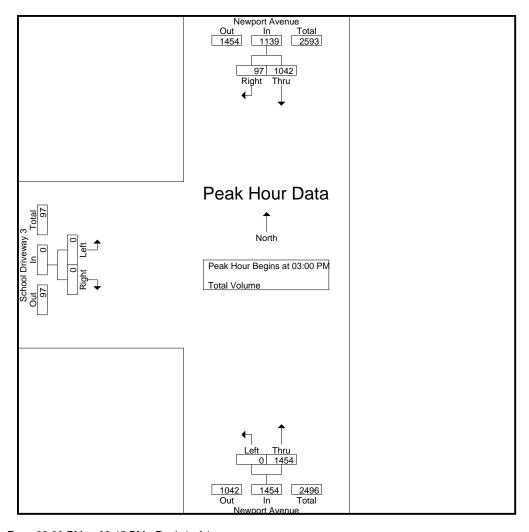
County of Orange N/S: Newport Avenue E/W: School Driveway 3

Weather: Clear

File Name: 03\_ORC\_New\_Sc DW3 Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

. oan 100 - aon 1									
	03:00 PM			03:00 PM			02:00 PM		
+0 mins.	248	19	267	0	329	329	0	0	0
+15 mins.	227	27	254	0	349	349	0	0	0
+30 mins.	245	36	281	0	415	415	0	1	1
+45 mins.	322	15	337	0	361	361	0	1	1
Total Volume	1042	97	1139	0	1454	1454	0	2	2
% App. Total	91.5	8.5		0	100		0	100	
PHF	.809	.674	.845	.000	.876	.876	.000	.500	.500

County of Orange N/S: Newport Avenue E/W: Church Driveway 1

Weather: Clear

File Name : 04\_ORC\_New\_Ch DW1 Wed AM Site Code : 10523777

Start Date : 8/30/2023

Page No : 1

_					Groups Printed- Total Volume						
		Ne	wport Aver	nue	N	ewport Aver	nue	Chu	rch Drivew	ay 1	
		5	Southbound	b		Northbound	b		Eastbound	d	
	Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
	07:00 AM	291	0	291	0	123	123	0	0	0	414
	07:15 AM	277	1	278	0	104	104	0	0	0	382
	07:30 AM	367	1	368	0	160	160	0	4	4	532
	07:45 AM	439	7	446	0	250	250	0	16	16	712
	Total	1374	9	1383	0	637	637	0	20	20	2040
	08:00 AM	521	4	525	0	244	244	0	17	17	786
	08:15 AM	414	6	420	0	212	212	0	23	23	655
	08:30 AM	386	2	388	0	273	273	0	6	6	667
	08:45 AM	459	0	459	0	222	222	0	6	6	687
	Total	1780	12	1792	0	951	951	0	52	52	2795
	Grand Total	3154	21	3175	0	1588	1588	0	72	72	4835
	Apprch %	99.3	0.7		0	100		0	100		
	Total %	65.2	0.4	65.7	0	32.8	32.8	0	1.5	1.5	

		wport Ave		N	ewport Ave		Ch	vay 1		
		<u>Southboun</u>	d		Northboun	d		Eastbound	b	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 AN	/I to 08:45	AM - Peak 1 d	of 1						
Peak Hour for Entire Ir										
07:45 AM	439	7	446	0	250	250	0	16	16	712
08:00 AM	521	4	525	0	244	244	0	17	17	786
08:15 AM	414	6	420	0	212	212	0	23	23	655
08:30 AM	386	2	388	0	273	273	0	6	6	667
Total Volume	1760	19	1779	0	979	979	0	62	62	2820
% App. Total	98.9	1.1		0	100		0	100		
PHF	.845	.679	.847	.000	.897	.897	.000	.674	.674	.897

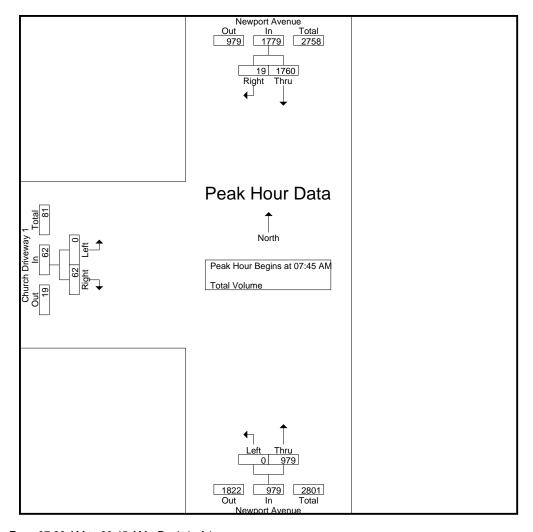
County of Orange N/S: Newport Avenue E/W: Church Driveway 1

Weather: Clear

File Name: 04\_ORC\_New\_Ch DW1 Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  $\,$ 

- Cart Hoar for Lacity									
	08:00 AM			07:45 AM			07:45 AM		
+0 mins.	521	4	525	0	250	250	0	16	16
+15 mins.	414	6	420	0	244	244	0	17	17
+30 mins.	386	2	388	0	212	212	0	23	23
+45 mins.	459	0	459	0	273	273	0	6	6
Total Volume	1780	12	1792	0	979	979	0	62	62
% App. Total	99.3	0.7		0	100		0	100	
PHF	.854	.500	.853	.000	.897	.897	.000	.674	.674

County of Orange N/S: Newport Avenue E/W: Church Driveway 1

Weather: Clear

File Name : 04\_ORC\_New\_Ch DW1 Wed MD Site Code : 10523777

Start Date : 8/30/2023

Page No : 1

					<u> Floups Plin</u>	tea- rotai v	olume				
		Ne	ewport Aver	nue	N	ewport Aver	nue	Chu	rch Drivew	ay 1	
		;	Southbound	b		Northbound	b		Eastbound		
	Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
	02:00 PM	185	0	185	0	261	261	0	0	0	446
	02:15 PM	148	1	149	0	305	305	0	2	2	456
	02:30 PM	263	2	265	0	278	278	0	9	9	552
	02:45 PM	290	2	292	0	303	303	0	8	8	603
	Total	886	5	891	0	1147	1147	0	19	19	2057
	03:00 PM	259	0	259	0	330	330	0	8	8	597
	03:15 PM	235	2	237	0	351	351	0	21	21	609
	03:30 PM	262	1	263	0	425	425	0	22	22	710
	03:45 PM	318	0	318	0	373	373	0	20	20	711
	Total	1074	3	1077	0	1479	1479	0	71	71	2627
G	Frand Total	1960	8	1968	0	2626	2626	0	90	90	4684
	Apprch %	99.6	0.4		0	100		0	100		
	Total %	41.8	0.2	42	0	56.1	56.1	0	1.9	1.9	

	Ne	wport Aver	nue	N	ewport Ave	nue	Chu	urch Drivew	vay 1	
		Southbound	d		Northboun	d		Eastbound	b	
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 02:00 PM	I to 03:45 I	PM - Peak 1 c	of 1						
Peak Hour for Entire Ir	tersection B	egins at 03	:00 PM							
03:00 PM	259	0	259	0	330	330	0	8	8	597
03:15 PM	235	2	237	0	351	351	0	21	21	609
03:30 PM	262	1	263	0	425	425	0	22	22	710
03:45 PM	318	0	318	0	373	373	0	20	20	711
Total Volume	1074	3	1077	0	1479	1479	0	71	71	2627
% App. Total	99.7	0.3		0	100		0	100		
PHF	.844	.375	.847	.000	.870	.870	.000	.807	.807	.924

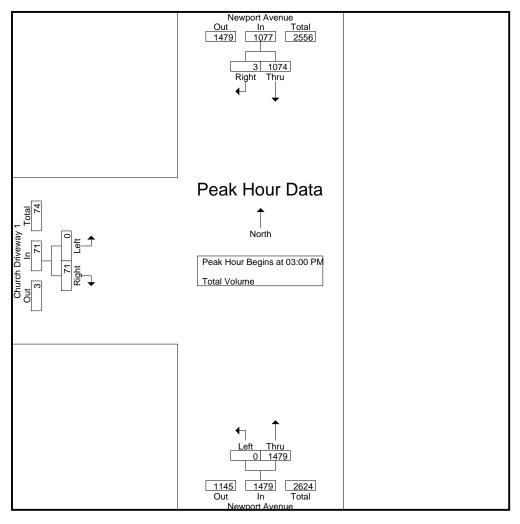
County of Orange N/S: Newport Avenue E/W: Church Driveway 1

Weather: Clear

File Name: 04\_ORC\_New\_Ch DW1 Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

	03:00 PM			03:00 PM			03:00 PM		
mins.	259	0	259	0	330	330	0	8	8
5 mins.	235	2	237	0	351	351	0	21	21
mins.	262	1	263	0	425	425	0	22	22
5 mins.	318	0	318	0	373	373	0	20	20
/olume	1074	3	1077	0	1479	1479	0	71	71
o. Total	99.7	0.3		0	100		0	100	
PHF	.844	.375	.847	.000	.870	.870	.000	.807	.807
		0 mins. 259 5 mins. 235 0 mins. 262 5 mins. 318 /olume 1074 0. Total 99.7	0 mins.     259     0       5 mins.     235     2       0 mins.     262     1       5 mins.     318     0       /olume     1074     3       0. Total     99.7     0.3	0 mins.     259     0     259       5 mins.     235     2     237       0 mins.     262     1     263       5 mins.     318     0     318       /olume     1074     3     1077       0. Total     99.7     0.3	0 mins.     259     0     259     0       5 mins.     235     2     237     0       0 mins.     262     1     263     0       5 mins.     318     0     318     0       /olume     1074     3     1077     0       0. Total     99.7     0.3     0	0 mins.     259     0     259     0     330       5 mins.     235     2     237     0     351       0 mins.     262     1     263     0     425       5 mins.     318     0     318     0     373       /olume     1074     3     1077     0     1479       0. Total     99.7     0.3     0     100	0 mins.     259     0     259     0     330     330       5 mins.     235     2     237     0     351     351       0 mins.     262     1     263     0     425     425       5 mins.     318     0     318     0     373     373       /olume     1074     3     1077     0     1479     1479       0. Total     99.7     0.3     0     100	0 mins.     259     0     259     0     330     330     0       5 mins.     235     2     237     0     351     351     0       0 mins.     262     1     263     0     425     425     0       5 mins.     318     0     318     0     373     373     0       /olume     1074     3     1077     0     1479     1479     0       0. Total     99.7     0.3     0     100     0	0 mins.     259     0     259     0     330     330     0     8       5 mins.     235     2     237     0     351     351     0     21       0 mins.     262     1     263     0     425     425     0     22       5 mins.     318     0     318     0     373     373     0     20       /olume     1074     3     1077     0     1479     1479     0     71       0. Total     99.7     0.3     0     100     0     100

County of Orange N/S: Church Driveway 2 E/W: Vanderlip Avenue

Weather: Clear

File Name: 05\_ORC\_Ch DW2\_Vand Wed AM Site Code: 10523777

Start Date : 8/30/2023 Page No : 1

						Jioups	HIIICU	i Otai v	Jiuille							
Pe	ersonal	Drivev	vay	V	/anderli	p Aven	ue	С	hurch [	Drivewa	y 2	\	/anderli	p Aven	ue	
	South	bound			West	bound			North	bound			East	bound		
Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
0	0	0	0	2	9	0	11	0	0	0	0	0	8	1	9	20
0	0	0	0	4	5	0	9	0	0	0	0	0	6	3	9	18
0	0	0	0	9	11	0	20	0	0	0	0	0	9	5	14	34
0	0	0	0	27	12	0	39	2	0	4	6	0	23	8	31	76
0	0	0	0	42	37	0	79	2	0	4	6	0	46	17	63	148
0	0	0	0	31	24	0	55	1	0	7	8	0	43	7	50	113
0	0	0	0	24	12	0	36	2	0	5	7	0	21	5	26	69
0	0	0	0	7	7	0	14	0	0	3	3	0	24	0	24	41
0	0	0	0	1	8	0	9	0	0	1	1	0	8	1	9	19
0	0	0	0	63	51	0	114	3	0	16	19	0	96	13	109	242
0	0	0	0	105	88	0	193	5	0	20	25	0	142	30	172	390
0	0	0		54.4	45.6	0		20	0	80		0	82.6	17.4		
0	0	0	0	26.9	22.6	0	49.5	1.3	0	5.1	6.4	0	36.4	7.7	44.1	
	Left   0	South   Left   Thru	Southbound           Left         Thru         Right           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0           0         0         0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Southbound   Left   Continue	Personal Driveway   Southbound   West	Personal Driveway   Southbound   Westbound   Westbound	Personal Driveway Southbound   Vanderlip Avenue Westbound   Westbound	Personal Driveway   Southbound   Southbound   Southbound   Westbound   Westbound   Left   Thru   Right   App. Total   Left   Thru   T	North   South   Sout	Personal Driveway   Southbound   Westbound   Westbound   Northbound   Northbound	Personal Driveway South-bound   Personal Driveway South-boun	Personal Driveway Southbound   Southbound   Southbound   Southbound   Southbound   Westbound   Southbound   Southbound	Personal Driveway	Personal Driveway	Personal Driveway   Vanderlip Avenue   Southbound   Westbound   Westbound   Northbound   Eastbound   Eastbound

	Р	ersonal	Drivev	vay	V	anderli	p Aven	ue	С	hurch [	Drivewa	y 2	V	/anderli	ip Aven	ue	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 07:	00 AM	to 08:45	AM - P	eak 1 o	f 1					· ·					
Peak Hour for																	
07:45 AM	0	0	0	0	27	12	0	39	2	0	4	6	0	23	8	31	76
08:00 AM	0	0	0	0	31	24	0	55	1	0	7	8	0	43	7	50	113
08:15 AM	0	0	0	0	24	12	0	36	2	0	5	7	0	21	5	26	69
08:30 AM	0	0	0	0	7	7	0	14	0	0	3	3	0	24	0	24	41
Total Volume	0	0	0	0	89	55	0	144	5	0	19	24	0	111	20	131	299
% App. Total	0	0	0		61.8	38.2	0		20.8	0	79.2		0	84.7	15.3		
PHF	.000	.000	.000	.000	.718	.573	.000	.655	.625	.000	.679	.750	.000	.645	.625	.655	.662

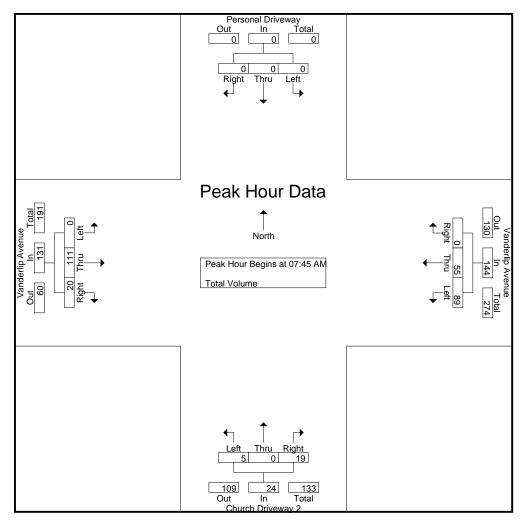
County of Orange N/S: Church Driveway 2 E/W: Vanderlip Avenue

Weather: Clear

File Name: 05\_ORC\_Ch DW2\_Vand Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for	Each A	pproach	Begins at:

Peak Hour for	Each Ap	proacr	n Begin	s at:												
	07:00 AM				07:30 AN	Л			07:45 AM	1			07:45 AN	1		
+0 mins.	0	0	0	0	9	11	0	20	2	0	4	6	0	23	8	31
+15 mins.	0	0	0	0	27	12	0	39	1	0	7	8	0	43	7	50
+30 mins.	0	0	0	0	31	24	0	55	2	0	5	7	0	21	5	26
+45 mins.	0	0	0	0	24	12	0	36	0	0	3	3	0	24	0	24
Total Volume	0	0	0	0	91	59	0	150	5	0	19	24	0	111	20	131
% App. Total	0	0	0		60.7	39.3	0		20.8	0	79.2		0	84.7	15.3	
PHF	.000	.000	.000	.000	.734	.615	.000	.682	.625	.000	.679	.750	.000	.645	.625	.655

County of Orange N/S: Church Driveway 2 E/W: Vanderlip Avenue

Weather: Clear

File Name : 05\_ORC\_Ch DW2\_Vand Wed MD Site Code : 10523777 Start Date : 8/30/2023 Page No : 1

							<u>Jioups</u>	riiileu-	i Olai Vi	Julie							
	P	ersonal	Drivev	vay	V	anderli	ip Aven	ue	С	hurch [	Drivewa	y 2	\	/anderli	p Aven	ue	
		South	bound			West	tbound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
02:00 PM	0	0	0	0	3	9	0	12	0	0	0	0	0	14	1	15	27
02:15 PM	0	0	0	0	5	11	0	16	0	0	0	0	0	4	1	5	21
02:30 PM	0	0	0	0	8	10	0	18	1	0	0	1	0	8	0	8	27
02:45 PM	0	0	0	0	8	16	0	24	1	0	0	1	0	6	0	6	31
Total	0	0	0	0	24	46	0	70	2	0	0	2	0	32	2	34	106
03:00 PM	0	0	0	0	11	14	0	25	1	0	2	3	0	16	1	17	45
03:15 PM	0	0	0	0	28	19	0	47	0	0	1	1	0	18	1	19	67
03:30 PM	0	0	0	0	22	15	0	37	2	0	5	7	0	13	2	15	59
03:45 PM	0	0	0	0	5	9	0	14	9	0	3	12	1	3	0	4	30
Total	0	0	0	0	66	57	0	123	12	0	11	23	1	50	4	55	201
Grand Total	0	0	0	0	90	103	0	193	14	0	11	25	1	82	6	89	307
Apprch %	0	0	0		46.6	53.4	0		56	0	44		1.1	92.1	6.7		
Total %	0	0	0	0	29.3	33.6	0	62.9	4.6	0	3.6	8.1	0.3	26.7	2	29	

	Р	ersonal	Drivev	vay	V	'anderli	p Aven	ue	С	hurch [	Drivewa	y 2	V	/anderli	ip Aven	ue	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Ana	alysis F	rom 02:	00 PM	to 03:45	PM - P	eak 1 d	f 1										
Peak Hour for	Entire I	ntersec	tion Be	gins at 0	2:45 PN	1											
02:45 PM	0	0	0	0	8	16	0	24	1	0	0	1	0	6	0	6	31
03:00 PM	0	0	0	0	11	14	0	25	1	0	2	3	0	16	1	17	45
03:15 PM	0	0	0	0	28	19	0	47	0	0	1	1	0	18	1	19	67
03:30 PM	0	0	0	0	22	15	0	37	2	0	5	7	0	13	2	15	59
Total Volume	0	0	0	0	69	64	0	133	4	0	8	12	0	53	4	57	202
% App. Total	0	0	0		51.9	48.1	0		33.3	0	66.7		0	93	7		
PHF	.000	.000	.000	.000	.616	.842	.000	.707	.500	.000	.400	.429	.000	.736	.500	.750	.754

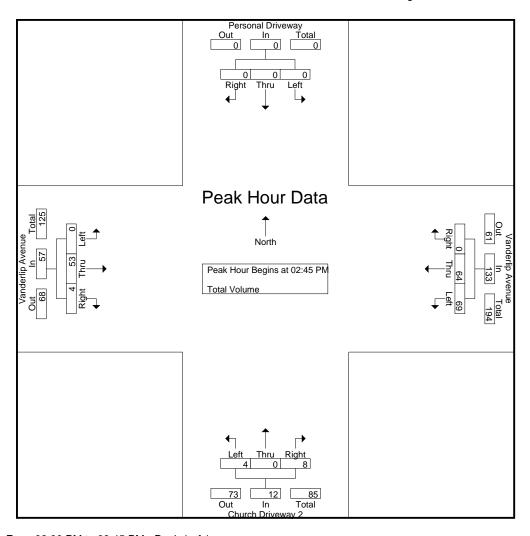
County of Orange N/S: Church Driveway 2 E/W: Vanderlip Avenue

Weather: Clear

File Name: 05\_ORC\_Ch DW2\_Vand Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for	Each Ap	oproach	Begins at:

1 Oak Hoar for																
	02:00 PM	1			02:45 PN	1			03:00 PN	Л			02:45 PN	1		
+0 mins.	0	0	0	0	8	16	0	24	1	0	2	3	0	6	0	6
+15 mins.	0	0	0	0	11	14	0	25	0	0	1	1	0	16	1	17
+30 mins.	0	0	0	0	28	19	0	47	2	0	5	7	0	18	1	19
+45 mins.	0	0	0	0	22	15	0	37	9	0	3	12	0	13	2	15
Total Volume	0	0	0	0	69	64	0	133	12	0	11	23	0	53	4	57
% App. Total	0	0	0		51.9	48.1	0		52.2	0	47.8		0	93	7	
PHF	.000	.000	.000	.000	.616	.842	.000	.707	.333	.000	.550	.479	.000	.736	.500	.750

County of Orange N/S: Newport Avenue E/W: Vanderlip Avenue

Weather: Clear

File Name : 06\_ORC\_New\_Vand Wed AM Site Code : 10523777

Start Date : 8/30/2023 Page No : 1

Groups Frinted- Total Volume										
	Newport Avenue			Newport Avenue			Vanderlip Avenue			
	;	Southbound	d	Northbound			Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	276	2	278	11	110	121	0	9	9	408
07:15 AM	277	3	280	7	96	103	0	6	6	389
07:30 AM	358	2	360	24	137	161	0	10	10	531
 07:45 AM	429	7	436	35	219	254	1	29	30	720
Total	1340	14	1354	77	562	639	1	54	55	2048
08:00 AM	491	17	508	42	202	244	0	45	45	797
08:15 AM	406	4	410	32	175	207	0	27	27	644
08:30 AM	377	7	384	8	265	273	3	23	26	683
08:45 AM	457	1	458	9	220	229	1	9	10	697
 Total	1731	29	1760	91	862	953	4	104	108	2821
Grand Total	3071	43	3114	168	1424	1592	5	158	163	4869
Apprch %	98.6	1.4		10.6	89.4		3.1	96.9		
Total %	63.1	0.9	64	3.5	29.2	32.7	0.1	3.2	3.3	

	Newport Avenue			Newport Avenue			Vanderlip Avenue			
	5	Southbound	b	Northbound		Eastbound				
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fre	om 07:00 AM	1 to 08:45 A	AM - Peak 1 c	of 1						
Peak Hour for Entire In	tersection Be	egins at 07	:45 AM							
07:45 AM	429	7	436	35	219	254	1	29	30	720
08:00 AM	491	17	508	42	202	244	0	45	45	797
08:15 AM	406	4	410	32	175	207	0	27	27	644
08:30 AM	377	7	384	8	265	273	3	23	26	683
Total Volume	1703	35	1738	117	861	978	4	124	128	2844
% App. Total	98	2		12	88		3.1	96.9		
PHF	.867	.515	.855	.696	.812	.896	.333	.689	.711	.892

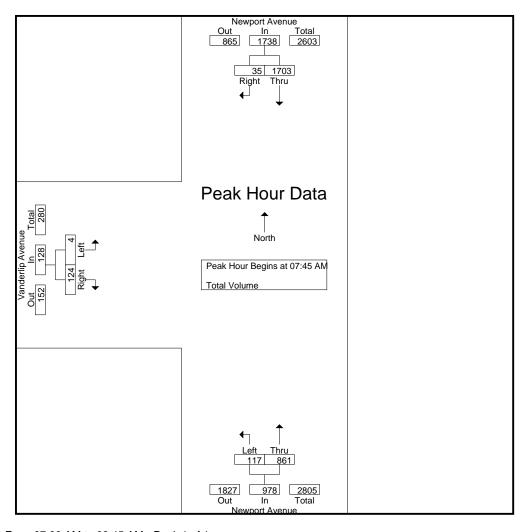
County of Orange N/S: Newport Avenue E/W: Vanderlip Avenue

Weather: Clear

File Name: 06\_ORC\_New\_Vand Wed AM

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  $\,$ 

	tour flour for Each represent Bogino at:								
	08:00 AM			07:45 AM			07:45 AM		
+0 mins.	491	17	508	35	219	254	1	29	30
+15 mins.	406	4	410	42	202	244	0	45	45
+30 mins.	377	7	384	32	175	207	0	27	27
+45 mins.	457	1	458	8	265	273	3	23	26
Total Volume	1731	29	1760	117	861	978	4	124	128
% App. Total	98.4	1.6		12	88		3.1	96.9	
PHF	.881	.426	.866	.696	.812	.896	.333	.689	.711

County of Orange N/S: Newport Avenue E/W: Vanderlip Avenue

Weather: Clear

File Name : 06\_ORC\_New\_Vand Wed MD Site Code : 10523777

Start Date : 8/30/2023

Page No : 1

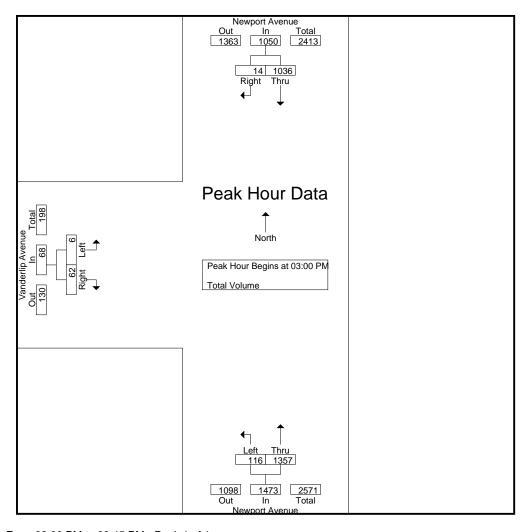
Groups Printed- Total Volume									
Γotal	Int. Total								
15	444								
5	452								
10	552								
6	593								
36	2041								
15	580								
23	604								
22	704								
8	703_								
68	2591								
104	4632								
2.2									
	5 10 6 36 15 23 22 8 68								

		wport Aver		Newport Avenue Northbound			Vanderlip Avenue Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 02:00 PM	to 03:45 F	PM - Peak 1 c	of 1						
Peak Hour for Entire In	itersection Be	egins at 03	:00 PM							
03:00 PM	229	4	233	24	308	332	0	15	15	580
03:15 PM	231	8	239	42	300	342	1	22	23	604
03:30 PM	254	1	255	33	394	427	4	18	22	704
03:45 PM	322	1	323	17	355	372	1	7	8	703
Total Volume	1036	14	1050	116	1357	1473	6	62	68	2591
% App. Total	98.7	1.3		7.9	92.1		8.8	91.2		
PHF	.804	.438	.813	.690	.861	.862	.375	.705	.739	.920

County of Orange N/S: Newport Avenue E/W: Vanderlip Avenue Weather: Clear File Name: 06\_ORC\_New\_Vand Wed MD

Site Code : 10523777 Start Date : 8/30/2023

Page No : 2



Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

1 Cak Hour for Each Approach Degins at.									
03:00 PM			03:00 PM			03:00 PM			
229	4	233	24	308	332	0	15	15	
231	8	239	42	300	342	1	22	23	
254	1	255	33	394	427	4	18	22	
322	1	323	17	355	372	1	7	8	
1036	14	1050	116	1357	1473	6	62	68	
98.7	1.3		7.9	92.1		8.8	91.2		
.804	.438	.813	.690	.861	.862	.375	.705	.739	
	03:00 PM 229 231 254 <b>322</b> 1036 98.7	03:00 PM 229 4 231 8 254 1 322 1 1036 14 98.7 1.3	03:00 PM 229	03:00 PM     03:00 PM       229     4     233     24       231     8     239     42       254     1     255     33       322     1     323     17       1036     14     1050     116       98.7     1.3     7.9	03:00 PM         03:00 PM           229         4         233         24         308           231         8         239         42         300           254         1         255         33         394           322         1         323         17         355           1036         14         1050         116         1357           98.7         1.3         7.9         92.1	03:00 PM         03:00 PM           229         4         233         24         308         332           231         8         239         42         300         342           254         1         255         33         394         427           322         1         323         17         355         372           1036         14         1050         116         1357         1473           98.7         1.3         7.9         92.1	03:00 PM         03:00 PM         03:00 PM           229         4         233         24         308         332         0           231         8         239         42         300         342         1           254         1         255         33         394         427         4           322         1         323         17         355         372         1           1036         14         1050         116         1357         1473         6           98.7         1.3         7.9         92.1         8.8	03:00 PM         03:00 PM         03:00 PM           229         4         233         24         308         332         0         15           231         8         239         42         300         342         1         22           254         1         255         33         394         427         4         18           322         1         323         17         355         372         1         7           1036         14         1050         116         1357         1473         6         62           98.7         1.3         7.9         92.1         8.8         91.2	



# **Appendix B**

24-Hour Driveway Counts



City: County of Orange

Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 1

Date: Thursday, May 18, 2023
Count Type: Driveway Volume Count

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	1	0	1
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	1	2	3
7:15	0	0	0
7:30	1	0	1
7:45	3	2	5
8:00	1	0	1
8:15	0	1	1
8:30	1	0	1
8:45	0	1	1
9:00	0	0	0
9:15	0	0	0
9:30	0	0	0
9:45	0	0	0
10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	1	1
11.75		_	



Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 1

	- Cotorina	- Cyiting	Total
12.00	Entering	Exiting	Total
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	0	0
13:15	0	0	0
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0
15:15	0	0	0
15:30	0	0	0
15:45	0	0	0
16:00	0	0	0
16:15	0	1	1
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	8	8	16



Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 2

ı			
	- Entoring	- Fyiting	Total
0:00	Entering 0	Exiting 0	Total 0
0:00	0		0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	0	3	3
7:15	0	3	3
7:30	0	13	13
7:45	0	37	37
8:00	0	34	34
8:15	0	30	30
8:30	0	5	5
8:45	0	5	5
9:00	0	5	5
9:15	0	4	4
9:30	0	2	2
9:45	0	1	1
10:00	0	1	1
10:15	0	0	0
10:30	0	2	2
10:45	0	0	0
11:00	0	5	5
11:15	0	1	1
11:30	0	1	1
11:45	0	4	4



Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 2

	Fuetauina.	Fuitin a	Takal
12.00	Entering	Exiting	Total
12:00	0	1	1
12:15	0	3	3
12:30	0	0	0
12:45	0	3	3
13:00	1	1	2
13:15	0	1	1
13:30	0	1	1
13:45	0	2	2
14:00	0	0	0
14:15	0	1	1
14:30	0	8	8
14:45	0	14	14
15:00	0	14	14
15:15	0	22	22
15:30	0	35	35
15:45	0	22	22
16:00	0	14	14
16:15	0	13	13
16:30	0	2	2
16:45	0	3	3
17:00	0	12	12
17:15	0	4	4
17:30	0	2	2
17:45	0	0	0
18:00	0	0	0
18:15	0	1	1
18:30	0	0	0
18:45	0	0	0
19:00	0	1	1
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	1	1
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	1	337	338



Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 3

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	1	0	1
6:30	0	0	0
6:45	1	0	1
7:00	6	0	6
7:15	5	0	5
7:30	4	0	4
7:45	37	0	37
8:00	65	0	65
8:15	23	0	23
8:30	10	0	10
8:45	4	0	4
9:00	3	0	3
9:15	3	0	3
9:30	2	0	2
9:45	2	0	2
10:00	1	0	1
10:15	0	0	0
10:30	0	0	0
10:45	1	0	1
11:00	4	0	4
11:15	1	0	1
11:30	1	0	1
11:45	4	0	4
	-		



Location: Fairmont Prviate School, 12421 Newport Ave

School Driveway 3

	Fueta via a	Fuitin a	Takal
12.00	Entering	Exiting	Total
12:00	1	0	1
12:15	1	0	1
12:30		0	1
12:45	2	0	2
13:00	1	1	2
13:15	0	0	0
13:30	1	0	1
13:45	2	0	2
14:00	0	0	0
14:15	7	0	7
14:30	5	0	5
14:45	22	0	22
15:00	14	0	14
15:15	42	0	42
15:30	17	0	17
15:45	11	1	12
16:00	8	0	8
16:15	7	0	7
16:30	4	1	5
16:45	5	0	5
17:00	8	0	8
17:15	3	0	3
17:30	0	1	1
17:45	0	0	0
18:00	0	0	0
18:15	1	0	1
18:30	0	0	0
18:45	1	0	1
19:00	1	0	1
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	1	1
21:15	1	0	1
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	344	5	349



Location: Fairmont Prviate School, 12421 Newport Ave

Church Dwy 1

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	1	0	1
6:15	0	0	0
6:30	0	0	0
6:45	0	2	2
7:00	0	1	1
7:15	2	2	4
7:30	0	2	2
7:45	4	22	26
8:00	0	27	27
8:15	1	10	11
8:30	1	6	7
8:45	0	2	2
9:00	0	1	1
9:15	0	0	0
9:30	0	1	1
9:45	0	2	2
10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	3	3
11:00	1	4	5
11:15	0	1	1
11:30	0	0	0
11:45	0	1	1
11.75		_	



Location: Fairmont Prviate School, 12421 Newport Ave

Church Dwy 1

ı			I
	Entering	Exiting	Total
12:00	0	1	1
12:15	0	0	0
	0		
12:30		2	2
12:45	0	2	2
13:00	0	1	1
13:15	0	1	1
13:30	0	0	0
13:45	0	1	1
14:00	1	0	1
14:15	0	4	4
14:30	0	3	3
14:45	1	14	15
15:00	1	6	7
15:15	0	30	30
15:30	0	11	11
15:45	0	10	10
16:00	1	4	5
16:15	0	4	4
16:30	0	2	2
16:45	0	5	5
17:00	0	2	2
17:15	0	3	3
17:30	0	0	0
17:45	0	1	1
18:00	0	0	0
18:15	0	0	0
18:30	0	1	1
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	<b>14</b>	<b>195</b>	209
IUIAL	14	132	209



Location: Fairmont Prviate School, 12421 Newport Ave

Church Dwy 2

	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	0	0	0
6:45	0	0	0
7:00	4	0	4
7:15	8	0	8
7:30	13	0	13
7:45	32	3	35
8:00	33	10	43
8:15	28	5	33
8:30	7	3	10
8:45	2	0	2
9:00	2	0	2
9:15	1	1	2
9:30	0	0	0
9:45	3	0	3
10:00	0	0	0
10:00	0	0	0
10:13	1	0	1
10:30	0	0	0
11:00	1	1	2
11:00	0	1	1
11:15	1	1	2
11:30	0	1	1
11:45	U	1	Ţ



Location: Fairmont Prviate School, 12421 Newport Ave

Church Dwy 2

ı			I
	Entering	Exiting	Total
12:00	2	2	4
12:15	0	0	0
12:30	4	0	4
12:45	3	1	4
13:00	2	0	2
13:15	0	0	0
13:30	0	0	0
13:45	1	0	1
14:00	1	0	1
14:15	6	1	7
14:30	6	1	7
14:45	13	0	13
15:00	14	3	17
15:15	27	12	39
15:30	20	11	31
15:45	7	12	19
16:00	3	4	7
16:15	3	2	5
16:30	5	1	6
16:45	1	1	2
17:00	5	1	6
17:15	2	0	2
17:30	1	1	2
17:45	0	2	2
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	1	0	1
19:00	2	0	2
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	3	3
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	265	84	349
	_30	٠.	



Location: Fairmont Prviate School, 12421 Newport Ave

TOTAL

,			
	Entering	Exiting	Total
0:00	0	0	0
0:15	0	0	0
0:30	0	0	0
0:45	0	0	0
1:00	0	0	0
1:15	0	0	0
1:30	0	0	0
1:45	0	0	0
2:00	0	0	0
2:15	0	0	0
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	0	0
4:30	0	0	0
4:45	0	0	0
5:00	0	0	0
5:15	0	0	0
5:30	1	0	1
5:45	0	0	0
6:00	1	0	1
6:15	1	0	1
6:30	0	0	0
6:45	1	2	3
7:00	11	6	17
7:15	15	5	20
7:30	18	15	33
7:45	76	64	140
8:00	99	71	170
8:15	52	46	98
8:30	19	14	33
8:45	6	8	14
9:00	5	6	11
9:15	4	5	9
9:30	2	3	5
9:45	5	3	8
10:00	1	1	2
10:00	0	0	0
10:15	1	2	3
10:30	1	3	4
	6		
11:00		10	16
11:15	1	3	4
11:30	2	7	4
11:45	4	/	11



Location: Fairmont Prviate School, 12421 Newport Ave

TOTAL

ı			
	Entering	Exiting	Total
12:00	3	4	7
12:15	1	3	4
12:30	5	2	7
12:45	5	6	11
13:00	4	3	7
13:15	0	2	2
13:30	1	1	2
13:45	3	3	6
14:00	2	0	2
14:15	13	6	19
14:30	11	12	23
14:45	36	28	64
15:00	29	23	52
15:15	69	64	133
15:30	37	57	94
15:45	18	45	63
16:00	12	22	34
16:15	10	20	30
16:30	9	6	15
16:45	6	9	15
17:00	13	15	28
17:15	5	7	12
17:30	1	4	5
17:45	0	3	3
18:00	0	0	0
18:15	1	1	2
18:30	0	1	1
18:45	2	0	2
19:00	3	1	4
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	1	1
20:15	0	0	0
20:30	0	3	3
20:45	0	0	0
21:00	0	1	1
21:15	1	0	1
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0
TOTAL	632	629	1261
IOIAL	032	023	1201



# **Appendix C**

Detailed CA MUTCD Traffic Signal Warrant Analysis Worksheets Version 2023 (SP 0-8)

JN: 2739-2023-01

## Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major S	Streets	Minor Streets
	S	N	W
1	978	1738	128
2	949	1686	124
3	929	1651	122
4	870	1547	114
5	773	1373	101
6	763	1356	100
7	753	1338	99
8	685	1217	90
9	675	1199	88
10	665	1182	87
11	577	1025	76
12	538	956	70
13	528	939	69
14	391	695	51
15	391	695	51
16	274	487	36
17	156	278	20
18	156	278	20
19	88	156	12
20	49	87	6
21	29	52	4
22	10	17	1
23	10	17	1
24	10	17	1

## Warrant Analysis by Hour

Hour	Major 9	Streets	Minor	Street		Warrant 1	Condition A	1		Warrant 1	Condition B	}	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2716	2	128	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	2635	2	124	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	2580	2	122	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
4	3	2417	2	114	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No
5	3	2146	2	101	No	No	No	No	Yes	Yes	Yes	Yes	No	No
6	3	2119	2	100	No	No	No	No	Yes	Yes	Yes	Yes	No	No
7	3	2091	2	99	No	No	No	No	No	Yes	Yes	Yes	No	No
8	3	1902	2	90	No	No	No	No	No	Yes	Yes	Yes	No	No
9	3	1874	2	88	No	No	No	No	No	Yes	Yes	Yes	No	No
10	3	1847	2	87	No	No	No	No	No	Yes	Yes	Yes	No	No
11	3	1602	2	76	No	No	No	No	No	No	Yes	Yes	No	No
12	3	1494	2	70	No	No	No	No	No	No	Yes	Yes	No	No
13	3	1467	2	69	No	No	No	No	No	No	No	Yes	No	No
14	3	1086	2	51	No	No	No	No	No	No	No	No	No	No
15	3	1086	2	51	No	No	No	No	No	No	No	No	No	No
16	3	761	2	36	No	No	No	No	No	No	No	No	No	No
17	3	434	2	20	No	No	No	No	No	No	No	No	No	No
18	3	434	2	20	No	No	No	No	No	No	No	No	No	No
19	3	244	2	12	No	No	No	No	No	No	No	No	No	No
20	3	136	2	6	No	No	No	No	No	No	No	No	No	No
21	3	81	2	4	No	No	No	No	No	No	No	No	No	No
22	3	27	2	1	No	No	No	No	No	No	No	No	No	No
23	3	27	2	1	No	No	No	No	No	No	No	No	No	No
24	3	27	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	4	6	10	12	13	3	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	36.1
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:17
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	128
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2844
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major S	Streets	Minor Streets
	S	N	W
1	116	1050	68
2	113	1019	66
3	110	998	65
4	103	935	61
5	92	830	54
6	90	819	53
7	89	809	52
8	81	735	48
9	80	725	47
10	79	714	46
11	68	620	40
12	64	578	37
13	63	567	37
14	46	420	27
15	46	420	27
16	32	294	19
17	19	168	11
18	19	168	11
19	10	95	6
20	6	53	3
21	3	32	2
22	1	11	1
23	1	11	1
24	1	11	1



## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street		Warrant 1	Condition A	1		Warrant 1	Condition E	3	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1166	2	68	No	No	No	No	No	No	No	Yes	No	No
2	3	1132	2	66	No	No	No	No	No	No	No	Yes	No	No
3	3	1108	2	65	No	No	No	No	No	No	No	Yes	No	No
4	3	1038	2	61	No	No	No	No	No	No	No	Yes	No	No
5	3	922	2	54	No	No	No	No	No	No	No	No	No	No
6	3	909	2	53	No	No	No	No	No	No	No	No	No	No
7	3	898	2	52	No	No	No	No	No	No	No	No	No	No
8	3	816	2	48	No	No	No	No	No	No	No	No	No	No
9	3	805	2	47	No	No	No	No	No	No	No	No	No	No
10	3	793	2	46	No	No	No	No	No	No	No	No	No	No
11	3	688	2	40	No	No	No	No	No	No	No	No	No	No
12	3	642	2	37	No	No	No	No	No	No	No	No	No	No
13	3	630	2	37	No	No	No	No	No	No	No	No	No	No
14	3	466	2	27	No	No	No	No	No	No	No	No	No	No
15	3	466	2	27	No	No	No	No	No	No	No	No	No	No
16	3	326	2	19	No	No	No	No	No	No	No	No	No	No
17	3	187	2	11	No	No	No	No	No	No	No	No	No	No
18	3	187	2	11	No	No	No	No	No	No	No	No	No	No
19	3	105	2	6	No	No	No	No	No	No	No	No	No	No
20	3	59	2	3	No	No	No	No	No	No	No	No	No	No
21	3	35	2	2	No	No	No	No	No	No	No	No	No	No
22	3	12	2	1	No	No	No	No	No	No	No	No	No	No
23	3	12	2	1	No	No	No	No	No	No	No	No	No	No
24	3	12	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met				_	0	0	0	0	0	0	0	4	0	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.6
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:16
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	68
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1234
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

## Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

#### Warrants Summary

Warrant	Name	Met?		
#1	Eight Hour Vehicular Volume	No		
#2	Four Hour Vehicular Volume	Yes		
#3	Peak Hour	No		

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major	Minor Streets	
	S	N	W
1	1016	1788	134
2	986	1734	130
3	965	1699	127
4	904	1591	119
5	803	1413	106
6	792	1395	105
7	782	1377	103
8	711	1252	94
9	701	1234	92
10	691	1216	91
11	599	1055	79
12	559	983	74
13	549	966	72
14	406	715	54
15	406	715	54
16	284	501	38
17	163	286	21
18	163	286	21
19	91	161	12
20	51	89	7
21	30	54	4
22	10	18	1
23	10	18	1
24	10	18	1

Version 2023 (SP 0-8) JN: 2739-2023-01

## Warrant Analysis by Hour

Hour	Major	Streets	s Minor Street			Warrant 1 Condition A				Warrant 1 Condition B				Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2804	2	134	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	2720	2	130	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	2664	2	127	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
4	3	2495	2	119	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
5	3	2216	2	106	No	No	No	No	Yes	Yes	Yes	Yes	No	No
6	3	2187	2	105	No	No	No	No	Yes	Yes	Yes	Yes	No	No
7	3	2159	2	103	No	No	No	No	Yes	Yes	Yes	Yes	No	No
8	3	1963	2	94	No	No	No	No	No	Yes	Yes	Yes	No	No
9	3	1935	2	92	No	No	No	No	No	Yes	Yes	Yes	No	No
10	3	1907	2	91	No	No	No	No	No	Yes	Yes	Yes	No	No
11	3	1654	2	79	No	No	No	No	No	No	Yes	Yes	No	No
12	3	1542	2	74	No	No	No	No	No	No	Yes	Yes	No	No
13	3	1515	2	72	No	No	No	No	No	No	Yes	Yes	No	No
14	3	1121	2	54	No	No	No	No	No	No	No	No	No	No
15	3	1121	2	54	No	No	No	No	No	No	No	No	No	No
16	3	785	2	38	No	No	No	No	No	No	No	No	No	No
17	3	449	2	21	No	No	No	No	No	No	No	No	No	No
18	3	449	2	21	No	No	No	No	No	No	No	No	No	No
19	3	252	2	12	No	No	No	No	No	No	No	No	No	No
20	3	140	2	7	No	No	No	No	No	No	No	No	No	No
21	3	84	2	4	No	No	No	No	No	No	No	No	No	No
22	3	28	2	1	No	No	No	No	No	No	No	No	No	No
23	3	28	2	1	No	No	No	No	No	No	No	No	No	No
24	3	28	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	4	7	10	13	13	4	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	40.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:30
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	134
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2938
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

## Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major S	treets	Minor Streets
	S	N	W
1	146	1084	73
2	142	1051	71
3	139	1030	69
4	130	965	65
5	115	856	58
6	114	846	57
7	112	835	56
8	102	759	51
9	101	748	50
10	99	737	50
11	86	640	43
12	80	596	40
13	79	585	39
14	58	434	29
15	58	434	29
16	41	304	20
17	23	173	12
18	23	173	12
19	13	98	7
20	7	54	4
21	4	33	2
22	1	11	1
23	1	11	1
24	1	11	1



## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street		Warrant 1	Condition A	1	,	Warrant 1	Condition E	3	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1230	2	73	No	No	No	No	No	No	Yes	Yes	No	No
2	3	1193	2	71	No	No	No	No	No	No	Yes	Yes	No	No
3	3	1169	2	69	No	No	No	No	No	No	No	Yes	No	No
4	3	1095	2	65	No	No	No	No	No	No	No	Yes	No	No
5	3	971	2	58	No	No	No	No	No	No	No	Yes	No	No
6	3	960	2	57	No	No	No	No	No	No	No	Yes	No	No
7	3	947	2	56	No	No	No	No	No	No	No	Yes	No	No
8	3	861	2	51	No	No	No	No	No	No	No	No	No	No
9	3	849	2	50	No	No	No	No	No	No	No	No	No	No
10	3	836	2	50	No	No	No	No	No	No	No	No	No	No
11	3	726	2	43	No	No	No	No	No	No	No	No	No	No
12	3	676	2	40	No	No	No	No	No	No	No	No	No	No
13	3	664	2	39	No	No	No	No	No	No	No	No	No	No
14	3	492	2	29	No	No	No	No	No	No	No	No	No	No
15	3	492	2	29	No	No	No	No	No	No	No	No	No	No
16	3	345	2	20	No	No	No	No	No	No	No	No	No	No
17	3	196	2	12	No	No	No	No	No	No	No	No	No	No
18	3	196	2	12	No	No	No	No	No	No	No	No	No	No
19	3	111	2	7	No	No	No	No	No	No	No	No	No	No
20	3	61	2	4	No	No	No	No	No	No	No	No	No	No
21	3	37	2	2	No	No	No	No	No	No	No	No	No	No
22	3	12	2	1	No	No	No	No	No	No	No	No	No	No
23	3	12	2	1	No	No	No	No	No	No	No	No	No	No
24	3	12	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	2	7	0	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:18
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	73
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1303
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major	Streets	Minor Streets
	S	N	W
1	1000	1776	130
2	970	1723	126
3	950	1687	124
4	890	1581	116
5	790	1403	103
6	780	1385	101
7	770	1368	100
8	700	1243	91
9	690	1225	90
10	680	1208	88
11	590	1048	77
12	550	977	72
13	540	959	70
14	400	710	52
15	400	710	52
16	280	497	36
17	160	284	21
18	160	284	21
19	90	160	12
20	50	89	7
21	30	53	4
22	10	18	1
23	10	18	1
24	10	18	1

## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street	,	Warrant 1	Condition A	١	Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2776	2	130	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	2693	2	126	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	2637	2	124	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
4	3	2471	2	116	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
5	3	2193	2	103	No	No	No	No	Yes	Yes	Yes	Yes	No	No
6	3	2165	2	101	No	No	No	No	Yes	Yes	Yes	Yes	No	No
7	3	2138	2	100	No	No	No	No	Yes	Yes	Yes	Yes	No	No
8	3	1943	2	91	No	No	No	No	No	Yes	Yes	Yes	No	No
9	3	1915	2	90	No	No	No	No	No	Yes	Yes	Yes	No	No
10	3	1888	2	88	No	No	No	No	No	Yes	Yes	Yes	No	No
11	3	1638	2	77	No	No	No	No	No	No	Yes	Yes	No	No
12	3	1527	2	72	No	No	No	No	No	No	Yes	Yes	No	No
13	3	1499	2	70	No	No	No	No	No	No	Yes	Yes	No	No
14	3	1110	2	52	No	No	No	No	No	No	No	No	No	No
15	3	1110	2	52	No	No	No	No	No	No	No	No	No	No
16	3	777	2	36	No	No	No	No	No	No	No	No	No	No
17	3	444	2	21	No	No	No	No	No	No	No	No	No	No
18	3	444	2	21	No	No	No	No	No	No	No	No	No	No
19	3	250	2	12	No	No	No	No	No	No	No	No	No	No
20	3	139	2	7	No	No	No	No	No	No	No	No	No	No
21	3	83	2	4	No	No	No	No	No	No	No	No	No	No
22	3	28	2	1	No	No	No	No	No	No	No	No	No	No
23	3	28	2	1	No	No	No	No	No	No	No	No	No	No
24	3	28	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	4	7	10	13	13	4	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	38.8
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:24
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	130
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	2906
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

## Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major	Streets	Minor Streets
	S	N	W
1	122	1075	69
2	118	1043	67
3	116	1021	66
4	109	957	61
5	96	849	55
6	95	839	54
7	94	828	53
8	85	753	48
9	84	742	48
10	83	731	47
11	72	634	41
12	67	591	38
13	66	581	37
14	49	430	28
15	49	430	28
16	34	301	19
17	20	172	11
18	20	172	11
19	11	97	6
20	6	54	3
21	4	32	2
22	1	11	1
23	1	11	1
24	1	11	1

## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street		Warrant 1	Condition A	١		Warrant 1 (	Condition E	3	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1197	2	69	No	No	No	No	No	No	No	Yes	No	No
2	3	1161	2	67	No	No	No	No	No	No	No	Yes	No	No
3	3	1137	2	66	No	No	No	No	No	No	No	Yes	No	No
4	3	1066	2	61	No	No	No	No	No	No	No	Yes	No	No
5	3	945	2	55	No	No	No	No	No	No	No	No	No	No
6	3	934	2	54	No	No	No	No	No	No	No	No	No	No
7	3	922	2	53	No	No	No	No	No	No	No	No	No	No
8	3	838	2	48	No	No	No	No	No	No	No	No	No	No
9	3	826	2	48	No	No	No	No	No	No	No	No	No	No
10	3	814	2	47	No	No	No	No	No	No	No	No	No	No
11	3	706	2	41	No	No	No	No	No	No	No	No	No	No
12	3	658	2	38	No	No	No	No	No	No	No	No	No	No
13	3	647	2	37	No	No	No	No	No	No	No	No	No	No
14	3	479	2	28	No	No	No	No	No	No	No	No	No	No
15	3	479	2	28	No	No	No	No	No	No	No	No	No	No
16	3	335	2	19	No	No	No	No	No	No	No	No	No	No
17	3	192	2	11	No	No	No	No	No	No	No	No	No	No
18	3	192	2	11	No	No	No	No	No	No	No	No	No	No
19	3	108	2	6	No	No	No	No	No	No	No	No	No	No
20	3	60	2	3	No	No	No	No	No	No	No	No	No	No
21	3	36	2	2	No	No	No	No	No	No	No	No	No	No
22	3	12	2	1	No	No	No	No	No	No	No	No	No	No
23	3	12	2	1	No	No	No	No	No	No	No	No	No	No
24	3	12	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	4	0	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.9
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:17
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	69
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1266
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major S	Streets	Minor Streets
	S	N	W
1	1038	1826	136
2	1007	1771	132
3	986	1735	129
4	924	1625	121
5	820	1443	107
6	810	1424	106
7	799	1406	105
8	727	1278	95
9	716	1260	94
10	706	1242	92
11	612	1077	80
12	571	1004	75
13	561	986	73
14	415	730	54
15	415	730	54
16	291	511	38
17	166	292	22
18	166	292	22
19	93	164	12
20	52	91	7
21	31	55	4
22	10	18	1
23	10	18	1
24	10	18	1

## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street		Warrant 1	Condition A	1	,	Warrant 1	Condition E	3	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	2864	2	136	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	2778	2	132	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	2721	2	129	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
4	3	2549	2	121	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
5	3	2263	2	107	No	No	No	No	Yes	Yes	Yes	Yes	No	No
6	3	2234	2	106	No	No	No	No	Yes	Yes	Yes	Yes	No	No
7	3	2205	2	105	No	No	No	No	Yes	Yes	Yes	Yes	No	No
8	3	2005	2	95	No	No	No	No	No	Yes	Yes	Yes	No	No
9	3	1976	2	94	No	No	No	No	No	Yes	Yes	Yes	No	No
10	3	1948	2	92	No	No	No	No	No	Yes	Yes	Yes	No	No
11	3	1689	2	80	No	No	No	No	No	Yes	Yes	Yes	No	No
12	3	1575	2	75	No	No	No	No	No	No	Yes	Yes	No	No
13	3	1547	2	73	No	No	No	No	No	No	Yes	Yes	No	No
14	3	1145	2	54	No	No	No	No	No	No	No	No	No	No
15	3	1145	2	54	No	No	No	No	No	No	No	No	No	No
16	3	802	2	38	No	No	No	No	No	No	No	No	No	No
17	3	458	2	22	No	No	No	No	No	No	No	No	No	No
18	3	458	2	22	No	No	No	No	No	No	No	No	No	No
19	3	257	2	12	No	No	No	No	No	No	No	No	No	No
20	3	143	2	7	No	No	No	No	No	No	No	No	No	No
21	3	86	2	4	No	No	No	No	No	No	No	No	No	No
22	3	28	2	1	No	No	No	No	No	No	No	No	No	No
23	3	28	2	1	No	No	No	No	No	No	No	No	No	No
24	3	28	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	4	7	11	13	13	4	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	43.6
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	1:38
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	136
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	3000
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No

Version 2023 (SP 0-8) JN: 2739-2023-01

Signal Warrants Report For Intersection 5: Newport Avenue at Vanderlip Avenue

## Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

#### Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Hour	Major S	Streets	Minor Streets
	S	N	W
1	152	1109	74
2	147	1076	72
3	144	1054	70
4	135	987	66
5	120	876	58
6	119	865	58
7	117	854	57
8	106	776	52
9	105	765	51
10	103	754	50
11	90	654	44
12	84	610	41
13	82	599	40
14	61	444	30
15	61	444	30
16	43	311	21
17	24	177	12
18	24	177	12
19	14	100	7
20	8	55	4
21	5	33	2
22	2	11	1
23	2	11	1
24	2	11	1



## Warrant Analysis by Hour

Hour	Major	Streets	Minor	Street		Warrant 1	Condition A	1		Warrant 1	Condition B	3	Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1261	2	74	No	No	No	No	No	No	Yes	Yes	No	No
2	3	1223	2	72	No	No	No	No	No	No	Yes	Yes	No	No
3	3	1198	2	70	No	No	No	No	No	No	Yes	Yes	No	No
4	3	1122	2	66	No	No	No	No	No	No	No	Yes	No	No
5	3	996	2	58	No	No	No	No	No	No	No	Yes	No	No
6	3	984	2	58	No	No	No	No	No	No	No	Yes	No	No
7	3	971	2	57	No	No	No	No	No	No	No	Yes	No	No
8	3	882	2	52	No	No	No	No	No	No	No	No	No	No
9	3	870	2	51	No	No	No	No	No	No	No	No	No	No
10	3	857	2	50	No	No	No	No	No	No	No	No	No	No
11	3	744	2	44	No	No	No	No	No	No	No	No	No	No
12	3	694	2	41	No	No	No	No	No	No	No	No	No	No
13	3	681	2	40	No	No	No	No	No	No	No	No	No	No
14	3	505	2	30	No	No	No	No	No	No	No	No	No	No
15	3	505	2	30	No	No	No	No	No	No	No	No	No	No
16	3	354	2	21	No	No	No	No	No	No	No	No	No	No
17	3	201	2	12	No	No	No	No	No	No	No	No	No	No
18	3	201	2	12	No	No	No	No	No	No	No	No	No	No
19	3	114	2	7	No	No	No	No	No	No	No	No	No	No
20	3	63	2	4	No	No	No	No	No	No	No	No	No	No
21	3	38	2	2	No	No	No	No	No	No	No	No	No	No
22	3	13	2	1	No	No	No	No	No	No	No	No	No	No
23	3	13	2	1	No	No	No	No	No	No	No	No	No	No
24	3	13	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	3	7	0	0

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.7
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:19
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	74
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1335
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



## **Appendix D**

Existing Conditions
Level of Service
Calculation Worksheets



## Intersection Level Of Service Report

Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):31.8Analysis Method:HCM 7th EditionLevel Of Service:DAnalysis Period:15 minutesVolume to Capacity (v/c):0.015

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	veway No. 1	
Approach	North	bound	South	nbound	Eastbound		
Lane Configuration	٦	11	1	ŀ	Ψ.		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0 0		0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	.00	25	5.00	25.00		
Grade [%]	0.	00	0	.00	0.	00	
Crosswalk	٨	lo	1	No	No		

#### Volumes

Name	Newport	Avenue	Newport	Avenue	School Driv	eway No. 1
Base Volume Input [veh/h]	0	789	1705	3	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	789	1705	3	2	0
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	213	460	1	1	0
Total Analysis Volume [veh/h]	0	852	1841	3	2	0
Pedestrian Volume [ped/h]	(	)	(	)	(	)

Version 2023 (SP 0-8)

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

#### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	16.05	0.00	0.00	0.00	31.80	18.62
Movement LOS	С	A	A	А	D	С
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.04	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.11	1.11
d_A, Approach Delay [s/veh]	0.	00	0	.00	31	.80
Approach LOS	,	4		A	1	D
d_I, Intersection Delay [s/veh]			0	.02		
Intersection LOS				D		

Version 2023 (SP 0-8) JN: 2739-2023-01

#### Intersection Level Of Service Report

#### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.605

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive	
Approach	١	Northbound			Southbound			Eastbound	ı	Westbound			
Lane Configuration		IF			пİİ			+		٦٢			
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]		25.00			25.00		25.00			30.00			
Grade [%]		0.00			0.00		0.00			0.00			
Crosswalk		No			Yes			Yes		Yes			

#### Volumes

Name	Nev	wport Ave	nue	Nev	vport Ave	nue	Schoo	l Driveway	/ No. 2	La Colina Drive		
Base Volume Input [veh/h]	0	762	65	151	1522	0	22	33	61	66	0	191
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	762	65	151	1522	0	22	33	61	66	0	191
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	191	16	38	381	0	6	8	15	17	0	48
Total Analysis Volume [veh/h]	0	762	65	151	1522	0	22	33	61	66	0	191
Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Version 2023 (SP 0-8) JN: 2739-2023-01

#### Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

#### Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

#### Movement, Approach, & Intersection Results

	V/C, Movement V/C Ratio	0.00	0.24	0.24	0.09	0.45	0.00	0.01	0.07	0.07	0.04	0.00	0.11
	Intersection LOS						E	3					
Γ	Intersection V/C						0.6	605					





## Intersection Level Of Service Report

Intersection 3: Newport Avenue at School Driveway No. 3

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.019

#### Intersection Setup

Name	Newport Avenue		Newport Avenue		School Driveway No. 3	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	11		I F			
Turning Movement	Left	Left Thru Thru Right		Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

#### Volumes

Name	Newpor	t Avenue	Newport Avenue		School Driveway No. 3	
Base Volume Input [veh/h]	0	975	1682	128	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	975	1682	128	0	0
Peak Hour Factor	1.0000	0.8930	0.8930	0.8930	1.0000	0.8380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	273	471	36	0	0
Total Analysis Volume [veh/h]	0	1092	1884	143	0	0
Pedestrian Volume [ped/h]	0		0		0	



Intersection Settings

Priority Scheme	Free	Free	Stop	
Flared Lane				
Storage Area [veh]	0	0	0	
Two-Stage Gap Acceptance				
Number of Storage Spaces in Median	0	0	0	

#### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	
Movement LOS		А	Α	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.00 0.00				0.00		
Approach LOS	A A				A		
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	A						





## Intersection Level Of Service Report Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):23.6Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.264

#### Intersection Setup

Name	Newport Avenue		Newport Avenue		Church Driveway No. 1	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	11		i h		r	
Turning Movement	Left Thru		Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

#### Volumes

Name	Newpo	rt Avenue	Newport Avenue		Church Driveway No. 1	
Base Volume Input [veh/h]	0	979	1760	19	0	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	979	1760	19	0	62
Peak Hour Factor	1.0000	0.8970	0.8970	0.8970	1.0000	0.8970
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	273	491	5	0	17
Total Analysis Volume [veh/h]	0	1091	1962	21	0	69
Pedestrian Volume [ped/h]	0		0		0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.26	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	23.64	
Movement LOS		A	A	A		С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	1.03	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	25.79	
d_A, Approach Delay [s/veh]	0.	00	0	.00	23	.64	
Approach LOS	,	A		A		2	
d_I, Intersection Delay [s/veh]	0.52						
Intersection LOS		С					



# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):61.2Analysis Method:HCM 7th EditionLevel Of Service:FAnalysis Period:15 minutesVolume to Capacity (v/c):0.059

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	Newport Avenue		p Avenue	
Approach	North	bound	South	bound	East	bound	
Lane Configuration	٦	ıll		I F		Γ	
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	0	0	1	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	lo	N	No		No	

Name	Newport	t Avenue	Newport	Avenue	Vanderlij	Avenue
Base Volume Input [veh/h]	117	861	1703	35	4	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	117	861	1703	35	4	124
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	241	477	10	1	35
Total Analysis Volume [veh/h]	131	965	1909	39	4	139
Pedestrian Volume [ped/h]	(	0	(	)	0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.44	0.01	0.02	0.00	0.06	0.55	
d_M, Delay for Movement [s/veh]	26.40	0.00	0.00	0.00	61.24	35.71	
Movement LOS	D	A	A	A	F	E	
95th-Percentile Queue Length [veh/ln]	2.15	0.00	0.00	0.00	0.18	3.05	
95th-Percentile Queue Length [ft/ln]	53.76	0.00	0.00	0.00	4.58	76.24	
d_A, Approach Delay [s/veh]	3.	16	0.	00	36.	.43	
Approach LOS	,	A	,	4	E		
d_I, Intersection Delay [s/veh]	2.72						
Intersection LOS		F					



# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):13.2Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.018

#### Intersection Setup

Name	Church Dri	veway No. 2	Vanderli	p Avenue	Vanderli	p Avenue	
Approach	North	bound	Eastl	bound	West	bound	
Lane Configuration	-	т		F		1	
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	5.00	30	30.00		0.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	1	No		No		No	

Name	Church Driv	eway No. 2	Vanderlip Avenue		Vanderlip Avenue		
Base Volume Input [veh/h]	5	19	111	20	89	55	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	5	19	111	20	89	55	
Peak Hour Factor	0.6620	0.6620	0.6620	0.6620	0.6620	0.6620	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	2	7	42	8	34	21	
Total Analysis Volume [veh/h]	8	29	168	30	134	83	
Pedestrian Volume [ped/h]	(	)	(	0	(	0	

#### Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.02	0.03	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	13.18	9.46	0.00	0.00	7.78	0.00
Movement LOS	В	Α	A	A	Α	А
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.00	0.00	0.24	0.24
95th-Percentile Queue Length [ft/ln]	4.05	4.05	0.00	0.00	6.03	6.03
d_A, Approach Delay [s/veh]	10.	26	0.0	00	4.8	80
Approach LOS	E	3	A	4	A	4
d_I, Intersection Delay [s/veh]	3.15					
Intersection LOS		В				

## Intersection Level Of Service Report

Intersection 1: Newport Avenue at School Driveway No. 1

Control Type: Two-way stop Delay (sec / veh): 0.0 Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.014

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	Newport Avenue		veway No. 1	
Approach	North	Northbound		Southbound		oound	
Lane Configuration	٦	ıll		I F		Ψ.	
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	lo	1	No	No		

Name	Newport	Newport Avenue Newport Avenue		School Driv	eway No. 1		
Base Volume Input [veh/h]	0	1285	1020	2	0	0	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1285	1020	2	0	0	
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	342	272	1	0	0	
Total Analysis Volume [veh/h]	0	1370	1087	2	0	0	
Pedestrian Volume [ped/h]	(	0		0		0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	10.66	0.00	0.00	0.00	23.74	12.46	
Movement LOS	В	A	A	A	С	В	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.	00	0	.00	18	.10	
Approach LOS	,	4	(				
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	A						

#### Intersection Level Of Service Report

#### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: A
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.579

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Approach	١	Northbound			outhboun	d	E	Eastbound	ı	Westbound		
Lane Configuration		IF.			пII		+			70		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00			25.00		25.00			30.00		
Grade [%]	0.00			0.00		0.00			0.00			
Crosswalk		No			Yes		Yes			Yes		

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La Colina Drive		
Base Volume Input [veh/h]	0	1202	78	108	929	0	20	39	47	45	0	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1202	78	108	929	0	20	39	47	45	0	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	301	20	27	232	0	5	10	12	11	0	53
Total Analysis Volume [veh/h]	0	1202	78	108	929	0	20	39	47	45	0	212
Pedestrian Volume [ped/h]	0		0		0			0				
Bicycle Volume [bicycles/h]		0			0			0			0	

#### Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

#### Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.38	0.38	0.06	0.27	0.00	0.01	0.06	0.06	0.03	0.00	0.12
Intersection LOS		A										
Intersection V/C						0.5	79					

## Intersection Level Of Service Report

Intersection 3: Newport Avenue at School Driveway No. 3

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.016

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	veway No. 3	
Approach	North	Northbound		nbound	Eastbound		
Lane Configuration	1	II II		ŀ			
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		0.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	1	No	1	No	No		

Name	Newpo	rt Avenue	Newpo	rt Avenue	School Driv	eway No. 3
Base Volume Input [veh/h]	0	1454	1042	97	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1454	1042	97	0	0
Peak Hour Factor	1.0000	0.9290	0.9290	0.9290	1.0000	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	391	280	26	0	0
Total Analysis Volume [veh/h]	0	1565	1122	104	0	0
Pedestrian Volume [ped/h]		0	0		0	



#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	
Movement LOS		A	А	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.	00	0	0.00	0.	00	
Approach LOS	,	A A A					
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	A						





# Intersection Level Of Service Report Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):14.5Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.169

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	Church Dri	veway No. 1	
Approach	Northbound		South	bound	East	oound	
Lane Configuration	11		1	H	۲		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00 12.00		12.00 12.00		12.00	
No. of Lanes in Entry Pocket	0	0 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00	
No. of Lanes in Exit Pocket	0	0	0	0 0		0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		.00	
Grade [%]	0.00		0.	0.00		00	
Crosswalk	Y	es	Y	Yes		es	

Name	Newpo	rt Avenue	Newpor	t Avenue	Church Driv	veway No. 1
Base Volume Input [veh/h]	0	1479	1074	3	0	71
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1479	1074	3	0	71
Peak Hour Factor	1.0000	0.9240	0.9240	0.9240	1.0000	0.9240
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	400	291	1	0	19
Total Analysis Volume [veh/h]	0	1601	1162	3	0	77
Pedestrian Volume [ped/h]		0		0	0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.17		
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	14.49		
Movement LOS		A	А	A		В		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.60		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	15.05		
d_A, Approach Delay [s/veh]	0.0	00	0	.00	14	14.49		
Approach LOS	A	4		A	В			
d_I, Intersection Delay [s/veh]	0.39							
Intersection LOS	В							





# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):22.8Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.033

#### Intersection Setup

Name	Newport Avenue		Newpoi	Newport Avenue		p Avenue	
Approach	North	bound	South	nbound	Eastbound		
Lane Configuration	пII		I F		٦٢		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	1	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25.00		30.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	lo	1	No		No	

Name	Newport	Newport Avenue		Newport Avenue		o Avenue
Base Volume Input [veh/h]	116	0	1036	14	6	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	116	0	1036	14	6	62
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	0	282	4	2	17
Total Analysis Volume [veh/h]	126	0	1126	15	7	67
Pedestrian Volume [ped/h]	0		0		(	0



#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.21	0.00	0.01	0.00	0.03	0.14	
d_M, Delay for Movement [s/veh]	12.46	0.00	0.00	0.00	22.80	14.06	
Movement LOS	В	А	A	A	С	В	
95th-Percentile Queue Length [veh/ln]	0.77	0.00	0.00	0.00	0.10	0.50	
95th-Percentile Queue Length [ft/ln]	19.35	0.00	0.00	0.00	2.59	12.52	
d_A, Approach Delay [s/veh]	12	.46	0.	00	14.88		
Approach LOS	E	3		A	В		
d_I, Intersection Delay [s/veh]	1.99						
Intersection LOS		С					

Control Type:

Analysis Method:

Analysis Period:

# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Two-way stop Delay (sec / veh): 11.0
HCM 7th Edition Level Of Service: B
15 minutes Volume to Capacity (v/c): 0.008

#### Intersection Setup

Name	Church Dri	Church Driveway No. 2		Vanderlip Avenue		p Avenue	
Approach	North	Northbound		Eastbound		bound	
Lane Configuration	-	T		ŀ		+	
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		30.00		30.00	
Grade [%]	0.	0.00		0.00		0.00	
Crosswalk	N	No		No		No	

Name	Church Driveway No. 2 Vanderlip Avenue		Vanderlij	o Avenue			
Base Volume Input [veh/h]	4	8	53	4	69	64	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	4	8	53	4	69	64	
Peak Hour Factor	0.7540	0.7540	0.7540	0.7540	0.7540	0.7540	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	1	3	18	1	23	21	
Total Analysis Volume [veh/h]	5	11	70	5	92	85	
Pedestrian Volume [ped/h]	0		0		(	0	



#### Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.06	0.00	
d_M, Delay for Movement [s/veh]	10.96	8.72	0.00	0.00	7.47	0.00	
Movement LOS	В	Α	А	A	A	А	
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.00	0.00	0.16	0.16	
95th-Percentile Queue Length [ft/ln]	1.47	1.47	0.00	0.00	4.04	4.04	
d_A, Approach Delay [s/veh]	9.4	42	0.	00	3.8	38	
Approach LOS	A	4	,	4	A		
d_I, Intersection Delay [s/veh]	3.13						
Intersection LOS		В					



# **Appendix E**

Existing Plus Project Conditions Level of Service Calculation Worksheets



### Intersection Level Of Service Report

Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):32.6Analysis Method:HCM 7th EditionLevel Of Service:DAnalysis Period:15 minutesVolume to Capacity (v/c):0.015

#### Intersection Setup

Name	Newport Avenue		Newpor	Newport Avenue		veway No. 1	
Approach	North	bound	South	nbound	East	bound	
Lane Configuration	ıll		IF.		Ψ.		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	No		No	No		

Name	Newport	Avenue	Newport	t Avenue	School Driv	eway No. 1
Base Volume Input [veh/h]	0	804	1726	3	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	804	1726	3	2	0
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	217	466	1	1	0
Total Analysis Volume [veh/h]	0	868	1864	3	2	0
Pedestrian Volume [ped/h]	(	)	(	0	0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.02	0.00	
d_M, Delay for Movement [s/veh]	16.29	0.00	0.00	0.00	32.59	18.88	
Movement LOS	С	A	A	A	D	С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.05	0.05	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.15	1.15	
d_A, Approach Delay [s/veh]	0.	00	0	.00	32	.59	
Approach LOS	,	4		A		)	
d_I, Intersection Delay [s/veh]		0.02					
Intersection LOS		D					



#### Intersection Level Of Service Report

#### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.626

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Approach	١	Northbound		S	outhboun	d	E	Eastbound	d	Westbound		
Lane Configuration		1H			пП			+			٦٢	
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00	-		25.00			25.00	-		30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			Yes			Yes			Yes	

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Base Volume Input [veh/h]	0	777	65	163	1528	0	29	45	76	66	0	199
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	777	65	163	1528	0	29	45	76	66	0	199
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	194	16	41	382	0	7	11	19	17	0	50
Total Analysis Volume [veh/h]	0	777	65	163	1528	0	29	45	76	66	0	199
Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

#### Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

#### Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.25	0.25	0.10	0.45	0.00	0.02	0.09	0.09	0.04	0.00	0.12
Intersection LOS						E	3					
Intersection V/C						0.6	26					

## Intersection Level Of Service Report

Intersection 3: Newport Avenue at School Driveway No. 3

Control Type: Two-way stop Delay (sec / veh): 0.0 Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.019

#### Intersection Setup

Name	Newpor	Newport Avenue		rt Avenue	School Driv	eway No. 3	
Approach	North	Northbound		nbound	Eastbound		
Lane Configuration	11		1	F			
Turning Movement	Left	Left Thru		Right	Left	Right	
Lane Width [ft]	12.00	12.00 12.00		12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0 0		0	0 0		0	
Entry Pocket Length [ft]	100.00	100.00	100.00 100.00		100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	1	No	1	No	No		

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	veway No. 3
Base Volume Input [veh/h]	0	1013	1700	170	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1013	1700	170	0	0
Peak Hour Factor	1.0000	0.8930	0.8930	0.8930	1.0000	0.8380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	284	476	48	0	0
Total Analysis Volume [veh/h]	0	1134	1904	190	0	0
Pedestrian Volume [ped/h]		0		0	0	

JN: 2739-2023-01



Version 2023 (SP 0-8)

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.00		
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00		
Movement LOS		A	A	A				
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00		
d_A, Approach Delay [s/veh]	0.	0.00 0.00				00		
Approach LOS	,	4	J.	4				
d_I, Intersection Delay [s/veh]	0.00							
Intersection LOS		A						



## Intersection Level Of Service Report

#### Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type: Two-way stop Delay (sec / veh): 26.8 Analysis Method: HCM 7th Edition Level Of Service: D Analysis Period: 15 minutes Volume to Capacity (v/c): 0.352

#### Intersection Setup

Name	Newport Avenue		Newpor	Newport Avenue		veway No. 1	
Approach	Northbound		South	Southbound		bound	
Lane Configuration	11		IF.		۲		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25	5.00	25.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Y	Yes		Yes		Yes	

Name	Newpor	t Avenue	Newport Avenue		Church Driv	veway No. 1	
Base Volume Input [veh/h]	0	1017	1802	19	0	80	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1017	1802	19	0	80	
Peak Hour Factor	1.0000	0.8970	0.8970	0.8970	1.0000	0.8970	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	283	502	5	0	22	
Total Analysis Volume [veh/h]	0	1134	2009	21	0	89	
Pedestrian Volume [ped/h]		0		0		0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.35	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	26.82	
Movement LOS		A	А	A		D	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	1.52	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	38.00	
d_A, Approach Delay [s/veh]	0.	00	0	.00	26	5.82	
Approach LOS	,	4		A		D	
d_I, Intersection Delay [s/veh]	0.73						
Intersection LOS	D						



# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):80.3Analysis Method:HCM 7th EditionLevel Of Service:FAnalysis Period:15 minutesVolume to Capacity (v/c):0.188

#### Intersection Setup

Name	Newport Avenue		Newpor	Newport Avenue		p Avenue	
Approach	Northbound		South	nbound	East	bound	
Lane Configuration	пll		IF.		٦٢		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	1	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25	25.00		30.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	No		No		No	

Name	Newport	Newport Avenue		Newport Avenue		Avenue
Base Volume Input [veh/h]	140	876	1745	43	10	124
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	140	876	1745	43	10	124
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	246	489	12	3	35
Total Analysis Volume [veh/h]	157	982	1956	48	11	139
Pedestrian Volume [ped/h]	(	)	0		0	

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.56	0.01	0.02	0.00	0.19	0.58	
d_M, Delay for Movement [s/veh]	32.70	0.00	0.00	0.00	80.29	38.56	
Movement LOS	D	A	A	A	F	E	
95th-Percentile Queue Length [veh/ln]	3.14	0.00	0.00	0.00	0.63	3.26	
95th-Percentile Queue Length [ft/ln]	78.48	0.00	0.00	0.00	15.71	81.54	
d_A, Approach Delay [s/veh]	4.	51	0.	00	41.	.62	
Approach LOS	,	Ą		4	E		
d_I, Intersection Delay [s/veh]	3.45						
Intersection LOS		F					



# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):14.8Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.031

#### Intersection Setup

Name	Church Driveway No. 2		Vanderli	Vanderlip Avenue		p Avenue	
Approach	Northbound		East	bound	West	bound	
Lane Configuration	т		ŀ		4		
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		30.00		30.00	
Grade [%]	0.00		0	0.00		.00	
Crosswalk	N	No		No		No	

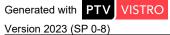
Name	Church Driv	eway No. 2	. 2 Vanderlip Avenue		Vanderlip Avenue	
Base Volume Input [veh/h]	8	25	111	24	120	55
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	25	111	24	120	55
Peak Hour Factor	0.6620	0.6620	0.6620	0.6620	0.6620	0.6620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	9	42	9	45	21
Total Analysis Volume [veh/h]	12	38	168	36	181	83
Pedestrian Volume [ped/h]	0		0		0	

#### Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.03	0.04	0.00	0.00	0.13	0.00	
d_M, Delay for Movement [s/veh]	14.84	9.65	0.00	0.00	7.86	0.00	
Movement LOS	В	Α	A	A	Α	Α	
95th-Percentile Queue Length [veh/ln]	0.24	0.24	0.00	0.00	0.33	0.33	
95th-Percentile Queue Length [ft/ln]	6.12	6.12	0.00	0.00	8.37	8.37	
d_A, Approach Delay [s/veh]	10.	90	0.0	00	5.3	39	
Approach LOS	E	3	A	A	A	١	
d_I, Intersection Delay [s/veh]	3.80						
Intersection LOS		В					





#### Intersection Level Of Service Report Intersection 1: Newport Avenue at School Driveway No. 1

Control Type: Two-way stop Delay (sec / veh): 0.0 Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.014

#### Intersection Setup

Name	Newport	t Avenue	Newpor	t Avenue	School Driv	eway No. 1	
Approach	Northbound		South	nbound	Eastbound		
Lane Configuration	пΠ		1	ŀ	T		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1 0		0	0 0		0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25.00		25.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	١	lo	1	No	No		

Name	Newport	Avenue	Newport	Avenue	School Driv	eway No. 1	
Base Volume Input [veh/h]	0	1296	1039	2	0	0	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1296	1039	2	0	0	
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	345	277	1	0	0	
Total Analysis Volume [veh/h]	0	1382	1108	2	0	0	
Pedestrian Volume [ped/h]	(	)	0		0		

#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00		
d_M, Delay for Movement [s/veh]	10.76	0.00	0.00	0.00	24.18	12.58		
Movement LOS	В	A	A	A	С	В		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00		
d_A, Approach Delay [s/veh]	0.0	00	0.	.00	18.	38		
Approach LOS	<i>A</i>	4						
d_I, Intersection Delay [s/veh]	0.00							
Intersection LOS	A							

JN: 2739-2023-01

#### Intersection Level Of Service Report

#### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.606

#### Intersection Setup

Name	Nev	Newport Avenue		Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Approach	١	Northbound		S	outhboun	d	E	Eastbound	ı	Westbound		
Lane Configuration		11-			пП			+			٦٢	
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00	-		25.00			25.00			30.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			Yes			Yes			Yes	

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Base Volume Input [veh/h]	0	1213	78	119	934	0	25	50	61	45	0	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1213	78	119	934	0	25	50	61	45	0	217
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	303	20	30	234	0	6	13	15	11	0	54
Total Analysis Volume [veh/h]	0	1213	78	119	934	0	25	50	61	45	0	217
Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

#### Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

#### Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.38	0.38	0.07	0.27	0.00	0.01	0.08	0.08	0.03	0.00	0.13
Intersection LOS		В										
Intersection V/C		0.606										

Intersection Level Of Service Report

## Intersection Level Of Service Report Intersection 3: Newport Avenue at School Driveway No. 3

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.016

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Dri	veway No. 3	
Approach	Northbound		South	nbound	Eastbound		
Lane Configuration	1	11		H			
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0 0		0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25.00		30.00		
Grade [%]	0.00		0	0.00		.00	
Crosswalk	N	No	1	No	No		

Name	Newpo	rt Avenue	Newpoi	rt Avenue	School Driv	veway No. 3
Base Volume Input [veh/h]	0	1483	1058	126	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1483	1058	126	0	0
Peak Hour Factor	1.0000	0.9290	0.9290	0.9290	1.0000	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	399	285	34	0	0
Total Analysis Volume [veh/h]	0	1596	1139	136	0	0
Pedestrian Volume [ped/h]		0	0		0	



#### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		А	A	A		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	Α		A		А	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					



## Intersection Level Of Service Report Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):15.2Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.211

#### Intersection Setup

Name	Newport Avenue		Newpor	t Avenue	Church Driv	veway No. 1	
Approach	North	Northbound		Southbound		bound	
Lane Configuration	11		Th-		۲		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		5.00	25.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Yes		Y	Yes		Yes	

Name	Newpoi	rt Avenue	Newpor	t Avenue	Church Driv	veway No. 1	
Base Volume Input [veh/h]	0	1508	1103	3	0	87	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1508	1103	3	0	87	
Peak Hour Factor	1.0000	0.9240	0.9240	0.9240	1.0000	0.9240	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	408	298	1	0	24	
Total Analysis Volume [veh/h]	0	1632	1194	3	0	94	
Pedestrian Volume [ped/h]		0		0		0	



## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.21	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.24	
Movement LOS		А	A	A		С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.79	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	19.73	
d_A, Approach Delay [s/veh]	0.	00	0.	00	15	5.24	
Approach LOS	,	4		A		С	
d_I, Intersection Delay [s/veh]	0.49						
Intersection LOS	С						





# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):24.7Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.062

#### Intersection Setup

Name	Newport Avenue		Newpor	Newport Avenue		p Avenue
Approach	North	bound	South	nbound	Eastbound	
Lane Configuration	7		7		٦	Γ
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	N	lo	No		No	

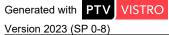
Name	Newport	Newport Avenue		Newport Avenue		Avenue
Base Volume Input [veh/h]	132	14	1065	19	11	62
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	14	1065	19	11	62
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	4	289	5	3	17
Total Analysis Volume [veh/h]	143	15	1158	21	12	67
Pedestrian Volume [ped/h]	(	)	0		0	



## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.24	0.00	0.01	0.00	0.06	0.15		
d_M, Delay for Movement [s/veh]	13.08	0.00	0.00	0.00	24.70	14.37		
Movement LOS	В	A	A	A	С	В		
95th-Percentile Queue Length [veh/ln]	0.95	0.00	0.00	0.00	0.20	0.52		
95th-Percentile Queue Length [ft/ln]	23.69	0.00	0.00	0.00	4.88	12.94		
d_A, Approach Delay [s/veh]	11	.84	0.	00	15.	94		
Approach LOS	E	3	,	A				
d_I, Intersection Delay [s/veh]	2.21							
Intersection LOS		С						



### Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type: Two-way stop Delay (sec / veh): 11.6 Analysis Method: HCM 7th Edition Level Of Service: В Analysis Period: 15 minutes Volume to Capacity (v/c): 0.016

#### Intersection Setup

Name	Church Dri	Church Driveway No. 2		Vanderlip Avenue		p Avenue	
Approach	North	Northbound		Eastbound		bound	
Lane Configuration	-	T		ŀ		1	
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	No		N	No		No	

Name	Church Driv	Church Driveway No. 2 Vanderlip Avenue		Vanderlij	Avenue	
Base Volume Input [veh/h]	7	13	53	7	90	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	13	53	7	90	64
Peak Hour Factor	0.7540	0.7540	0.7540	0.7540	0.7540	0.7540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	4	18	2	30	21
Total Analysis Volume [veh/h]	9	17	70	9	119	85
Pedestrian Volume [ped/h]	0		0		0	

## Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.08	0.00	
d_M, Delay for Movement [s/veh]	11.61	8.81	0.00	0.00	7.51	0.00	
Movement LOS	В	Α	A	A	A	А	
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.21	0.21	
95th-Percentile Queue Length [ft/ln]	2.59	2.59	0.00	0.00	5.30	5.30	
d_A, Approach Delay [s/veh]	9.	78	0.0	00	4.0	38	
Approach LOS	A	٨	A	4	A	4	
d_I, Intersection Delay [s/veh]	3.72						
Intersection LOS	В						



# **Appendix F**

Project Opening Year (2025) Without Project Conditions Level of Service Calculation Worksheets



## Intersection Level Of Service Report Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):33.1Analysis Method:HCM 7th EditionLevel Of Service:DAnalysis Period:15 minutesVolume to Capacity (v/c):0.015

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Dri	veway No. 1	
Approach	Northbound		South	nbound	Eastbound		
Lane Configuration	пll		1	H	Ŧ		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25.00		25.00		25.00		
Grade [%]	0.00		0	0.00		.00	
Crosswalk	N	lo	1	No	No		

Name	Newport	Avenue	Newport	Avenue	School Driv	eway No. 1
Base Volume Input [veh/h]	0	807	1742	3	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	807	1742	3	2	0
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	218	470	1	1	0
Total Analysis Volume [veh/h]	0	871	1881	3	2	0
Pedestrian Volume [ped/h]	(	)	(	0 0		)

## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.02	0.00	
d_M, Delay for Movement [s/veh]	16.46	0.00	0.00	0.00	33.08	19.07	
Movement LOS	С	A	Α	A	D	С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.05	0.05	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	1.17	1.17	
d_A, Approach Delay [s/veh]	0.	00	0	.00	33	.08	
Approach LOS	,	4			)		
d_I, Intersection Delay [s/veh]	0.02						
Intersection LOS	D						

### Intersection Level Of Service Report

### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.616

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Approach	١	Northbound		S	Southboun	d	E	Eastbound	I	Westbound		
Lane Configuration	IF.			пII		+			71			
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00	-		25.00			25.00			30.00	
Grade [%]	0.00		0.00		0.00			0.00				
Crosswalk		No			Yes			Yes			Yes	

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Base Volume Input [veh/h]	0	779	66	154	1554	0	23	34	62	67	0	196
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	779	66	154	1554	0	23	34	62	67	0	196
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	195	17	39	389	0	6	9	16	17	0	49
Total Analysis Volume [veh/h]	0	779	66	154	1554	0	23	34	62	67	0	196
Pedestrian Volume [ped/h]	0		0		0			0				
Bicycle Volume [bicycles/h]		0			0			0			0	

## Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

## Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.25	0.25	0.09	0.46	0.00	0.01	0.07	0.07	0.04	0.00	0.12
Intersection LOS		В										
Intersection V/C		0.616										



## Intersection Level Of Service Report

Intersection 3: Newport Avenue at School Driveway No. 3

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.019

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	veway No. 3	
Approach	North	bound	South	nbound	East	bound	
Lane Configuration	1	1	1	ŀ			
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00 12.00		12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0 0		0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	5.00	25.00		30.00		
Grade [%]	0.	.00	0.00		0.00		
Crosswalk	1	No	1	No	No		

Name	Newpo	rt Avenue	Newpo	rt Avenue	School Driv	eway No. 3
Base Volume Input [veh/h]	0	998	1719	131	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	998	1719	131	0	0
Peak Hour Factor	1.0000	0.8930	0.8930	0.8930	1.0000	0.8380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	279	481	37	0	0
Total Analysis Volume [veh/h]	0	1118	1925	147	0	0
Pedestrian Volume [ped/h]		0	0		0	

## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		A	A	A		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.	00	0	0.00	0.00	
Approach LOS	,	4		A	А	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					





## Intersection Level Of Service Report

## Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):24.5Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.276

#### Intersection Setup

Name	Newpor	Newport Avenue		rt Avenue	Church Dri	veway No. 1		
Approach	North	bound	South	nbound	Eastbound			
Lane Configuration	11		IF		I F		ı	-
Turning Movement	Left	Thru	Thru	Right	Left	Right		
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00		
No. of Lanes in Entry Pocket	0	0	0	0	0	0		
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00		
No. of Lanes in Exit Pocket	0	0	0	0	0	0		
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00		
Speed [mph]	25.00		25.00		25.00			
Grade [%]	0.00		0.00		0.00			
Crosswalk	Y	es	Yes		Yes			

Name	Newpoi	rt Avenue	Newpor	t Avenue	Church Driv	veway No. 1
Base Volume Input [veh/h]	0	1002	1798	19	0	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1002	1798	19	0	63
Peak Hour Factor	1.0000	0.8970	0.8970	0.8970	1.0000	0.8970
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	279	501	5	0	18
Total Analysis Volume [veh/h]	0	1117	2004	21	0	70
Pedestrian Volume [ped/h]		0		0	0	



## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.28	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	24.54	
Movement LOS		A	Α	A		С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	1.09	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	27.32	
d_A, Approach Delay [s/veh]	0.	00	0	0.00	24	.54	
Approach LOS	,	A A				С	
d_I, Intersection Delay [s/veh]	0.53						
Intersection LOS	С						



Intersection Level Of Service Report
Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type: Two-way stop Delay (sec / veh): 65.0
Analysis Method: HCM 7th Edition Level Of Service: F
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.063

#### Intersection Setup

Name	Newpor	Newport Avenue		Newport Avenue		p Avenue
Approach	North	bound	South	nbound	East	bound
Lane Configuration	пΠ		IF.		٦٢	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	N	lo	1	No	No	

Name	Newport Avenue Newport Avenue		Vanderlij	o Avenue		
Base Volume Input [veh/h]	119	881	1740	36	4	126
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	119	881	1740	36	4	126
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	247	488	10	1	35
Total Analysis Volume [veh/h]	133	988	1951	40	4	141
Pedestrian Volume [ped/h]	0 0		0	0		

## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.47	0.01	0.02	0.00	0.06	0.58	
d_M, Delay for Movement [s/veh]	28.18	0.00	0.00	0.00	65.01	38.40	
Movement LOS	D	A	A	A	F	E	
95th-Percentile Queue Length [veh/ln]	2.33	0.00	0.00	0.00	0.20	3.29	
95th-Percentile Queue Length [ft/ln]	58.36	0.00	0.00	0.00	4.88	82.29	
d_A, Approach Delay [s/veh]	3.	34	0.	00	39.	.14	
Approach LOS	,	Ą	,	A	E		
d_I, Intersection Delay [s/veh]	2.89						
Intersection LOS	F						



# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):13.3Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.018

#### Intersection Setup

Name	Church Dri	Church Driveway No. 2		p Avenue	Vanderli	p Avenue	
Approach	North	bound	Eastl	bound	West	bound	
Lane Configuration	-	r	1	<b>→</b>	•	1	
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	1	No		No		No	

Name	Church Driv	eway No. 2	Vanderlip	Avenue	Vanderli	Avenue
Base Volume Input [veh/h]	5	19	113	20	91	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	19	113	20	91	56
Peak Hour Factor	0.6620	0.6620	0.6620	0.6620	0.6620	0.6620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	7	43	8	34	21
Total Analysis Volume [veh/h]	8	29	171	30	137	85
Pedestrian Volume [ped/h]	(	)	(	)	(	)



Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.02	0.03	0.00	0.00	0.10	0.00		
d_M, Delay for Movement [s/veh]	13.33	9.48	0.00	0.00	7.79	0.00		
Movement LOS	В	Α	A	A	Α	А		
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.00	0.00	0.25	0.25		
95th-Percentile Queue Length [ft/ln]	4.09	4.09	0.00	0.00	6.17	6.17		
d_A, Approach Delay [s/veh]	10.	31	0.0	00	4.8	81		
Approach LOS	E	3	A	4	A			
d_I, Intersection Delay [s/veh]								
Intersection LOS		В						



## Intersection Level Of Service Report

## Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.014

#### Intersection Setup

Name	Newpor	t Avenue	Newpoi	rt Avenue	School Driv	veway No. 1	
Approach	North	bound	South	nbound	Eastbound		
Lane Configuration	٦		1	F	T		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00 12.00		12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00	
No. of Lanes in Exit Pocket	0	0	0	0 0		0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00 0.00		0.00	
Speed [mph]	25	.00	25.00		25.00		
Grade [%]	0.	00	0	.00	0.00		
Crosswalk	N	lo	ı	No	No		

Name	Newport	t Avenue	Newport	Avenue	School Driv	eway No. 1	
Base Volume Input [veh/h]	0	1316	1316 1043 2		0	0	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1316	1043	2	0	0	
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	351	278	1	0	0	
Total Analysis Volume [veh/h]	0	1403	1112 2		0	0	
Pedestrian Volume [ped/h]	(	0	(	)	(	0	

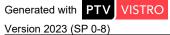


## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00			
d_M, Delay for Movement [s/veh]	10.78	0.00	0.00	0.00	24.36	12.60			
Movement LOS	В	А	A	A	С	В			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00			
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00			
d_A, Approach Delay [s/veh]	0.	00	0	.00	18.48				
Approach LOS	,	4		A	(				
d_I, Intersection Delay [s/veh]		0.00							
Intersection LOS		A							





ersion 2023 (SP 0-8) JN: 2

### Intersection Level Of Service Report

Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: A
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.591

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La Colina Drive		
Approach	١	Northboun	d	S	outhboun	d	E	Eastbound	ı	Westbound		
Lane Configuration		IF.			пII			+		٦٢		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00			25.00		25.00			30.00		
Grade [%]		0.00			0.00		0.00			0.00		
Crosswalk		No			Yes		Yes			Yes		

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Base Volume Input [veh/h]	0	1230	81	111	951	0	20	40	48	46	0	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1230	81	111	951	0	20	40	48	46	0	217
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	308	20	28	238	0	5	10	12	12	0	54
Total Analysis Volume [veh/h]	0	1230	81	111	951	0	20	40	48	46	0	217
Pedestrian Volume [ped/h]		0			0		0			0		
Bicycle Volume [bicycles/h]		0			0			0			0	

## Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

## Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.39	0.39	0.07	0.28	0.00	0.01	0.06	0.06	0.03	0.00	0.13
Intersection LOS		A										
Intersection V/C						0.5	591					



Intersection Level Of Service Report

Intersection 3: Newport Avenue at School Driveway No. 3

Control Type: Delay (sec / veh): 0.0 Two-way stop Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.016

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	veway No. 3	
Approach	North	bound	South	nbound	Eastbound		
Lane Configuration	1	1	1	ŀ			
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00 12.00		12.00 12.00		12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		0.00	
Grade [%]	0.00		0	.00	0.00		
Crosswalk	1	No	1	No	No		

Name	Newpo	rt Avenue	Newpo	rt Avenue	School Driv	veway No. 3	
Base Volume Input [veh/h]	0	1487	1067	99	0	0	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1487	1067	99	0	0	
Peak Hour Factor	1.0000	0.9290	0.9290	0.9290	1.0000	0.9530	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	400	287	27	0	0	
Total Analysis Volume [veh/h]	0	1601	1149	107	0	0	
Pedestrian Volume [ped/h]		0		0	0		



## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	
Movement LOS		Α	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.0	00	0	.00	0.	00	
Approach LOS	A	4		A	l l	A	
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	A						





## Intersection Level Of Service Report

## Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):14.8Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.175

#### Intersection Setup

Name	Newpor	Newport Avenue		Newport Avenue		veway No. 1	
Approach	North	Northbound		nbound	Eastl	bound	
Lane Configuration	1	11		I F		r	
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0	0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		5.00	25.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	Y	'es	Y	Yes		Yes	

Name	Newpo	t Avenue	Newport	t Avenue	Church Driv	veway No. 1
Base Volume Input [veh/h]	0	1513	1099	3	0	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1513	1099	3	0	72
Peak Hour Factor	1.0000	0.9240	0.9240	0.9240	1.0000	0.9240
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	409	297	1	0	19
Total Analysis Volume [veh/h]	0	1637	1189	3	0	78
Pedestrian Volume [ped/h]		0	0		0	

## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.17		
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	14.75		
Movement LOS		A	A	A		В		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.63		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	15.65		
d_A, Approach Delay [s/veh]	0.	00	0	.00	14	.75		
Approach LOS	,	A		A	E	3		
d_I, Intersection Delay [s/veh]		0.40						
Intersection LOS		В						



# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):23.5Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.035

#### Intersection Setup

Name	Newpor	t Avenue	Newpor	Newport Avenue		p Avenue	
Approach	North	Northbound		nbound	Eastl	bound	
Lane Configuration	٦	ıll		I F		٦٢	
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	0	0	1	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		5.00	30.00		
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	lo	1	No		No	

Name	Newport	Avenue	Newport	Avenue	Vanderlij	Avenue
Base Volume Input [veh/h]	118	4	1061	14	6	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	118	4	1061	14	6	63
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	32	1	288	4	2	17
Total Analysis Volume [veh/h]	128	4	1153	15	7	68
Pedestrian Volume [ped/h]	(	)	(	)	0	



## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.22	0.00	0.01	0.00	0.03	0.15
d_M, Delay for Movement [s/veh]	12.72	0.00	0.00	0.00	23.46	14.30
Movement LOS	В	Α	A	A	С	В
95th-Percentile Queue Length [veh/ln]	0.81	0.00	0.00	0.00	0.11	0.52
95th-Percentile Queue Length [ft/ln]	20.32	0.00	0.00	0.00	2.68	13.04
d_A, Approach Delay [s/veh]	12	.33	0.	.00	15	.15
Approach LOS	E	3		A	(	0
d_I, Intersection Delay [s/veh]	2.01					
Intersection LOS		С				

# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):11.0Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.008

#### Intersection Setup

Name	Church Driveway No. 2		Vanderli	Vanderlip Avenue		p Avenue
Approach	North	Northbound		oound	Westbound	
Lane Configuration	-	₩		F		1
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25	25.00		30.00		.00
Grade [%]	0.	0.00		00	0.00	
Crosswalk	N	No		lo	No	

Name	Church Driv	veway No. 2	Vanderli	o Avenue	Vanderli	Avenue
Base Volume Input [veh/h]	4	8	54	4	70	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	4	8	54	4	70	65
Peak Hour Factor	0.7540	0.7540	0.7540	0.7540	0.7540	0.7540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	3	18	1	23	22
Total Analysis Volume [veh/h]	5	11	72	5	93	86
Pedestrian Volume [ped/h]	(	0	0		0	

## Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.01 0.01		0.00	0.00	0.06	0.00						
d_M, Delay for Movement [s/veh]	11.00	8.73	0.00	0.00	7.47	0.00						
Movement LOS	B A		A	A	Α	Α						
95th-Percentile Queue Length [veh/ln]	0.06 0.06		0.00	0.00	0.16	0.16						
95th-Percentile Queue Length [ft/ln]	1.48	1.48	0.00	0.00	4.08	4.08						
d_A, Approach Delay [s/veh]	9.4	44	0.0	00	3.88							
Approach LOS	A	4	A	A	A							
d_I, Intersection Delay [s/veh]	3.11											
Intersection LOS		В										



# Appendix G

Project Opening Year (2025) With Project Conditions Level of Service Calculation Worksheets



## Intersection Level Of Service Report

Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):33.9Analysis Method:HCM 7th EditionLevel Of Service:DAnalysis Period:15 minutesVolume to Capacity (v/c):0.016

#### Intersection Setup

Name	Newpor	t Avenue	Newpoi	rt Avenue	School Driv	veway No. 1	
Approach	North	bound	South	nbound	Eastbound		
Lane Configuration	пli		1	F	Ψ		
Turning Movement	Left Thru		Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00 12.00		12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1 0		0	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	5.00	25	5.00	25.00		
Grade [%]	0.	00	0	.00	0.00		
Crosswalk	N	lo .	ı	No	No		

Name	Newport	t Avenue	Newport	Avenue	School Driv	reway No. 1
Base Volume Input [veh/h]	0	822	1763	3	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	822	1763	3	2	0
Peak Hour Factor	0.9260	0.9260	0.9260	0.9260	0.9260	0.9260
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	222	476	1	1	0
Total Analysis Volume [veh/h]	0	888	1904	3	2	0
Pedestrian Volume [ped/h]	(	0	(	)	(	0

## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.02	0.00					
d_M, Delay for Movement [s/veh]	16.70 0.00		0.00	0.00		19.34					
Movement LOS	C A		А	А	D	С					
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.05	0.05					
95th-Percentile Queue Length [ft/ln]	0.00 0.00 0.00		1.20	1.20							
d_A, Approach Delay [s/veh]	0.	00	0	.00	33.93						
Approach LOS	,	4		A	D						
d_I, Intersection Delay [s/veh]	0.02										
Intersection LOS		D									



#### Intersection Level Of Service Report

### Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.638

#### Intersection Setup

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Approach	١	Northbound			outhboun	d	E	Eastbound	ı	Westbound		
Lane Configuration	IF.				ılı			+		٦٢		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00	-		25.00		25.00			30.00		
Grade [%]	0.00				0.00		0.00			0.00		
Crosswalk		No			Yes		Yes			Yes		

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	Schoo	l Driveway	/ No. 2	La	Colina Dr	ive
Base Volume Input [veh/h]	0	794	66	166	1560	0	30	46	77	67	0	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	794	66	166	1560	0	30	46	77	67	0	204
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	199	17	42	390	0	8	12	19	17	0	51
Total Analysis Volume [veh/h]	0	794	66	166	1560	0	30	46	77	67	0	204
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]		0			0			0			0	

## Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

## Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.25	0.25	0.10	0.46	0.00	0.02	0.09	0.09	0.04	0.00	0.12
Intersection LOS		В										
Intersection V/C		0.638										



Intersection 3: Newport Avenue at School Driveway No. 3

Control Type: Delay (sec / veh): 0.0 Two-way stop Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.019

### Intersection Setup

Name	Newpor	Newport Avenue		t Avenue	School Dri	veway No. 3	
Approach	North	Northbound		Southbound		bound	
Lane Configuration	1	11		11-			
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		30.00	
Grade [%]	0.	0.00		0.00		0.00	
Crosswalk	N	No		No		No	

Name	Newpor	t Avenue	Newpor	t Avenue	School Driv	reway No. 3
Base Volume Input [veh/h]	0	1036	1737	173	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1036	1737	173	0	0
Peak Hour Factor	1.0000	0.8930	0.8930	0.8930	1.0000	0.8380
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	290	486	48	0	0
Total Analysis Volume [veh/h]	0	1160	1945	194	0	0
Pedestrian Volume [ped/h]		0		0	0	

Version 2023 (SP 0-8) JN: 2739-2023-01

# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	
Movement LOS		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.	00	0	0.00	0.00		
Approach LOS	,	4		A	A		
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	А						



Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type: Two-way stop Delay (sec / veh): 28.0 Analysis Method: HCM 7th Edition Level Of Service: D Analysis Period: 15 minutes Volume to Capacity (v/c): 0.368

### Intersection Setup

Name	Newpor	Newport Avenue		t Avenue	Church Driv	veway No. 1	
Approach	Northbound		South	Southbound		bound	
Lane Configuration	11		i h		۲		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	0	0 0		0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	Y	'es	Y	'es	Yes		

Name	Newpo	rt Avenue	Newpor	t Avenue	Church Driv	veway No. 1	
Base Volume Input [veh/h]	0	1040	1840	19	0	81	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1040	1840	19	0	81	
Peak Hour Factor	1.0000	0.8970	0.8970	0.8970	1.0000	0.8970	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	290	513	5	0	23	
Total Analysis Volume [veh/h]	0	1159	2051	21	0	90	
Pedestrian Volume [ped/h]		0		0		0	

# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.01	0.02	0.00	0.00	0.37		
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	28.01		
Movement LOS		A	Α	A		D		
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	1.61		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	40.25		
d_A, Approach Delay [s/veh]	0.	00	0	0.00	28	.01		
Approach LOS		A		A	[	)		
d_I, Intersection Delay [s/veh]	0.76							
Intersection LOS		D						

# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):86.9Analysis Method:HCM 7th EditionLevel Of Service:FAnalysis Period:15 minutesVolume to Capacity (v/c):0.202

### Intersection Setup

Name	Newport Avenue		Newpor	Newport Avenue		p Avenue	
Approach	Northbound		South	Southbound		bound	
Lane Configuration	пII		11-		٦٢		
Turning Movement	Left	Thru	Thru	Right	Left	Right	
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	1 0		0	0	1	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
No. of Lanes in Exit Pocket	0	0	0	0	0	0	
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	
Speed [mph]	25	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00		
Crosswalk	N	No		No		No	

Name	Newport	Newport Avenue		Newport Avenue		o Avenue	
Base Volume Input [veh/h]	142	896	1782	44	10	126	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	142	896	1782	44	10	126	
Peak Hour Factor	0.8920	0.8920	0.8920	0.8920	0.8920	0.8920	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	40	251	499	12	3	35	
Total Analysis Volume [veh/h]	159	1004	1998	49	11	141	
Pedestrian Volume [ped/h]	(	0		0		0	



# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.59	0.01	0.02	0.00	0.20	0.61
d_M, Delay for Movement [s/veh]	35.50	0.00	0.00	0.00	86.93	41.63
Movement LOS	E	A	А	A	F	E
95th-Percentile Queue Length [veh/ln]	3.42	0.00	0.00	0.00	0.67	3.52
95th-Percentile Queue Length [ft/ln]	85.47	0.00	0.00	0.00	16.85	88.05
d_A, Approach Delay [s/veh]	4.	85	0.	00	44.	.91
Approach LOS	,	4	A		Е	
d_I, Intersection Delay [s/veh]	3.71					
Intersection LOS				F		



# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):15.0Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.032

#### Intersection Setup

Name	Church Driveway No. 2		Vanderli	p Avenue	Vanderlip Avenue			
Approach	Northbound		East	bound	Westbound			
Lane Configuration	-	r	1	<b>→</b>	•	4		
Turning Movement	Left	Right	Thru	Right	Left	Thru		
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00		
No. of Lanes in Entry Pocket	0	0	0	0	0	0		
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00		
No. of Lanes in Exit Pocket	0	0	0	0	0	0		
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00		
Speed [mph]	25.00		30	0.00	30.00			
Grade [%]	0.00		0.	.00	0.00			
Crosswalk	No		N	No	No			

Name	Church Driv	eway No. 2	Vanderlip	Avenue	Vanderlip Avenue		
Base Volume Input [veh/h]	8	25	113 24		122	56	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0 0		0	0	
Diverted Trips [veh/h]	0	0	0 0		0	0	
Pass-by Trips [veh/h]	0	0	0 0		0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	8	25	113	24	122	56	
Peak Hour Factor	0.6620	0.6620	0.6620	0.6620	0.6620	0.6620	
Other Adjustment Factor	1.0000	1.0000	1.0000 1.0000		1.0000	1.0000	
Total 15-Minute Volume [veh/h]	3	9	43	9	46	21	
Total Analysis Volume [veh/h]	12	38	171	36	184	85	
Pedestrian Volume [ped/h]	(	)	(	)	(	)	



Intersection	n Settings
--------------	------------

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.03 0.04		0.00	0.00	0.13	0.00		
d_M, Delay for Movement [s/veh]	15.02	9.68	0.00	0.00	7.87	0.00		
Movement LOS	С	Α	А	A	A	А		
95th-Percentile Queue Length [veh/ln]	0.25 0.25		0.00	0.00	0.34	0.34		
95th-Percentile Queue Length [ft/ln]	6.19 6.19		0.00	0.00	8.53	8.53		
d_A, Approach Delay [s/veh]	10.	96	0.	00	5.3	38		
Approach LOS	E	B A A						
d_I, Intersection Delay [s/veh]	3.79							
Intersection LOS	С							



Intersection 1: Newport Avenue at School Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):0.0Analysis Method:HCM 7th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.014

### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Driveway No. 1			
Approach	Northbound		South	nbound	East	bound		
Lane Configuration	пΠ		1	H	-	Ψ.		
Turning Movement	Left	Thru	Thru	Right	Left	Right		
Lane Width [ft]	12.00	12.00 12.00		12.00	12.00	12.00		
No. of Lanes in Entry Pocket	1 0		0	0	0	0		
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00 100.00		100.00		
No. of Lanes in Exit Pocket	0	0	0	0	0	0		
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00 0.00		0.00		
Speed [mph]	25.00		25	25.00		25.00		
Grade [%]	0.00		0	.00	0.00			
Crosswalk	No		1	No	No			

Name	Newport	Avenue	Newport	Avenue	School Driveway No. 1		
Base Volume Input [veh/h]	0	1327	1062 2		0	0	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0 0		0	0	
Pass-by Trips [veh/h]	0	0 0		0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	0	1327	1062	2	0	0	
Peak Hour Factor	0.9380	0.9380	0.9380	0.9380	0.9380	0.9380	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	354	283	1	0	0	
Total Analysis Volume [veh/h]	0	1415	1132	2	0	0	
Pedestrian Volume [ped/h]	0		(	)	(	)	

# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	1

V/C, Movement V/C Ratio	0.00	0.01	0.01	0.00	0.00	0.00		
d_M, Delay for Movement [s/veh]	10.88	0.00	0.00	0.00	24.80	12.71		
Movement LOS	В	А	А	A	С	В		
95th-Percentile Queue Length [veh/ln]	0.00	0.00 0.00		0.00	0.00	0.00		
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00 0.00 0.00		0.00	0.00		
d_A, Approach Delay [s/veh]	0.	0.00 0.00 18.76						
Approach LOS	A A C							
d_I, Intersection Delay [s/veh]	0.00							
Intersection LOS	A							



# Intersection 2: Newport Avenue at School Driveway No. 2/La Colina Drive

Control Type: Signalized Delay (sec / veh): Analysis Method: ICU 1 Level Of Service: B
Analysis Period: 15 minutes Volume to Capacity (v/c): 0.619

### Intersection Setup

Name	Nev	Newport Avenue		Nev	Newport Avenue		School Driveway No. 2			La Colina Drive		
Approach	N	lorthboun	d	S	outhboun	d	ı	Eastbound	ł	Westbound		
Lane Configuration		1H			пП			+			٦٢	
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]		25.00	-		25.00			25.00	-		30.00	
Grade [%]	0.00			0.00		0.00			0.00			
Crosswalk		No			Yes		Yes	es Yes				

Name	Nev	wport Ave	nue	Nev	wport Ave	nue	School Driveway No. 2			La Colina Drive		
Base Volume Input [veh/h]	0	1241	81	122	956	0	25	51	62	46	0	222
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1241	81	122	956	0	25	51	62	46	0	222
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	310	20	31	239	0	6	13	16	12	0	56
Total Analysis Volume [veh/h]	0	1241	81	122	956	0	25	51	62	46	0	222
Pedestrian Volume [ped/h]	0			0		0			0			
Bicycle Volume [bicycles/h]		0			0			0			0	·

Version 2023 (SP 0-8) JN: 2739-2023-01

# Intersection Settings

Cycle Length [s]	100
Lost time [s]	5.00

# Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	7	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-

V/C, Movement V/C Ratio	0.00	0.39	0.39	0.07	0.28	0.00	0.01	0.08	0.08	0.03	0.00	0.13
Intersection LOS		В										
Intersection V/C		0.619										





Intersection 3: Newport Avenue at School Driveway No. 3

Control Type: Delay (sec / veh): 0.0 Two-way stop Analysis Method: HCM 7th Edition Level Of Service: Α Analysis Period: 15 minutes Volume to Capacity (v/c): 0.016

### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	School Dri	veway No. 3
Approach	North	bound	South	nbound	Eastbound	
Lane Configuration	1	1	1F			
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25	5.00	25	25.00		0.00
Grade [%]	0.	0.00		0.00		.00
Crosswalk	N	No	No		No	

Name	Newpo	rt Avenue	Newpoi	rt Avenue	School Driv	veway No. 3
Base Volume Input [veh/h]	0	1516	1083	128	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1516	1083	128	0	0
Peak Hour Factor	1.0000	0.9290	0.9290	0.9290	1.0000	0.9530
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	408	291	34	0	0
Total Analysis Volume [veh/h]	0	1632	1166	138	0	0
Pedestrian Volume [ped/h]		0		0 0		0

Version 2023 (SP 0-8) JN: 2739-2023-01

# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.00	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00	
Movement LOS		A	A	A			
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	
d_A, Approach Delay [s/veh]	0.	00	0	.00	0.00		
Approach LOS	-	A		A	A		
d_I, Intersection Delay [s/veh]	0.00						
Intersection LOS	А						





# Intersection Level Of Service Report Intersection 4: Newport Avenue at Church Driveway No. 1

Control Type:Two-way stopDelay (sec / veh):15.5Analysis Method:HCM 7th EditionLevel Of Service:CAnalysis Period:15 minutesVolume to Capacity (v/c):0.218

### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	Church Dri	veway No. 1
Approach	North	bound	South	nbound	Eastbound	
Lane Configuration	1	1	ih r		<b>→</b>	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25	5.00	25.00		25	5.00
Grade [%]	0.	.00	0.00		0.00	
Crosswalk	Y	'es	Yes		Yes	

Name	Newpor	t Avenue	Newport	Avenue	Church Driv	veway No. 1
Base Volume Input [veh/h]	0	1542	1128	3	0	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1542	1128	3	0	88
Peak Hour Factor	1.0000	0.9240	0.9240	0.9240	1.0000	0.9240
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	417	305	1	0	24
Total Analysis Volume [veh/h]	0	1669	1221	3	0	95
Pedestrian Volume [ped/h]		0	(	)		0

Version 2023 (SP 0-8) JN: 2739-2023-01

# Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

V/C, Movement V/C Ratio	0.00	0.02	0.01	0.00	0.00	0.22	
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	15.54	
Movement LOS		A	A	A		С	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.82	
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	20.49	
d_A, Approach Delay [s/veh]	0.	00	0	0.00	15.54		
Approach LOS		A		A		C	
d_I, Intersection Delay [s/veh]	0.49						
Intersection LOS	С						

# Intersection Level Of Service Report Intersection 5: Newport Avenue at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):25.5Analysis Method:HCM 7th EditionLevel Of Service:DAnalysis Period:15 minutesVolume to Capacity (v/c):0.064

### Intersection Setup

Name	Newpor	t Avenue	Newpor	t Avenue	Vanderli	p Avenue
Approach	North	bound	South	nbound	Eastbound	
Lane Configuration	٦	11	1	IF ar		Γ
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25	5.00	25	25.00		.00
Grade [%]	0.00		0.00		0.00	
Crosswalk	N	lo	No		No	

Name	Newport	Avenue	Newport	Avenue	Vanderlij	Avenue
Base Volume Input [veh/h]	134	18	1090	19	11	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	134	18	1090	19	11	63
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	5	296	5	3	17
Total Analysis Volume [veh/h]	146	20	1185	21	12	68
Pedestrian Volume [ped/h]	(	)	(	)	(	)



# Intersection Settings

Priority Scheme	Free	Free	Stop	
Flared Lane				
Storage Area [veh]	0	0	0	
Two-Stage Gap Acceptance			Yes	
Number of Storage Spaces in Median	0	0	1	

V/C, Movement V/C Ratio	0.25	0.00	0.01	0.00	0.06	0.15
d_M, Delay for Movement [s/veh]	13.39	0.00	0.00	0.00	25.50	14.62
Movement LOS	В	A	A	A	D	В
95th-Percentile Queue Length [veh/ln]	1.00	0.00	0.00	0.00	0.20	0.54
95th-Percentile Queue Length [ft/ln]	25.09	0.00	0.00	0.00	5.08	13.48
d_A, Approach Delay [s/veh]	11.78		0.00		16.25	
Approach LOS	В		Α		С	
d_I, Intersection Delay [s/veh]	2.24					
Intersection LOS	D					



# Intersection Level Of Service Report Intersection 6: Church Driveway No. 2 at Vanderlip Avenue

Control Type:Two-way stopDelay (sec / veh):11.7Analysis Method:HCM 7th EditionLevel Of Service:BAnalysis Period:15 minutesVolume to Capacity (v/c):0.016

### Intersection Setup

Name	Church Driveway No. 2		Vanderlip Avenue		Vanderlip Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	Ψ.		F		+	
Turning Movement	Left Right		Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Name	Church Driveway No. 2		Vanderlip Avenue		Vanderlip Avenue	
Base Volume Input [veh/h]	7	13	54	7	91	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	13	54	7	91	65
Peak Hour Factor	0.7540	0.7540	0.7540	0.7540	0.7540	0.7540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	4	18	2	30	22
Total Analysis Volume [veh/h]	9	17	72	9	121	86
Pedestrian Volume [ped/h]	0		0		0	



# Intersection Settings

Priority Scheme	Stop	Free	Free	
Flared Lane	No			
Storage Area [veh]	0	0	0	
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	

V/C, Movement V/C Ratio	0.02	0.02	0.00	0.00	0.08	0.00
d_M, Delay for Movement [s/veh]	11.69	8.82	0.00	0.00	7.52	0.00
Movement LOS	В	Α	A	A	Α	А
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.22	0.22
95th-Percentile Queue Length [ft/ln]	2.60	2.60	0.00	0.00	5.40	5.40
d_A, Approach Delay [s/veh]	9.81		0.00		4.39	
Approach LOS	A		A		Α	
d_I, Intersection Delay [s/veh]	3.71					
Intersection LOS	В					