

# Traffic Impact Analysis

**Sri Sairam Mandir**

San Bernardino County, California

June 28, 2020

*Prepared for:*

**Sri Sairam Mandir**

*Prepared by:*

**Keecheril Sajeev Kumar P.E, T.E**

## 1. Introduction

A focused traffic impact analysis is required by the County of San Bernardino as a part of the development process for a proposed 36,900 square foot worship center with related on-site facilities. This project is located on Roswell Avenue, south of the rail-way track in San Bernardino County, California. The 4.83-acre site will be developed into a worshipping center with associated parking, landscaping and drainage facilities. Figure 1 is a vicinity map for this project. Figure 2 is a site plan of the proposal. The site is proposed to be accessed from Roswell Avenue through a left-in / right-out access driveway as shown in the site plan.

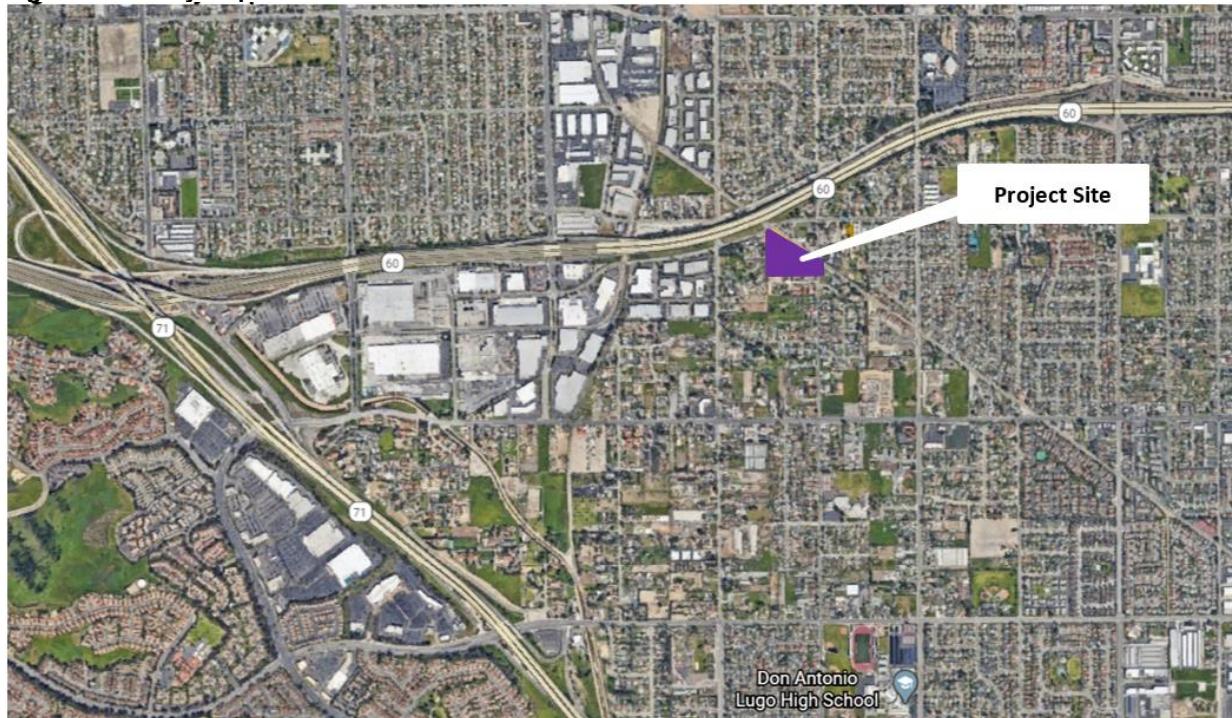
The purpose of this analysis is to review, assess and identify potential traffic related impacts which this proposal may have on the surrounding transportation system and where possible minimize these impacts. This traffic impact analysis is completed in accordance with the current traffic guidelines from the County of San Bernardino, and the Institute Transportation Engineers (ITE) manual).

The project study area for this Traffic Impact Analysis was determined through discussions with the County of San Bernardino personnel to include the intersections of:

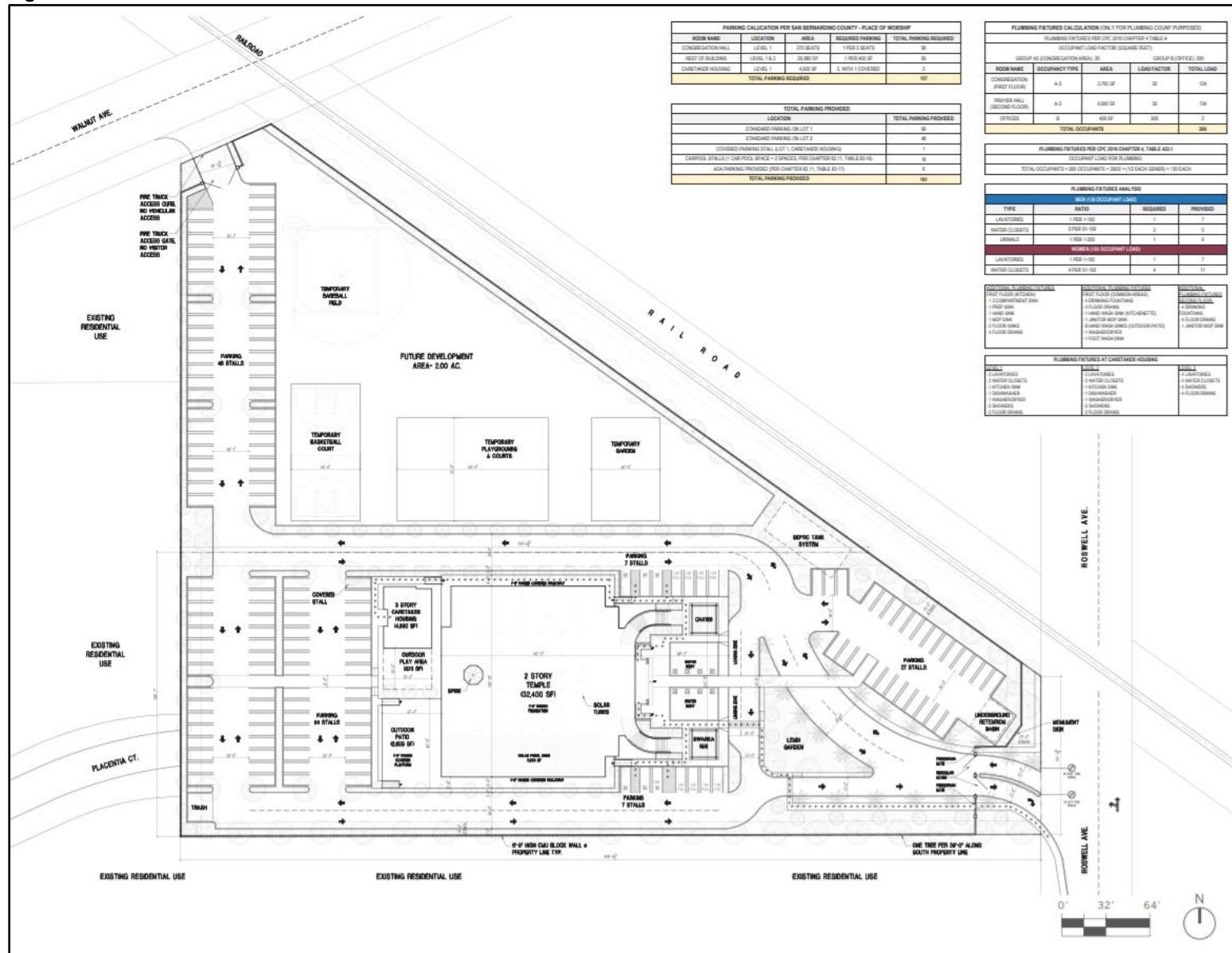
- Roswell Avenue & Riverside Drive
- Site Driveway & Roswell Avenue

The study focused on the characteristics of these intersections. The study was scoped to include weekday AM and PM peak hour analysis and Weekend AM and PM peak generator analysis for the existing conditions (2020), and existing plus project build out (2020) conditions. This traffic report is consistent with the requirements and procedures outlined in the most current Congestion Management Program for San Bernardino County. The Scope of Work for this traffic study, which is included in **Appendix A**, was developed in conjunction with County of San Bernardino staff.

**Figure 1: Vicinity Map**



**Figure 2: Site Plan**



## 2. Existing Conditions

### 2.1 Existing Roadways

The principal transportation network in this area which serves the proposed project includes the Riverside Drive and the Roswell Avenue.

**Riverside Drive** is a four-lane roadway with two lanes in each direction with a center turn lane. It is posted on Riverside drive is 45 mph and oriented in the east-west direction in the vicinity of the proposed project.

**Roswell Avenue** is a two-lane roadway with one lane in each direction. It is posted on Roswell avenue drive is 25 mph and it is oriented in north-south direction in the vicinity of the project. The project site will be accessed from the driveway on Roswell Avenue.

### 2.2 Study Intersections

**Roswell Avenue & Riverside Drive** is a signalized intersection with protected-left turn phasing on Riverside Drive and permitted left-turn phasing on Roswell Avenue. The northbound and southbound approaches on Roswell Avenue have one shared lane. The eastbound and westbound approaches on the Riverside Drive have one left turn lane, one through lane and one through-right combined lane.

### 2.2 Existing Traffic Volumes

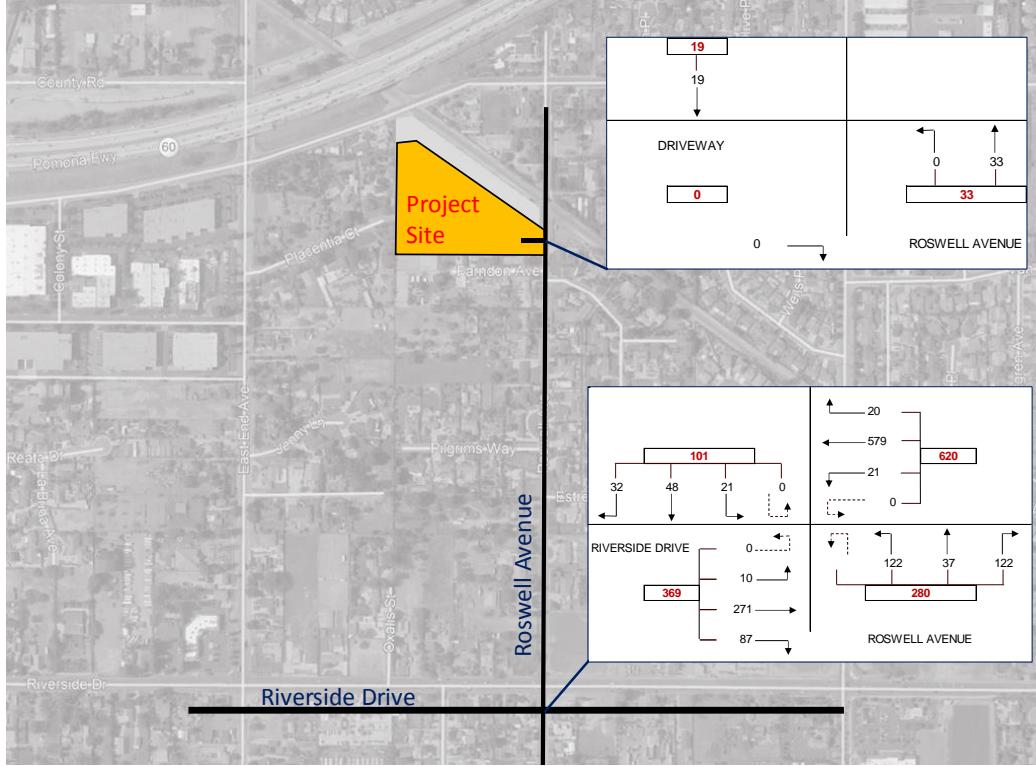
This focused traffic study is required to evaluate the driveway on Roswell Avenue and the intersection of Riverside Drive and Roswell Ave for the weekday peak hours and weekend peak hour generator. Since the traffic volume on the streets are expected to be less than normal due the COVID-19 situation, based on the input from the County of San Bernardino personal, historical volume data (February 2019) with the current counts are used to estimate the traffic volumes for this study. Traffic volumes were estimated using the following steps:

- County of San Bernardino provided the 24-hour volume data on Riverside Drive and the Roswell avenue.
- Collected new counts on a weekday (standard Tuesday, Wednesday, OR Thursday) and the following weekend for both Roswell and Riverside.
- Use the new intersection counts to get the turning movement distribution at the intersection.
- Using the February and the current counts, estimate traffic differential on Riverside.
- Assuming consistency, used the differential from previous step to scale Roswell.

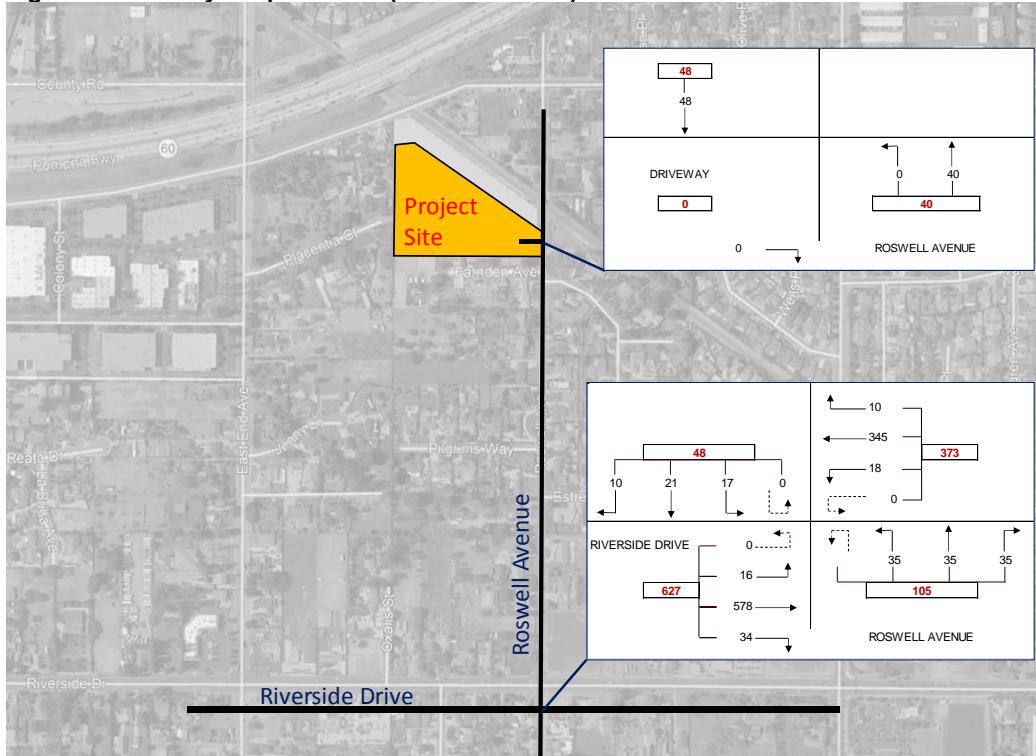
24-hour traffic volumes were conducted on Riverside drive and Roswell Avenue on Thursday, May 14 and Sunday, May 17,2020. Intersection turning movement counts were conducted on Thursday, May 14 between 7:00 to 9:00 am in the AM peak period and 4:00 to 6:00 pm in the PM peak period. For the weekend peak hour generator analysis, intersection turning movement counts were conducted on Sunday between 9:00 to 10:00 am in the AM period and 7:00 to 8:00 pm in the PM period. February 2019 traffic volume data obtained from the County of San Bernardino and the new counts conducted by Wiltec, in May 2020 are as shown in **Appendix B**. Weekday AM peak hour (7:00 to 8:00 am), PM peak

hour (4:45 to 5:45 pm), Sunday AM peak hour generator (9:00 to 10:00 am) and Sunday PM peak hour generator (7:00 to 8:00 pm) are shown in figures 3,4,5 and 6.

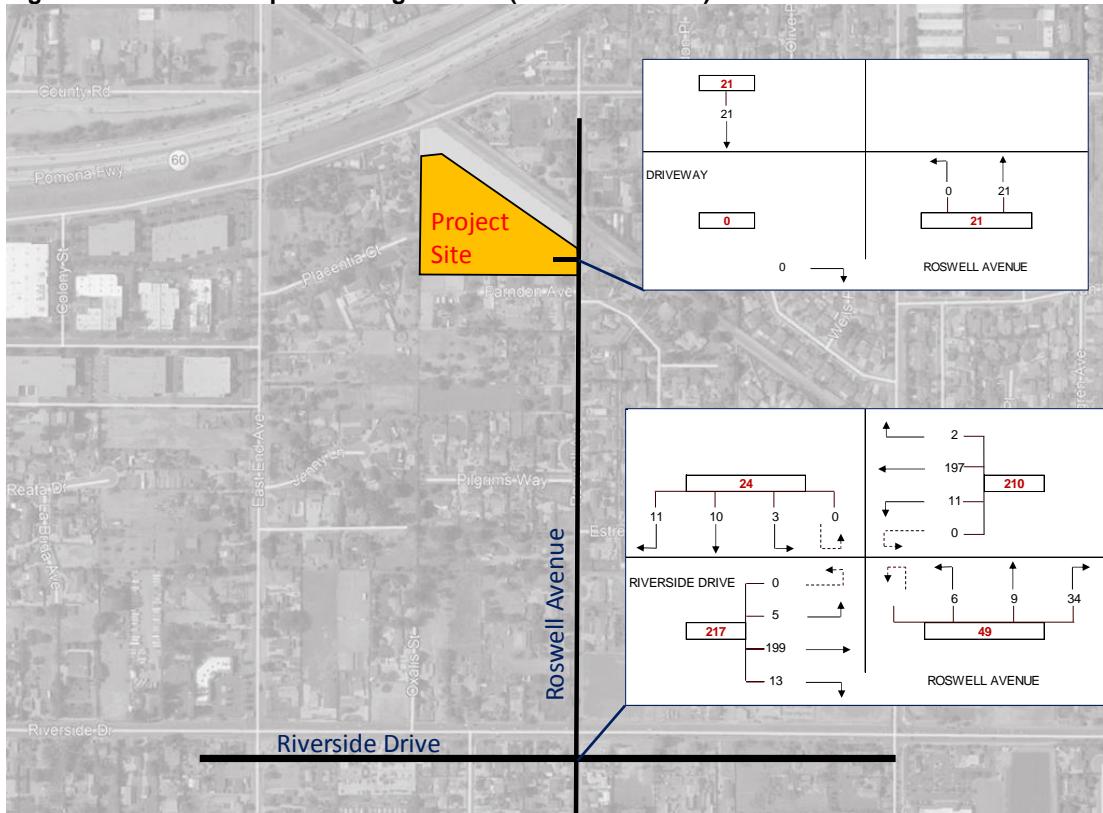
**Figure 3: Weekday AM peak hour (7:00 to 8:00 am) volume**



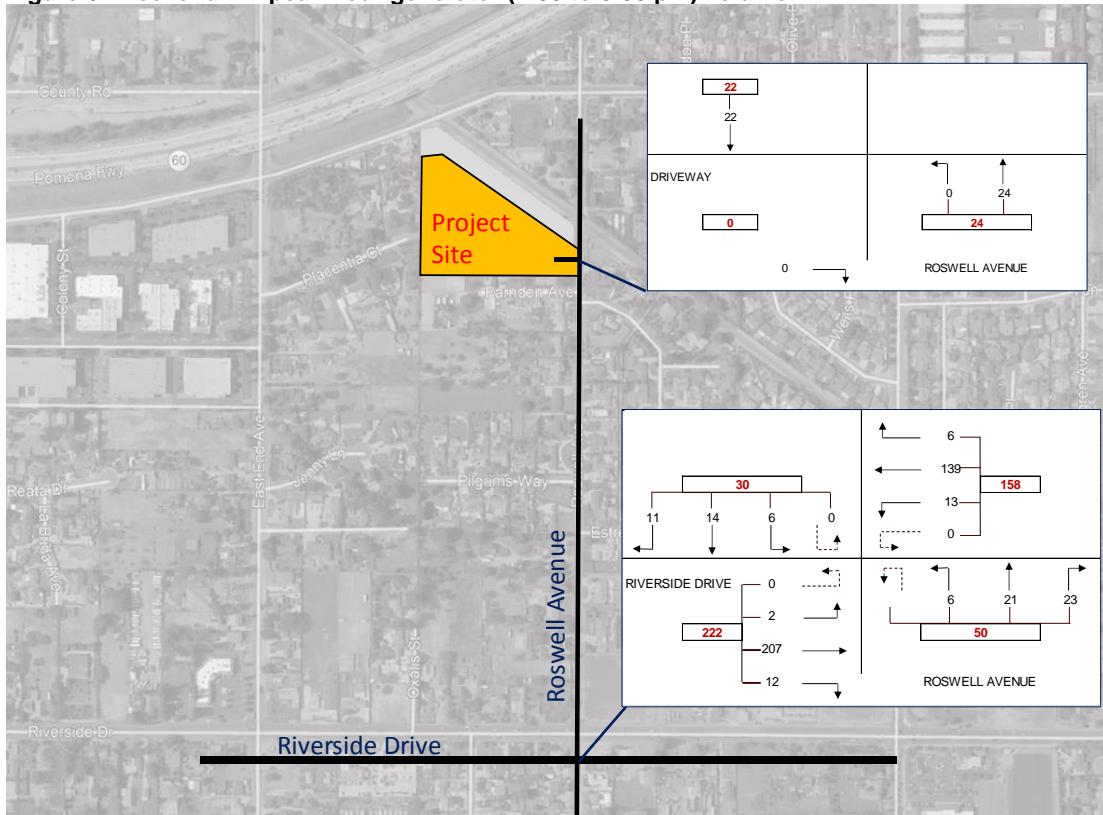
**Figure 4: Weekday PM peak hour (4:45 to 5:45 am) volume**



**Figure 5: Weekend AM peak hour generator (9:00 to 10:00 am) volume**



**Figure 6: Weekend PM peak hour generator (7:00 to 8:00 pm) volume**



## 2.2 Existing Intersections Analysis

Based on San Bernardino County CMP requirements and the directions from the County of San Bernardino, existing weekday AM and PM peak hour operating conditions and the weekend peak generator conditions for the intersection of Roswell Avenue and Riverside Drive was analyzed using the Highway Capacity Manual (HCM) methodology. Synchro 10 software from Trafficware is used to estimate the HCM delay and LOS.

At signalized intersections, the intersection control delay per vehicle is estimated using the HCM methodology. The control delay includes the total delay experienced by the vehicle which includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Based on the control delay, HCM classifies the Level of Service (LOS) of signalized intersections from "A" to "F" as shown in Table 1.

Unsignalized methodology for stop-controlled methodology was used to analyze the drive-way. Based on the HCM methodology for stop-controlled intersections, the control delay for each movement was estimated to determine the level of service. LOS categories for the unsignalized intersections are shown in Table 2.

The County of San Bernardino requires a LOS "D" as the minimum acceptable condition that should be maintained during the peak hours.

**Table 1. Level of Service Criteria for Signalized Intersections**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	$\leq 1.0$	$>1.0$
$\leq 10$	A	F
$>10-20$	B	F
$>20-35$	C	F
$>35-55$	D	F
$>55-80$	E	F
$>80$	F	F

Source: *Hiahwav Capacity Manual 6<sup>th</sup> Edition*, Transportation Research Board.

**Table 2. Level of Service Criteria for Two-Way Stop-Controlled Intersections**

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	$\leq 1.0$	$>1.0$
$\leq 10$	A	F
$>10-15$	B	F
$>15-25$	C	F
$>25-35$	D	F
$>35-50$	E	F
$>50$	F	F

Source: *Hiahwav Capacity Manual 6<sup>th</sup> Edition*, Transportation Research Board.

A peak hour factor of 0.86 for the weekday AM peak hour, 0.95 for the weekday PM peak hour, .83 for the weekend AM peak hour generator and 0.93 for the weekday PM peak hour generator. The existing

levels of service for the intersection of Riverside Drive and Roswell Avenue is shown on Table 3. Table 3 shows LOS for the weekday AM peak hour, weekday PM peak hour, weekend AM peak hour generator and weekend PM peak hour generator.

**Table 3. Existing Condition Level of Service**

Intersection	Weekday AM Peak Hour (7:00 to 8:00 am)		Weekday PM Peak Hour (4:45 to 5:45 pm)		Weekend AM Peak Hour Generator (9:00 to 10:00 am)		Weekend AM Peak Hour Generator (7:00 to 8:00 pm)	
	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS
Riverside Drive & Roswell Avenue	13.0	B	7.1	A	4.1	A	4.4	A

Level of service D has been established as the minimum acceptable level for intersections within the study area. Therefore, the intersection of Riverside Drive and Roswell Avenue is currently operating at levels of service A or B in all the analysis periods. **Appendix C** presents the HCM delay and LOS calculations from Synchro 10.

### 3. Project Traffic

The traffic impact characteristics of the proposed Project is estimated using the multi-step process including the trip generation, trip distribution and trip assignment.

#### 3.1 Trip Generation

Trip generation estimate the number of vehicles arriving and departing from the proposed site. Traffic and transportation impact studies for various land uses are typically conducted using the Trip generation rates from the Institute Transportation Engineers (ITE) manual. Even though the trip generation rates for most of the land uses are available in the ITE manual, typical land uses like Hindu Temples are not available. Therefore, a trip generation study based on the ITE manual was conducted on three different sites in southern California to develop the trip generation rate for the proposed site. The trip generation and distribution memo completed and submitted to the county of San Bernardino as a part of this project is shown in **Appendix D**. Table 4 shows the estimated trips generated by the proposed project.

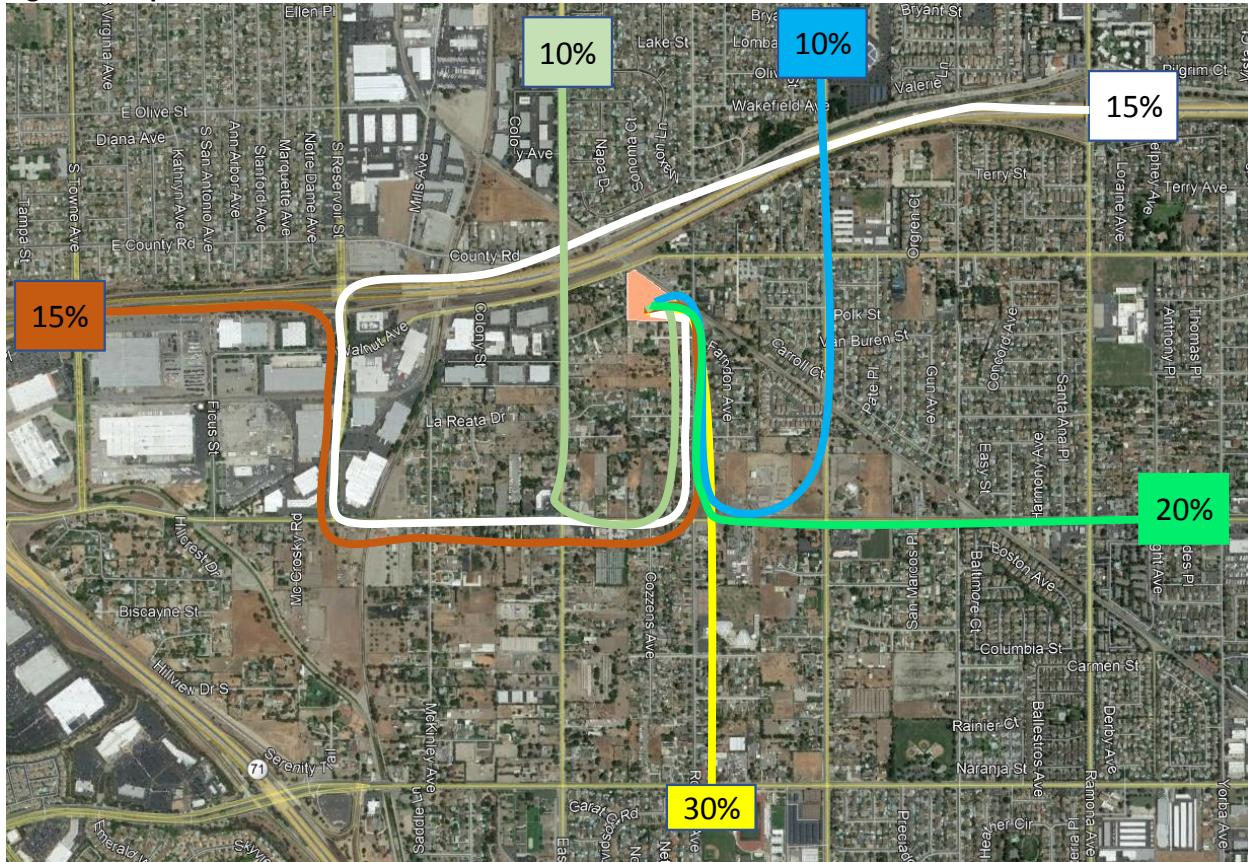
**Table 4: Trip Generated by the Proposed Hindu Temple**

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	127	120	247	24 -hour Volume	158	155	313	24 -hour Volume	451	455	905
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	7	8	15	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 7-8 AM	37	4	41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	5	4	9
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	10	6	16	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	19	33	52	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4-5 PM	57	17	75
A.M. Peak Hour Generator Time: 9-10 AM	10	9	20	A.M. Peak Hour Generator Time: 7-8 AM	37	4	41	A.M. Peak Hour Generator Time: 9-10 AM	90	7	96
P.M. Peak Hour Generator Time: 6-7 PM	34	16	50	P.M. Peak Hour Generator Time: 5-6 PM	19	33	52	P.M. Peak Hour Generator Time: 7-8 PM	15	103	118

### 3.2 Trip Distribution

Trip distribution is based on the assumption that the site is served with one left-in/ right-out driveway on Roswell Avenue. Most of the devotees are expected to/from the south direction of the site. 30% of the trips are expected to/from SR-60, 30% will be using Roswell avenue, 20% may use Riverside drive and 20% is expected from north side of the site. Trip distribution percentages with the routes are shown in Figure 7.

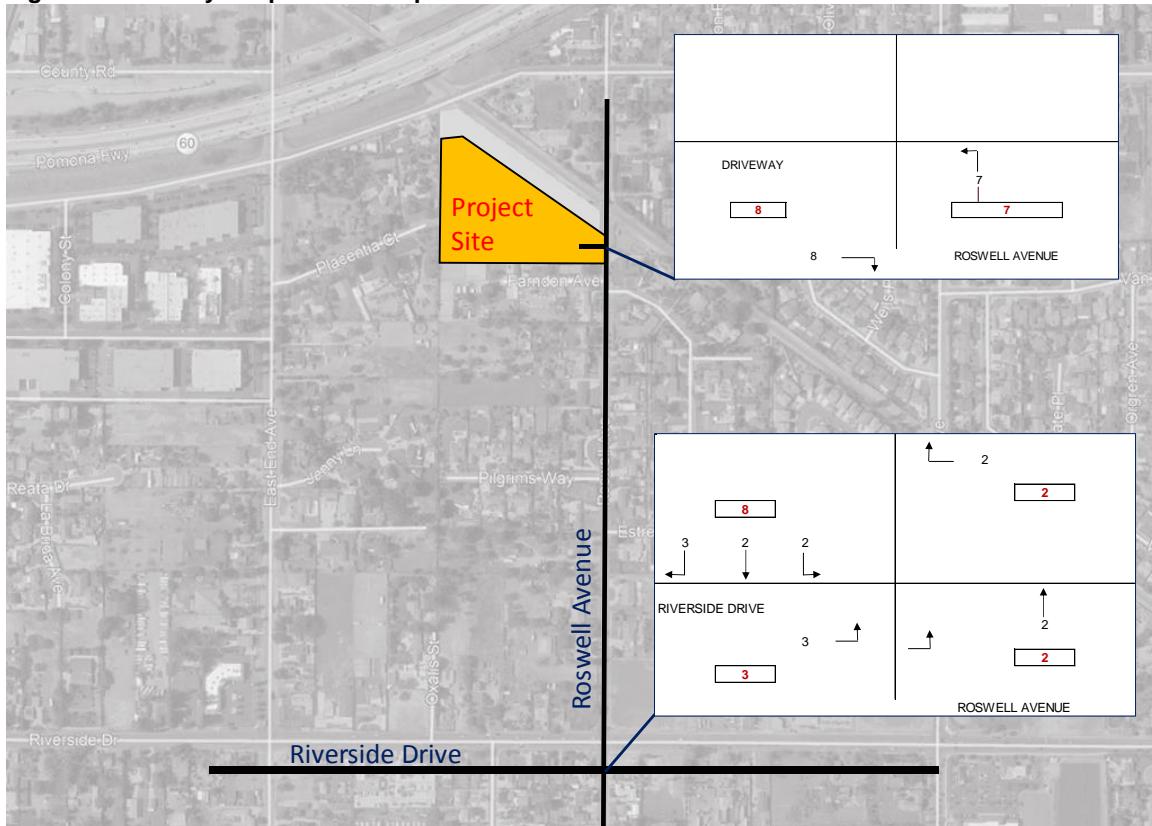
**Figure 7: Trip distribution**



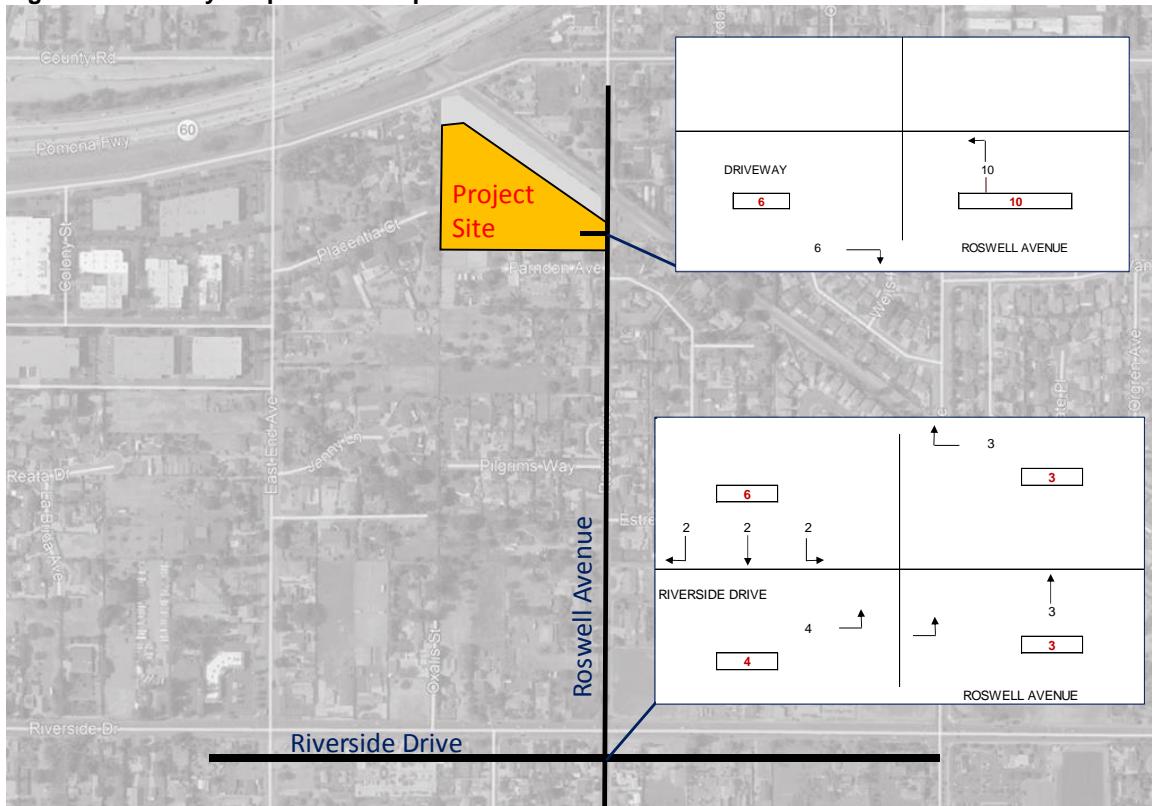
### 3.3 Project Trips

The assigned trips generated by the project at the study intersections during the weekday AM peak hour, weekday PM peak hour, weekend AM peak generator and weekend PM peak generator are shown in Figures 8,9,10 and 11.

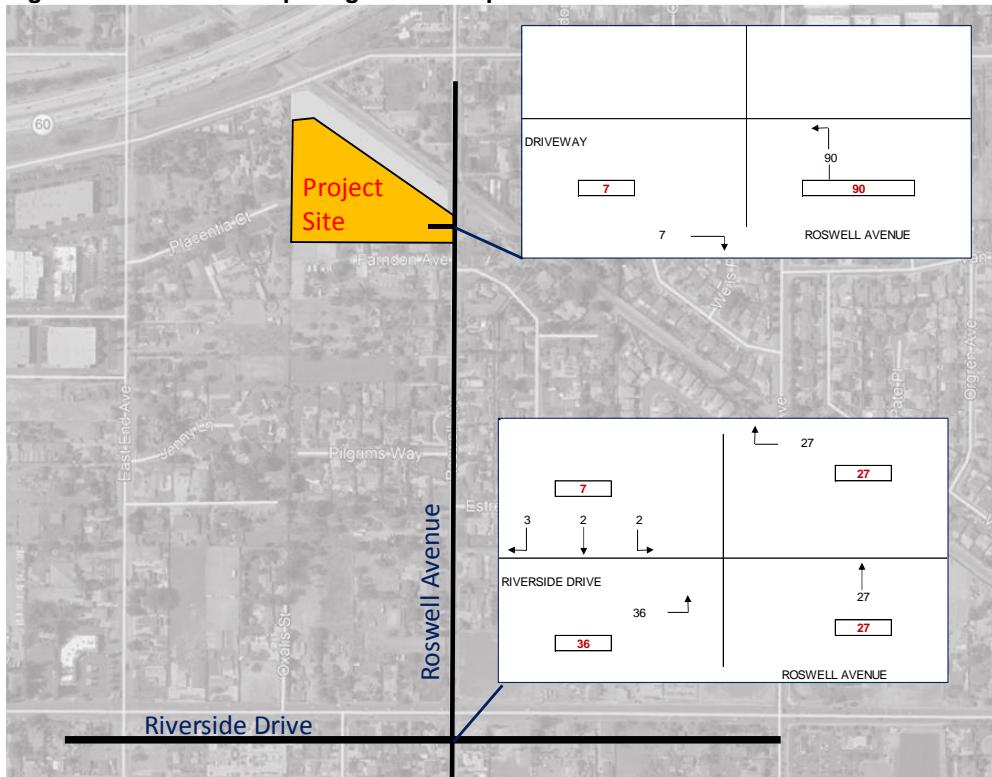
**Figure 8: Weekday AM peak hour trips**



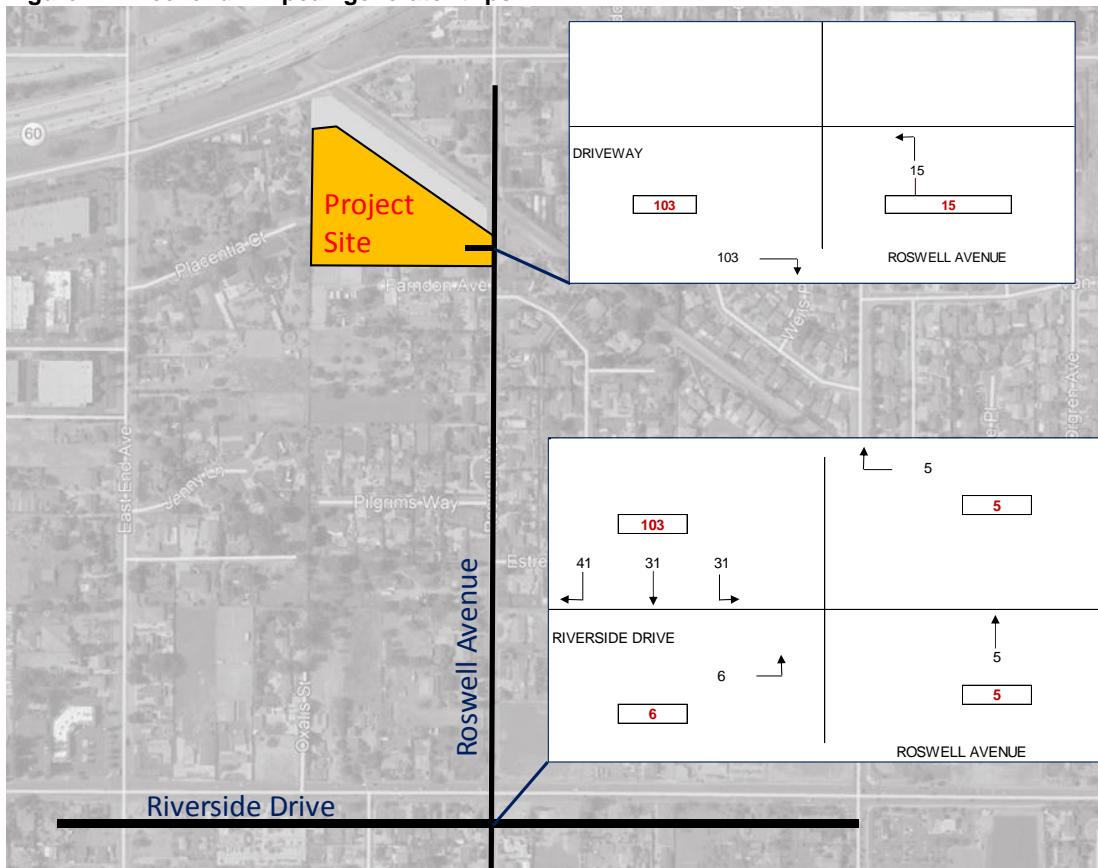
**Figure 9: Weekday PM peak hour trips**



**Figure 10: Weekend AM peak generator trips**



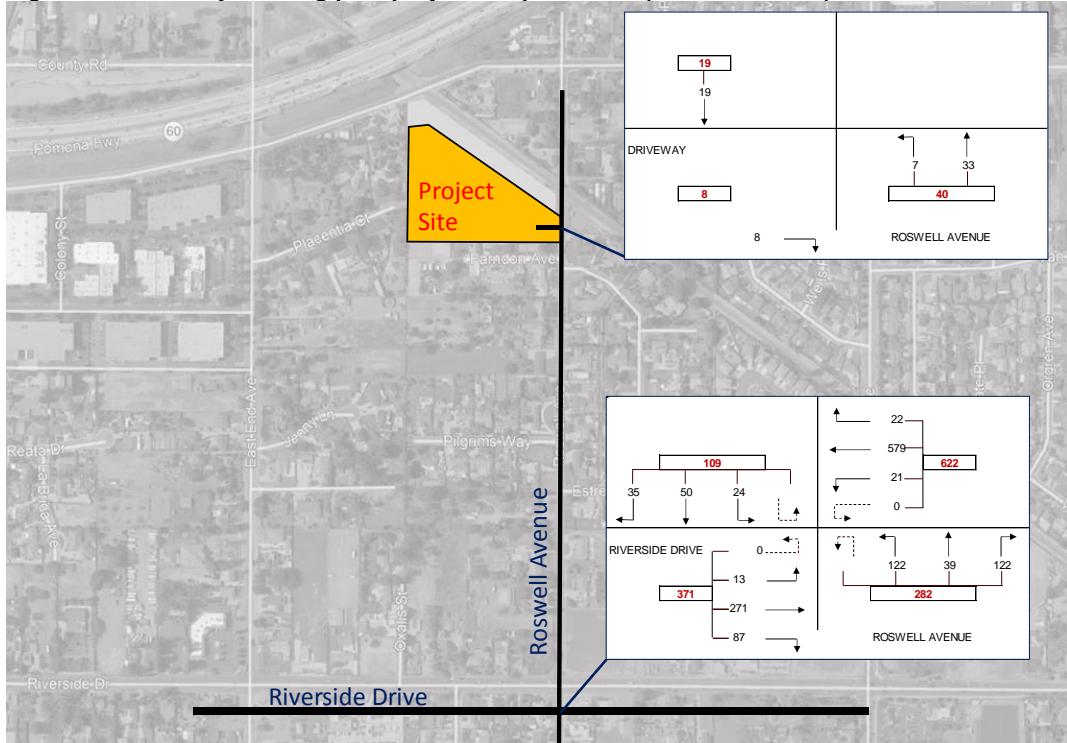
**Figure 11: Weekend PM peak generator trips**



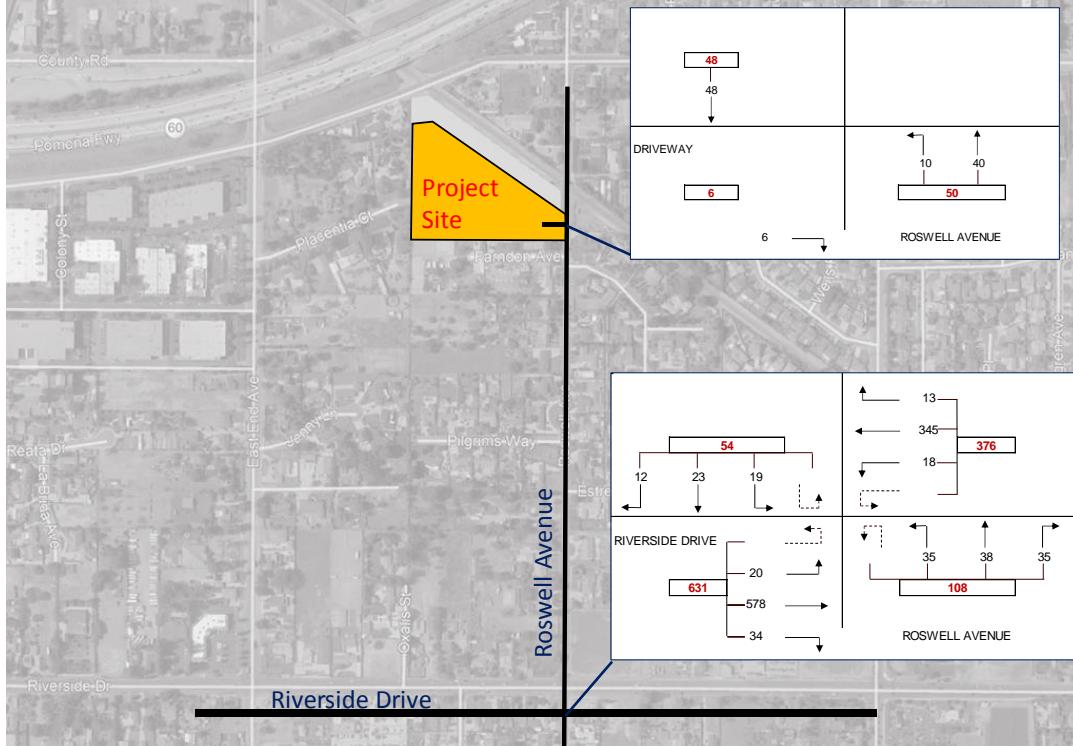
## 4. Existing Plus Project Conditions

The traffic volumes included in this analysis include the existing traffic and the additional traffic from the proposed project, as shown on Figures 12,13,14 and 15.

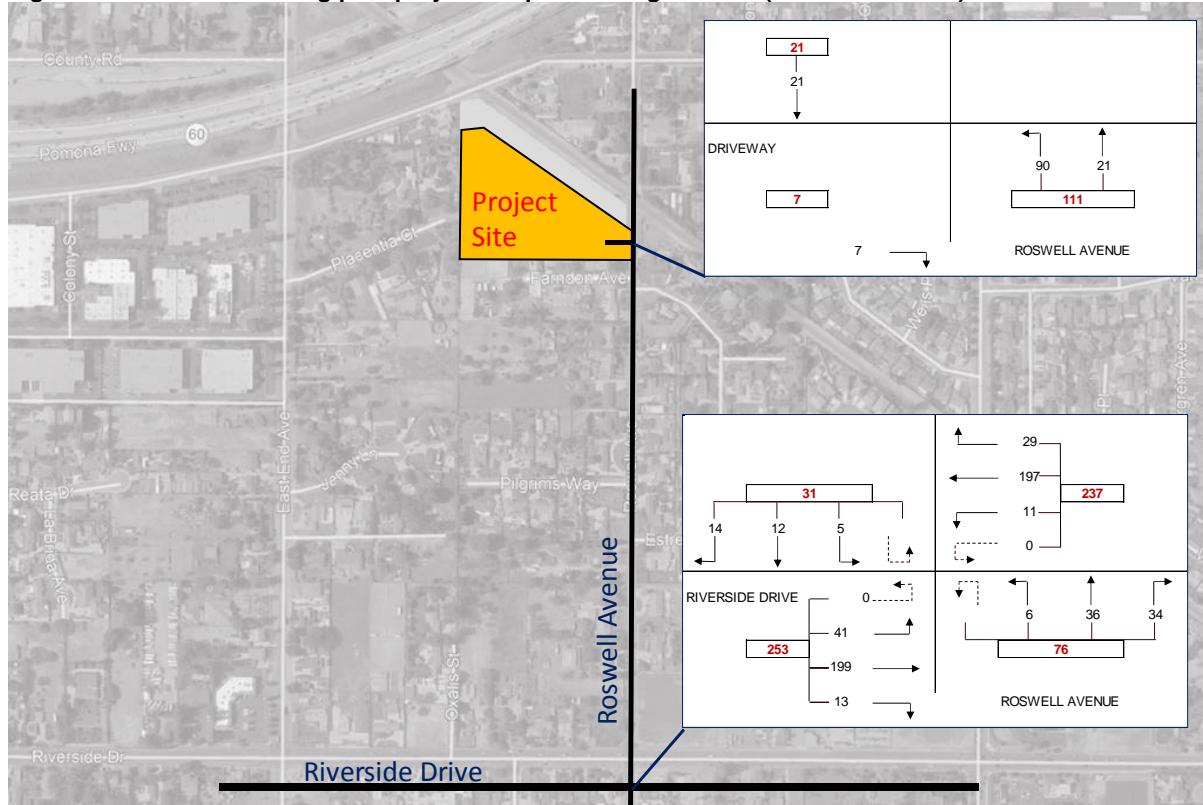
**Figure 12: Weekday existing plus project AM peak hour (7:00 to 8:00 am) volume**



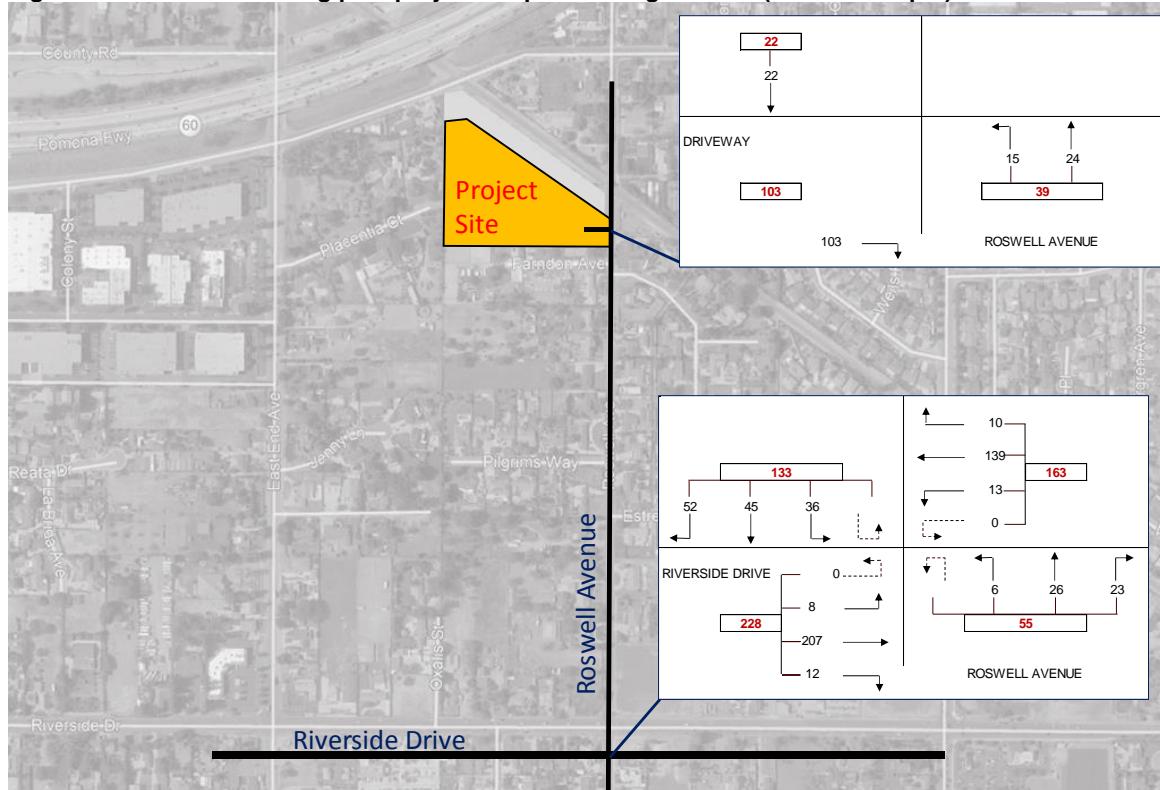
**Figure 13: Weekday existing plus project PM peak hour (4:45 to 5:45 am) volume**



**Figure 14: Weekend existing plus project AM peak hour generator (9:00 to 10:00 am) volume**



**Figure 15: Weekend existing plus project PM peak hour generator (7:00 to 8:00 pm) volume**



The existing plus project conditions levels of service for the intersection of Riverside Drive and Roswell Avenue is shown on Table 5. Table 5 shows the LOS for the weekday AM peak hour, weekday PM peak hour, weekend AM peak hour generator and weekend PM peak hour generator.

**Table 5. Existing Plus Project Condition Level of Service**

Intersection	Weekday AM Peak Hour (7:00 to 8:00 am)		Weekday PM Peak Hour (4:45 to 5:45 pm)		Weekend AM Peak Hour Generator (9:00 to 10:00 am)		Weekend AM Peak Hour Generator (7:00 to 8:00 pm)	
	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS	Control Delay (veh/sec)	LOS
Riverside Drive & Roswell Avenue	13.1	B	7.1	A	6.7	A	7.3	A

Level of service D has been established as the minimum acceptable level for intersections within the study area. Therefore, the intersection of Riverside Drive and Roswell Avenue and the driveway will be operating at levels of service A or B in all the analysis periods.

## 5. Conclusion

Based upon the analysis presented, the intersections will be operating in LOS A or B. So, this project will have a little or no impacts at the intersections when comparing the LOS and delay.

## **Appendix A**

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>	Sri Sairam Mandir
----------------------	-------------------

This Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:

<b>Project Address:</b>	SRI SAIRAM MANDIR 12594 ROSWELL AVE. CHINO, CA. 91710-3036		
<b>Project Description:</b>	Hindu Worship Center		
<b>City:</b>	County of San Bernardino		
<b>Project Buildout Year:</b>	2020	<b>Ambient Growth Rate per Year:</b>	
<b>Closest Intersection (Xtn) to the Project</b>			
<b>Xtn N/S Street Name:</b>	Roswell Avenue		
<b>Xtn E/W Street Name:</b>			
<b>Thomas Guide Pg+Grid:</b>		<b>County Supervisorial District:</b>	

	<b>Engineer</b>	<b>Developer</b>
<b>Company:</b>	SRI JAYARAM FOUNDATION INC.	
<b>Name:</b>	Sajeev Kumar Keecheril P.E, T.E	SRI JAYARAM FOUNDATION INC.
<b>Address:</b>	31 marsala	6549 PIMLICO PL.
<b>City, State, Zip Code:</b>	Irvine	EASTVALE, CA. 92880
<b>Phone #:</b>	2083012005	(951)-544-832
<b>Fax #:</b>		
<b>Email:</b>	Saju_bang@yahoo.com	

**By:**

**Reviewed By:**

**Print Name: ARUNASRI REDDY    06/28/2020**

**Print Name:**

**Consultant/Developer's  
Representative**

**Date**

**Traffic Divsion Representative      Date**

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>	Sri Sairam Mandir
----------------------	-------------------

**1. Traffic Distribution:** Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.

A detailed traffic report with traffic volumes, trip generation, trip distribution and the traffic report are attached.

**2. Trip Credit:** Exact amount of credit subject to approval by Traffic Division.

<b>Transportation Demand Management (TDM)</b>	no	
<b>Existing Active Land Use</b>	no	
<b>Previous Land Use</b>	no	
<b>Internal Trip Reduction</b>	no	
<b>Pass-by Trip Reduction</b>	no	

**3. Related Projects:** Consultant should check with Planning in the San Bernardino County Department of Land Use Services and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

**4. Freeway Analysis:** The potential traffic impact on the following Freeway(s) must be considered.

---

---

---

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) and can be obtained from <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tiguide.pdf>. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the SANBAG CMP outlines allowable modifications to these procedures. The SANBAG CMP can be viewed online at: [http://www.sanbag.ca.gov/planning/subr\\_congestion.html](http://www.sanbag.ca.gov/planning/subr_congestion.html)

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>	Sri Sairam Mandir
----------------------	-------------------

### 5. Trip Generation

A detailed traffic report with traffic volumes, trip generation, trip distribution and the traffic report are attached. Table below shows the number of trips and ADT.

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	127	120	247	24 -hour Volume	158	155	313	24 -hour Volume	451	455	905
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	7	8	15	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 7-8 AM	37	4	41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	5	4	9
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	10	6	16	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	19	33	52	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4-5 PM	57	17	75
A.M. Peak Hour Generator Time: 9-10 AM	10	9	20	A.M. Peak Hour Generator Time: 7-8 AM	37	4	41	A.M. Peak Hour Generator Time: 9-10 AM	90	7	96
P.M. Peak Hour Generator Time: 6-7 PM	34	16	50	P.M. Peak Hour Generator Time: 5-6 PM	19	33	52	P.M. Peak Hour Generator Time: 7-8 PM	15	103	118

Trip Generation Rate(s) Source: ITE Trip Generation		I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:							Edition:		10th	
Land Use Code	Land Use	Rate Based on	Qty	*AVTE vs	ADT	Weekday a.m. peak		Weekday p.m. peak		Weekend peak hour		
						In	Out	In	Out	In	Out	
	Hindu Worship Center	Trip Generation Study										

\* - Average Vehicle Trip Ends.

For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store

## SCOPE FOR TRAFFIC STUDY

Project Name:	Sri Sairam Mandir
---------------	-------------------

**6. Study Intersections:** At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	% County	Thomas Guide Page+Grid	N S/E/W Street Name	City	Signalized	CMP
1			Riverside Dr./ Roswell Ave		Yes	Yes/no
2			Roswell Ave/Site Driveway		no	Yes/no

Cities to be consulted: None

## SCOPE FOR TRAFFIC STUDY

Project Name:
---------------

### 7. Other:

Traffic counts may be conducted immediately per the following:
<ul style="list-style-type: none"><li>• Must be taken on Tuesdays, Wednesdays or Thursdays.</li></ul>
<ul style="list-style-type: none"><li>• Must exclude holidays, and the first weekdays before and after the holiday.</li></ul>
<ul style="list-style-type: none"><li>• Must be taken on days when local schools or colleges are in session.</li></ul>
<ul style="list-style-type: none"><li>• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).</li></ul>
<ul style="list-style-type: none"><li>• Traffic counts used for other traffic studies in the area shall <b>NOT</b> be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.</li></ul>
<ul style="list-style-type: none"><li>• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.</li></ul>
<ul style="list-style-type: none"><li>• For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way.</li></ul>
<ul style="list-style-type: none"><li>• For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted.</li></ul>

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

### 8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of \$2000 is required at the time that a land use application is filed with the Department of Land Use Services. If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>
----------------------

### **9. Contact Information:**

*Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:*

County of San Bernardino  
Dept. of Public Works, Traffic Division  
825 E. 3<sup>rd</sup> Street, Rm 115  
San Bernardino, CA 92415-0835

Phone: 909-387-8186

Fax: 909-387-7809

Email: [Anthony.Pham@dpw.sbccounty.gov](mailto:Anthony.Pham@dpw.sbccounty.gov)

## **Appendix B**

70105002003 Riverside Drive W, Pipeline Avenue  
 Department of Public Works  
 Location: Chino

Page 1

Date Start: 25-Feb-20  
 Site Code: Riverside Dr W Pipel  
 Counter #743  
 Longitude: 117° 42.9890 West  
 Latitude: 34° 1.1250 North

EB

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classe	Total
02/25/2															
0	0	31	3	0	2	0	0	1	0	0	0	0	0	0	37
01:00	1	10	6	0	0	1	0	0	1	0	0	0	0	0	19
02:00	0	8	3	0	1	0	0	0	0	0	0	0	0	0	12
03:00	1	27	3	0	3	1	0	2	0	0	0	0	0	1	38
04:00	0	53	9	0	3	0	0	0	3	0	0	0	0	1	69
05:00	4	97	42	4	9	1	1	2	3	0	0	0	0	3	166
06:00	3	115	49	1	16	3	1	4	3	0	0	0	1	2	198
07:00	8	242	85	6	30	6	2	6	7	1	0	0	2	12	407
08:00	4	260	84	5	32	4	0	9	7	1	1	0	2	5	414
09:00	2	188	64	8	23	5	0	12	2	2	0	0	1	7	314
10:00	1	195	67	7	24	6	0	13	4	0	0	0	0	3	320
11:00	7	222	79	7	25	3	1	13	7	0	0	0	2	8	374
12 PM	8	250	78	9	18	9	0	13	7	1	1	0	1	6	401
13:00	7	247	87	6	30	8	5	13	8	0	0	0	1	9	421
14:00	10	288	101	7	40	7	2	8	3	1	0	1	3	15	486
15:00	26	342	115	7	27	9	2	16	5	4	0	1	0	44	598
16:00	18	405	88	1	23	12	2	20	1	3	0	1	1	44	619
17:00	30	396	94	0	25	4	3	16	3	6	1	0	2	50	630
18:00	20	346	86	1	19	3	3	12	1	3	0	0	0	24	518
19:00	3	258	51	0	13	1	1	5	0	0	0	0	0	4	336
20:00	2	164	33	1	12	1	2	3	3	0	0	0	0	1	222
21:00	3	121	21	0	4	0	0	1	1	0	0	0	0	0	151
22:00	1	85	16	0	4	0	0	0	0	0	0	0	0	1	107
23:00	0	45	11	1	1	0	0	0	0	0	0	0	0	0	58
Total	159	4395	1275	71	384	84	25	169	69	22	3	3	16	240	6915
Percent	2.3%	63.6%	18.4%	1.0%	5.6%	1.2%	0.4%	2.4%	1.0%	0.3%	0.0%	0.0%	0.2%	3.5%	
AM Peak Vol.	07:00	08:00	07:00	09:00	08:00	07:00	07:00	10:00	07:00	09:00	08:00		07:00	07:00	08:00
	8	260	85	8	32	6	2	13	7	2	1		2	12	414
PM Peak Vol.	17:00	16:00	15:00	12:00	14:00	16:00	13:00	16:00	13:00	17:00	12:00	14:00	14:00	17:00	17:00
	30	405	115	9	40	12	5	20	8	6	1	1	3	50	630
Grand Total	159	4395	1275	71	384	84	25	169	69	22	3	3	16	240	6915
Percent	2.3%	63.6%	18.4%	1.0%	5.6%	1.2%	0.4%	2.4%	1.0%	0.3%	0.0%	0.0%	0.2%	3.5%	

70105002003 Riverside Drive W, Pipeline Avenue  
Department of Public Works  
Location: Chino

Page 2

Date Start: 25-Feb-20  
Site Code: Riverside Dr W PipeL  
Counter #743  
Longitude: 117° 42.9890 West  
Latitude: 34° 1.1250 North

70105002003 Riverside Drive W, Pipeline Avenue  
 Department of Public Works  
 Location: Chino

Page 1

Date Start: 25-Feb-20  
 Site Code: Riverside Dr W Pipel  
 Counter #731  
 Longitude: 117° 42.9900 West  
 Latitude: 34° 1.1410 North

WB

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classe	Total
02/25/2															
0	0	2	25	1	3	0	0	1	0	0	0	0	0	0	32
01:00	1	1	15	0	2	0	0	1	0	0	1	0	0	1	22
02:00	0	1	11	4	3	0	0	0	0	0	0	0	0	0	19
03:00	0	2	16	1	5	0	0	0	0	0	0	0	0	0	24
04:00	0	6	74	0	17	0	0	0	1	0	0	0	0	1	99
05:00	2	17	186	5	71	9	2	25	3	1	0	0	0	4	325
06:00	5	25	218	15	67	2	1	44	2	4	1	0	0	6	390
07:00	19	49	348	26	56	7	6	79	3	7	1	2	1	15	619
08:00	7	22	203	23	58	4	3	45	4	1	0	1	0	5	376
09:00	3	23	166	8	30	6	2	24	5	2	0	1	1	3	274
10:00	6	27	151	18	49	6	1	22	5	0	0	0	1	0	286
11:00	7	24	185	11	46	7	2	20	3	2	0	0	3	3	313
12 PM	3	29	180	10	47	5	1	20	1	2	0	0	0	5	303
13:00	5	38	190	9	43	6	0	29	5	2	0	0	0	2	329
14:00	5	36	230	12	47	5	3	26	4	5	0	1	0	5	379
15:00	4	44	205	9	57	2	3	44	6	4	0	0	0	3	381
16:00	6	37	222	12	47	0	6	31	2	7	1	1	0	1	373
17:00	1	42	214	8	40	1	2	33	5	5	0	0	0	3	354
18:00	7	32	193	5	23	0	1	30	1	1	0	0	0	4	297
19:00	1	19	131	1	16	1	0	16	0	1	0	0	0	0	186
20:00	1	11	83	2	10	1	0	8	0	2	0	0	0	0	118
21:00	1	12	75	2	17	0	0	2	1	0	0	0	0	1	111
22:00	0	9	41	0	5	1	0	1	0	0	0	0	0	0	57
23:00	0	1	32	0	3	0	0	0	0	0	0	0	0	0	36
Total	84	509	3394	182	762	63	33	501	51	46	4	6	6	62	5703
Percent	1.5%	8.9%	59.5%	3.2%	13.4%	1.1%	0.6%	8.8%	0.9%	0.8%	0.1%	0.1%	0.1%	1.1%	
AM Peak Vol.	07:00	07:00	07:00	07:00	05:00	05:00	07:00	07:00	09:00	07:00	01:00	07:00	11:00	07:00	07:00
PM Peak Vol.	18:00	15:00	14:00	14:00	15:00	13:00	16:00	15:00	15:00	16:00	16:00	14:00	12:00	15:00	
Grand Total	84	509	3394	182	762	63	33	501	51	46	4	6	6	62	5703
Percent	1.5%	8.9%	59.5%	3.2%	13.4%	1.1%	0.6%	8.8%	0.9%	0.8%	0.1%	0.1%	0.1%	1.1%	

70105002003 Riverside Drive W, Pipeline Avenue  
Department of Public Works  
Location: Chino

Page 2

Date Start: 25-Feb-20  
Site Code: Riverside Dr W PipeL  
Counter #731  
Longitude: 117° 42.9900 West  
Latitude: 34° 1.1410 North

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classe	Total	
02/25/2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	8	9	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Percent	1	0	0	0	0	0	0	0	0	0	0	0	0	28	29	
AM Peak Vol.	07:00													07:00	07:00	
PM Peak Vol.	1													8	9	
Grand Total Percent	1	0	0	0	0	0	0	0	0	0	0	0	0	15:00	15:00	
	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	96.6%	5	5

## Department of Public Works

Location: CHI

Date Start: 19-Feb-20

Site Code: Roswell Ave N Rivers

Counter #738

Longitude: 117° 43.1960 West

Latitude: 34° 1.1620 North

Start Time	17-Feb-20		Tue		Wed		Thu		Fri		Sat		Sun		Average Da	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	0	26	*	*	*	*	*	*	*	*	0	26
12:15	*	*	*	*	0	22	*	*	*	*	*	*	*	*	0	22
12:30	*	*	*	*	5	19	*	*	*	*	*	*	*	*	5	19
12:45	*	*	*	*	2	22	*	*	*	*	*	*	*	*	2	22
01:00	*	*	*	*	2	18	*	*	*	*	*	*	*	*	2	18
01:15	*	*	*	*	0	18	*	*	*	*	*	*	*	*	0	18
01:30	*	*	*	*	1	16	*	*	*	*	*	*	*	*	1	16
01:45	*	*	*	*	0	16	*	*	*	*	*	*	*	*	0	16
02:00	*	*	*	*	0	22	*	*	*	*	*	*	*	*	0	22
02:15	*	*	*	*	0	34	*	*	*	*	*	*	*	*	0	34
02:30	*	*	*	*	1	35	*	*	*	*	*	*	*	*	1	35
02:45	*	*	*	*	0	30	*	*	*	*	*	*	*	*	0	30
03:00	*	*	*	*	0	24	*	*	*	*	*	*	*	*	0	24
03:15	*	*	*	*	2	18	*	*	*	*	*	*	*	*	2	18
03:30	*	*	*	*	0	24	*	*	*	*	*	*	*	*	0	24
03:45	*	*	*	*	2	17	*	*	*	*	*	*	*	*	2	17
04:00	*	*	*	*	0	20	*	*	*	*	*	*	*	*	0	20
04:15	*	*	*	*	4	32	*	*	*	*	*	*	*	*	4	32
04:30	*	*	*	*	3	26	*	*	*	*	*	*	*	*	3	26
04:45	*	*	*	*	3	23	*	*	*	*	*	*	*	*	3	23
05:00	*	*	*	*	7	20	*	*	*	*	*	*	*	*	7	20
05:15	*	*	*	*	3	28	*	*	*	*	*	*	*	*	3	28
05:30	*	*	*	*	5	22	*	*	*	*	*	*	*	*	5	22
05:45	*	*	*	*	5	27	*	*	*	*	*	*	*	*	5	27
06:00	*	*	*	*	4	28	*	*	*	*	*	*	*	*	4	28
06:15	*	*	*	*	7	27	*	*	*	*	*	*	*	*	7	27
06:30	*	*	*	*	9	26	*	*	*	*	*	*	*	*	9	26
06:45	*	*	*	*	14	14	*	*	*	*	*	*	*	*	14	14
07:00	*	*	*	*	34	29	*	*	*	*	*	*	*	*	34	29
07:15	*	*	*	*	68	14	*	*	*	*	*	*	*	*	68	14
07:30	*	*	*	*	40	11	*	*	*	*	*	*	*	*	40	11
07:45	*	*	*	*	24	10	*	*	*	*	*	*	*	*	24	10
08:00	*	*	*	*	36	10	*	*	*	*	*	*	*	*	36	10
08:15	*	*	*	*	11	10	*	*	*	*	*	*	*	*	11	10
08:30	*	*	*	*	13	11	*	*	*	*	*	*	*	*	13	11
08:45	*	*	*	*	13	13	*	*	*	*	*	*	*	*	13	13
09:00	*	*	*	*	18	5	*	*	*	*	*	*	*	*	18	5
09:15	*	*	*	*	14	8	*	*	*	*	*	*	*	*	14	8
09:30	*	*	*	*	9	9	*	*	*	*	*	*	*	*	9	9
09:45	*	*	*	*	11	3	*	*	*	*	*	*	*	*	11	3
10:00	*	*	*	*	8	6	*	*	*	*	*	*	*	*	8	6
10:15	*	*	*	*	9	2	*	*	*	*	*	*	*	*	9	2
10:30	*	*	*	*	17	3	*	*	*	*	*	*	*	*	17	3
10:45	*	*	*	*	16	1	*	*	*	*	*	*	*	*	16	1
11:00	*	*	*	*	20	4	*	*	*	*	*	*	*	*	20	4
11:15	*	*	*	*	14	1	*	*	*	*	*	*	*	*	14	1
11:30	*	*	*	*	23	1	*	*	*	*	*	*	*	*	23	1
11:45	*	*	*	*	34	*	*	*	*	*	*	*	*	*	34	*
Total Day Total	0	0	0	0	511	805	0	0	0	0	0	0	0	0	511	805
% Splits	0.0%	0.0%	0.0%	0.0%	38.8%	61.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.8%	61.2%
Peak Vol.	-	-	-	-	07:15	02:15	-	-	-	-	-	-	-	-	07:15	02:15
P.H.F.	-	-	-	-	168	123	-	-	-	-	-	-	-	-	168	123
					0.618	0.879									0.618	0.879

ADT ADT 1,330 AADT 1,330

71155001002 Roswell Avenue S, Riverside Drive  
Department of Public Works  
Location: Chino

Date Start: 20-Feb-20  
Site Code: Roswell Ave S Rivers  
Counter #736  
Longitude: 117° 43.1930 West  
Latitude: 34° 1.1090 North

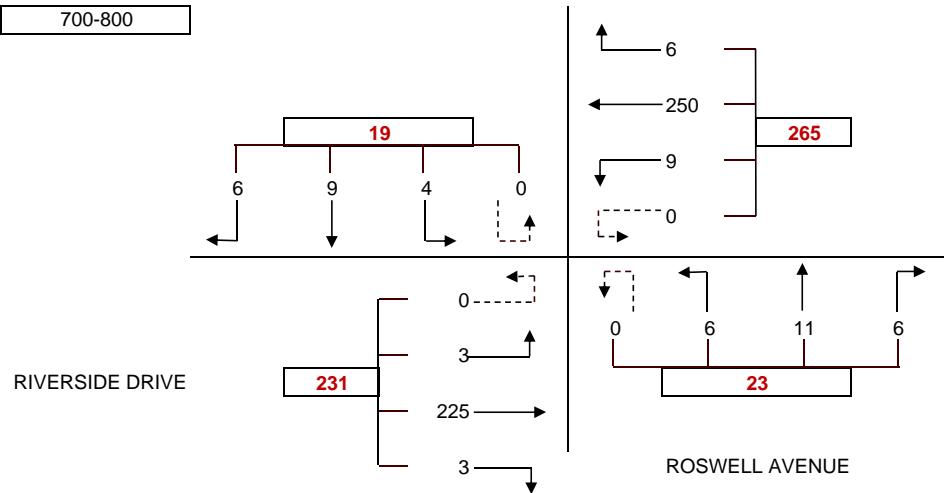
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: THURSDAY MAY 14, 2020  
 PERIOD: 7:00 AM TO 9:00 AM  
 INTERSECTION: N/S ROSWELL AVENUE  
 E/W RIVERSIDE DRIVE  
 CITY: CHINO

### VEHICLE COUNTS

15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-715	1	4	1	0	1	71	2	0	0	6	0	0	0	46	0	0	132
715-730	1	1	1	0	1	54	2	0	1	4	4	0	1	44	0	0	114
730-745	2	1	1	0	4	67	2	0	2	1	0	0	2	73	2	0	157
745-800	2	3	1	0	0	58	3	0	3	0	2	0	0	62	1	0	135
800-815	2	2	1	0	0	54	3	0	3	2	1	0	2	39	1	0	110
815-830	4	2	1	0	0	55	0	0	3	2	1	0	4	36	0	0	108
830-845	2	1	0	0	0	50	1	0	4	4	1	0	1	50	0	0	114
845-900	2	3	0	0	1	47	0	0	3	2	2	0	0	57	1	0	118
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-800	6	9	4	0	6	250	9	0	6	11	6	0	3	225	3	0	538
715-815	7	7	4	0	5	233	10	0	9	7	7	0	5	218	4	0	516
730-830	10	8	4	0	4	234	8	0	11	5	4	0	8	210	4	0	510
745-845	10	8	3	0	0	217	7	0	13	8	5	0	7	187	2	0	467
800-900	10	8	2	0	1	206	4	0	13	10	5	0	7	182	2	0	450

PEAK HOUR 700-800



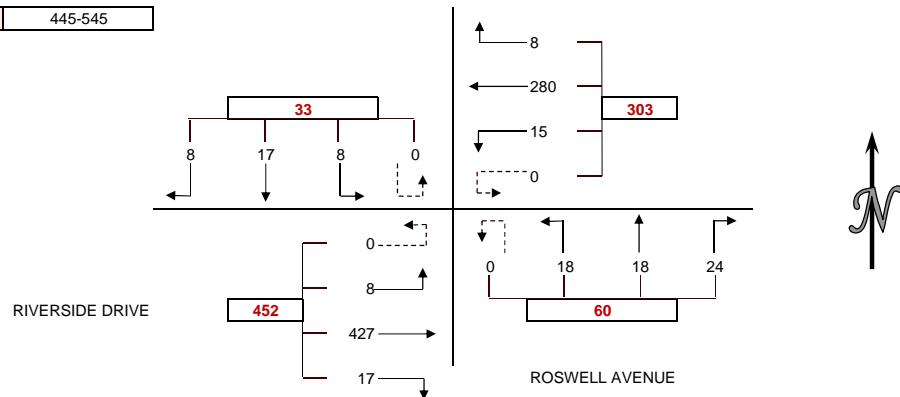
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: THURSDAY MAY 14, 2020  
 PERIOD: 4:00 PM TO 6:00 PM  
 INTERSECTION: N/S ROSWELL AVENUE  
 E/W RIVERSIDE DRIVE  
 CITY: CHINO

## VEHICLE COUNTS

15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
400-415	1	8	2	0	5	68	6	0	3	3	3	0	2	110	2	0	213
415-430	2	4	0	0	3	78	6	0	8	7	1	0	3	117	2	0	231
430-445	3	4	0	0	3	71	4	0	4	4	4	0	5	99	2	0	203
445-500	1	2	1	0	2	67	1	0	3	2	5	0	5	97	7	0	193
500-515	1	7	4	0	2	70	6	0	4	4	6	0	1	113	0	0	218
515-530	2	5	1	0	2	73	4	0	6	4	4	0	5	106	1	0	213
530-545	4	3	2	0	2	70	4	0	11	8	3	0	6	111	0	0	224
545-600	1	5	1	0	0	55	4	0	9	6	3	0	3	85	4	0	176
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
400-500	7	18	3	0	13	284	17	0	18	16	13	0	15	423	13	0	840
415-515	7	17	5	0	10	286	17	0	19	17	16	0	14	426	11	0	845
430-530	7	18	6	0	9	281	15	0	17	14	19	0	16	415	10	0	827
445-545	8	17	8	0	8	280	15	0	24	18	18	0	17	427	8	0	848
500-600	8	20	8	0	6	268	18	0	30	22	16	0	15	415	5	0	831

PEAK HOUR 445-545

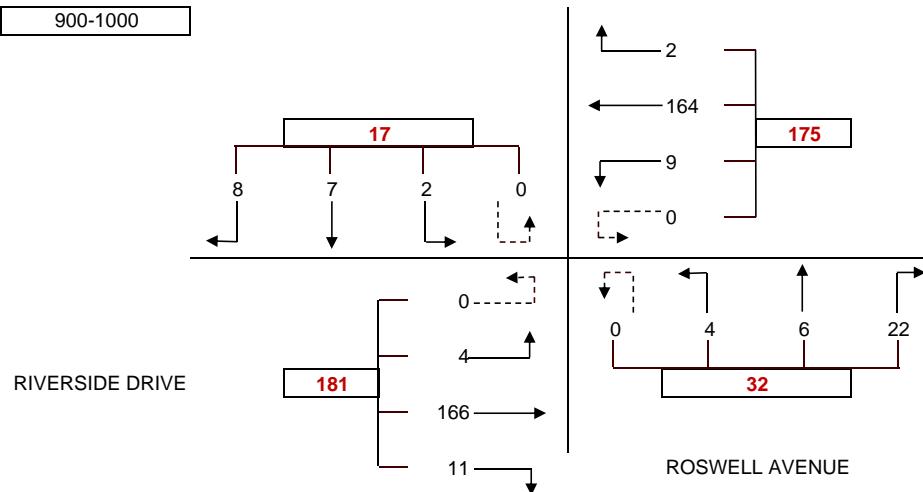


## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: SUNDAY MAY 24, 2020  
 PERIOD: 9:00 AM TO 10:00 AM  
 INTERSECTION: N/S ROSWELL AVENUE  
                   E/W RIVERSIDE DRIVE  
 CITY: CHINO

VEHICLE COUNTS																	
15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
900-915	1	3	0	0	1	30	4	0	9	1	2	0	1	32	1	0	85
915-930	2	0	0	0	1	38	2	0	3	0	0	0	2	45	1	0	94
930-945	4	3	0	0	0	41	0	0	3	1	1	0	4	47	0	0	104
945-1000	1	1	2	0	0	55	3	0	7	4	1	0	4	42	2	0	122
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
900-10000	8	7	2	0	2	164	9	0	22	6	4	0	11	166	4	0	405

PEAK HOUR	900-1000
-----------	----------



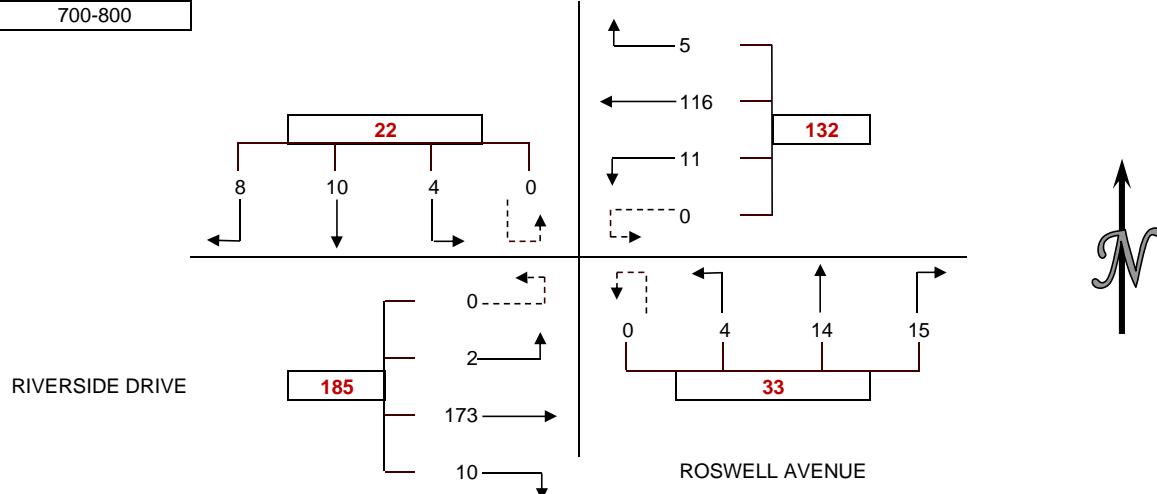
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: SUNDAY MAY 24, 2020  
 PERIOD: 7:00 PM TO 8:00 PM  
 INTERSECTION: N/S ROSWELL AVENUE  
                   E/W RIVERSIDE DRIVE  
 CITY: CHINO

### VEHICLE COUNTS

15 MIN COUNTS		1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD		SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-715		3	2	2	0	1	26	1	0	4	6	2	0	3	42	0	0	92
715-730		1	4	2	0	3	32	3	0	3	3	1	0	3	39	1	0	95
730-745		3	2	0	0	0	23	6	0	3	3	1	0	2	42	0	0	85
745-800		1	2	0	0	1	35	1	0	5	2	0	0	2	50	1	0	100
HOUR TOTALS		1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD		SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-800		8	10	4	0	5	116	11	0	15	14	4	0	10	173	2	0	372

PEAK HOUR 700-800



## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12931 ROSWELL AVENUE  
 SOUTH OF RIVERSIDE DRIVE  
 DATE: THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	0	0	0	1	
1:00	2	0	0	0	2	
2:00	1	0	0	1	2	
3:00	3	2	1	3	9	
4:00	1	0	2	5	8	
5:00	2	1	9	4	16	
6:00	2	4	5	3	14	
7:00	8	9	3	4	24	
8:00	9	6	8	8	31	
9:00	8	9	9	6	32	
10:00	2	9	5	6	22	
11:00	8	7	11	14	40	
12:00	12	7	8	12	39	
13:00	14	6	6	4	30	
14:00	10	12	8	18	48	
15:00	16	10	10	10	46	
16:00	11	16	12	10	49	
17:00	13	16	23	18	70	
18:00	14	5	13	6	38	
19:00	13	9	6	9	37	
20:00	8	10	4	4	26	
21:00	3	3	1	2	9	
22:00	2	1	3	0	6	
23:00	2	6	1	2	11	
		TOTAL			610	

AM PEAK HOUR	1100-1200
VOLUME	40
PM PEAK HOUR	1715-1815
VOLUME	71

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	1	0	1	3	
1:00	1	0	1	3	5	
2:00	0	1	0	0	1	
3:00	0	0	0	1	1	
4:00	0	2	2	1	5	
5:00	2	2	3	2	9	
6:00	2	3	7	5	17	
7:00	5	6	5	6	22	
8:00	7	7	3	4	21	
9:00	6	8	5	8	27	
10:00	4	4	10	9	27	
11:00	3	12	10	1	26	
12:00	11	9	10	12	42	
13:00	8	9	8	15	40	
14:00	11	9	12	12	44	
15:00	10	12	4	13	39	
16:00	15	16	14	9	54	
17:00	15	14	14	12	55	
18:00	8	11	5	7	31	
19:00	8	5	9	8	30	
20:00	8	6	1	6	21	
21:00	5	5	3	4	17	
22:00	4	3	2	2	11	
23:00	2	1	3	0	6	
		TOTAL			554	

AM PEAK HOUR	1030-1130
VOLUME	34
PM PEAK HOUR	1545-1645
VOLUME	58

TOTAL BI-DIRECTIONAL VOLUME	1164
-----------------------------	------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12931 ROSWELL AVENUE  
 SOUTH OF RIVERSIDE DRIVE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	2	1	1	5	
1:00	2	2	0	0	4	
2:00	0	1	1	0	2	
3:00	0	1	1	2	4	
4:00	0	1	1	1	3	
5:00	0	1	1	1	3	
6:00	4	1	1	2	8	
7:00	2	2	4	3	11	
8:00	4	6	2	5	17	
9:00	4	4	10	9	27	
10:00	8	10	4	3	25	
11:00	7	5	8	8	28	
12:00	6	4	12	9	31	
13:00	10	6	12	10	38	
14:00	8	8	7	10	33	
15:00	10	11	14	4	39	
16:00	3	7	4	13	27	
17:00	6	9	4	7	26	
18:00	9	9	5	4	27	
19:00	8	8	10	8	34	
20:00	14	9	6	8	37	
21:00	11	6	2	4	23	
22:00	1	6	1	2	10	
23:00	0	0	2	1	3	
		TOTAL			465	

AM PEAK HOUR	0930-1030
VOLUME	37
PM PEAK HOUR	1445-1545
VOLUME	45

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	2	2	0	7	
1:00	2	1	2	3	8	
2:00	1	1	0	0	2	
3:00	0	0	2	0	2	
4:00	1	1	0	1	3	
5:00	0	1	0	0	1	
6:00	0	1	2	0	3	
7:00	3	2	2	3	10	
8:00	3	6	2	6	17	
9:00	10	6	7	1	24	
10:00	6	7	11	8	32	
11:00	4	9	8	13	34	
12:00	14	8	7	4	33	
13:00	15	7	10	12	44	
14:00	11	9	10	10	40	
15:00	5	12	8	8	33	
16:00	6	9	14	7	36	
17:00	7	5	13	8	33	
18:00	4	8	10	3	25	
19:00	8	6	15	9	38	
20:00	9	11	10	6	36	
21:00	10	4	4	6	24	
22:00	4	7	5	1	17	
23:00	4	4	1	0	9	
		TOTAL			511	

AM PEAK HOUR	1100-1200
VOLUME	34
PM PEAK HOUR	1300-1400
VOLUME	44

TOTAL BI-DIRECTIONAL VOLUME	976
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

**CLIENT:** ARUNA REDDY  
**PROJECT:** CHINO TEMPLE  
**LOCATION:** 3990 RIVERSIDE DRIVE  
**DATE:** WEST OF PIPELINE AVENUE  
 THURSDAY MAY 14, 2020

DIRECTION:		EB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	9	6	6	4	25	
1:00	0	6	6	3	15	
2:00	6	3	8	6	23	
3:00	6	4	16	8	34	
4:00	14	13	25	26	78	
5:00	14	29	40	54	137	
6:00	36	52	50	47	185	
7:00	56	46	80	64	246	
8:00	48	44	54	60	206	
9:00	62	74	60	82	278	
10:00	76	86	76	84	322	
11:00	82	70	72	100	324	
12:00	108	88	98	74	368	
13:00	112	105	106	112	435	
14:00	96	117	114	125	452	
15:00	114	100	100	120	434	
16:00	119	138	106	100	463	
17:00	132	112	126	96	466	
18:00	108	80	70	76	334	
19:00	74	56	62	55	247	
20:00	48	46	37	46	177	
21:00	24	46	15	16	101	
22:00	18	19	29	14	80	
23:00	18	16	15	14	63	
					TOTAL	5493

AM PEAK HOUR	1015-1115
VOLUME	328
PM PEAK HOUR	1545-1645
VOLUME	483

DIRECTION:		WB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	5	5	5	18	
1:00	2	2	4	7	15	
2:00	4	5	4	2	15	
3:00	8	6	8	10	32	
4:00	8	9	13	22	52	
5:00	27	34	40	42	143	
6:00	40	42	50	64	196	
7:00	72	58	74	68	272	
8:00	62	59	52	48	221	
9:00	70	80	64	58	272	
10:00	68	68	69	88	293	
11:00	69	68	72	78	287	
12:00	74	88	84	85	331	
13:00	94	60	67	84	305	
14:00	84	91	106	114	395	
15:00	84	85	75	88	332	
16:00	84	90	86	66	326	
17:00	89	78	74	69	310	
18:00	71	82	52	52	257	
19:00	41	41	41	48	171	
20:00	44	28	35	30	137	
21:00	36	31	23	23	113	
22:00	20	17	23	14	74	
23:00	14	12	12	18	56	
					TOTAL	4623

AM PEAK HOUR	1045-1145
VOLUME	297
PM PEAK HOUR	1400-1500
VOLUME	395

TOTAL BI-DIRECTIONAL VOLUME	10116
-----------------------------	-------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 3990 RIVERSIDE DRIVE  
 WEST OF PIPELINE AVENUE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		EB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	12	6	5	9	32	
1:00	10	4	4	3	21	
2:00	3	4	5	3	15	
3:00	3	1	7	2	13	
4:00	3	1	2	5	11	
5:00	5	3	7	1	16	
6:00	8	9	14	21	52	
7:00	17	25	30	39	111	
8:00	36	32	38	51	157	
9:00	46	48	54	49	197	
10:00	52	58	74	60	244	
11:00	72	70	85	80	307	
12:00	74	66	75	78	293	
13:00	80	70	84	82	316	
14:00	73	80	77	84	314	
15:00	70	78	71	71	290	
16:00	72	62	68	78	280	
17:00	70	69	64	72	275	
18:00	60	49	49	50	208	
19:00	56	52	42	46	196	
20:00	45	48	34	44	171	
21:00	42	30	29	16	117	
22:00	18	17	14	14	63	
23:00	16	7	15	8	46	
		TOTAL			3745	

AM PEAK HOUR	1100-1200
VOLUME	307
PM PEAK HOUR	1330-1430
VOLUME	319

DIRECTION:		WB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	13	8	6	6	33	
1:00	10	5	5	2	22	
2:00	10	6	3	1	20	
3:00	4	3	6	0	13	
4:00	3	3	7	3	16	
5:00	8	4	3	5	20	
6:00	12	13	17	23	65	
7:00	22	28	19	28	97	
8:00	29	19	38	41	127	
9:00	49	48	46	53	196	
10:00	62	58	64	52	236	
11:00	65	47	46	51	209	
12:00	58	74	77	60	269	
13:00	70	62	52	61	245	
14:00	60	55	72	68	255	
15:00	51	59	60	52	222	
16:00	54	56	56	64	230	
17:00	66	55	40	48	209	
18:00	62	50	48	44	204	
19:00	40	34	44	32	150	
20:00	32	47	40	30	149	
21:00	40	21	30	11	102	
22:00	10	18	18	14	60	
23:00	10	7	9	6	32	
		TOTAL			3181	

AM PEAK HOUR	1015-1115
VOLUME	239
PM PEAK HOUR	1215-1315
VOLUME	281

TOTAL BI-DIRECTIONAL VOLUME	6926
-----------------------------	------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12844 ROSWELL AVENUE  
 NORTH OF RIVERSIDE DRIVE  
 DATE: THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	0	0	0	0	
1:00	2	0	1	0	3	
2:00	0	0	1	0	1	
3:00	0	0	0	1	1	
4:00	2	0	1	2	5	
5:00	2	1	3	2	8	
6:00	3	2	2	4	11	
7:00	7	5	6	2	20	
8:00	3	2	4	3	12	
9:00	4	9	8	4	25	
10:00	2	6	2	4	14	
11:00	2	6	8	8	24	
12:00	9	4	4	10	27	
13:00	10	8	2	7	27	
14:00	10	8	15	12	45	
15:00	14	7	9	8	38	
16:00	9	12	7	12	40	
17:00	6	10	8	11	35	
18:00	9	8	11	8	36	
19:00	8	6	3	12	29	
20:00	6	4	8	3	21	
21:00	1	4	4	1	10	
22:00	1	0	1	2	4	
23:00	1	1	1	2	5	
		TOTAL			441	

AM PEAK HOUR	0900-1000
VOLUME	25
PM PEAK HOUR	1415-1515
VOLUME	49

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	1	1	1	3	
1:00	1	0	2	0	3	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	1	1	0	1	3	
5:00	2	3	3	2	10	
6:00	4	2	3	3	12	
7:00	7	2	5	4	18	
8:00	6	8	2	4	20	
9:00	8	8	3	8	27	
10:00	2	5	3	5	15	
11:00	2	4	8	5	19	
12:00	4	7	6	6	23	
13:00	6	4	6	4	20	
14:00	10	4	16	8	38	
15:00	6	6	5	6	23	
16:00	13	6	5	8	32	
17:00	6	11	7	7	31	
18:00	4	2	6	9	21	
19:00	8	4	7	4	23	
20:00	3	6	2	2	13	
21:00	3	2	7	1	13	
22:00	2	1	1	1	5	
23:00	2	1	1	1	5	
		TOTAL			377	

AM PEAK HOUR	0900-1000
VOLUME	27
PM PEAK HOUR	1400-1500
VOLUME	38

TOTAL BI-DIRECTIONAL VOLUME	818
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12844 ROSWELL AVENUE  
 NORTH OF RIVERSIDE DRIVE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	1	0	0	2	
1:00	1	1	1	0	3	
2:00	1	0	0	0	1	
3:00	0	1	1	2	4	
4:00	0	1	0	0	1	
5:00	0	1	1	0	2	
6:00	2	1	1	2	6	
7:00	5	2	2	0	9	
8:00	3	7	1	3	14	
9:00	4	2	8	4	18	
10:00	4	4	8	4	20	
11:00	5	3	8	9	25	
12:00	3	2	4	4	13	
13:00	3	4	6	8	21	
14:00	2	9	4	6	21	
15:00	7	5	10	5	27	
16:00	4	3	4	4	15	
17:00	1	3	4	5	13	
18:00	9	4	5	6	24	
19:00	3	4	2	8	17	
20:00	5	8	2	2	17	
21:00	5	0	4	2	11	
22:00	1	3	1	1	6	
23:00	1	0	2	1	4	
		TOTAL			294	

AM PEAK HOUR	1100-1200
VOLUME	25
PM PEAK HOUR	1445-1545
VOLUME	28

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	2	0	1	0	3	
1:00	2	1	1	1	5	
2:00	1	1	1	0	3	
3:00	1	0	2	0	3	
4:00	0	1	0	0	1	
5:00	0	0	1	1	2	
6:00	1	0	2	3	6	
7:00	3	0	1	4	8	
8:00	2	3	2	2	9	
9:00	7	6	3	5	21	
10:00	5	4	4	4	17	
11:00	4	2	6	2	14	
12:00	7	6	3	3	19	
13:00	7	3	5	12	27	
14:00	4	8	6	9	27	
15:00	5	4	6	9	24	
16:00	4	6	8	5	23	
17:00	3	0	6	5	14	
18:00	3	6	6	4	19	
19:00	6	4	2	3	15	
20:00	3	7	4	4	18	
21:00	6	2	7	4	19	
22:00	2	3	0	2	7	
23:00	3	2	0	0	5	
		TOTAL			309	

AM PEAK HOUR	0900-1000
VOLUME	21
PM PEAK HOUR	1345-1445
VOLUME	30

TOTAL BI-DIRECTIONAL VOLUME	603
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

**CLIENT:** ARUNA REDDY  
**PROJECT:** CHINO TEMPLE  
**LOCATION:** ROSWELL AVENUE  
**BETWEEN FARNDON AVENUE AND RAILROAD TRACKS**  
**DATE:** THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	0	0	0	0	
1:00	1	0	1	0	2	
2:00	0	0	1	0	1	
3:00	0	0	0	0	0	
4:00	0	2	2	2	6	
5:00	1	1	6	3	11	
6:00	2	4	7	6	19	
7:00	7	8	7	2	24	
8:00	3	6	3	4	16	
9:00	6	9	4	4	23	
10:00	6	7	2	5	20	
11:00	3	3	10	4	20	
12:00	11	9	6	8	34	
13:00	11	6	6	8	31	
14:00	7	6	7	8	28	
15:00	3	9	6	11	29	
16:00	6	6	6	10	28	
17:00	5	7	11	6	29	
18:00	11	5	6	11	33	
19:00	5	7	4	9	25	
20:00	6	2	10	2	20	
21:00	2	4	3	0	9	
22:00	2	0	0	0	2	
23:00	1	0	1	1	3	
		TOTAL			413	

AM PEAK HOUR	0630-0730
VOLUME	28
PM PEAK HOUR	1715-1815
VOLUME	35

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	1	1	1	6	
1:00	1	0	1	1	3	
2:00	0	1	0	1	2	
3:00	0	0	0	0	0	
4:00	1	0	1	2	4	
5:00	1	1	2	1	5	
6:00	3	1	3	2	9	
7:00	4	1	7	2	14	
8:00	4	4	1	2	11	
9:00	11	3	2	4	20	
10:00	3	3	3	5	14	
11:00	3	3	11	11	28	
12:00	3	7	8	7	25	
13:00	6	4	8	7	25	
14:00	11	9	10	5	35	
15:00	6	7	3	4	20	
16:00	5	6	8	8	27	
17:00	9	11	8	7	35	
18:00	4	3	4	11	22	
19:00	8	4	5	3	20	
20:00	3	0	2	3	8	
21:00	2	6	7	2	17	
22:00	1	3	2	0	6	
23:00	2	2	2	0	6	
		TOTAL			362	

AM PEAK HOUR	1100-1200
VOLUME	28
PM PEAK HOUR	1345-1445
VOLUME	37

TOTAL BI-DIRECTIONAL VOLUME	775
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: ROSWELL AVENUE  
 BETWEEN FARNDON AVENUE AND RAILROAD TRACKS  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	4	1	0	0	5	
1:00	1	1	1	1	4	
2:00	2	0	0	0	2	
3:00	0	1	0	2	3	
4:00	0	1	0	0	1	
5:00	0	1	0	0	1	
6:00	2	1	1	2	6	
7:00	2	3	2	1	8	
8:00	2	3	4	3	12	
9:00	1	3	7	4	15	
10:00	3	5	6	2	16	
11:00	0	1	6	5	12	
12:00	6	1	2	5	14	
13:00	3	4	10	6	23	
14:00	3	5	10	9	27	
15:00	6	6	12	7	31	
16:00	6	3	4	2	15	
17:00	0	5	2	9	16	
18:00	8	6	6	4	24	
19:00	6	2	4	5	17	
20:00	5	8	7	5	25	
21:00	5	3	1	2	11	
22:00	1	3	1	1	6	
23:00	0	0	2	2	4	
					TOTAL	298

AM PEAK HOUR	0930-1030
VOLUME	19
PM PEAK HOUR	1445-1545
VOLUME	33

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	2	1	0	4	
1:00	0	1	3	2	6	
2:00	1	1	1	0	3	
3:00	1	0	1	0	2	
4:00	0	0	1	0	1	
5:00	0	0	0	0	0	
6:00	0	1	2	2	5	
7:00	3	1	0	3	7	
8:00	2	1	1	0	4	
9:00	5	2	5	3	15	
10:00	7	5	6	5	23	
11:00	4	5	6	3	18	
12:00	8	3	6	4	21	
13:00	7	7	5	8	27	
14:00	5	3	6	8	22	
15:00	7	3	10	7	27	
16:00	4	6	4	3	17	
17:00	4	0	2	3	9	
18:00	3	4	9	2	18	
19:00	7	2	3	4	16	
20:00	4	9	5	2	20	
21:00	4	4	5	6	19	
22:00	1	4	1	2	8	
23:00	6	3	0	0	9	
					TOTAL	301

AM PEAK HOUR	1000-1100
VOLUME	23
PM PEAK HOUR	1445-1545
VOLUME	28

TOTAL BI-DIRECTIONAL VOLUME	599
-----------------------------	-----

## **Appendix C**

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔		
Volume (vph)	10	271	87	21	579	20	122	37	122	21	48	32	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.964			0.995			0.941			0.957		
Flt Protected	0.950			0.950				0.979			0.990		
Satd. Flow (prot)	1770	3412	0	1770	3522	0	0	1716	0	0	1765	0	
Flt Permitted	0.950			0.950				0.814			0.907		
Satd. Flow (perm)	1770	3412	0	1770	3522	0	0	1427	0	0	1617	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	55			4			38			23			
Link Speed (mph)	30			30			30			30			
Link Distance (ft)	1347			1178			1131			2231			
Travel Time (s)	30.6			26.8			25.7			50.7			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
Adj. Flow (vph)	12	315	101	24	673	23	142	43	142	24	56	37	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	12	416	0	24	696	0	0	327	0	0	117	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)	12			12			0			0			
Link Offset(ft)	0			0			0			0			
Crosswalk Width(ft)	16			16			16			16			
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)	94			94			94			94			
Detector 2 Size(ft)	6			6			6			6			
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel													
Detector 2 Extend (s)	0.0			0.0			0.0			0.0			
Turn Type	Prot			Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6		
Permitted Phases							2			6			
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.5	17.3		6.8	17.4			16.9			16.9	
Actuated g/C Ratio	0.15	0.39		0.15	0.39			0.38			0.38	
v/c Ratio	0.05	0.31		0.09	0.50			0.58			0.19	
Control Delay	24.4	10.3		24.0	13.1			15.9			10.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	24.4	10.3		24.0	13.1			15.9			10.2	
LOS	C	B		C	B			B			B	
Approach Delay		10.7			13.5			15.9			10.2	
Approach LOS		B			B			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 44.6

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 13.0

Intersection LOS: B

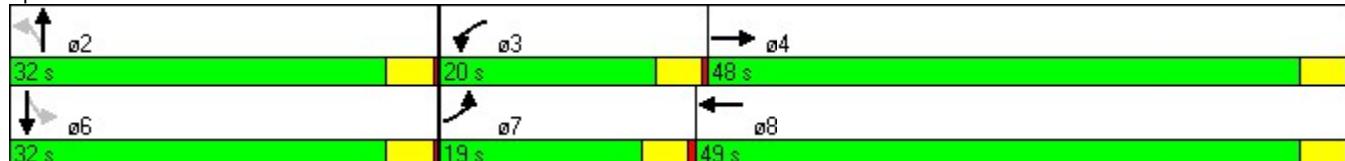
Intersection Capacity Utilization 47.0%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	33	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	38	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	38	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↓			↓	↓	
Volume (vph)	16	578	34	21	579	20	35	35	35	21	48	32	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.992			0.995			0.955			0.957		
Flt Protected	0.950			0.950				0.984			0.990		
Satd. Flow (prot)	1770	3511	0	1770	3522	0	0	1750	0	0	1765	0	
Flt Permitted	0.950			0.950				0.851			0.910		
Satd. Flow (perm)	1770	3511	0	1770	3522	0	0	1514	0	0	1622	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		8			4			25			23		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1347			1178			1131			2231		
Travel Time (s)		30.6			26.8			25.7			50.7		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	17	608	36	22	609	21	37	37	37	22	51	34	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	17	644	0	22	630	0	0	111	0	0	107	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)		12			12			0			0		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94			94			94			94		
Detector 2 Size(ft)		6			6			6			6		
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0			0.0			0.0		
Turn Type	Prot		Prot			Perm			Perm				
Protected Phases	7	4		3	8			2			6		
Permitted Phases								2			6		
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.9	18.0		8.0	18.0			9.5			9.4	
Actuated g/C Ratio	0.29	0.66		0.30	0.66			0.35			0.35	
v/c Ratio	0.03	0.28		0.04	0.27			0.20			0.18	
Control Delay	15.2	6.3		15.1	6.2			10.9			10.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.2	6.3		15.1	6.2			10.9			10.7	
LOS	B	A		B	A			B			B	
Approach Delay		6.5			6.5			10.9			10.7	
Approach LOS		A			A			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 27.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 7.1

Intersection LOS: A

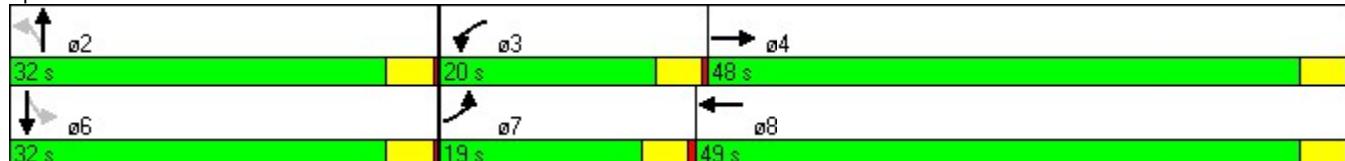
Intersection Capacity Utilization 33.8%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave



Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔	
Volume (vph)	5	199	13	11	197	2	6	9	34	3	10	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.999			0.906			0.939	
Flt Protected	0.950			0.950				0.994			0.993	
Satd. Flow (prot)	1770	3507	0	1770	3536	0	0	1678	0	0	1737	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3507	0	1770	3536	0	0	1688	0	0	1749	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)	9				1			41			13	
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	1347				1178			1131			2231	
Travel Time (s)	30.6				26.8			25.7			50.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	6	240	16	13	237	2	7	11	41	4	12	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	256	0	13	239	0	0	59	0	0	29	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.0	11.8		7.1	11.9			7.2			7.2	
Actuated g/C Ratio	0.45	0.76		0.46	0.77			0.46			0.46	
v/c Ratio	0.01	0.10		0.02	0.09			0.07			0.04	
Control Delay	7.8	3.8		7.4	3.8			4.3			5.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	7.8	3.8		7.4	3.8			4.3			5.5	
LOS	A	A		A	A			A			A	
Approach Delay		3.9			4.0			4.3			5.5	
Approach LOS		A			A			A			A	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 15.5

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.10

Intersection Signal Delay: 4.1

Intersection LOS: A

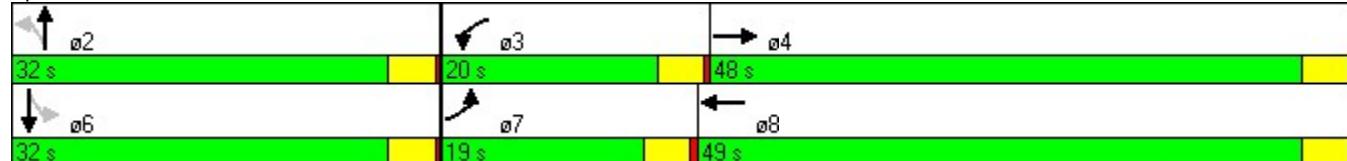
Intersection Capacity Utilization 19.6%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	21	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	25	25	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	25	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	2	207	12	13	139	6	6	21	23	6	14	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.992			0.993			0.939			0.952	
Flt Protected	0.950			0.950				0.994			0.990	
Satd. Flow (prot)	1770	3511	0	1770	3514	0	0	1739	0	0	1756	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3511	0	1770	3514	0	0	1749	0	0	1773	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			6			25			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	225	13	14	151	7	7	23	25	7	15	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	238	0	14	158	0	0	55	0	0	34	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.8	10.6		7.0	10.5			7.2			7.2	
Actuated g/C Ratio	0.42	0.65		0.43	0.65			0.44			0.44	
v/c Ratio	0.00	0.10		0.02	0.07			0.07			0.04	
Control Delay	8.0	4.1		7.3	4.0			5.0			5.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	8.0	4.1		7.3	4.0			5.0			5.6	
LOS	A	A		A	A			A			A	
Approach Delay		4.1			4.2			5.0			5.6	
Approach LOS		A			A			A			A	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 16.2

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.10

Intersection Signal Delay: 4.4

Intersection LOS: A

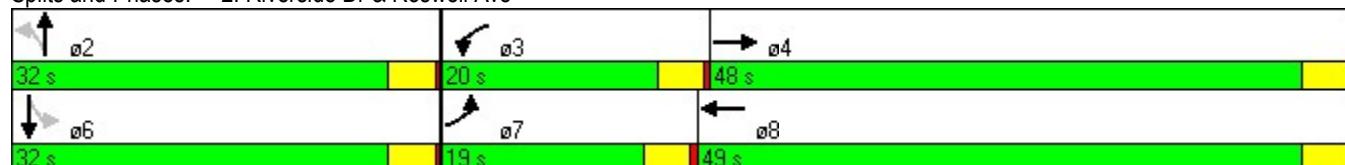
Intersection Capacity Utilization 20.8%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	24	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	26	24	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	26	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔		
Volume (vph)	13	271	87	21	579	22	122	39	122	24	50	35	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.964			0.994			0.942			0.956		
Flt Protected	0.950			0.950				0.979			0.989		
Satd. Flow (prot)	1770	3412	0	1770	3518	0	0	1718	0	0	1761	0	
Flt Permitted	0.950			0.950				0.811			0.897		
Satd. Flow (perm)	1770	3412	0	1770	3518	0	0	1423	0	0	1597	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	55			5			38			24			
Link Speed (mph)	30			30			30			30			
Link Distance (ft)	1347			1178			1131			2231			
Travel Time (s)	30.6			26.8			25.7			50.7			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
Adj. Flow (vph)	15	315	101	24	673	26	142	45	142	28	58	41	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	15	416	0	24	699	0	0	329	0	0	127	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)		12			12			0			0		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94			94			94			94		
Detector 2 Size(ft)		6			6			6			6		
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0			0.0			0.0		
Turn Type	Prot		Prot			Perm			Perm				
Protected Phases	7	4		3	8			2			6		
Permitted Phases								2			6		
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.6	17.5		6.8	17.6			17.3			17.3	
Actuated g/C Ratio	0.15	0.39		0.15	0.39			0.38			0.38	
v/c Ratio	0.06	0.31		0.09	0.51			0.58			0.20	
Control Delay	24.6	10.4		24.3	13.3			15.9			10.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	24.6	10.4		24.3	13.3			15.9			10.4	
LOS	C	B		C	B			B			B	
Approach Delay		10.9			13.6			15.9			10.4	
Approach LOS		B			B			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 45.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 13.1

Intersection LOS: B

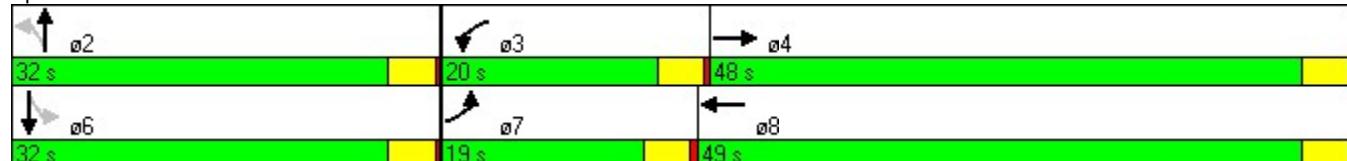
Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	8	7	33	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.991		
Satd. Flow (prot)	0	1611	0	1846	1863	0
Flt Permitted				0.991		
Satd. Flow (perm)	0	1611	0	1846	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	9	8	38	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	46	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓			↓			↓	
Volume (vph)	20	578	34	18	345	13	35	38	35	19	23	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.992			0.994			0.956			0.969	
Flt Protected	0.950			0.950				0.984			0.983	
Satd. Flow (prot)	1770	3511	0	1770	3518	0	0	1752	0	0	1774	0
Flt Permitted	0.950			0.950				0.870			0.870	
Satd. Flow (perm)	1770	3511	0	1770	3518	0	0	1549	0	0	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			5			24			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	608	36	19	363	14	37	40	37	20	24	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	644	0	19	377	0	0	114	0	0	57	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	8.0	18.0		7.9	18.0			9.5			9.3	
Actuated g/C Ratio	0.30	0.66		0.29	0.66			0.35			0.34	
v/c Ratio	0.04	0.28		0.04	0.16			0.20			0.10	
Control Delay	15.1	6.3		15.1	5.9			10.9			10.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.1	6.3		15.1	5.9			10.9			10.6	
LOS	B	A		B	A			B			B	
Approach Delay		6.5			6.3			10.9			10.6	
Approach LOS		A			A			B			B	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 27.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 7.1

Intersection LOS: A

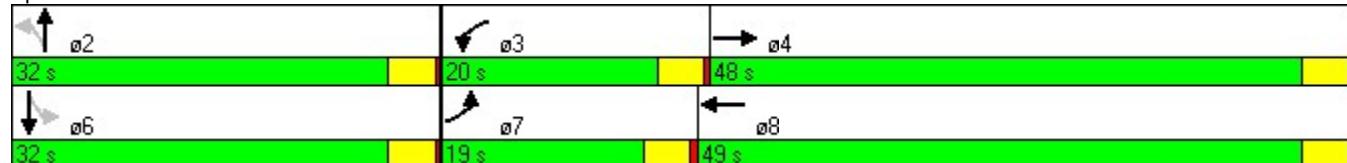
Intersection Capacity Utilization 31.4%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	6	10	40	48	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.990		
Satd. Flow (prot)	0	1611	0	1844	1863	0
Flt Permitted				0.990		
Satd. Flow (perm)	0	1611	0	1844	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	6	11	42	51	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	6	0	53	51	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	41	199	13	11	197	29	6	36	34	5	12	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.981			0.939			0.938	
Flt Protected	0.950			0.950				0.996			0.992	
Satd. Flow (prot)	1770	3507	0	1770	3472	0	0	1742	0	0	1733	0
Flt Permitted	0.950			0.950				0.968			0.923	
Satd. Flow (perm)	1770	3507	0	1770	3472	0	0	1693	0	0	1613	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			21			41			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	49	240	16	13	237	35	7	43	41	6	14	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	256	0	13	272	0	0	91	0	0	37	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.8	10.8		7.3	10.7			8.0			7.9	
Actuated g/C Ratio	0.37	0.52		0.35	0.51			0.38			0.38	
v/c Ratio	0.07	0.14		0.02	0.15			0.14			0.06	
Control Delay	9.4	6.2		10.6	6.4			6.8			7.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	9.4	6.2		10.6	6.4			6.8			7.3	
LOS	A	A		B	A			A			A	
Approach Delay		6.7			6.6			6.8			7.3	
Approach LOS		A			A			A			A	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 20.9

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.15

Intersection Signal Delay: 6.7

Intersection LOS: A

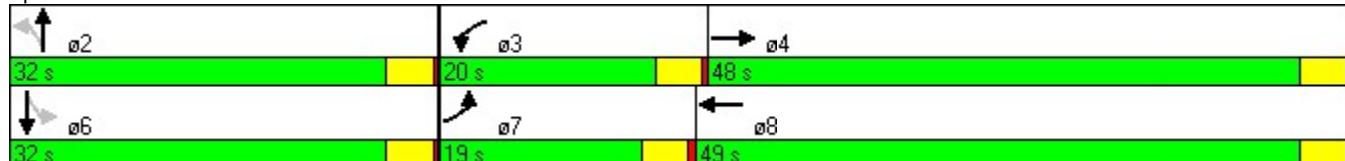
Intersection Capacity Utilization 24.6%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	7	90	111	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.978		
Satd. Flow (prot)	0	1611	0	1822	1863	0
Flt Permitted				0.978		
Satd. Flow (perm)	0	1611	0	1822	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	8	108	134	25	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	8	0	242	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.8%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔		
Volume (vph)	8	207	12	13	139	10	6	26	23	36	45	52	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.992			0.990			0.943			0.947		
Flt Protected	0.950			0.950				0.995			0.987		
Satd. Flow (prot)	1770	3511	0	1770	3504	0	0	1748	0	0	1741	0	
Flt Permitted	0.950			0.950				0.942			0.888		
Satd. Flow (perm)	1770	3511	0	1770	3504	0	0	1655	0	0	1566	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	8			10			25			32			
Link Speed (mph)	30			30			30			30			
Link Distance (ft)	1347			1178			1131			2231			
Travel Time (s)	30.6			26.8			25.7			50.7			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	9	223	13	14	149	11	6	28	25	39	48	56	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	9	236	0	14	160	0	0	59	0	0	143	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)	12			12			0			0			
Link Offset(ft)	0			0			0			0			
Crosswalk Width(ft)	16			16			16			16			
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)	94			94			94			94			
Detector 2 Size(ft)	6			6			6			6			
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel													
Detector 2 Extend (s)	0.0			0.0			0.0			0.0			
Turn Type	Prot			Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6		
Permitted Phases							2			6			
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.0	8.6		7.1	8.5			8.1			8.5	
Actuated g/C Ratio	0.33	0.41		0.33	0.40			0.38			0.40	
v/c Ratio	0.02	0.17		0.02	0.11			0.09			0.22	
Control Delay	10.9	7.3		10.6	7.2			6.3			7.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	10.9	7.3		10.6	7.2			6.3			7.5	
LOS	B	A		B	A			A			A	
Approach Delay		7.4			7.4			6.3			7.5	
Approach LOS		A			A			A			A	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 21.2

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.22

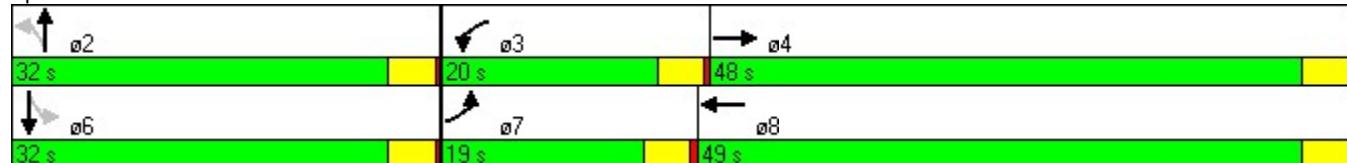
Intersection Signal Delay: 7.3      Intersection LOS: A

Intersection Capacity Utilization 31.7%      ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave



## **Appendix D**

# Sri Sairam Mandir- Traffic/Trip Generation Memo

**PREPARED FOR:** Jeremy Johnson/ San Bernardino County  
**PREPARED BY:** Sajeev Kumar, P.E., T.E.  
**COPIES:** Arunasri Reddy/ Sri Sairam Mandir Project Team  
Sri Sairam Mandir Project Team  
**DATE:** April 08, 2020

This memo summarizes the trip generation study conducted in May 2019 based on the Institute of Transportation Engineers (ITE) Trip Generation Manual and the number of trips estimated for the Sri Sairam Mandir project based on the new site plan. A traffic memo was submitted to the County of San Bernardino and the City of Chino Hills in May 2019 for the 22,650 square foot place of worship. The site plan is revised to add approximately 10,000 square foot to a total of 36,900 square foot area.

Preliminary site plan for the project is attached with this memo. As shown in the plan, the site will be accessed via the driveways from the Walnut Avenue and the Roswell Avenue. The driveway access on Walnut Avenue will be a full access driveway and the driveway on Roswell will be limited to left-in, right out only.

## Introduction

Traffic and transportation impact studies for various land uses are typically conducted using the Trip generation rates from the Institute Transportation Engineers (ITE) manual. Even though the trip generation rates for most of the land uses are available in the ITE manual, typical land uses like Hindu Temples are not available. Therefore, a trip generation study based on the ITE manual was conducted on three different sites in southern California to develop the trip generation rate for the proposed site.

## Study Sites

A list of land uses having the same characteristics as the proposed site were made as a part of this study. Getting permission to do survey at these sites was challenging and three sites finalized for the study. To be conservative, the temples established more than 15 years and in the major populated cities in Southern California were selected.

**Site 1 (Gayathri Mandir, Anaheim):** This temple was established in 1993 and serving the community for last 25 years. This facility has two driveways, one for drive-in and another to drive-out as shown in Figure 1. Details of site characteristics are included in Table 1.

**Figure 1: Site 1(Gayathri Mandir, Anaheim)**

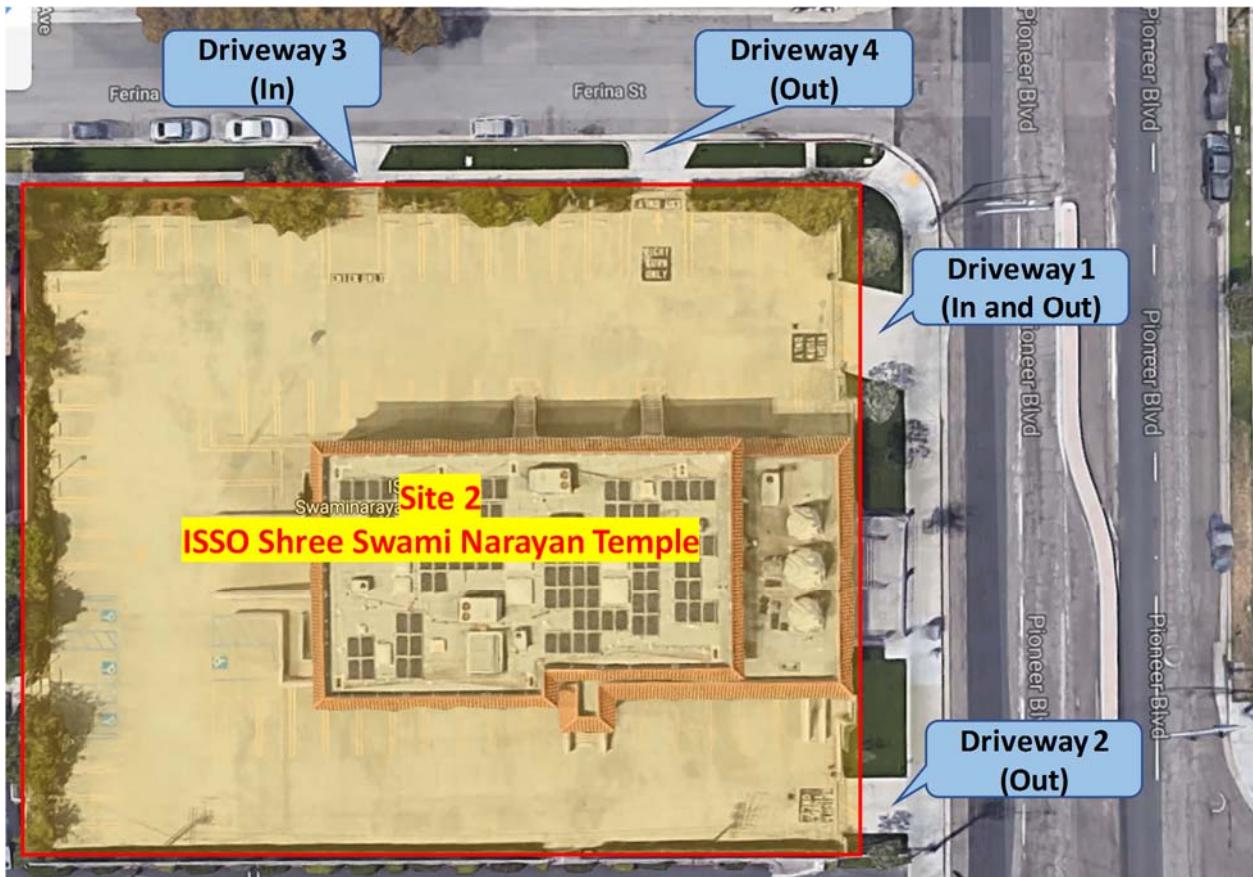


**Table 1: Site 1(Gayathri Mandir, Anaheim) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Gayathri Mandir	2446 W Orange Avenue, Anaheim	Hindu Temple	1993	0.7	9,000	<p>This site has three building in the site</p> <ul style="list-style-type: none"><li>• 4,000 square foot building with congregation area, one office room, one audio visual room and the kitchen</li><li>• 2,000 square foot house with three bed room for the priest, manager and the guest.</li><li>• 3,000 square foot build for community services. This includes a hall and six rooms to hold classes for kids.</li></ul>	8:00 AM to 8:00 PM	<p>Monday: 7:00 PM Swadhyay</p> <p>Tuesday: 7:00 PM Yoga &amp; Meditation</p> <p>Thursday: 7:00 PM Swadhyay</p> <p>Sunday : 11:00 AM Sanskaar &amp; Yagya, Yoga classes</p> <p>Yagya(Daily): 10:00 AM</p> <p>Aarti (Daily): 8:00 AM &amp; 6:30 PM</p>

**Site 2 (ISSO Shree Swami Narayan Temple, Norwalk):** This temple was established in 2010 and serving the community for last 9 years. This facility has four driveways, one of the driveways on Pioneer Boulevard is drive-in and out and the other one is drive-out only. There are two driveways to Ferina Street one for drive-in and other for drive-out. During the data collection, all the driveways were closed except the driveway 1. Driveway details are shown in Figure 2 and the details of site characteristics are included in Table 2.

**Figure 2: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk)**

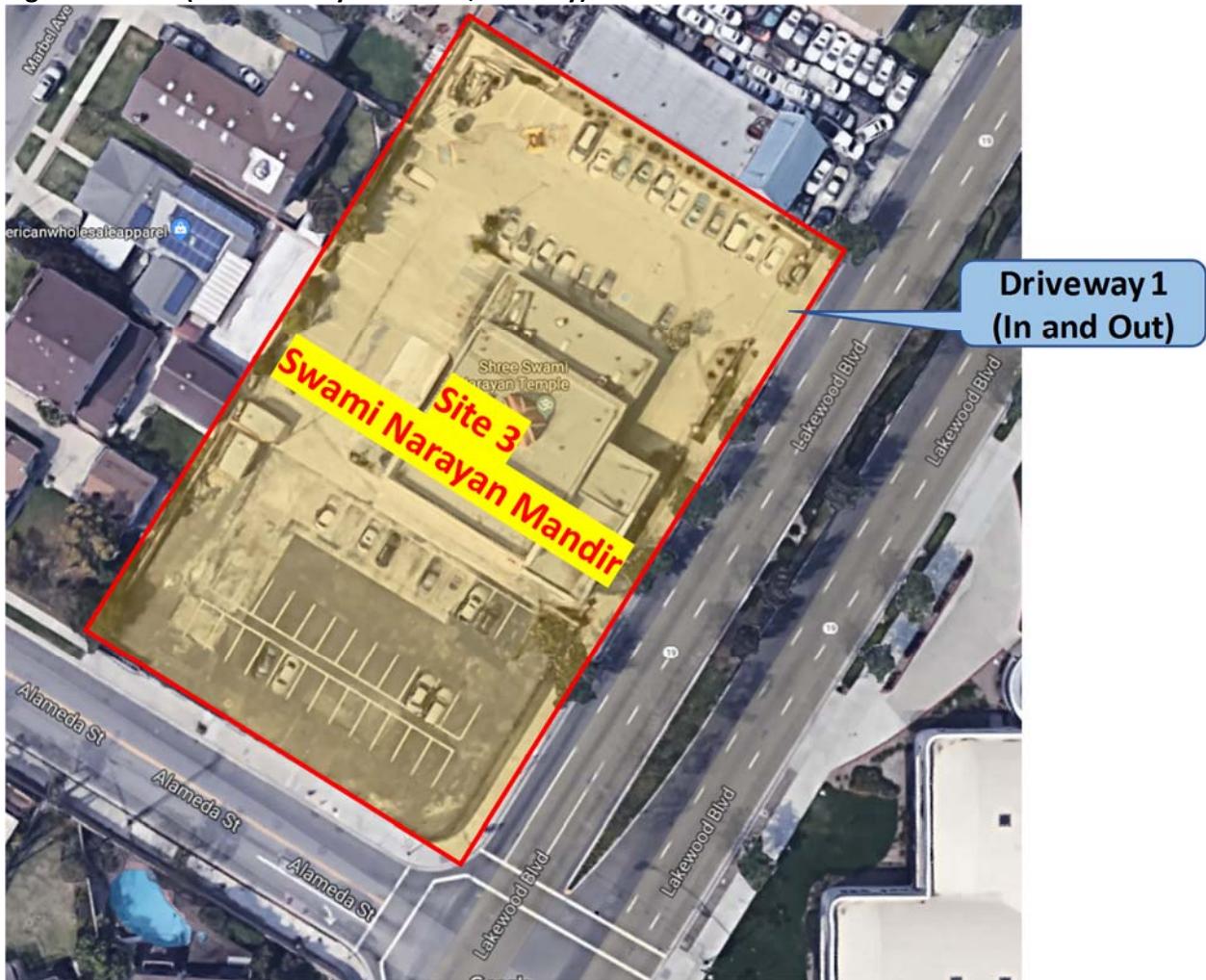


**Table 2: Site 2(ISSO Shree Swami Narayan Temple, Norwalk) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Swami Narayan Mandir	15213 Pioneer Blvd, Norwalk, CA 90650	Hindu Temple	2010	0.84	13,000	<ul style="list-style-type: none"><li>• 2,400 square foot of congregation area</li><li>• 2,000 square foot of dining hall and kitchen</li><li>• 2 full-size apartments for the priest, manager and the guest.</li><li>• Other amenities include an office room, four storage rooms, one audio visual room and two class rooms</li></ul>	8:00 AM to 8:00 PM	<p>Darshan Times:</p> <ul style="list-style-type: none"><li>• 8:00 AM to 10:00 AM</li><li>• 10:30 AM to 12:00 PM</li><li>• 3:30 PM to 5:00 PM</li><li>• 5:30 PM to 8:00 PM</li></ul> <p>Aarti Times:</p> <p>Shangaar Aarti: 8:00 AM</p> <p>Sandhya Aarti: 7:00 PM</p> <p><b>Sunday:</b></p> <p>Ravi Sabha from 3:00 pm to 6 pm</p> <p>Aarti: 6:30 pm</p>

**Site 3 (Swami Narayan Mandir, Downey):** This temple was established in 2000 and serving the community for last 19 years. This facility has one driveway on Lakewood Boulevard. Driveway details are shown in Figure 3. Details of site characteristics are included in Table 3.

Figure 2: Site 3 (Swami Narayan Mandir, Downey)



**Table 3: Site 3 (Swami Narayan Mandir, Downey) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Swami Narayan Mandir	12147 Lakewood Blvd, Downey, CA 90242	Hindu Temple	2000	0.60	5,600	<ul style="list-style-type: none"><li>• 2,500 square foot of congregation area</li><li>• 3 bedrooms and 3 bathrooms for the priest, manager and the guest.</li><li>• Other amenities include an office room, one storage rooms, two kitchens and two class rooms</li><li>• The site includes two houses behind the temple.</li></ul>	7:00 AM to 8:00 PM	<p>Darshan Times:</p> <ul style="list-style-type: none"><li>• 7:30 AM to 12:00 PM</li><li>• 4:00 PM to 8:00 PM</li></ul> <p>Aarti Times:</p> <p>Shangaar Aarti: 7:30 AM Sandhya Aarti: 7:30 PM</p> <p><b>Sunday:</b></p> <p>Satsang Sabha from 3:00 pm to 6 pm</p> <p>Aarti: 6:30 pm</p>

## Data Collection and Summary of Data

Data collection was conducted by Wiltec Inc. in all the three sites from 6 am to 9 pm daily for 7 consecutive days in the month April and May. Video cameras were installed at the driveways for seven days of a week and manually extracted data from the videos.

### Site 1 (Gayathri Mandir, Anaheim)

At Site 1, a video camera was installed at Driveway 1 to collect the traffic data from April 15, 2019 to April 21, 2019. All the driveways were closed except the Driveway 1 to get the accurate counts of vehicles going in and coming out from the site. Due to the heavy traffic on Sunday, Driveway 2, which is a drive-out only driveway was opened along with Driveway 1 to send the traffic out from the site 1. All the vehicles were coming onto the site using the Driveway 1, so the total count on Sunday is accurate. But the departure time of the vehicles were not accurate. The yoga classes on Sunday was finished at 12:00 pm and most of the cars departed between 12:00 and 2:00 pm. The data was adjusted based on these timing on Sunday. All other weekdays and weekend, the Driveway 2 was closed, and the traffic was using Driveway 1 only. Table 4 has the raw traffic count from the Site 1 for each hour.

**Table 4: Site 1 (Gayathri Mandir, Anaheim) Raw Volume Count**

Time	Gayathri Mandir, Anaheim													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	2	0	2	0	2	0	3	2	2	0	2	0	1	0
7 am - 8 am	3	5	2	3	2	3	3	3	3	3	26	3	4	1
8 am - 9 am	5	6	2	3	2	2	2	2	4	6	4	4	2	3
9 am - 10 am	5	5	6	5	1	3	2	2	2	1	5	4	58	3
10 am - 11 am	2	1	2	2	5	2	3	3	2	3	6	5	28	5
11 am - 12 am	0	1	1	2		2	5	1	1	1	6	5	26	1
12 pm - 1 pm	2	1	2	1	3	2	0	2	4	3	0	1	10	3
1 pm - 2 pm	5	1	1	2	1		2	3	2	4	2	2	20	6
2 pm - 3 pm	1	5	2	3	2	3	1	1	2	1	2	1	3	7
3 pm - 4 pm	1	1	0	0	1	1	0	2	1	0	5	1	1	1
4 pm - 5 pm	4	3	1	1	2	3	2	1	2	3	7	7	1	4
5 pm - 6 pm	4	4	5	2	2		2	2	5	4	10	22	2	2
6 pm - 7 pm	10	0	15	6	8	4	3	2	19	3	6	23	3	2
7 pm - 8 pm	3	9	7	6	3	7	5	4	2	1	0	3	3	4
8 pm - 9 pm	2	4	2	16	2	2	2	1	5	7	0	0	0	0
Total	49	46	50	52	36	34	35	31	56	40	81	81	162	42

The counts from Sunday were adjusted by the assumption that the devotees entered in the temple between 9:00 am to 12:00 pm started leaving after 12:00 pm. Most of the cars were using the Driveway 2 to exit from the site. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 5.

**Table 5: Site 1 (Gayathri Mandir, Anaheim) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	2	0	3	2	0	2	1	0	1
7 am - 8 am	3	3	6	26	3	29	4	1	5
8 am - 9 am	3	4	7	4	4	8	2	3	5
9 am - 10 am	3	3	6	5	4	9	58	3	61
10 am - 11 am	3	2	5	6	5	11	28	5	33
11 am - 12 am	2	1	3	6	5	11	26	1	27
12 pm - 1 pm	2	2	4	0	1	1	10	61	71
1 pm - 2 pm	2	3	5	2	2	4	20	60	80
2 pm - 3 pm	2	3	4	2	1	3	3	17	20
3 pm - 4 pm	1	1	1	5	1	6	1	1	2
4 pm - 5 pm	2	2	4	7	7	14	1	4	5
5 pm - 6 pm	4	3	7	10	22	32	2	2	4
6 pm - 7 pm	11	3	14	6	23	29	3	2	5
7 pm - 8 pm	4	5	9	0	3	3	3	4	7
8 pm - 9 pm	3	6	9	0	0	0	0	0	0
<b>Total</b>	<b>46</b>	<b>42</b>	<b>87</b>	<b>81</b>	<b>81</b>	<b>162</b>	<b>162</b>	<b>164</b>	<b>326</b>

**Site 2 (ISSO Shree Swami Narayan Temple, Norwalk)**

At Site 2, a video camera was installed to collect the driveway data from April 15, 2019 to April 21, 2019. All the driveways were closed except Driveway 1 to get the accurate counts of vehicles going in and coming out from the site. On Sunday the traffic was heavy, so the Driveway 2 which is a drive-out only driveway was open to send the vehicles out after 7 pm. All the vehicles were coming onto the site using Driveway 1, so the total count on Sunday is accurate. All other weekdays and weekend, the Driveway 2 was closed, and the traffic was using Driveway 1. Hourly raw traffic counts from the Site 2 is shown in Table 6.

**Table 6: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk) Raw Volume Count**

Time	ISSO Shree Swami Narayan Temple, Norwalk													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	3	5	1	1	1	1	2	2	3	0	2	0	0	0
8 am - 9 am	2	2	6	0	1	0	2	2	1	4	1	3	2	0
9 am - 10 am	4	3	2	2	3	4	2	2	6	4	0	0	6	0
10 am - 11 am	0	3	0	1	0	0	4	4	2	1	0	0	7	2
11 am - 12 am	2	1	5	1	2	2	1	1	2	1	4	2	7	0
12 pm - 1 pm	0	1	0	3	0	0	0	0	0	1	1	1	2	1
1 pm - 2 pm	0	0	0	0	0	0	0	0	2	0	0	0	4	0
2 pm - 3 pm	0	0	0	1	0	0	0	0	3	1	0	0	5	1
3 pm - 4 pm	0	0	0	0	0	0	0	0	2	1	0	0	5	2
4 pm - 5 pm	4	4	1	1	0	0	2	2	6	2	2	1	16	1
5 pm - 6 pm	1	0	4	1	2	0	1	1	12	2	2	2	22	3
6 pm - 7 pm	2	3	10	9	13	8	8	4	29	12	4	4	18	1
7 pm - 8 pm	1	2	5	4	8	12	1	5	6	19	1	3	6	35
8 pm - 9 pm	0	1	0	4	5	10	0	0	3	23	1	1	2	15
<b>Total</b>	<b>20</b>	<b>25</b>	<b>34</b>	<b>28</b>	<b>35</b>	<b>37</b>	<b>23</b>	<b>23</b>	<b>77</b>	<b>71</b>	<b>18</b>	<b>17</b>	<b>102</b>	<b>61</b>

On Sunday, special service was performed between 5 pm to 7 pm. Therefore, the Driveway 2 which is a drive-out driveway was opened after 7 pm. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 5.

**Table 7: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0	0	0	0	0	0	0	0	0
7 am - 8 am	2	2	4	2	0	2	0	0	0
8 am - 9 am	2	2	4	1	3	4	2	0	2
9 am - 10 am	3	3	6	0	0	0	6	0	6
10 am - 11 am	1	2	3	0	0	0	7	2	9
11 am - 12 am	2	1	4	4	2	6	7	0	7
12 pm - 1 pm	0	1	1	1	1	2	2	1	3
1 pm - 2 pm	0	0	0	0	0	0	4	0	4
2 pm - 3 pm	1	0	1	0	0	0	5	1	6
3 pm - 4 pm	0	0	1	0	0	0	5	2	7
4 pm - 5 pm	3	2	4	2	1	3	16	1	17
5 pm - 6 pm	4	1	5	2	2	4	22	3	25
6 pm - 7 pm	12	7	20	4	4	8	18	1	19
7 pm - 8 pm	4	8	13	1	3	4	6	46	52
8 pm - 9 pm	2	8	9	1	1	2	2	45	47
Total	38	37	75	18	17	35	102	102	204

### **Site 3 (Swami Narayan Mandir, Downey)**

At Site 3, the video camera was installed to collect the driveway data from May 3, 2019 to May 9, 2019. This temple has only one driveway, Driveway 1 which is used by all the vehicles going in and coming out from the site. On Sunday, some cars left after 9 p.m. so the departure time of those vehicles were not accounted. All other weekdays and weekend, the data is accurate.

Hourly raw traffic counts from the Site 3 is shown in Table 8.

**Table 8: Site 3 (Swami Narayan Mandir, Downey) Raw Volume Count**

Time	Swami Narayan Mandir, Downey													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	2	0	0	0	0	0
8 am - 9 am	0	0	0	0	0	0	0	0	0	2	0	0	0	0
9 am - 10 am	0	0	1	1	1	1	2	1	1	1	1	1	3	2
10 am - 11 am	1	0	1	0	2	1	2	2	3	2	4	3	0	1
11 am - 12 am	3	0	2	3	2	1	0	1	1	2	3	3	2	1
12 pm - 1 pm	0	0	3	3	0	2	1	1	1	1	1	2	1	1
1 pm - 2 pm	1	2	2	2	1	1	1	1	0	0	1	1	1	1
2 pm - 3 pm	1	1	0	0	0	0	0	0	0	0	1	0	7	3
3 pm - 4 pm	1	2	1	1	0	0	0	0	1	1	1	2	10	2
4 pm - 5 pm	0	1	3	3	1	0	1	0	0	0	2	2	26	8
5 pm - 6 pm	0	1	0	0	0	1	0	1	0	0	2	1	16	1
6 pm - 7 pm	0	0	1	1	2	2	7	5	1	1	0	1	4	2
7 pm - 8 pm	1	1	2	1	1	1	0	2	0	0	3	1	2	27
8 pm - 9 pm	0	0	0	0	0	0	0	0	0	0	0	1	1	5
Total	8	8	16	15	10	10	14	14	10	10	19	18	73	54

On Sunday, some cars left after 9 p.m., so the number of cars left after 9 pm is added to 8 to 9 pm. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 9.

**Table 9: Site 3 (Swami Narayan Mandir, Downey) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	0
8 am - 9 am	0	0	0	0	0	0	0	0	0
9 am - 10 am	1	1	2	1	1	2	3	2	5
10 am - 11 am	2	1	3	4	3	7	0	1	1
11 am - 12 am	2	1	3	3	3	6	2	1	3
12 pm - 1 pm	1	1	2	1	2	3	1	1	2
1 pm - 2 pm	1	1	2	1	1	2	1	1	2
2 pm - 3 pm	0	0	0	1	0	1	7	3	10
3 pm - 4 pm	1	1	1	1	2	3	10	2	12
4 pm - 5 pm	1	1	2	2	2	4	26	8	34
5 pm - 6 pm	0	1	1	2	1	3	16	1	17
6 pm - 7 pm	2	2	4	0	1	1	4	22	26
7 pm - 8 pm	1	1	2	3	1	4	2	27	29
8 pm - 9 pm	0	0	0	0	1	1	1	5	6
<b>Total</b>	12	11	23	19	18	37	73	74	147

## Trip Generation Rate for a Hindu Temple

Using the methodology described in the ITE Trip Generation Manual, the trip generation rate for a Hindu temple is estimated from data collected from the field. Based on the trip generation data collected from field, the trip generation rate per 1000 square foot area of a Hindu temple at different time periods on Weekdays, Saturdays and Sundays are shown in Table 10.

**Table 10: Daily Trip Generation Rate for a Hindu temple**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0.09	0.01	0.10	0.07	0.00	0.07	0.04	0.00	0.04
7 am - 8 am	0.18	0.19	0.37	1.01	0.11	1.12	0.14	0.04	0.18
8 am - 9 am	0.20	0.21	0.41	0.18	0.25	0.43	0.14	0.11	0.25
9 am - 10 am	0.28	0.25	0.53	0.22	0.18	0.40	2.43	0.18	2.61
10 am - 11 am	0.21	0.18	0.39	0.36	0.29	0.65	1.27	0.29	1.56
11 am - 12 am	0.21	0.14	0.35	0.47	0.36	0.83	1.27	0.07	1.34
12 pm - 1 pm	0.12	0.15	0.27	0.07	0.14	0.22	0.47	2.28	2.75
1 pm - 2 pm	0.13	0.13	0.26	0.11	0.11	0.22	0.91	2.21	3.12
2 pm - 3 pm	0.09	0.12	0.20	0.11	0.04	0.14	0.54	0.76	1.30
3 pm - 4 pm	0.06	0.07	0.12	0.22	0.11	0.33	0.58	0.18	0.76
4 pm - 5 pm	0.21	0.17	0.38	0.40	0.36	0.76	1.56	0.47	2.03
5 pm - 6 pm	0.28	0.16	0.43	0.51	0.91	1.41	1.45	0.22	1.67
6 pm - 7 pm	0.93	0.43	1.36	0.36	1.01	1.38	0.91	0.91	1.81
7 pm - 8 pm	0.33	0.54	0.86	0.14	0.25	0.40	0.40	2.79	3.19
8 pm - 9 pm	0.15	0.49	0.64	0.04	0.07	0.11	0.11	1.81	1.92
<b>Total</b>	3.44	3.26	6.70	4.28	4.20	8.48	12.21	12.32	24.53

Table 11 illustrates the trip generation rate per 1000 square foot area of a Hindu temple for the AM and PM peak period of the adjacent street traffic, AM and PM peak hour of the generator and the 24-hour volumes on an average weekday (M-F), Saturday and Sunday.

**Table 11: Trip Generation Rate for a 1000 Square Foot Hindu temple**

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	3.44	3.26	6.70	24 -hour Volume	4.28	4.20	8.48	24 -hour Volume	12.21	12.32	24.53
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	0.20	0.21	0.41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>7-8 AM</b>	1.01	0.11	1.12	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	0.14	0.11	0.25
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	0.28	0.16	0.43	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	0.51	0.91	1.41	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>4-5 PM</b>	1.56	0.47	2.03
A.M. Peak Hour Generator Time: <b>9-10 AM</b>	0.28	0.25	0.53	A.M. Peak Hour Generator Time: <b>7-8 AM</b>	1.01	0.11	1.12	A.M. Peak Hour Generator Time: <b>9-10 AM</b>	2.43	0.18	2.61
P.M. Peak Hour Generator Time: <b>6-7 PM</b>	0.93	0.43	1.36	P.M. Peak Hour Generator Time: <b>5-6 PM</b>	0.51	0.91	1.41	P.M. Peak Hour Generator Time: <b>7-8 PM</b>	0.40	2.79	3.19

## Trip Generation for the Proposed Hindu Temple

The Project site is approximately 2.92 acres, located at 12594 Roswell Avenue, Chino in San Bernardino County. The proposed project is to construct a 36,900 square foot place of worship for Hindus with related on-site facilities. The on-site facilities include congregation area, kitchen, office, dining and class rooms. The hours of operation are from 6:00 AM to 1:00 PM and 6:00 PM to 9 PM on weekdays. The facility will be closed from 1:00 PM to 6 PM on weekdays. On weekends (Saturdays and Sundays) the facility will be open from 6:00 AM to 9:00 PM. Every day four aarthis or services will be performed. The timings of the daily services are 6:00 AM (morning aarthi), 12:00 PM (afternoon aarthi), 7:00 PM (evening aarthi) and 8:30 PM (night aarthi). These services last for 10-15 minutes. It is expected that the members of the congregation would attend one of the four services once or twice a month.

Based on the trip generation rate from Table 11, the expected trips generated by the proposed temple is estimated and shown in Table 12.

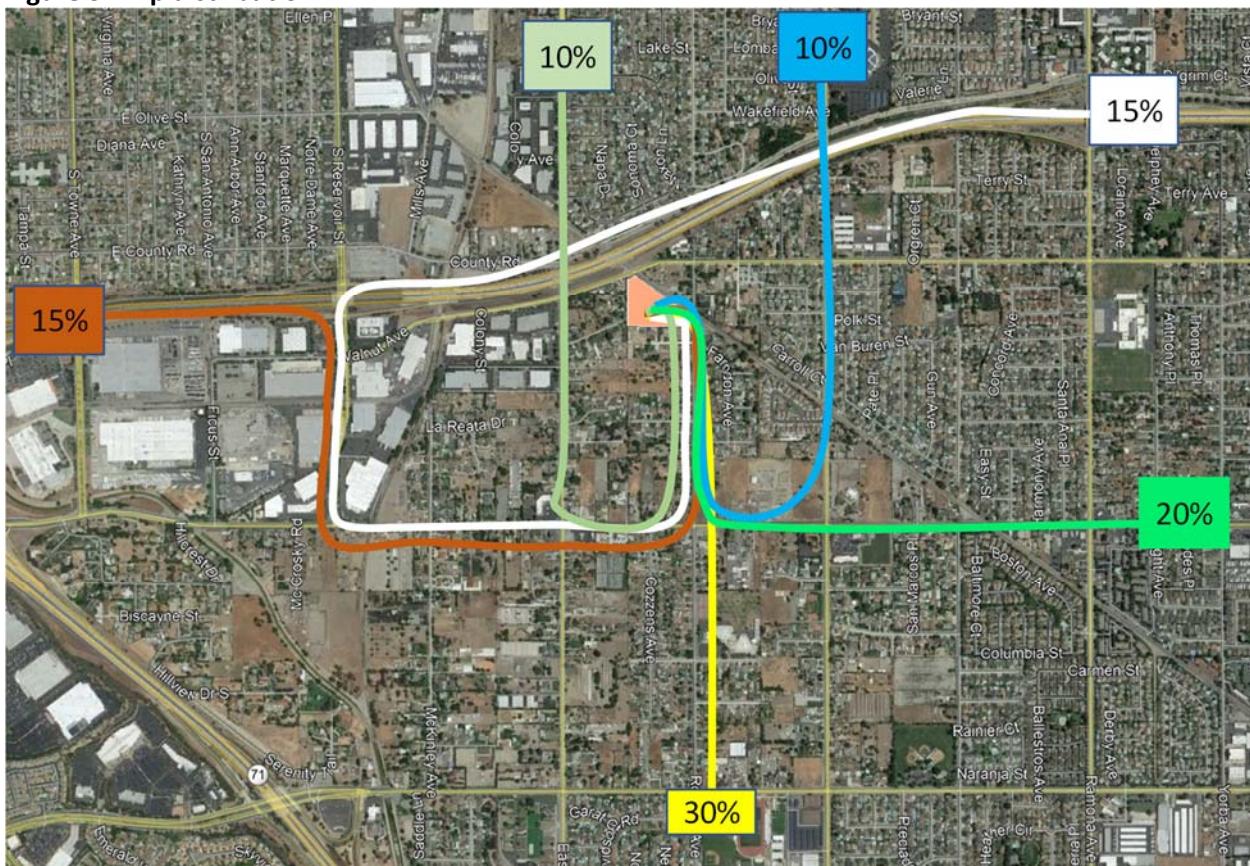
**Table 12: Trip Generated by the Proposed Hindu Temple**

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	127	120	247	24 -hour Volume	158	155	313	24 -hour Volume	451	455	905
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	7	8	15	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>7-8 AM</b>	37	4	41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	5	4	9
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	10	6	16	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	19	33	52	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>4-5 PM</b>	57	17	75
A.M. Peak Hour Generator Time: <b>9-10 AM</b>	10	9	20	A.M. Peak Hour Generator Time: <b>7-8 AM</b>	37	4	41	A.M. Peak Hour Generator Time: <b>9-10 AM</b>	90	7	96
P.M. Peak Hour Generator Time: <b>6-7 PM</b>	34	16	50	P.M. Peak Hour Generator Time: <b>5-6 PM</b>	19	33	52	P.M. Peak Hour Generator Time: <b>7-8 PM</b>	15	103	118

## Trip Distribution

Trip distribution is based on the assumption that the site is served with one left-in/ right-out driveway on Roswell Avenue. Most of the devotees are expected to/from the south direction of the site. 30% of the trips are expected to/from SR-60, 30% will be using Roswell avenue, 20% may use Riverside drive and 20% is expected from north side of the site. Trip distribution percentages with the routes are shown in Figure 3.

**Figure 3: Trip distribution**



## Conclusion

The maximum number of trips generated by the proposed site will be on Sundays. The trips generated at the PM peak hour of the adjacent street traffic on weekdays are a total of 16 trips. Weekday PM peak hour generator traffic is a total of 50 vehicles between 6 and 7 PM. This is due to the fact that the services are offered at 7 pm on weekdays.

The trip generation study shows the number of trips generated by this proposed temple is very minimum on weekdays and maximum number of trips happen on Sundays between 5 to 6 PM.

## **Appendix A**

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>	Sri Sairam Mandir
----------------------	-------------------

This Scope for Traffic Study acknowledges San Bernardino County Department of Public Works, Traffic Division requirements of traffic impact analysis for the project and is subject to change:

<b>Project Address:</b>	SRI SAIRAM MANDIR 12594 ROSWELL AVE. CHINO, CA. 91710-3036		
<b>Project Description:</b>	Hindu Worship Center		
<b>City:</b>	County of San Bernardino		
<b>Project Buildout Year:</b>	2020	<b>Ambient Growth Rate per Year:</b>	
<b>Closest Intersection (Xtn) to the Project</b>			
<b>Xtn N/S Street Name:</b>	Roswell Avenue		
<b>Xtn E/W Street Name:</b>			
<b>Thomas Guide Pg+Grid:</b>		<b>County Supervisorial District:</b>	

	<b>Engineer</b>	<b>Developer</b>
<b>Company:</b>	SRI JAYARAM FOUNDATION INC.	
<b>Name:</b>	Sajeev Kumar Keecheril P.E, T.E	SRI JAYARAM FOUNDATION INC.
<b>Address:</b>	31 marsala	6549 PIMLICO PL.
<b>City, State, Zip Code:</b>	Irvine	EASTVALE, CA. 92880
<b>Phone #:</b>	2083012005	(951)-544-832
<b>Fax #:</b>		
<b>Email:</b>	Saju_bang@yahoo.com	

**By:**

**Reviewed By:**

**Print Name: ARUNASRI REDDY    06/28/2020**

**Print Name:**

**Consultant/Developer's  
Representative**

**Date**

**Traffic Divsion Representative      Date**

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>	Sri Sairam Mandir
----------------------	-------------------

**1. Traffic Distribution:** Please insert or attach Figure(s) illustrating project trip distribution in percentages and volumes at the study intersections analyzed.

A detailed traffic report with traffic volumes, trip generation, trip distribution and the traffic report are attached.

**2. Trip Credit:** Exact amount of credit subject to approval by Traffic Division.

<b>Transportation Demand Management (TDM)</b>	no	
<b>Existing Active Land Use</b>	no	
<b>Previous Land Use</b>	no	
<b>Internal Trip Reduction</b>	no	
<b>Pass-by Trip Reduction</b>	no	

**3. Related Projects:** Consultant should check with Planning in the San Bernardino County Department of Land Use Services and planning departments of adjoining Cities. Documentation of the consultation from these agencies shall be included in the traffic study. Related projects list shall be submitted to Traffic Division for our review and approval before being incorporated in the study.

**4. Freeway Analysis:** The potential traffic impact on the following Freeway(s) must be considered.

---

---

---

The applicant shall consult with the State of California Department of Transportation (Caltrans) to determine the California Environmental Quality Act levels of significance with regard to traffic impacts on Caltrans' freeway facilities. This consultation shall also include a determination of Caltrans requirements for the study of traffic impacts to its facilities and the mitigation of any such impacts. This analysis must follow the most current Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) and can be obtained from <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tiguide.pdf>. If Caltrans finds that the project has a significant impact on the freeway, Caltrans shall be requested to include the basis for this finding in their response. If fees are proposed to mitigate the freeway impact, Caltrans shall be requested to identify the specific project to which the fees will apply. These written comments from Caltrans shall be included with the traffic study and submitted to Public Works for review and approval. If a documented good faith effort is made to consult with Caltrans and written comments cannot be obtained from within a reasonable amount of time, an analysis of the freeway impact shall be made using HCM procedures. Appendix A of the SANBAG CMP outlines allowable modifications to these procedures. The SANBAG CMP can be viewed online at: [http://www.sanbag.ca.gov/planning/subr\\_congestion.html](http://www.sanbag.ca.gov/planning/subr_congestion.html)

## SCOPE FOR TRAFFIC STUDY

Project Name:	Sri Sairam Mandir
---------------	-------------------

### 5. Trip Generation

A detailed traffic report with traffic volumes, trip generation, trip distribution and the traffic report are attached. Table below shows the number of trips and ADT.

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	127	120	247	24 -hour Volume	158	155	313	24 -hour Volume	451	455	905
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	7	8	15	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 7-8 AM	37	4	41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: 8-9 AM	5	4	9
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	10	6	16	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 5-6 PM	19	33	52	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4-5 PM	57	17	75
A.M. Peak Hour Generator Time: 9-10 AM	10	9	20	A.M. Peak Hour Generator Time: 7-8 AM	37	4	41	A.M. Peak Hour Generator Time: 9-10 AM	90	7	96
P.M. Peak Hour Generator Time: 6-7 PM	34	16	50	P.M. Peak Hour Generator Time: 5-6 PM	19	33	52	P.M. Peak Hour Generator Time: 7-8 PM	15	103	118

Trip Generation Rate(s) Source: ITE Trip Generation		I – Institute of Transportation Engineers; S – San Diego Traffic Generators; C – County; O – Other:							Edition:		10th		
		Land Use Code	Land Use	Rate Based on	Qty	*AVTE vs	ADT	Weekday a.m. peak		Weekday p.m. peak		Weekend peak hour	
								In	Out	In	Out	In	Out
	Hindu Worship Center		Trip Generation Study										

\* - Average Vehicle Trip Ends.

For ITE Land Uses provide number and name of Land Use. e.g. LU 814 - Variety Store

## SCOPE FOR TRAFFIC STUDY

Project Name:	Sri Sairam Mandir
---------------	-------------------

**6. Study Intersections:** At minimum, the study shall include the following intersections. The list is subject to change after related projects, trip generation and distribution are determined. Consultant should check with adjoining Cities regarding their requirements in addition to the following County/City intersections. Documentation of the consultation from these agencies shall be included in the traffic study.

Xtn #	% County	Thomas Guide Page+Grid	N S/E/W Street Name	City	Signalized	CMP
1			Riverside Dr./ Roswell Ave		Yes	Yes/no
2			Roswell Ave/Site Driveway		no	Yes/no

Cities to be consulted: None

## SCOPE FOR TRAFFIC STUDY

Project Name:
---------------

### 7. Other:

Traffic counts may be conducted immediately per the following:
<ul style="list-style-type: none"><li>• Must be taken on Tuesdays, Wednesdays or Thursdays.</li></ul>
<ul style="list-style-type: none"><li>• Must exclude holidays, and the first weekdays before and after the holiday.</li></ul>
<ul style="list-style-type: none"><li>• Must be taken on days when local schools or colleges are in session.</li></ul>
<ul style="list-style-type: none"><li>• Must be taken on days of good weather, and avoid atypical conditions (e.g., road construction, detours, or major traffic incidents).</li></ul>
<ul style="list-style-type: none"><li>• Traffic counts used for other traffic studies in the area shall <b>NOT</b> be reused again, unless 25% of the counts conducted for that particular traffic study are validated with new counts. The difference in volumes between the old and new counts at each corresponding movement should not be more than 10%.</li></ul>
<ul style="list-style-type: none"><li>• New traffic counts shall be checked to ensure the difference in volumes at corresponding approaches, if applicable, between two adjacent intersections is no more than 10% unless the difference can be justified.</li></ul>
<ul style="list-style-type: none"><li>• For all proposed mitigation measures, a conceptual plan for the improvements shall be submitted to our Traffic Studies section for review and approval prior to the approval of the Traffic Impact Analysis. All proposed improvements shall be within the right-of-way.</li></ul>
<ul style="list-style-type: none"><li>• For all cumulative mitigation measures, a cost estimate for the improvement shall be submitted.</li></ul>

This analysis must follow the most current Traffic Impact Study Guidelines for the County as stated in the County's Road Planning and Design Standards.

### 8. Fees

The County charges on an actual cost basis for review of traffic studies. An initial deposit of \$2000 is required at the time that a land use application is filed with the Department of Land Use Services. If the review costs exceed the initial deposit, the applicant will be expected to provide additional funds and the review will be suspended until the additional funds are deposited.

## SCOPE FOR TRAFFIC STUDY

<b>Project Name:</b>
----------------------

### **9. Contact Information:**

*Please submit a signed copy of this scope for approval by the Traffic Division. Draft scopes may be sent electronically. Final scope with signature should be submitted in person or by US Mail to:*

County of San Bernardino  
Dept. of Public Works, Traffic Division  
825 E. 3<sup>rd</sup> Street, Rm 115  
San Bernardino, CA 92415-0835

Phone: 909-387-8186

Fax: 909-387-7809

Email: [Anthony.Pham@dpw.sbccounty.gov](mailto:Anthony.Pham@dpw.sbccounty.gov)

## **Appendix B**

70105002003 Riverside Drive W, Pipeline Avenue  
 Department of Public Works  
 Location: Chino

Page 1

Date Start: 25-Feb-20  
 Site Code: Riverside Dr W Pipel  
 Counter #743  
 Longitude: 117° 42.9890 West  
 Latitude: 34° 1.1250 North

EB

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classe	Total
02/25/2															
0	0	31	3	0	2	0	0	1	0	0	0	0	0	0	37
01:00	1	10	6	0	0	1	0	0	1	0	0	0	0	0	19
02:00	0	8	3	0	1	0	0	0	0	0	0	0	0	0	12
03:00	1	27	3	0	3	1	0	2	0	0	0	0	0	1	38
04:00	0	53	9	0	3	0	0	0	3	0	0	0	0	1	69
05:00	4	97	42	4	9	1	1	2	3	0	0	0	0	3	166
06:00	3	115	49	1	16	3	1	4	3	0	0	0	1	2	198
07:00	8	242	85	6	30	6	2	6	7	1	0	0	2	12	407
08:00	4	260	84	5	32	4	0	9	7	1	1	0	2	5	414
09:00	2	188	64	8	23	5	0	12	2	2	0	0	1	7	314
10:00	1	195	67	7	24	6	0	13	4	0	0	0	0	3	320
11:00	7	222	79	7	25	3	1	13	7	0	0	0	2	8	374
12 PM	8	250	78	9	18	9	0	13	7	1	1	0	1	6	401
13:00	7	247	87	6	30	8	5	13	8	0	0	0	1	9	421
14:00	10	288	101	7	40	7	2	8	3	1	0	1	3	15	486
15:00	26	342	115	7	27	9	2	16	5	4	0	1	0	44	598
16:00	18	405	88	1	23	12	2	20	1	3	0	1	1	44	619
17:00	30	396	94	0	25	4	3	16	3	6	1	0	2	50	630
18:00	20	346	86	1	19	3	3	12	1	3	0	0	0	24	518
19:00	3	258	51	0	13	1	1	5	0	0	0	0	0	4	336
20:00	2	164	33	1	12	1	2	3	3	0	0	0	0	1	222
21:00	3	121	21	0	4	0	0	1	1	0	0	0	0	0	151
22:00	1	85	16	0	4	0	0	0	0	0	0	0	0	1	107
23:00	0	45	11	1	1	0	0	0	0	0	0	0	0	0	58
Total	159	4395	1275	71	384	84	25	169	69	22	3	3	16	240	6915
Percent	2.3%	63.6%	18.4%	1.0%	5.6%	1.2%	0.4%	2.4%	1.0%	0.3%	0.0%	0.0%	0.2%	3.5%	
AM Peak Vol.	07:00	08:00	07:00	09:00	08:00	07:00	07:00	10:00	07:00	09:00	08:00		07:00	07:00	08:00
	8	260	85	8	32	6	2	13	7	2	1		2	12	414
PM Peak Vol.	17:00	16:00	15:00	12:00	14:00	16:00	13:00	16:00	13:00	17:00	12:00	14:00	14:00	17:00	17:00
	30	405	115	9	40	12	5	20	8	6	1	1	3	50	630
Grand Total	159	4395	1275	71	384	84	25	169	69	22	3	3	16	240	6915
Percent	2.3%	63.6%	18.4%	1.0%	5.6%	1.2%	0.4%	2.4%	1.0%	0.3%	0.0%	0.0%	0.2%	3.5%	

70105002003 Riverside Drive W, Pipeline Avenue  
Department of Public Works  
Location: Chino

Page 2

Date Start: 25-Feb-20  
Site Code: Riverside Dr W PipeL  
Counter #743  
Longitude: 117° 42.9890 West  
Latitude: 34° 1.1250 North

70105002003 Riverside Drive W, Pipeline Avenue  
 Department of Public Works  
 Location: Chino

Page 1

Date Start: 25-Feb-20  
 Site Code: Riverside Dr W Pipel  
 Counter #731  
 Longitude: 117° 42.9900 West  
 Latitude: 34° 1.1410 North

WB

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Not Classe	Total
02/25/2															
0	0	2	25	1	3	0	0	1	0	0	0	0	0	0	32
01:00	1	1	15	0	2	0	0	1	0	0	1	0	0	1	22
02:00	0	1	11	4	3	0	0	0	0	0	0	0	0	0	19
03:00	0	2	16	1	5	0	0	0	0	0	0	0	0	0	24
04:00	0	6	74	0	17	0	0	0	1	0	0	0	0	1	99
05:00	2	17	186	5	71	9	2	25	3	1	0	0	0	4	325
06:00	5	25	218	15	67	2	1	44	2	4	1	0	0	6	390
07:00	19	49	348	26	56	7	6	79	3	7	1	2	1	15	619
08:00	7	22	203	23	58	4	3	45	4	1	0	1	0	5	376
09:00	3	23	166	8	30	6	2	24	5	2	0	1	1	3	274
10:00	6	27	151	18	49	6	1	22	5	0	0	0	1	0	286
11:00	7	24	185	11	46	7	2	20	3	2	0	0	3	3	313
12 PM	3	29	180	10	47	5	1	20	1	2	0	0	0	5	303
13:00	5	38	190	9	43	6	0	29	5	2	0	0	0	2	329
14:00	5	36	230	12	47	5	3	26	4	5	0	1	0	5	379
15:00	4	44	205	9	57	2	3	44	6	4	0	0	0	3	381
16:00	6	37	222	12	47	0	6	31	2	7	1	1	0	1	373
17:00	1	42	214	8	40	1	2	33	5	5	0	0	0	3	354
18:00	7	32	193	5	23	0	1	30	1	1	0	0	0	4	297
19:00	1	19	131	1	16	1	0	16	0	1	0	0	0	0	186
20:00	1	11	83	2	10	1	0	8	0	2	0	0	0	0	118
21:00	1	12	75	2	17	0	0	2	1	0	0	0	0	1	111
22:00	0	9	41	0	5	1	0	1	0	0	0	0	0	0	57
23:00	0	1	32	0	3	0	0	0	0	0	0	0	0	0	36
Total	84	509	3394	182	762	63	33	501	51	46	4	6	6	62	5703
Percent	1.5%	8.9%	59.5%	3.2%	13.4%	1.1%	0.6%	8.8%	0.9%	0.8%	0.1%	0.1%	0.1%	1.1%	
AM Peak Vol.	07:00	07:00	07:00	07:00	05:00	05:00	07:00	07:00	09:00	07:00	01:00	07:00	11:00	07:00	07:00
PM Peak Vol.	18:00	15:00	14:00	14:00	15:00	13:00	16:00	15:00	15:00	16:00	16:00	14:00	12:00	15:00	
Grand Total	84	509	3394	182	762	63	33	501	51	46	4	6	6	62	5703
Percent	1.5%	8.9%	59.5%	3.2%	13.4%	1.1%	0.6%	8.8%	0.9%	0.8%	0.1%	0.1%	0.1%	1.1%	

70105002003 Riverside Drive W, Pipeline Avenue  
Department of Public Works  
Location: Chino

Page 2

Date Start: 25-Feb-20  
Site Code: Riverside Dr W PipeL  
Counter #731  
Longitude: 117° 42.9900 West  
Latitude: 34° 1.1410 North

Start Time	Bikes	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classe	Total	
02/25/2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
07:00	1	0	0	0	0	0	0	0	0	0	0	0	0	8	9	
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Percent	1	0	0	0	0	0	0	0	0	0	0	0	0	28	29	
AM Peak Vol.	07:00													07:00	07:00	
PM Peak Vol.	1													8	9	
Grand Total Percent	1	0	0	0	0	0	0	0	0	0	0	0	0	15:00	15:00	
	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	96.6%	5	5

## Department of Public Works

Location: CHI

Date Start: 19-Feb-20

Site Code: Roswell Ave N Rivers

Counter #738

Longitude: 117° 43.1960 West

Latitude: 34° 1.1620 North

Start Time	17-Feb-20		Tue		Wed		Thu		Fri		Sat		Sun		Average Da	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	0	26	*	*	*	*	*	*	*	*	0	26
12:15	*	*	*	*	0	22	*	*	*	*	*	*	*	*	0	22
12:30	*	*	*	*	5	19	*	*	*	*	*	*	*	*	5	19
12:45	*	*	*	*	2	22	*	*	*	*	*	*	*	*	2	22
01:00	*	*	*	*	2	18	*	*	*	*	*	*	*	*	2	18
01:15	*	*	*	*	0	18	*	*	*	*	*	*	*	*	0	18
01:30	*	*	*	*	1	16	*	*	*	*	*	*	*	*	1	16
01:45	*	*	*	*	0	16	*	*	*	*	*	*	*	*	0	16
02:00	*	*	*	*	0	22	*	*	*	*	*	*	*	*	0	22
02:15	*	*	*	*	0	34	*	*	*	*	*	*	*	*	0	34
02:30	*	*	*	*	1	35	*	*	*	*	*	*	*	*	1	35
02:45	*	*	*	*	0	30	*	*	*	*	*	*	*	*	0	30
03:00	*	*	*	*	0	24	*	*	*	*	*	*	*	*	0	24
03:15	*	*	*	*	2	18	*	*	*	*	*	*	*	*	2	18
03:30	*	*	*	*	0	24	*	*	*	*	*	*	*	*	0	24
03:45	*	*	*	*	2	17	*	*	*	*	*	*	*	*	2	17
04:00	*	*	*	*	0	20	*	*	*	*	*	*	*	*	0	20
04:15	*	*	*	*	4	32	*	*	*	*	*	*	*	*	4	32
04:30	*	*	*	*	3	26	*	*	*	*	*	*	*	*	3	26
04:45	*	*	*	*	3	23	*	*	*	*	*	*	*	*	3	23
05:00	*	*	*	*	7	20	*	*	*	*	*	*	*	*	7	20
05:15	*	*	*	*	3	28	*	*	*	*	*	*	*	*	3	28
05:30	*	*	*	*	5	22	*	*	*	*	*	*	*	*	5	22
05:45	*	*	*	*	5	27	*	*	*	*	*	*	*	*	5	27
06:00	*	*	*	*	4	28	*	*	*	*	*	*	*	*	4	28
06:15	*	*	*	*	7	27	*	*	*	*	*	*	*	*	7	27
06:30	*	*	*	*	9	26	*	*	*	*	*	*	*	*	9	26
06:45	*	*	*	*	14	14	*	*	*	*	*	*	*	*	14	14
07:00	*	*	*	*	34	29	*	*	*	*	*	*	*	*	34	29
07:15	*	*	*	*	68	14	*	*	*	*	*	*	*	*	68	14
07:30	*	*	*	*	40	11	*	*	*	*	*	*	*	*	40	11
07:45	*	*	*	*	24	10	*	*	*	*	*	*	*	*	24	10
08:00	*	*	*	*	36	10	*	*	*	*	*	*	*	*	36	10
08:15	*	*	*	*	11	10	*	*	*	*	*	*	*	*	11	10
08:30	*	*	*	*	13	11	*	*	*	*	*	*	*	*	13	11
08:45	*	*	*	*	13	13	*	*	*	*	*	*	*	*	13	13
09:00	*	*	*	*	18	5	*	*	*	*	*	*	*	*	18	5
09:15	*	*	*	*	14	8	*	*	*	*	*	*	*	*	14	8
09:30	*	*	*	*	9	9	*	*	*	*	*	*	*	*	9	9
09:45	*	*	*	*	11	3	*	*	*	*	*	*	*	*	11	3
10:00	*	*	*	*	8	6	*	*	*	*	*	*	*	*	8	6
10:15	*	*	*	*	9	2	*	*	*	*	*	*	*	*	9	2
10:30	*	*	*	*	17	3	*	*	*	*	*	*	*	*	17	3
10:45	*	*	*	*	16	1	*	*	*	*	*	*	*	*	16	1
11:00	*	*	*	*	20	4	*	*	*	*	*	*	*	*	20	4
11:15	*	*	*	*	14	1	*	*	*	*	*	*	*	*	14	1
11:30	*	*	*	*	23	1	*	*	*	*	*	*	*	*	23	1
11:45	*	*	*	*	34	*	*	*	*	*	*	*	*	*	34	*
Total Day Total	0	0	0	0	511	805	0	0	0	0	0	0	0	0	511	805
% Splits	0.0%	0.0%	0.0%	0.0%	38.8%	61.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.8%	61.2%
Peak Vol.	-	-	-	-	07:15	02:15	-	-	-	-	-	-	-	-	07:15	02:15
P.H.F.					168	123	-	-	-	-	-	-	-	-	168	123
					0.618	0.879									0.618	0.879

ADT ADT 1,330 AADT 1,330

71155001002 Roswell Avenue S, Riverside Drive  
Department of Public Works  
Location: Chino

Date Start: 20-Feb-20  
Site Code: Roswell Ave S Rivers  
Counter #736  
Longitude: 117° 43.1930 West  
Latitude: 34° 1.1090 North

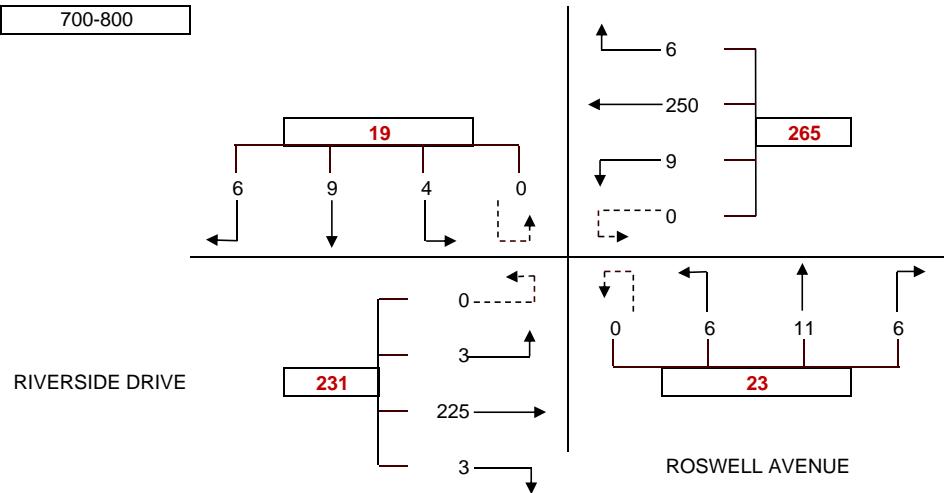
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: THURSDAY MAY 14, 2020  
 PERIOD: 7:00 AM TO 9:00 AM  
 INTERSECTION: N/S ROSWELL AVENUE  
 E/W RIVERSIDE DRIVE  
 CITY: CHINO

### VEHICLE COUNTS

15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-715	1	4	1	0	1	71	2	0	0	6	0	0	0	46	0	0	132
715-730	1	1	1	0	1	54	2	0	1	4	4	0	1	44	0	0	114
730-745	2	1	1	0	4	67	2	0	2	1	0	0	2	73	2	0	157
745-800	2	3	1	0	0	58	3	0	3	0	2	0	0	62	1	0	135
800-815	2	2	1	0	0	54	3	0	3	2	1	0	2	39	1	0	110
815-830	4	2	1	0	0	55	0	0	3	2	1	0	4	36	0	0	108
830-845	2	1	0	0	0	50	1	0	4	4	1	0	1	50	0	0	114
845-900	2	3	0	0	1	47	0	0	3	2	2	0	0	57	1	0	118
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-800	6	9	4	0	6	250	9	0	6	11	6	0	3	225	3	0	538
715-815	7	7	4	0	5	233	10	0	9	7	7	0	5	218	4	0	516
730-830	10	8	4	0	4	234	8	0	11	5	4	0	8	210	4	0	510
745-845	10	8	3	0	0	217	7	0	13	8	5	0	7	187	2	0	467
800-900	10	8	2	0	1	206	4	0	13	10	5	0	7	182	2	0	450

PEAK HOUR 700-800



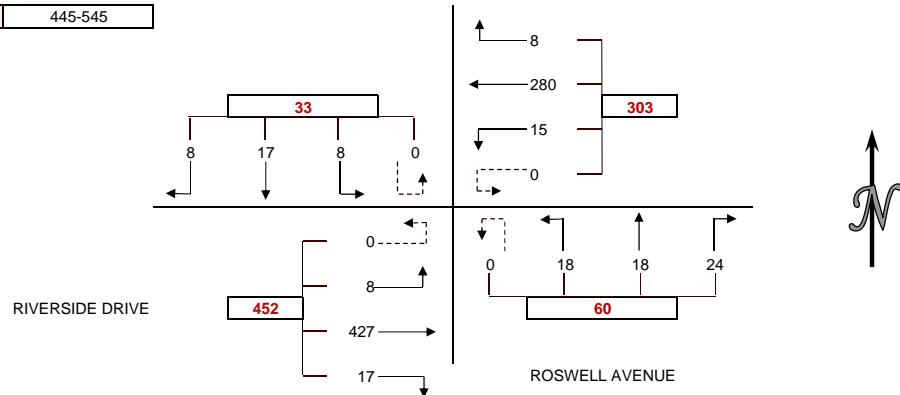
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: THURSDAY MAY 14, 2020  
 PERIOD: 4:00 PM TO 6:00 PM  
 INTERSECTION: N/S ROSWELL AVENUE  
 E/W RIVERSIDE DRIVE  
 CITY: CHINO

## VEHICLE COUNTS

15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
400-415	1	8	2	0	5	68	6	0	3	3	3	0	2	110	2	0	213
415-430	2	4	0	0	3	78	6	0	8	7	1	0	3	117	2	0	231
430-445	3	4	0	0	3	71	4	0	4	4	4	0	5	99	2	0	203
445-500	1	2	1	0	2	67	1	0	3	2	5	0	5	97	7	0	193
500-515	1	7	4	0	2	70	6	0	4	4	6	0	1	113	0	0	218
515-530	2	5	1	0	2	73	4	0	6	4	4	0	5	106	1	0	213
530-545	4	3	2	0	2	70	4	0	11	8	3	0	6	111	0	0	224
545-600	1	5	1	0	0	55	4	0	9	6	3	0	3	85	4	0	176
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
400-500	7	18	3	0	13	284	17	0	18	16	13	0	15	423	13	0	840
415-515	7	17	5	0	10	286	17	0	19	17	16	0	14	426	11	0	845
430-530	7	18	6	0	9	281	15	0	17	14	19	0	16	415	10	0	827
445-545	8	17	8	0	8	280	15	0	24	18	18	0	17	427	8	0	848
500-600	8	20	8	0	6	268	18	0	30	22	16	0	15	415	5	0	831

PEAK HOUR 445-545

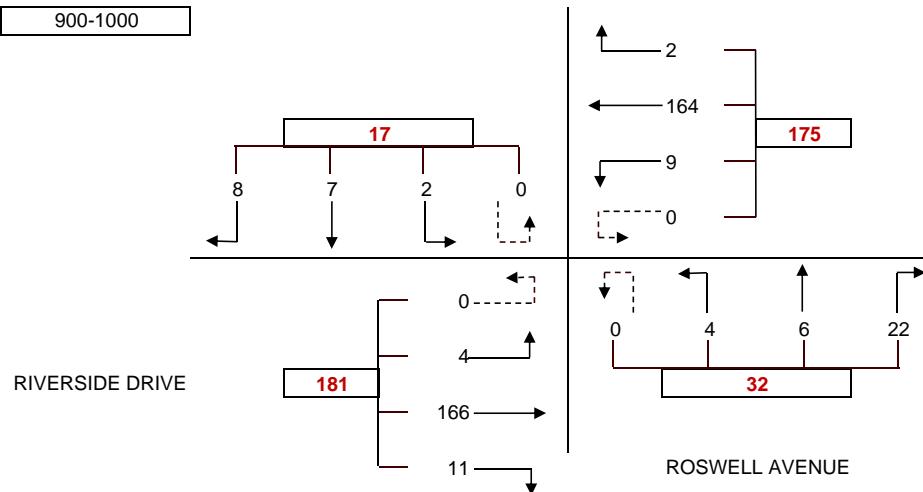


## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: SUNDAY MAY 24, 2020  
 PERIOD: 9:00 AM TO 10:00 AM  
 INTERSECTION: N/S ROSWELL AVENUE  
                   E/W RIVERSIDE DRIVE  
 CITY: CHINO

VEHICLE COUNTS																	
15 MIN COUNTS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
900-915	1	3	0	0	1	30	4	0	9	1	2	0	1	32	1	0	85
915-930	2	0	0	0	1	38	2	0	3	0	0	0	2	45	1	0	94
930-945	4	3	0	0	0	41	0	0	3	1	1	0	4	47	0	0	104
945-1000	1	1	2	0	0	55	3	0	7	4	1	0	4	42	2	0	122
HOUR TOTALS	1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD	SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
900-10000	8	7	2	0	2	164	9	0	22	6	4	0	11	166	4	0	405

PEAK HOUR	900-1000
-----------	----------



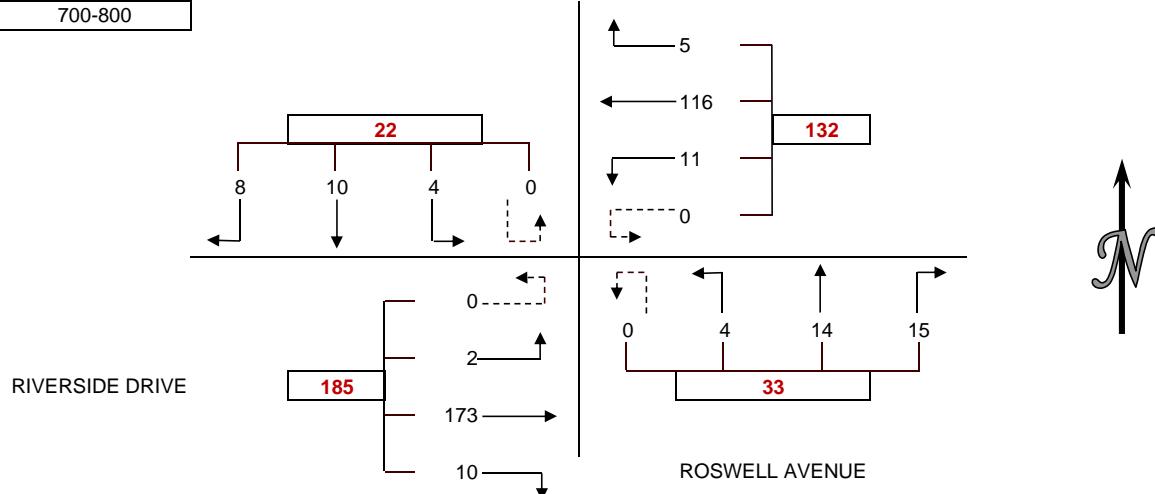
## INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: HINDU TEMPLE, CHINO  
 DATE: SUNDAY MAY 24, 2020  
 PERIOD: 7:00 PM TO 8:00 PM  
 INTERSECTION: N/S ROSWELL AVENUE  
                   E/W RIVERSIDE DRIVE  
 CITY: CHINO

### VEHICLE COUNTS

15 MIN COUNTS		1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD		SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-715		3	2	2	0	1	26	1	0	4	6	2	0	3	42	0	0	92
715-730		1	4	2	0	3	32	3	0	3	3	1	0	3	39	1	0	95
730-745		3	2	0	0	0	23	6	0	3	3	1	0	2	42	0	0	85
745-800		1	2	0	0	1	35	1	0	5	2	0	0	2	50	1	0	100
HOUR TOTALS		1	2	3	3U	4	5	6	6U	7	8	9	9U	10	11	12	12U	TOTAL
PERIOD		SBRT	SBTH	SBLT	SBUT	WBRT	WBTH	WBLT	WBUT	NBRT	NBTH	NBLT	NBUT	EBRT	EBTH	EBLT	EBUT	
700-800		8	10	4	0	5	116	11	0	15	14	4	0	10	173	2	0	372

PEAK HOUR 700-800



## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12931 ROSWELL AVENUE  
 SOUTH OF RIVERSIDE DRIVE  
 DATE: THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	0	0	0	1	
1:00	2	0	0	0	2	
2:00	1	0	0	1	2	
3:00	3	2	1	3	9	
4:00	1	0	2	5	8	
5:00	2	1	9	4	16	
6:00	2	4	5	3	14	
7:00	8	9	3	4	24	
8:00	9	6	8	8	31	
9:00	8	9	9	6	32	
10:00	2	9	5	6	22	
11:00	8	7	11	14	40	
12:00	12	7	8	12	39	
13:00	14	6	6	4	30	
14:00	10	12	8	18	48	
15:00	16	10	10	10	46	
16:00	11	16	12	10	49	
17:00	13	16	23	18	70	
18:00	14	5	13	6	38	
19:00	13	9	6	9	37	
20:00	8	10	4	4	26	
21:00	3	3	1	2	9	
22:00	2	1	3	0	6	
23:00	2	6	1	2	11	
		TOTAL			610	

AM PEAK HOUR	1100-1200
VOLUME	40
PM PEAK HOUR	1715-1815
VOLUME	71

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	1	0	1	3	
1:00	1	0	1	3	5	
2:00	0	1	0	0	1	
3:00	0	0	0	1	1	
4:00	0	2	2	1	5	
5:00	2	2	3	2	9	
6:00	2	3	7	5	17	
7:00	5	6	5	6	22	
8:00	7	7	3	4	21	
9:00	6	8	5	8	27	
10:00	4	4	10	9	27	
11:00	3	12	10	1	26	
12:00	11	9	10	12	42	
13:00	8	9	8	15	40	
14:00	11	9	12	12	44	
15:00	10	12	4	13	39	
16:00	15	16	14	9	54	
17:00	15	14	14	12	55	
18:00	8	11	5	7	31	
19:00	8	5	9	8	30	
20:00	8	6	1	6	21	
21:00	5	5	3	4	17	
22:00	4	3	2	2	11	
23:00	2	1	3	0	6	
		TOTAL			554	

AM PEAK HOUR	1030-1130
VOLUME	34
PM PEAK HOUR	1545-1645
VOLUME	58

TOTAL BI-DIRECTIONAL VOLUME	1164
-----------------------------	------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12931 ROSWELL AVENUE  
 SOUTH OF RIVERSIDE DRIVE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	2	1	1	5	
1:00	2	2	0	0	4	
2:00	0	1	1	0	2	
3:00	0	1	1	2	4	
4:00	0	1	1	1	3	
5:00	0	1	1	1	3	
6:00	4	1	1	2	8	
7:00	2	2	4	3	11	
8:00	4	6	2	5	17	
9:00	4	4	10	9	27	
10:00	8	10	4	3	25	
11:00	7	5	8	8	28	
12:00	6	4	12	9	31	
13:00	10	6	12	10	38	
14:00	8	8	7	10	33	
15:00	10	11	14	4	39	
16:00	3	7	4	13	27	
17:00	6	9	4	7	26	
18:00	9	9	5	4	27	
19:00	8	8	10	8	34	
20:00	14	9	6	8	37	
21:00	11	6	2	4	23	
22:00	1	6	1	2	10	
23:00	0	0	2	1	3	
		TOTAL			465	

AM PEAK HOUR	0930-1030
VOLUME	37
PM PEAK HOUR	1445-1545
VOLUME	45

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	2	2	0	7	
1:00	2	1	2	3	8	
2:00	1	1	0	0	2	
3:00	0	0	2	0	2	
4:00	1	1	0	1	3	
5:00	0	1	0	0	1	
6:00	0	1	2	0	3	
7:00	3	2	2	3	10	
8:00	3	6	2	6	17	
9:00	10	6	7	1	24	
10:00	6	7	11	8	32	
11:00	4	9	8	13	34	
12:00	14	8	7	4	33	
13:00	15	7	10	12	44	
14:00	11	9	10	10	40	
15:00	5	12	8	8	33	
16:00	6	9	14	7	36	
17:00	7	5	13	8	33	
18:00	4	8	10	3	25	
19:00	8	6	15	9	38	
20:00	9	11	10	6	36	
21:00	10	4	4	6	24	
22:00	4	7	5	1	17	
23:00	4	4	1	0	9	
		TOTAL			511	

AM PEAK HOUR	1100-1200
VOLUME	34
PM PEAK HOUR	1300-1400
VOLUME	44

TOTAL BI-DIRECTIONAL VOLUME	976
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 3990 RIVERSIDE DRIVE  
 WEST OF PIPELINE AVENUE  
 DATE: THURSDAY MAY 14, 2020

DIRECTION:		EB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	9	6	6	4	25	
1:00	0	6	6	3	15	
2:00	6	3	8	6	23	
3:00	6	4	16	8	34	
4:00	14	13	25	26	78	
5:00	14	29	40	54	137	
6:00	36	52	50	47	185	
7:00	56	46	80	64	246	
8:00	48	44	54	60	206	
9:00	62	74	60	82	278	
10:00	76	86	76	84	322	
11:00	82	70	72	100	324	
12:00	108	88	98	74	368	
13:00	112	105	106	112	435	
14:00	96	117	114	125	452	
15:00	114	100	100	120	434	
16:00	119	138	106	100	463	
17:00	132	112	126	96	466	
18:00	108	80	70	76	334	
19:00	74	56	62	55	247	
20:00	48	46	37	46	177	
21:00	24	46	15	16	101	
22:00	18	19	29	14	80	
23:00	18	16	15	14	63	
					TOTAL	5493

AM PEAK HOUR	1015-1115
VOLUME	328
PM PEAK HOUR	1545-1645
VOLUME	483

DIRECTION:		WB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	5	5	5	18	
1:00	2	2	4	7	15	
2:00	4	5	4	2	15	
3:00	8	6	8	10	32	
4:00	8	9	13	22	52	
5:00	27	34	40	42	143	
6:00	40	42	50	64	196	
7:00	72	58	74	68	272	
8:00	62	59	52	48	221	
9:00	70	80	64	58	272	
10:00	68	68	69	88	293	
11:00	69	68	72	78	287	
12:00	74	88	84	85	331	
13:00	94	60	67	84	305	
14:00	84	91	106	114	395	
15:00	84	85	75	88	332	
16:00	84	90	86	66	326	
17:00	89	78	74	69	310	
18:00	71	82	52	52	257	
19:00	41	41	41	48	171	
20:00	44	28	35	30	137	
21:00	36	31	23	23	113	
22:00	20	17	23	14	74	
23:00	14	12	12	18	56	
					TOTAL	4623

AM PEAK HOUR	1045-1145
VOLUME	297
PM PEAK HOUR	1400-1500
VOLUME	395

TOTAL BI-DIRECTIONAL VOLUME	10116
-----------------------------	-------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 3990 RIVERSIDE DRIVE  
 WEST OF PIPELINE AVENUE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		EB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	12	6	5	9	32	
1:00	10	4	4	3	21	
2:00	3	4	5	3	15	
3:00	3	1	7	2	13	
4:00	3	1	2	5	11	
5:00	5	3	7	1	16	
6:00	8	9	14	21	52	
7:00	17	25	30	39	111	
8:00	36	32	38	51	157	
9:00	46	48	54	49	197	
10:00	52	58	74	60	244	
11:00	72	70	85	80	307	
12:00	74	66	75	78	293	
13:00	80	70	84	82	316	
14:00	73	80	77	84	314	
15:00	70	78	71	71	290	
16:00	72	62	68	78	280	
17:00	70	69	64	72	275	
18:00	60	49	49	50	208	
19:00	56	52	42	46	196	
20:00	45	48	34	44	171	
21:00	42	30	29	16	117	
22:00	18	17	14	14	63	
23:00	16	7	15	8	46	
		TOTAL			3745	

AM PEAK HOUR	1100-1200
VOLUME	307
PM PEAK HOUR	1330-1430
VOLUME	319

DIRECTION:		WB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	13	8	6	6	33	
1:00	10	5	5	2	22	
2:00	10	6	3	1	20	
3:00	4	3	6	0	13	
4:00	3	3	7	3	16	
5:00	8	4	3	5	20	
6:00	12	13	17	23	65	
7:00	22	28	19	28	97	
8:00	29	19	38	41	127	
9:00	49	48	46	53	196	
10:00	62	58	64	52	236	
11:00	65	47	46	51	209	
12:00	58	74	77	60	269	
13:00	70	62	52	61	245	
14:00	60	55	72	68	255	
15:00	51	59	60	52	222	
16:00	54	56	56	64	230	
17:00	66	55	40	48	209	
18:00	62	50	48	44	204	
19:00	40	34	44	32	150	
20:00	32	47	40	30	149	
21:00	40	21	30	11	102	
22:00	10	18	18	14	60	
23:00	10	7	9	6	32	
		TOTAL			3181	

AM PEAK HOUR	1015-1115
VOLUME	239
PM PEAK HOUR	1215-1315
VOLUME	281

TOTAL BI-DIRECTIONAL VOLUME	6926
-----------------------------	------

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12844 ROSWELL AVENUE  
 NORTH OF RIVERSIDE DRIVE  
 DATE: THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	0	0	0	0	
1:00	2	0	1	0	3	
2:00	0	0	1	0	1	
3:00	0	0	0	1	1	
4:00	2	0	1	2	5	
5:00	2	1	3	2	8	
6:00	3	2	2	4	11	
7:00	7	5	6	2	20	
8:00	3	2	4	3	12	
9:00	4	9	8	4	25	
10:00	2	6	2	4	14	
11:00	2	6	8	8	24	
12:00	9	4	4	10	27	
13:00	10	8	2	7	27	
14:00	10	8	15	12	45	
15:00	14	7	9	8	38	
16:00	9	12	7	12	40	
17:00	6	10	8	11	35	
18:00	9	8	11	8	36	
19:00	8	6	3	12	29	
20:00	6	4	8	3	21	
21:00	1	4	4	1	10	
22:00	1	0	1	2	4	
23:00	1	1	1	2	5	
		TOTAL			441	

AM PEAK HOUR	0900-1000
VOLUME	25
PM PEAK HOUR	1415-1515
VOLUME	49

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	1	1	1	3	
1:00	1	0	2	0	3	
2:00	0	0	0	0	0	
3:00	0	0	0	0	0	
4:00	1	1	0	1	3	
5:00	2	3	3	2	10	
6:00	4	2	3	3	12	
7:00	7	2	5	4	18	
8:00	6	8	2	4	20	
9:00	8	8	3	8	27	
10:00	2	5	3	5	15	
11:00	2	4	8	5	19	
12:00	4	7	6	6	23	
13:00	6	4	6	4	20	
14:00	10	4	16	8	38	
15:00	6	6	5	6	23	
16:00	13	6	5	8	32	
17:00	6	11	7	7	31	
18:00	4	2	6	9	21	
19:00	8	4	7	4	23	
20:00	3	6	2	2	13	
21:00	3	2	7	1	13	
22:00	2	1	1	1	5	
23:00	2	1	1	1	5	
		TOTAL			377	

AM PEAK HOUR	0900-1000
VOLUME	27
PM PEAK HOUR	1400-1500
VOLUME	38

TOTAL BI-DIRECTIONAL VOLUME	818
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: 12844 ROSWELL AVENUE  
 NORTH OF RIVERSIDE DRIVE  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	1	0	0	2	
1:00	1	1	1	0	3	
2:00	1	0	0	0	1	
3:00	0	1	1	2	4	
4:00	0	1	0	0	1	
5:00	0	1	1	0	2	
6:00	2	1	1	2	6	
7:00	5	2	2	0	9	
8:00	3	7	1	3	14	
9:00	4	2	8	4	18	
10:00	4	4	8	4	20	
11:00	5	3	8	9	25	
12:00	3	2	4	4	13	
13:00	3	4	6	8	21	
14:00	2	9	4	6	21	
15:00	7	5	10	5	27	
16:00	4	3	4	4	15	
17:00	1	3	4	5	13	
18:00	9	4	5	6	24	
19:00	3	4	2	8	17	
20:00	5	8	2	2	17	
21:00	5	0	4	2	11	
22:00	1	3	1	1	6	
23:00	1	0	2	1	4	
		TOTAL			294	

AM PEAK HOUR	1100-1200
VOLUME	25
PM PEAK HOUR	1445-1545
VOLUME	28

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	2	0	1	0	3	
1:00	2	1	1	1	5	
2:00	1	1	1	0	3	
3:00	1	0	2	0	3	
4:00	0	1	0	0	1	
5:00	0	0	1	1	2	
6:00	1	0	2	3	6	
7:00	3	0	1	4	8	
8:00	2	3	2	2	9	
9:00	7	6	3	5	21	
10:00	5	4	4	4	17	
11:00	4	2	6	2	14	
12:00	7	6	3	3	19	
13:00	7	3	5	12	27	
14:00	4	8	6	9	27	
15:00	5	4	6	9	24	
16:00	4	6	8	5	23	
17:00	3	0	6	5	14	
18:00	3	6	6	4	19	
19:00	6	4	2	3	15	
20:00	3	7	4	4	18	
21:00	6	2	7	4	19	
22:00	2	3	0	2	7	
23:00	3	2	0	0	5	
		TOTAL			309	

AM PEAK HOUR	0900-1000
VOLUME	21
PM PEAK HOUR	1345-1445
VOLUME	30

TOTAL BI-DIRECTIONAL VOLUME	603
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

**CLIENT:** ARUNA REDDY  
**PROJECT:** CHINO TEMPLE  
**LOCATION:** ROSWELL AVENUE  
**BETWEEN FARNDON AVENUE AND RAILROAD TRACKS**  
**DATE:** THURSDAY MAY 14, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	0	0	0	0	0	
1:00	1	0	1	0	2	
2:00	0	0	1	0	1	
3:00	0	0	0	0	0	
4:00	0	2	2	2	6	
5:00	1	1	6	3	11	
6:00	2	4	7	6	19	
7:00	7	8	7	2	24	
8:00	3	6	3	4	16	
9:00	6	9	4	4	23	
10:00	6	7	2	5	20	
11:00	3	3	10	4	20	
12:00	11	9	6	8	34	
13:00	11	6	6	8	31	
14:00	7	6	7	8	28	
15:00	3	9	6	11	29	
16:00	6	6	6	10	28	
17:00	5	7	11	6	29	
18:00	11	5	6	11	33	
19:00	5	7	4	9	25	
20:00	6	2	10	2	20	
21:00	2	4	3	0	9	
22:00	2	0	0	0	2	
23:00	1	0	1	1	3	
		TOTAL			413	

AM PEAK HOUR	0630-0730
VOLUME	28
PM PEAK HOUR	1715-1815
VOLUME	35

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	3	1	1	1	6	
1:00	1	0	1	1	3	
2:00	0	1	0	1	2	
3:00	0	0	0	0	0	
4:00	1	0	1	2	4	
5:00	1	1	2	1	5	
6:00	3	1	3	2	9	
7:00	4	1	7	2	14	
8:00	4	4	1	2	11	
9:00	11	3	2	4	20	
10:00	3	3	3	5	14	
11:00	3	3	11	11	28	
12:00	3	7	8	7	25	
13:00	6	4	8	7	25	
14:00	11	9	10	5	35	
15:00	6	7	3	4	20	
16:00	5	6	8	8	27	
17:00	9	11	8	7	35	
18:00	4	3	4	11	22	
19:00	8	4	5	3	20	
20:00	3	0	2	3	8	
21:00	2	6	7	2	17	
22:00	1	3	2	0	6	
23:00	2	2	2	0	6	
		TOTAL			362	

AM PEAK HOUR	1100-1200
VOLUME	28
PM PEAK HOUR	1345-1445
VOLUME	37

TOTAL BI-DIRECTIONAL VOLUME	775
-----------------------------	-----

## 24-HOUR ADT COUNT SUMMARY

CLIENT: ARUNA REDDY  
 PROJECT: CHINO TEMPLE  
 LOCATION: ROSWELL AVENUE  
 BETWEEN FARNDON AVENUE AND RAILROAD TRACKS  
 DATE: SUNDAY MAY 17, 2020

DIRECTION:		NB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	4	1	0	0	5	
1:00	1	1	1	1	4	
2:00	2	0	0	0	2	
3:00	0	1	0	2	3	
4:00	0	1	0	0	1	
5:00	0	1	0	0	1	
6:00	2	1	1	2	6	
7:00	2	3	2	1	8	
8:00	2	3	4	3	12	
9:00	1	3	7	4	15	
10:00	3	5	6	2	16	
11:00	0	1	6	5	12	
12:00	6	1	2	5	14	
13:00	3	4	10	6	23	
14:00	3	5	10	9	27	
15:00	6	6	12	7	31	
16:00	6	3	4	2	15	
17:00	0	5	2	9	16	
18:00	8	6	6	4	24	
19:00	6	2	4	5	17	
20:00	5	8	7	5	25	
21:00	5	3	1	2	11	
22:00	1	3	1	1	6	
23:00	0	0	2	2	4	
		TOTAL			298	

AM PEAK HOUR	0930-1030
VOLUME	19
PM PEAK HOUR	1445-1545
VOLUME	33

DIRECTION:		SB				
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS	
0:00	1	2	1	0	4	
1:00	0	1	3	2	6	
2:00	1	1	1	0	3	
3:00	1	0	1	0	2	
4:00	0	0	1	0	1	
5:00	0	0	0	0	0	
6:00	0	1	2	2	5	
7:00	3	1	0	3	7	
8:00	2	1	1	0	4	
9:00	5	2	5	3	15	
10:00	7	5	6	5	23	
11:00	4	5	6	3	18	
12:00	8	3	6	4	21	
13:00	7	7	5	8	27	
14:00	5	3	6	8	22	
15:00	7	3	10	7	27	
16:00	4	6	4	3	17	
17:00	4	0	2	3	9	
18:00	3	4	9	2	18	
19:00	7	2	3	4	16	
20:00	4	9	5	2	20	
21:00	4	4	5	6	19	
22:00	1	4	1	2	8	
23:00	6	3	0	0	9	
		TOTAL			301	

AM PEAK HOUR	1000-1100
VOLUME	23
PM PEAK HOUR	1445-1545
VOLUME	28

TOTAL BI-DIRECTIONAL VOLUME	599
-----------------------------	-----

## **Appendix C**

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔		
Volume (vph)	10	271	87	21	579	20	122	37	122	21	48	32	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.964			0.995			0.941			0.957		
Flt Protected	0.950			0.950				0.979			0.990		
Satd. Flow (prot)	1770	3412	0	1770	3522	0	0	1716	0	0	1765	0	
Flt Permitted	0.950			0.950				0.814			0.907		
Satd. Flow (perm)	1770	3412	0	1770	3522	0	0	1427	0	0	1617	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	55			4			38			23			
Link Speed (mph)	30			30			30			30			
Link Distance (ft)	1347			1178			1131			2231			
Travel Time (s)	30.6			26.8			25.7			50.7			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	
Adj. Flow (vph)	12	315	101	24	673	23	142	43	142	24	56	37	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	12	416	0	24	696	0	0	327	0	0	117	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)	12			12			0			0			
Link Offset(ft)	0			0			0			0			
Crosswalk Width(ft)	16			16			16			16			
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)	94			94			94			94			
Detector 2 Size(ft)	6			6			6			6			
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel													
Detector 2 Extend (s)	0.0			0.0			0.0			0.0			
Turn Type	Prot			Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6		
Permitted Phases							2			6			
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.5	17.3		6.8	17.4			16.9			16.9	
Actuated g/C Ratio	0.15	0.39		0.15	0.39			0.38			0.38	
v/c Ratio	0.05	0.31		0.09	0.50			0.58			0.19	
Control Delay	24.4	10.3		24.0	13.1			15.9			10.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	24.4	10.3		24.0	13.1			15.9			10.2	
LOS	C	B		C	B			B			B	
Approach Delay		10.7			13.5			15.9			10.2	
Approach LOS		B			B			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 44.6

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 13.0

Intersection LOS: B

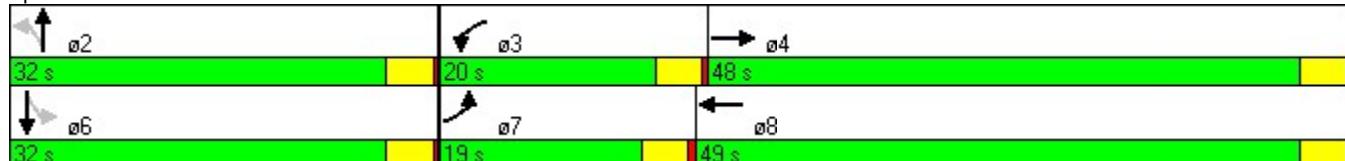
Intersection Capacity Utilization 47.0%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	33	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	38	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	38	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↓			↓	↓	
Volume (vph)	16	578	34	21	579	20	35	35	35	21	48	32	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.992			0.995			0.955			0.957		
Flt Protected	0.950			0.950				0.984			0.990		
Satd. Flow (prot)	1770	3511	0	1770	3522	0	0	1750	0	0	1765	0	
Flt Permitted	0.950			0.950				0.851			0.910		
Satd. Flow (perm)	1770	3511	0	1770	3522	0	0	1514	0	0	1622	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		8			4			25			23		
Link Speed (mph)		30			30			30			30		
Link Distance (ft)		1347			1178			1131			2231		
Travel Time (s)		30.6			26.8			25.7			50.7		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Adj. Flow (vph)	17	608	36	22	609	21	37	37	37	22	51	34	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	17	644	0	22	630	0	0	111	0	0	107	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)		12			12			0			0		
Link Offset(ft)		0			0			0			0		
Crosswalk Width(ft)		16			16			16			16		
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)		94			94			94			94		
Detector 2 Size(ft)		6			6			6			6		
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel													
Detector 2 Extend (s)		0.0			0.0			0.0			0.0		
Turn Type	Prot		Prot			Perm			Perm				
Protected Phases	7	4		3	8			2			6		
Permitted Phases								2			6		
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.9	18.0		8.0	18.0			9.5			9.4	
Actuated g/C Ratio	0.29	0.66		0.30	0.66			0.35			0.35	
v/c Ratio	0.03	0.28		0.04	0.27			0.20			0.18	
Control Delay	15.2	6.3		15.1	6.2			10.9			10.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.2	6.3		15.1	6.2			10.9			10.7	
LOS	B	A		B	A			B			B	
Approach Delay		6.5			6.5			10.9			10.7	
Approach LOS		A			A			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 27.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 7.1

Intersection LOS: A

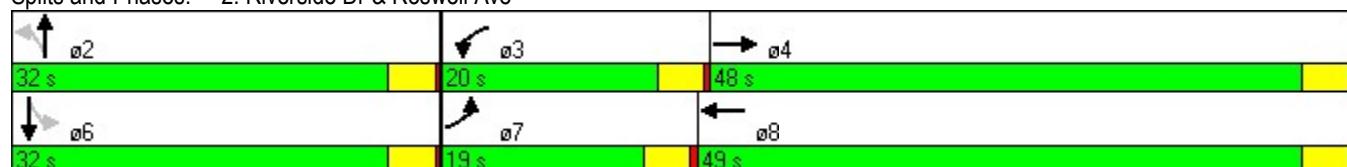
Intersection Capacity Utilization 33.8%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave



Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔	
Volume (vph)	5	199	13	11	197	2	6	9	34	3	10	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.999			0.906			0.939	
Flt Protected	0.950			0.950				0.994			0.993	
Satd. Flow (prot)	1770	3507	0	1770	3536	0	0	1678	0	0	1737	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3507	0	1770	3536	0	0	1688	0	0	1749	0
Right Turn on Red		Yes				Yes			Yes			Yes
Satd. Flow (RTOR)	9				1			41			13	
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	1347				1178			1131			2231	
Travel Time (s)	30.6				26.8			25.7			50.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	6	240	16	13	237	2	7	11	41	4	12	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	6	256	0	13	239	0	0	59	0	0	29	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.0	11.8		7.1	11.9			7.2			7.2	
Actuated g/C Ratio	0.45	0.76		0.46	0.77			0.46			0.46	
v/c Ratio	0.01	0.10		0.02	0.09			0.07			0.04	
Control Delay	7.8	3.8		7.4	3.8			4.3			5.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	7.8	3.8		7.4	3.8			4.3			5.5	
LOS	A	A		A	A			A			A	
Approach Delay		3.9			4.0			4.3			5.5	
Approach LOS		A			A			A			A	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 15.5

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.10

Intersection Signal Delay: 4.1

Intersection LOS: A

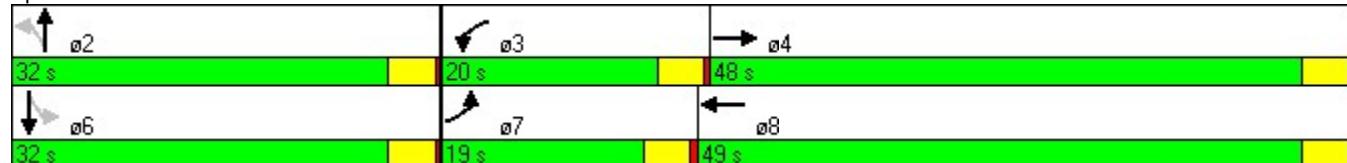
Intersection Capacity Utilization 19.6%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	21	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	25	25	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	25	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↓	↙	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	2	207	12	13	139	6	6	21	23	6	14	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.992			0.993			0.939			0.952	
Flt Protected	0.950			0.950				0.994			0.990	
Satd. Flow (prot)	1770	3511	0	1770	3514	0	0	1739	0	0	1756	0
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	3511	0	1770	3514	0	0	1749	0	0	1773	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			6			25			12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	225	13	14	151	7	7	23	25	7	15	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	238	0	14	158	0	0	55	0	0	34	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.8	10.6		7.0	10.5			7.2			7.2	
Actuated g/C Ratio	0.42	0.65		0.43	0.65			0.44			0.44	
v/c Ratio	0.00	0.10		0.02	0.07			0.07			0.04	
Control Delay	8.0	4.1		7.3	4.0			5.0			5.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	8.0	4.1		7.3	4.0			5.0			5.6	
LOS	A	A		A	A			A			A	
Approach Delay		4.1			4.2			5.0			5.6	
Approach LOS		A			A			A			A	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 16.2

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.10

Intersection Signal Delay: 4.4

Intersection LOS: A

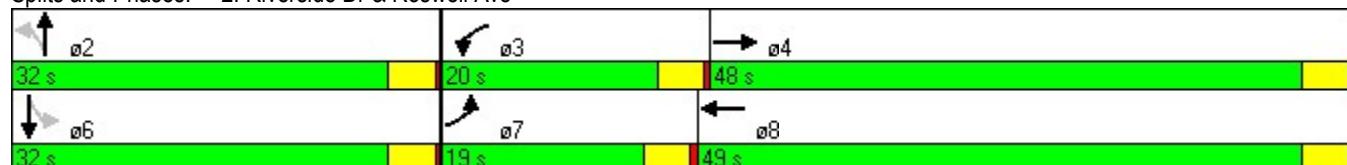
Intersection Capacity Utilization 20.8%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	0	0	24	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	1863	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1863	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	26	24	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	26	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 6.7%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	13	271	87	21	579	22	122	39	122	24	50	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.964			0.994			0.942			0.956	
Flt Protected	0.950			0.950				0.979			0.989	
Satd. Flow (prot)	1770	3412	0	1770	3518	0	0	1718	0	0	1761	0
Flt Permitted	0.950			0.950				0.811			0.897	
Satd. Flow (perm)	1770	3412	0	1770	3518	0	0	1423	0	0	1597	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	55			5			38			24		
Link Speed (mph)	30			30			30			30		
Link Distance (ft)	1347			1178			1131			2231		
Travel Time (s)	30.6			26.8			25.7			50.7		
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	15	315	101	24	673	26	142	45	142	28	58	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	416	0	24	699	0	0	329	0	0	127	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2			6		
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	6.6	17.5		6.8	17.6			17.3			17.3	
Actuated g/C Ratio	0.15	0.39		0.15	0.39			0.38			0.38	
v/c Ratio	0.06	0.31		0.09	0.51			0.58			0.20	
Control Delay	24.6	10.4		24.3	13.3			15.9			10.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	24.6	10.4		24.3	13.3			15.9			10.4	
LOS	C	B		C	B			B			B	
Approach Delay		10.9			13.6			15.9			10.4	
Approach LOS		B			B			B			B	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 45.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 13.1

Intersection LOS: B

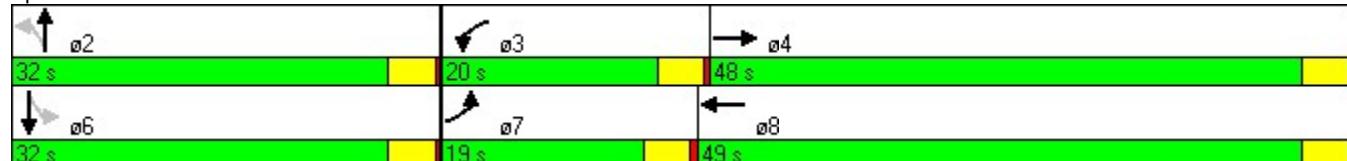
Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	8	7	33	19	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.991		
Satd. Flow (prot)	0	1611	0	1846	1863	0
Flt Permitted				0.991		
Satd. Flow (perm)	0	1611	0	1846	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	9	8	38	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	9	0	46	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	20	578	34	18	345	13	35	38	35	19	23	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.992			0.994			0.956			0.969	
Flt Protected	0.950			0.950				0.984			0.983	
Satd. Flow (prot)	1770	3511	0	1770	3518	0	0	1752	0	0	1774	0
Flt Permitted	0.950			0.950				0.870			0.870	
Satd. Flow (perm)	1770	3511	0	1770	3518	0	0	1549	0	0	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			5			24			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	608	36	19	363	14	37	40	37	20	24	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	644	0	19	377	0	0	114	0	0	57	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	8.0	18.0		7.9	18.0			9.5			9.3	
Actuated g/C Ratio	0.30	0.66		0.29	0.66			0.35			0.34	
v/c Ratio	0.04	0.28		0.04	0.16			0.20			0.10	
Control Delay	15.1	6.3		15.1	5.9			10.9			10.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	15.1	6.3		15.1	5.9			10.9			10.6	
LOS	B	A		B	A			B			B	
Approach Delay		6.5			6.3			10.9			10.6	
Approach LOS		A			A			B			B	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 27.1

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 7.1

Intersection LOS: A

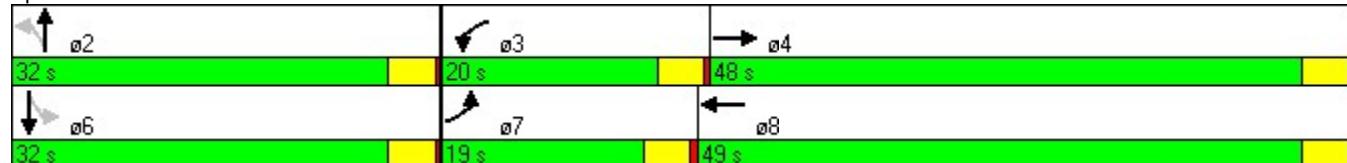
Intersection Capacity Utilization 31.4%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	6	10	40	48	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.990		
Satd. Flow (prot)	0	1611	0	1844	1863	0
Flt Permitted				0.990		
Satd. Flow (perm)	0	1611	0	1844	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	6	11	42	51	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	6	0	53	51	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 13.3%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↑	↗	↘	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↔			↔	
Volume (vph)	41	199	13	11	197	29	6	36	34	5	12	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.981			0.939			0.938	
Flt Protected	0.950			0.950				0.996			0.992	
Satd. Flow (prot)	1770	3507	0	1770	3472	0	0	1742	0	0	1733	0
Flt Permitted	0.950			0.950				0.968			0.923	
Satd. Flow (perm)	1770	3507	0	1770	3472	0	0	1693	0	0	1613	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			21			41			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1347			1178			1131			2231	
Travel Time (s)		30.6			26.8			25.7			50.7	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	49	240	16	13	237	35	7	43	41	6	14	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	256	0	13	272	0	0	91	0	0	37	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot		Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6	
Permitted Phases								2			6	
Detector Phase	7	4		3	8		2	2		6	6	

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.8	10.8		7.3	10.7			8.0			7.9	
Actuated g/C Ratio	0.37	0.52		0.35	0.51			0.38			0.38	
v/c Ratio	0.07	0.14		0.02	0.15			0.14			0.06	
Control Delay	9.4	6.2		10.6	6.4			6.8			7.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	9.4	6.2		10.6	6.4			6.8			7.3	
LOS	A	A		B	A			A			A	
Approach Delay		6.7			6.6			6.8			7.3	
Approach LOS		A			A			A			A	

#### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 20.9

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.15

Intersection Signal Delay: 6.7

Intersection LOS: A

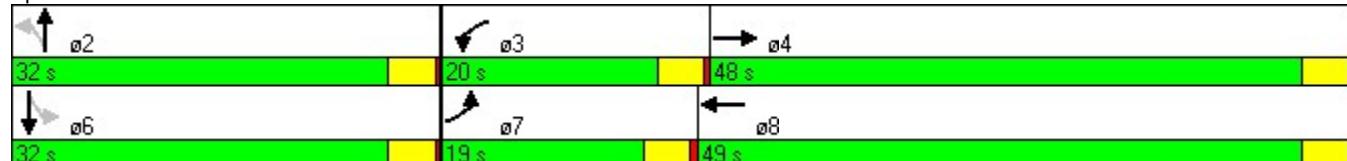
Intersection Capacity Utilization 24.6%

ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	0	7	90	111	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr <sub>t</sub>		0.865				
Flt Protected				0.978		
Satd. Flow (prot)	0	1611	0	1822	1863	0
Flt Permitted				0.978		
Satd. Flow (perm)	0	1611	0	1822	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	224			2231	466	
Travel Time (s)	5.1			50.7	10.6	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	8	108	134	25	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	8	0	242	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Free			Free	Free	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.8%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020

	↑	→	↓	↗	↖	↙	↖	↗	↑	↗	↖	↓	↗
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↓		↑	↑↓			↔			↔		
Volume (vph)	8	207	12	13	139	10	6	26	23	36	45	52	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	100		0	100		0	0		0	0	0	0	
Storage Lanes	1		0	1		0	0		0	0	0	0	
Taper Length (ft)	25		25	25		25	25		25	25	25	25	
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Fr <sub>t</sub>		0.992			0.990			0.943			0.947		
Flt Protected	0.950			0.950				0.995			0.987		
Satd. Flow (prot)	1770	3511	0	1770	3504	0	0	1748	0	0	1741	0	
Flt Permitted	0.950			0.950				0.942			0.888		
Satd. Flow (perm)	1770	3511	0	1770	3504	0	0	1655	0	0	1566	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	8			10			25			32			
Link Speed (mph)	30			30			30			30			
Link Distance (ft)	1347			1178			1131			2231			
Travel Time (s)	30.6			26.8			25.7			50.7			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	9	223	13	14	149	11	6	28	25	39	48	56	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	9	236	0	14	160	0	0	59	0	0	143	0	
Enter Blocked Intersection	No												
Lane Alignment	Left	Left	Right										
Median Width(ft)	12			12			0			0			
Link Offset(ft)	0			0			0			0			
Crosswalk Width(ft)	16			16			16			16			
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (mph)	15		9	15		9	15		9	15		9	
Number of Detectors	1	2		1	2		1	2		1	2		
Detector Template	Left	Thru											
Leading Detector (ft)	20	100		20	100		20	100		20	100		
Trailing Detector (ft)	0	0		0	0		0	0		0	0		
Detector 1 Position(ft)	0	0		0	0		0	0		0	0		
Detector 1 Size(ft)	20	6		20	6		20	6		20	6		
Detector 1 Type	Cl+Ex	Cl+Ex											
Detector 1 Channel													
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0		
Detector 2 Position(ft)	94			94			94			94			
Detector 2 Size(ft)	6			6			6			6			
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel													
Detector 2 Extend (s)	0.0			0.0			0.0			0.0			
Turn Type	Prot			Prot			Perm			Perm			
Protected Phases	7	4		3	8			2			6		
Permitted Phases							2			6			
Detector Phase	7	4		3	8		2	2		6	6		

Lanes, Volumes, Timings  
2: Riverside Dr & Roswell Ave

6/14/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	19.0	48.0	0.0	20.0	49.0	0.0	32.0	32.0	0.0	32.0	32.0	0.0
Total Split (%)	19.0%	48.0%	0.0%	20.0%	49.0%	0.0%	32.0%	32.0%	0.0%	32.0%	32.0%	0.0%
Maximum Green (s)	15.0	44.0		16.0	45.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None										
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effect Green (s)	7.0	8.6		7.1	8.5			8.1			8.5	
Actuated g/C Ratio	0.33	0.41		0.33	0.40			0.38			0.40	
v/c Ratio	0.02	0.17		0.02	0.11			0.09			0.22	
Control Delay	10.9	7.3		10.6	7.2			6.3			7.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	10.9	7.3		10.6	7.2			6.3			7.5	
LOS	B	A		B	A			A			A	
Approach Delay		7.4			7.4			6.3			7.5	
Approach LOS		A			A			A			A	

### Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 21.2

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.22

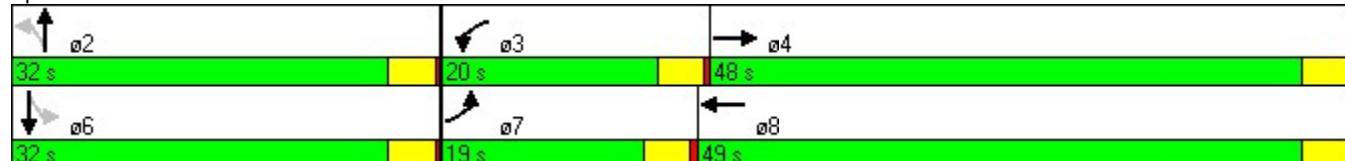
Intersection Signal Delay: 7.3      Intersection LOS: A

Intersection Capacity Utilization 31.7%      ICU Level of Service A

Analysis Period (min) 15

Description: Riverside Dr/Roswell Ave

Splits and Phases: 2: Riverside Dr & Roswell Ave



## **Appendix D**

# Sri Sairam Mandir- Traffic/Trip Generation Memo

**PREPARED FOR:** Jeremy Johnson/ San Bernardino County  
**PREPARED BY:** Sajeev Kumar, P.E., T.E.  
**COPIES:** Arunasri Reddy/ Sri Sairam Mandir Project Team  
Sri Sairam Mandir Project Team  
**DATE:** April 08, 2020

This memo summarizes the trip generation study conducted in May 2019 based on the Institute of Transportation Engineers (ITE) Trip Generation Manual and the number of trips estimated for the Sri Sairam Mandir project based on the new site plan. A traffic memo was submitted to the County of San Bernardino and the City of Chino Hills in May 2019 for the 22,650 square foot place of worship. The site plan is revised to add approximately 10,000 square foot to a total of 36,900 square foot area.

Preliminary site plan for the project is attached with this memo. As shown in the plan, the site will be accessed via the driveways from the Walnut Avenue and the Roswell Avenue. The driveway access on Walnut Avenue will be a full access driveway and the driveway on Roswell will be limited to left-in, right out only.

## Introduction

Traffic and transportation impact studies for various land uses are typically conducted using the Trip generation rates from the Institute Transportation Engineers (ITE) manual. Even though the trip generation rates for most of the land uses are available in the ITE manual, typical land uses like Hindu Temples are not available. Therefore, a trip generation study based on the ITE manual was conducted on three different sites in southern California to develop the trip generation rate for the proposed site.

## Study Sites

A list of land uses having the same characteristics as the proposed site were made as a part of this study. Getting permission to do survey at these sites was challenging and three sites finalized for the study. To be conservative, the temples established more than 15 years and in the major populated cities in Southern California were selected.

**Site 1 (Gayathri Mandir, Anaheim):** This temple was established in 1993 and serving the community for last 25 years. This facility has two driveways, one for drive-in and another to drive-out as shown in Figure 1. Details of site characteristics are included in Table 1.

**Figure 1: Site 1(Gayathri Mandir, Anaheim)**

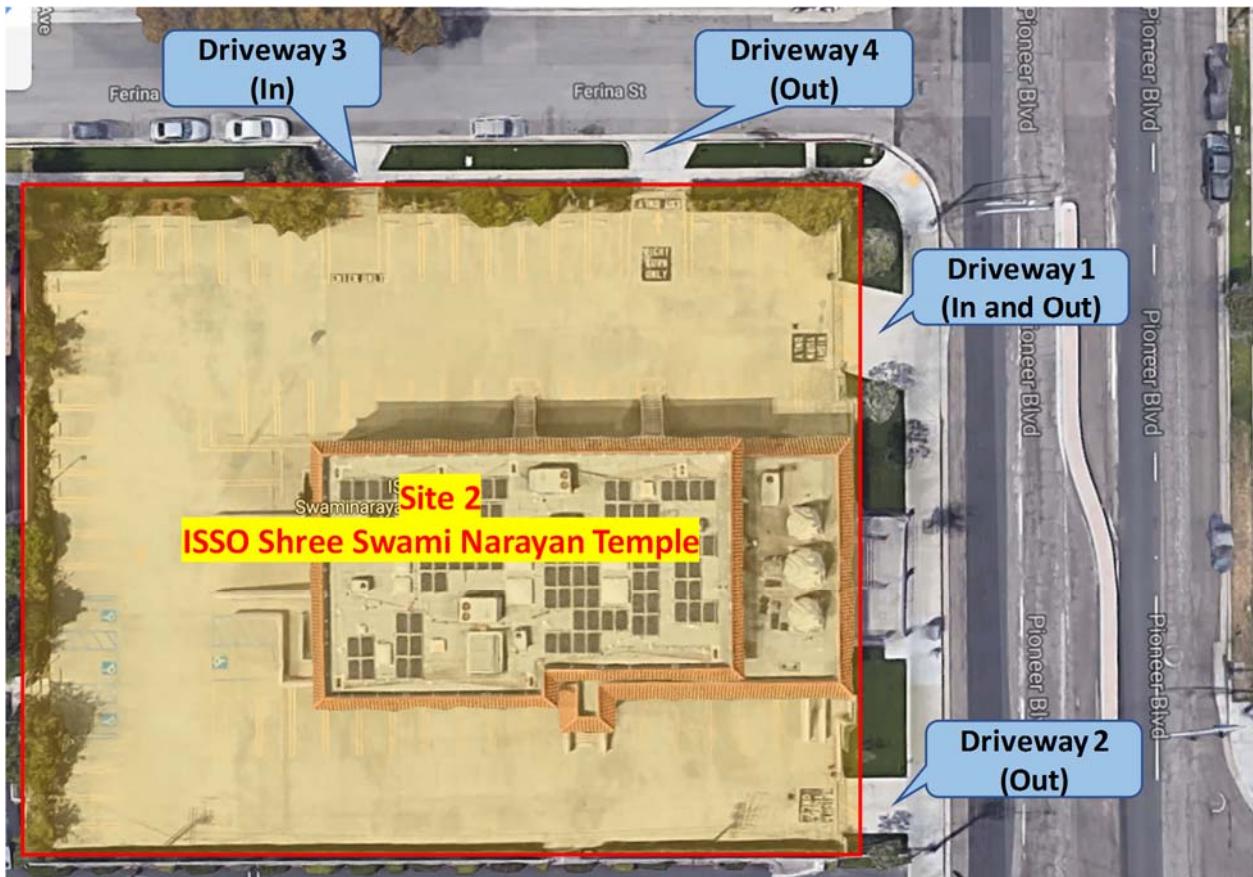


**Table 1: Site 1(Gayathri Mandir, Anaheim) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Gayathri Mandir	2446 W Orange Avenue, Anaheim	Hindu Temple	1993	0.7	9,000	<p>This site has three building in the site</p> <ul style="list-style-type: none"><li>• 4,000 square foot building with congregation area, one office room, one audio visual room and the kitchen</li><li>• 2,000 square foot house with three bed room for the priest, manager and the guest.</li><li>• 3,000 square foot build for community services. This includes a hall and six rooms to hold classes for kids.</li></ul>	8:00 AM to 8:00 PM	<p>Monday: 7:00 PM Swadhyay</p> <p>Tuesday: 7:00 PM Yoga &amp; Meditation</p> <p>Thursday: 7:00 PM Swadhyay</p> <p>Sunday : 11:00 AM Sanskaar &amp; Yagya, Yoga classes</p> <p>Yagya(Daily): 10:00 AM</p> <p>Aarti (Daily): 8:00 AM &amp; 6:30 PM</p>

**Site 2 (ISSO Shree Swami Narayan Temple, Norwalk):** This temple was established in 2010 and serving the community for last 9 years. This facility has four driveways, one of the driveways on Pioneer Boulevard is drive-in and out and the other one is drive-out only. There are two driveways to Ferina Street one for drive-in and other for drive-out. During the data collection, all the driveways were closed except the driveway 1. Driveway details are shown in Figure 2 and the details of site characteristics are included in Table 2.

**Figure 2: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk)**

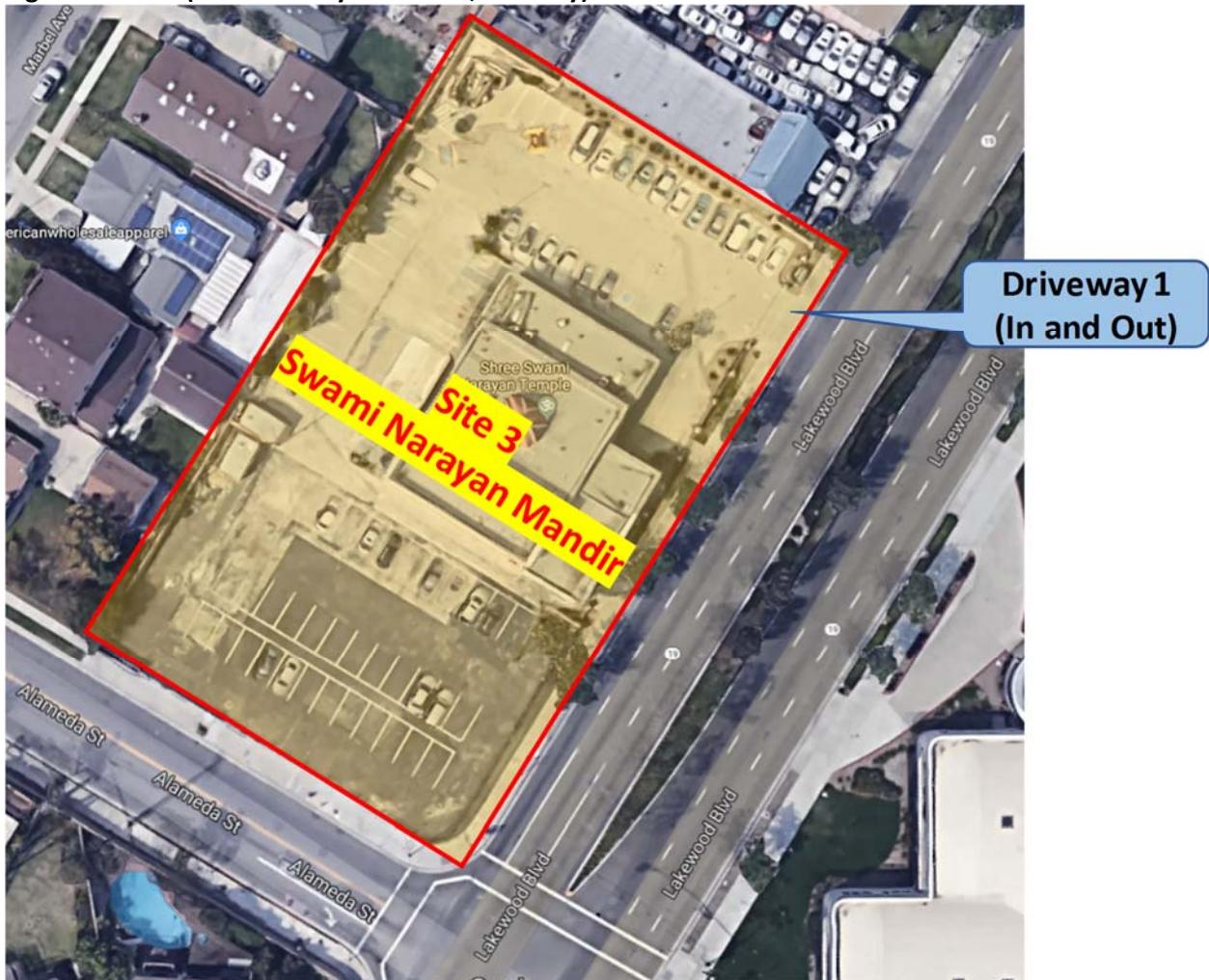


**Table 2: Site 2(ISSO Shree Swami Narayan Temple, Norwalk) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Swami Narayan Mandir	15213 Pioneer Blvd, Norwalk, CA 90650	Hindu Temple	2010	0.84	13,000	<ul style="list-style-type: none"><li>• 2,400 square foot of congregation area</li><li>• 2,000 square foot of dining hall and kitchen</li><li>• 2 full-size apartments for the priest, manager and the guest.</li><li>• Other amenities include an office room, four storage rooms, one audio visual room and two class rooms</li></ul>	8:00 AM to 8:00 PM	<p>Darshan Times:</p> <ul style="list-style-type: none"><li>• 8:00 AM to 10:00 AM</li><li>• 10:30 AM to 12:00 PM</li><li>• 3:30 PM to 5:00 PM</li><li>• 5:30 PM to 8:00 PM</li></ul> <p>Aarti Times:</p> <p>Shangaar Aarti: 8:00 AM</p> <p>Sandhya Aarti: 7:00 PM</p> <p><b>Sunday:</b></p> <p>Ravi Sabha from 3:00 pm to 6 pm</p> <p>Aarti: 6:30 pm</p>

**Site 3 (Swami Narayan Mandir, Downey):** This temple was established in 2000 and serving the community for last 19 years. This facility has one driveway on Lakewood Boulevard. Driveway details are shown in Figure 3. Details of site characteristics are included in Table 3.

Figure 2: Site 3 (Swami Narayan Mandir, Downey)



**Table 3: Site 3 (Swami Narayan Mandir, Downey) Characteristics**

Name	Location	Land Use	Opening Year	Site Size (acres)	Built Area (sqft)	Site Characteristics	Time of Operation	Events
Swami Narayan Mandir	12147 Lakewood Blvd, Downey, CA 90242	Hindu Temple	2000	0.60	5,600	<ul style="list-style-type: none"><li>• 2,500 square foot of congregation area</li><li>• 3 bedrooms and 3 bathrooms for the priest, manager and the guest.</li><li>• Other amenities include an office room, one storage rooms, two kitchens and two class rooms</li><li>• The site includes two houses behind the temple.</li></ul>	7:00 AM to 8:00 PM	Darshan Times: <ul style="list-style-type: none"><li>• 7:30 AM to 12:00 PM</li><li>• 4:00 PM to 8:00 PM</li></ul> Aarti Times: Shangaar Aarti: 7:30 AM Sandhya Aarti: 7:30 PM <b>Sunday:</b> Satsang Sabha from 3:00 pm to 6 pm Aarti: 6:30 pm

## Data Collection and Summary of Data

Data collection was conducted by Wiltec Inc. in all the three sites from 6 am to 9 pm daily for 7 consecutive days in the month April and May. Video cameras were installed at the driveways for seven days of a week and manually extracted data from the videos.

### Site 1 (Gayathri Mandir, Anaheim)

At Site 1, a video camera was installed at Driveway 1 to collect the traffic data from April 15, 2019 to April 21, 2019. All the driveways were closed except the Driveway 1 to get the accurate counts of vehicles going in and coming out from the site. Due to the heavy traffic on Sunday, Driveway 2, which is a drive-out only driveway was opened along with Driveway 1 to send the traffic out from the site 1. All the vehicles were coming onto the site using the Driveway 1, so the total count on Sunday is accurate. But the departure time of the vehicles were not accurate. The yoga classes on Sunday was finished at 12:00 pm and most of the cars departed between 12:00 and 2:00 pm. The data was adjusted based on these timing on Sunday. All other weekdays and weekend, the Driveway 2 was closed, and the traffic was using Driveway 1 only. Table 4 has the raw traffic count from the Site 1 for each hour.

**Table 4: Site 1 (Gayathri Mandir, Anaheim) Raw Volume Count**

Time	Gayathri Mandir, Anaheim													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	2	0	2	0	2	0	3	2	2	0	2	0	1	0
7 am - 8 am	3	5	2	3	2	3	3	3	3	3	26	3	4	1
8 am - 9 am	5	6	2	3	2	2	2	2	4	6	4	4	2	3
9 am - 10 am	5	5	6	5	1	3	2	2	2	1	5	4	58	3
10 am - 11 am	2	1	2	2	5	2	3	3	2	3	6	5	28	5
11 am - 12 am	0	1	1	2		2	5	1	1	1	6	5	26	1
12 pm - 1 pm	2	1	2	1	3	2	0	2	4	3	0	1	10	3
1 pm - 2 pm	5	1	1	2	1		2	3	2	4	2	2	20	6
2 pm - 3 pm	1	5	2	3	2	3	1	1	2	1	2	1	3	7
3 pm - 4 pm	1	1	0	0	1	1	0	2	1	0	5	1	1	1
4 pm - 5 pm	4	3	1	1	2	3	2	1	2	3	7	7	1	4
5 pm - 6 pm	4	4	5	2	2		2	2	5	4	10	22	2	2
6 pm - 7 pm	10	0	15	6	8	4	3	2	19	3	6	23	3	2
7 pm - 8 pm	3	9	7	6	3	7	5	4	2	1	0	3	3	4
8 pm - 9 pm	2	4	2	16	2	2	2	1	5	7	0	0	0	0
Total	49	46	50	52	36	34	35	31	56	40	81	81	162	42

The counts from Sunday were adjusted by the assumption that the devotees entered in the temple between 9:00 am to 12:00 pm started leaving after 12:00 pm. Most of the cars were using the Driveway 2 to exit from the site. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 5.

**Table 5: Site 1 (Gayathri Mandir, Anaheim) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	2	0	3	2	0	2	1	0	1
7 am - 8 am	3	3	6	26	3	29	4	1	5
8 am - 9 am	3	4	7	4	4	8	2	3	5
9 am - 10 am	3	3	6	5	4	9	58	3	61
10 am - 11 am	3	2	5	6	5	11	28	5	33
11 am - 12 am	2	1	3	6	5	11	26	1	27
12 pm - 1 pm	2	2	4	0	1	1	10	61	71
1 pm - 2 pm	2	3	5	2	2	4	20	60	80
2 pm - 3 pm	2	3	4	2	1	3	3	17	20
3 pm - 4 pm	1	1	1	5	1	6	1	1	2
4 pm - 5 pm	2	2	4	7	7	14	1	4	5
5 pm - 6 pm	4	3	7	10	22	32	2	2	4
6 pm - 7 pm	11	3	14	6	23	29	3	2	5
7 pm - 8 pm	4	5	9	0	3	3	3	4	7
8 pm - 9 pm	3	6	9	0	0	0	0	0	0
<b>Total</b>	<b>46</b>	<b>42</b>	<b>87</b>	<b>81</b>	<b>81</b>	<b>162</b>	<b>162</b>	<b>164</b>	<b>326</b>

**Site 2 (ISSO Shree Swami Narayan Temple, Norwalk)**

At Site 2, a video camera was installed to collect the driveway data from April 15, 2019 to April 21, 2019. All the driveways were closed except Driveway 1 to get the accurate counts of vehicles going in and coming out from the site. On Sunday the traffic was heavy, so the Driveway 2 which is a drive-out only driveway was open to send the vehicles out after 7 pm. All the vehicles were coming onto the site using Driveway 1, so the total count on Sunday is accurate. All other weekdays and weekend, the Driveway 2 was closed, and the traffic was using Driveway 1. Hourly raw traffic counts from the Site 2 is shown in Table 6.

**Table 6: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk) Raw Volume Count**

Time	ISSO Shree Swami Narayan Temple, Norwalk													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	1	0	0	0	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	3	5	1	1	1	1	2	2	3	0	2	0	0	0
8 am - 9 am	2	2	6	0	1	0	2	2	1	4	1	3	2	0
9 am - 10 am	4	3	2	2	3	4	2	2	6	4	0	0	6	0
10 am - 11 am	0	3	0	1	0	0	4	4	2	1	0	0	7	2
11 am - 12 am	2	1	5	1	2	2	1	1	2	1	4	2	7	0
12 pm - 1 pm	0	1	0	3	0	0	0	0	0	1	1	1	2	1
1 pm - 2 pm	0	0	0	0	0	0	0	0	2	0	0	0	4	0
2 pm - 3 pm	0	0	0	1	0	0	0	0	3	1	0	0	5	1
3 pm - 4 pm	0	0	0	0	0	0	0	0	2	1	0	0	5	2
4 pm - 5 pm	4	4	1	1	0	0	2	2	6	2	2	1	16	1
5 pm - 6 pm	1	0	4	1	2	0	1	1	12	2	2	2	22	3
6 pm - 7 pm	2	3	10	9	13	8	8	4	29	12	4	4	18	1
7 pm - 8 pm	1	2	5	4	8	12	1	5	6	19	1	3	6	35
8 pm - 9 pm	0	1	0	4	5	10	0	0	3	23	1	1	2	15
<b>Total</b>	<b>20</b>	<b>25</b>	<b>34</b>	<b>28</b>	<b>35</b>	<b>37</b>	<b>23</b>	<b>23</b>	<b>77</b>	<b>71</b>	<b>18</b>	<b>17</b>	<b>102</b>	<b>61</b>

On Sunday, special service was performed between 5 pm to 7 pm. Therefore, the Driveway 2 which is a drive-out driveway was opened after 7 pm. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 5.

**Table 7: Site 2 (ISSO Shree Swami Narayan Temple, Norwalk) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0	0	0	0	0	0	0	0	0
7 am - 8 am	2	2	4	2	0	2	0	0	0
8 am - 9 am	2	2	4	1	3	4	2	0	2
9 am - 10 am	3	3	6	0	0	0	6	0	6
10 am - 11 am	1	2	3	0	0	0	7	2	9
11 am - 12 am	2	1	4	4	2	6	7	0	7
12 pm - 1 pm	0	1	1	1	1	2	2	1	3
1 pm - 2 pm	0	0	0	0	0	0	4	0	4
2 pm - 3 pm	1	0	1	0	0	0	5	1	6
3 pm - 4 pm	0	0	1	0	0	0	5	2	7
4 pm - 5 pm	3	2	4	2	1	3	16	1	17
5 pm - 6 pm	4	1	5	2	2	4	22	3	25
6 pm - 7 pm	12	7	20	4	4	8	18	1	19
7 pm - 8 pm	4	8	13	1	3	4	6	46	52
8 pm - 9 pm	2	8	9	1	1	2	2	45	47
Total	38	37	75	18	17	35	102	102	204

### **Site 3 (Swami Narayan Mandir, Downey)**

At Site 3, the video camera was installed to collect the driveway data from May 3, 2019 to May 9, 2019. This temple has only one driveway, Driveway 1 which is used by all the vehicles going in and coming out from the site. On Sunday, some cars left after 9 p.m. so the departure time of those vehicles were not accounted. All other weekdays and weekend, the data is accurate.

Hourly raw traffic counts from the Site 3 is shown in Table 8.

**Table 8: Site 3 (Swami Narayan Mandir, Downey) Raw Volume Count**

Time	Swami Narayan Mandir, Downey													
	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
6 am - 7 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	2	0	0	0	0	0
8 am - 9 am	0	0	0	0	0	0	0	0	0	2	0	0	0	0
9 am - 10 am	0	0	1	1	1	1	2	1	1	1	1	1	3	2
10 am - 11 am	1	0	1	0	2	1	2	2	3	2	4	3	0	1
11 am - 12 am	3	0	2	3	2	1	0	1	1	2	3	3	2	1
12 pm - 1 pm	0	0	3	3	0	2	1	1	1	1	1	2	1	1
1 pm - 2 pm	1	2	2	2	1	1	1	1	0	0	1	1	1	1
2 pm - 3 pm	1	1	0	0	0	0	0	0	0	0	1	0	7	3
3 pm - 4 pm	1	2	1	1	0	0	0	0	1	1	1	2	10	2
4 pm - 5 pm	0	1	3	3	1	0	1	0	0	0	2	2	26	8
5 pm - 6 pm	0	1	0	0	0	1	0	1	0	0	2	1	16	1
6 pm - 7 pm	0	0	1	1	2	2	7	5	1	1	0	1	4	2
7 pm - 8 pm	1	1	2	1	1	1	0	2	0	0	3	1	2	27
8 pm - 9 pm	0	0	0	0	0	0	0	0	0	0	0	1	1	5
Total	8	8	16	15	10	10	14	14	10	10	19	18	73	54

On Sunday, some cars left after 9 p.m., so the number of cars left after 9 pm is added to 8 to 9 pm. The average traffic counts on weekdays, Saturday and adjusted traffic count on Sunday are shown in Table 9.

**Table 9: Site 3 (Swami Narayan Mandir, Downey) Average Traffic Count**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0	0	0	0	0	0	0	0	0
7 am - 8 am	0	0	0	0	0	0	0	0	0
8 am - 9 am	0	0	0	0	0	0	0	0	0
9 am - 10 am	1	1	2	1	1	2	3	2	5
10 am - 11 am	2	1	3	4	3	7	0	1	1
11 am - 12 am	2	1	3	3	3	6	2	1	3
12 pm - 1 pm	1	1	2	1	2	3	1	1	2
1 pm - 2 pm	1	1	2	1	1	2	1	1	2
2 pm - 3 pm	0	0	0	1	0	1	7	3	10
3 pm - 4 pm	1	1	1	1	2	3	10	2	12
4 pm - 5 pm	1	1	2	2	2	4	26	8	34
5 pm - 6 pm	0	1	1	2	1	3	16	1	17
6 pm - 7 pm	2	2	4	0	1	1	4	22	26
7 pm - 8 pm	1	1	2	3	1	4	2	27	29
8 pm - 9 pm	0	0	0	0	1	1	1	5	6
<b>Total</b>	12	11	23	19	18	37	73	74	147

## Trip Generation Rate for a Hindu Temple

Using the methodology described in the ITE Trip Generation Manual, the trip generation rate for a Hindu temple is estimated from data collected from the field. Based on the trip generation data collected from field, the trip generation rate per 1000 square foot area of a Hindu temple at different time periods on Weekdays, Saturdays and Sundays are shown in Table 10.

**Table 10: Daily Trip Generation Rate for a Hindu temple**

Time	Weekday Average			Saturday			Sunday		
	IN	OUT	Total	IN	OUT	Total	IN	OUT	Total
6 am - 7 am	0.09	0.01	0.10	0.07	0.00	0.07	0.04	0.00	0.04
7 am - 8 am	0.18	0.19	0.37	1.01	0.11	1.12	0.14	0.04	0.18
8 am - 9 am	0.20	0.21	0.41	0.18	0.25	0.43	0.14	0.11	0.25
9 am - 10 am	0.28	0.25	0.53	0.22	0.18	0.40	2.43	0.18	2.61
10 am - 11 am	0.21	0.18	0.39	0.36	0.29	0.65	1.27	0.29	1.56
11 am - 12 am	0.21	0.14	0.35	0.47	0.36	0.83	1.27	0.07	1.34
12 pm - 1 pm	0.12	0.15	0.27	0.07	0.14	0.22	0.47	2.28	2.75
1 pm - 2 pm	0.13	0.13	0.26	0.11	0.11	0.22	0.91	2.21	3.12
2 pm - 3 pm	0.09	0.12	0.20	0.11	0.04	0.14	0.54	0.76	1.30
3 pm - 4 pm	0.06	0.07	0.12	0.22	0.11	0.33	0.58	0.18	0.76
4 pm - 5 pm	0.21	0.17	0.38	0.40	0.36	0.76	1.56	0.47	2.03
5 pm - 6 pm	0.28	0.16	0.43	0.51	0.91	1.41	1.45	0.22	1.67
6 pm - 7 pm	0.93	0.43	1.36	0.36	1.01	1.38	0.91	0.91	1.81
7 pm - 8 pm	0.33	0.54	0.86	0.14	0.25	0.40	0.40	2.79	3.19
8 pm - 9 pm	0.15	0.49	0.64	0.04	0.07	0.11	0.11	1.81	1.92
<b>Total</b>	3.44	3.26	6.70	4.28	4.20	8.48	12.21	12.32	24.53

Table 11 illustrates the trip generation rate per 1000 square foot area of a Hindu temple for the AM and PM peak period of the adjacent street traffic, AM and PM peak hour of the generator and the 24-hour volumes on an average weekday (M-F), Saturday and Sunday.

**Table 11: Trip Generation Rate for a 1000 Square Foot Hindu temple**

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	3.44	3.26	6.70	24 -hour Volume	4.28	4.20	8.48	24 -hour Volume	12.21	12.32	24.53
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	0.20	0.21	0.41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>7-8 AM</b>	1.01	0.11	1.12	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	0.14	0.11	0.25
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	0.28	0.16	0.43	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	0.51	0.91	1.41	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>4-5 PM</b>	1.56	0.47	2.03
A.M. Peak Hour Generator Time: <b>9-10 AM</b>	0.28	0.25	0.53	A.M. Peak Hour Generator Time: <b>7-8 AM</b>	1.01	0.11	1.12	A.M. Peak Hour Generator Time: <b>9-10 AM</b>	2.43	0.18	2.61
P.M. Peak Hour Generator Time: <b>6-7 PM</b>	0.93	0.43	1.36	P.M. Peak Hour Generator Time: <b>5-6 PM</b>	0.51	0.91	1.41	P.M. Peak Hour Generator Time: <b>7-8 PM</b>	0.40	2.79	3.19

## Trip Generation for the Proposed Hindu Temple

The Project site is approximately 2.92 acres, located at 12594 Roswell Avenue, Chino in San Bernardino County. The proposed project is to construct a 36,900 square foot place of worship for Hindus with related on-site facilities. The on-site facilities include congregation area, kitchen, office, dining and class rooms. The hours of operation are from 6:00 AM to 1:00 PM and 6:00 PM to 9 PM on weekdays. The facility will be closed from 1:00 PM to 6 PM on weekdays. On weekends (Saturdays and Sundays) the facility will be open from 6:00 AM to 9:00 PM. Every day four aarthis or services will be performed. The timings of the daily services are 6:00 AM (morning aarthi), 12:00 PM (afternoon aarthi), 7:00 PM (evening aarthi) and 8:30 PM (night aarthi). These services last for 10-15 minutes. It is expected that the members of the congregation would attend one of the four services once or twice a month.

Based on the trip generation rate from Table 11, the expected trips generated by the proposed temple is estimated and shown in Table 12.

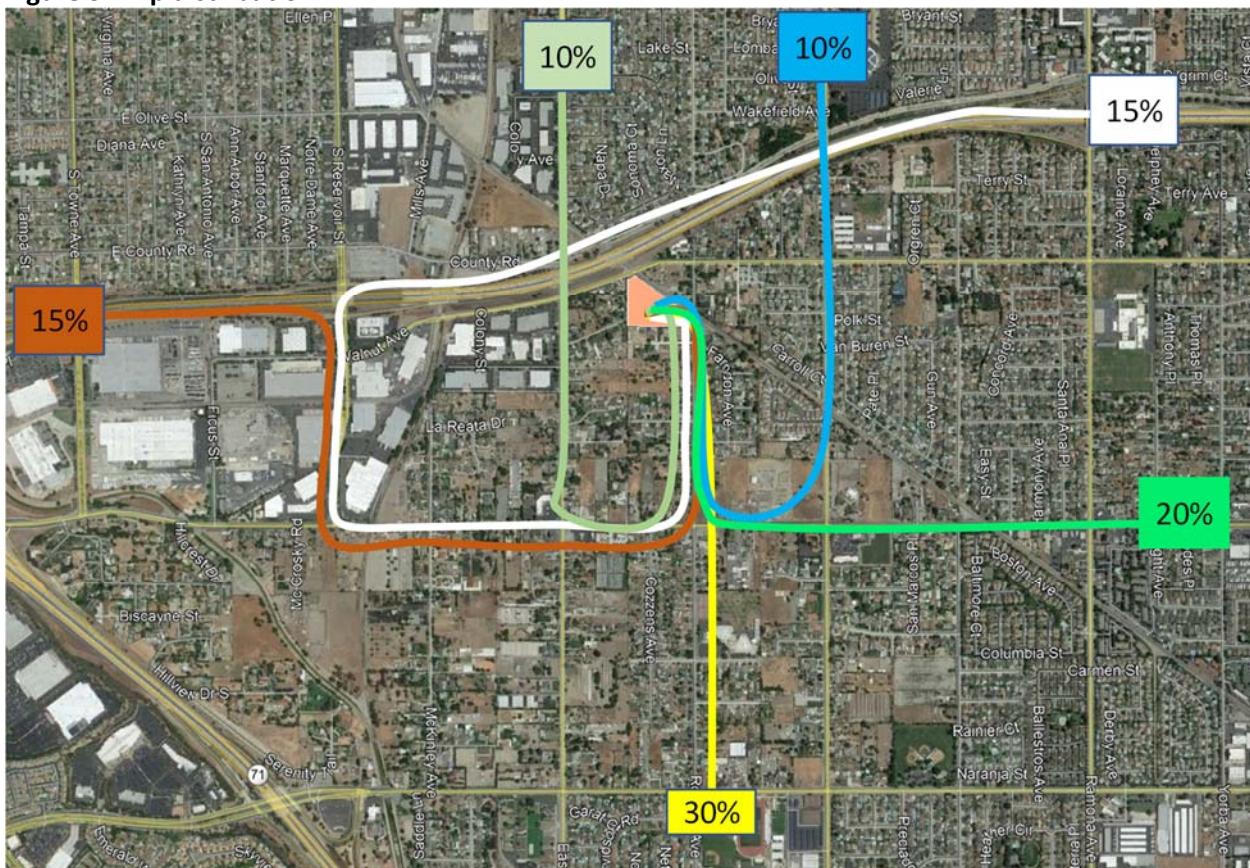
**Table 12: Trip Generated by the Proposed Hindu Temple**

	Average Weekday (M-F)			Saturday			Sunday				
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total		
24 -hour Volume	127	120	247	24 -hour Volume	158	155	313	24 -hour Volume	451	455	905
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	7	8	15	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>7-8 AM</b>	37	4	41	A.M. Peak Hour of Adjacent Street Traffic (7-9) Time: <b>8-9 AM</b>	5	4	9
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	10	6	16	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>5-6 PM</b>	19	33	52	P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: <b>4-5 PM</b>	57	17	75
A.M. Peak Hour Generator Time: <b>9-10 AM</b>	10	9	20	A.M. Peak Hour Generator Time: <b>7-8 AM</b>	37	4	41	A.M. Peak Hour Generator Time: <b>9-10 AM</b>	90	7	96
P.M. Peak Hour Generator Time: <b>6-7 PM</b>	34	16	50	P.M. Peak Hour Generator Time: <b>5-6 PM</b>	19	33	52	P.M. Peak Hour Generator Time: <b>7-8 PM</b>	15	103	118

## Trip Distribution

Trip distribution is based on the assumption that the site is served with one left-in/ right-out driveway on Roswell Avenue. Most of the devotees are expected to/from the south direction of the site. 30% of the trips are expected to/from SR-60, 30% will be using Roswell avenue, 20% may use Riverside drive and 20% is expected from north side of the site. Trip distribution percentages with the routes are shown in Figure 3.

**Figure 3: Trip distribution**



## Conclusion

The maximum number of trips generated by the proposed site will be on Sundays. The trips generated at the PM peak hour of the adjacent street traffic on weekdays are a total of 16 trips. Weekday PM peak hour generator traffic is a total of 50 vehicles between 6 and 7 PM. This is due to the fact that the services are offered at 7 pm on weekdays.

The trip generation study shows the number of trips generated by this proposed temple is very minimum on weekdays and maximum number of trips happen on Sundays between 5 to 6 PM.