

FOCUSED SITE TRAFFIC IMPACT ANALYSIS REPORT

ALL AMERICAN ASPHALT QUARRY

Corona, California January 19, 2018

Prepared for:

All American Asphalt 1776 All American Way Corona, CA 92879

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EXECUTIVE SUMMARY

- The All American Asphalt Quarry project is an existing rock quarry. Operations include extraction and processing of native rock for production of asphaltic grade construction aggregates from an approximately 263-acre project site in the City of Corona, Riverside County, CA.
- The proposed Project consists of extending the current mining permit to year 2121 without any increase to the mining area acreage or operational intensity. Specifically the purpose of the proposed amendment to SMP 95-1 (modified) and the associated Reclamation Plan is to:
 - o Extend the permit date to 2121, and
 - o Alter the phasing from three phases to five phases, and
 - Mine beneath the existing processing plant after moving the processing plant to a backfilled area, and
 - o Increase excavation depth to an elevation of 400 feet above mean sea level, and
 - Expand the excavation to areas that have been used for processing, storage, asphalt batching, and equipment maintenance.
- The one (1) key study intersection selected for evaluation in this report provide local access to the study area and is listed as follows:
 - 1. All American Way at Magnolia Avenue
- The two (2) roadway segments listed below were selected based on the arterial network within the study area and discussions with City of Corona staff:
 - A. Magnolia Avenue, west of All American Way
 - B. Magnolia Avenue, east of All American Way
- For the Existing With Project traffic conditions, the key study intersection is forecast to operate at acceptable levels of service during the AM and PM peak hours when compared to the LOS standards defined in this report, and none of the key study intersections will be directly impacted based on the LOS criteria defined in this report for Existing With Project traffic conditions. As such, no mitigation measures are recommended/required.
- For the Existing With Project traffic conditions, the two (2) study roadway segments are forecast to operate at an acceptable level of service on a daily basis when compared to the LOS standards defined in this report, and will not have a significant impact under the Existing With Project traffic conditions when compared to the LOS criteria defined in this report.

- For the Year 2040 With Project traffic conditions, the key study intersection is forecast to operate at acceptable levels of service during the AM and PM peak hour when compared to the LOS standards defined in this report, and none of the key study intersections will be cumulatively impacted based on the LOS criteria defined in this report for Year 2040 With Project traffic conditions. As such, no mitigation measures are recommended/required.
- For the Year 2040 With Project traffic conditions, the two (2) study roadway segment are forecast to operate at an acceptable level of service on a daily basis when compared to the LOS standards defined in this report, and the key study roadways segment will not have a significant impact under the Year 2040 With Project traffic conditions when compared to the LOS criteria defined in this report. It should be noted that the roadway capacity of Magnolia Avenue at the two (2) study roadway segments for Year 2040 traffic conditions is based on the six-lane Urban Arterial roadway classification consistent with the *City of Corona General Plan Circulation Element*.

FOCUSED SITE TRAFFIC IMPACT ANALYSIS REPORT

ALL AMERICAN ASPHALT QUARRY

Corona, California January 19, 2018

1.0 Introduction

This focused site traffic impact analysis evaluates the potential traffic impacts of the proposed All American Asphalt Quarry Extension Permit (hereinafter referred to as Project) on the area traffic circulation. The All American Asphalt Corona Quarry (Project) is an existing rock quarry. Operations include extraction and processing of native rock for production of asphaltic grade construction aggregates from an approximately 263-acre project site in the City of Corona, Riverside County, CA.

The Project site is located approximately one mile east of Interstate 15, south of Magnolia Avenue at the southerly terminus of All American Way. Current conditions consist of an active 229-acre rock quarry permitted for mining and processing. Activities associated with the mining operations include an aggregate processing facility, asphalt batch plant and all support structures. The Project site has been visited and an inventory of adjacent area roadways and intersections made. In support of detailed intersection capacity analyses, existing traffic count information has been compiled. The work program for this traffic study was developed in conjunction with the City of Corona Public Works Department staff.

The proposed Project consists of extending the current mining permit to year 2121 without any increase to the mining area acreage or operational intensity.

This traffic report analyzes Daily, AM peak hour, and PM peak hour conditions for existing 2017 and future Year 2040 buildout traffic conditions with the Project. Peak hour and daily forecasts for the Year 2040 traffic condition have been projected by increasing existing traffic volumes by an annual growth rate based on the City's General Plan Traffic Analysis Model.

1.1 Study Area

1.1.1 Intersections

One (1) key study intersection was designated for evaluation based on City of Corona focused site TIA criteria and discussions with City staff. The one (1) key study intersection selected for evaluation in this report provides local access to the study area and is listed as follows:

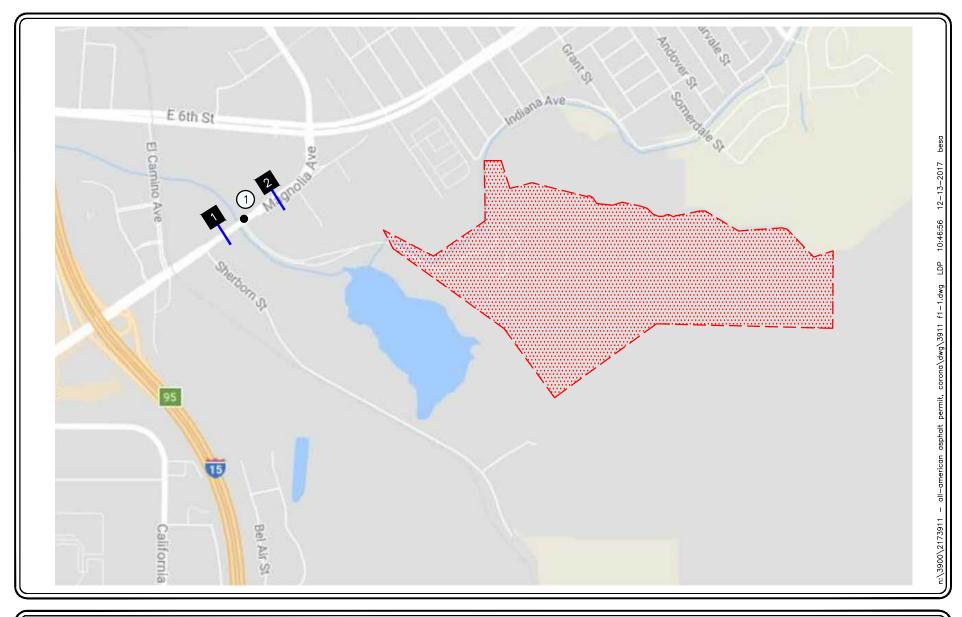
1. All American Way at Magnolia Avenue

1.1.2 Roadway Segments

The study roadway segments listed below are locations that could potentially be impacted by the Project. The two (2) roadway segments listed below were selected based on the arterial network within the study area and discussions with City of Corona staff:

- A. Magnolia Avenue, west of All American Way
- B. Magnolia Avenue, east of All American Way

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the Project and depicts the surrounding street system.







SOURCE: GOOGLE **KEY**



= STUDY INTERSECTION



= STUDY ROADWAY SEGMENT



FIGURE 1-1

VICINITY MAP

ALL AMERICAN ASPHALT QUARRY, CORONA

2.0 Project Description and Location

The proposed Project consists of extending the current mining permit to year 2121 without any increase to the mining area acreage or operational intensity. Specifically, the purpose of the proposed amendment to SMP 95-1 (modified) and the associated Reclamation Plan is to:

- Extend the permit date to 2121, and
- Alter the phasing from three phases to five phases, and
- Mine beneath the existing processing plant after moving the processing plant to a backfilled area, and
- Increase excavation depth to an elevation of 400 feet above mean sea level, and
- Expand the excavation to areas that have been used for processing, storage, asphalt batching, and equipment maintenance.

Reclamation of the Project will be phased with mining and will return the site to open space for slope areas and industrial use for finished pads in compliance with the underlying land use designation for the property.

No other substantial changes to the permit and reclamation plan are proposed. There will be no change in traffic generation, processing capabilities or throughput. The proposal specifically does not seek to expand mining onto undisturbed areas outside of the approved permit area nor increase the annual production rates.

Figure 2-1 presents the existing aerial site plan for the proposed Project.







SOURCE: ENVIROMINE INC.

FIGURE 2-1

AERIAL SITE PLAN

ALL AMERICAN ASPHALT QUARRY, CORONA

3.0 Existing Conditions

The principal local network of streets serving the site consists of Magnolia Avenue and All American way. The following discussion provides a brief synopsis of the key area streets.

3.1 Existing Street Network

Magnolia Avenue is an east-west, four-lane divided roadway classified as an Urban Arterial (six lanes) in the City's General Plan Circulation Element. Parking is generally permitted on both sides of the roadway; between 2nd Street and 6th Street, parking is not permitted on either side of the roadway in the Project vicinity. The posted speed limit on Magnolia Avenue within the vicinity of the Project is 45 miles per hour (mph).

All American Way is a north-south, two-lane divided roadway located south of Magnolia Avenue. Parking is not permitted on either side of the roadway within the vicinity of the Project. The posted speed limit on All American Way is 25 miles per hour (mph).

3.2 Existing Area Traffic Volumes

Existing daily, AM peak hour, and PM peak hour traffic volumes at the one (1) key study intersection and two (2) key study roadway segments evaluated in this focused site TIA report were collected in October 2017 by Counts Unlimited, Inc. *Appendix A* contains the detailed traffic count data. The one (1) key study intersection and two (2) key study roadway segments were designated for evaluation based on discussions with City staff, and knowledge of the area circulation system.

3.3 Level of Service (LOS) Analysis Methodologies

Weekday AM and PM peak hour operating conditions for the key study intersections and roadway segments were evaluated using the methodology outlined in *Chapter 19 of the Highway Capacity Manual 6 (HCM 6)* for signalized intersections. Daily operating conditions for the six (6) key study roadway segments were analyzed using the *Volume to Capacity (V/C) Ratio Methodology*.

3.3.1 Highway Capacity Manual (HCM) Method of Analysis (Signalized Intersections)

In conformance with City of Corona requirements, AM and PM peak hour operating conditions for the key study intersections were evaluated using the HCM operations method of analysis. Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents and when there are no other vehicles on the road.

In Chapter 18 of the HCM, only the portion of total delay attributed to the control facility is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay and final acceleration delay. In contrast, in previous versions of the HCM (1994 and earlier), delay included only stopped delay.

Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM control delay value range for signalized intersections are shown in *Table 3-1*.

3.3.2 Volume to Capacity (V/C) Ratio Method of Analysis (Roadway Segments)

In conformance with the City of Corona requirements, daily operating conditions for the key study roadway segments have been investigated according to the Volume to Capacity (V/C) ratio of each roadway segment. The V/C relationship is used to estimate the LOS of the roadway segment with the volume based on the 24-hour traffic volumes and the capacity based on the City's classification of each roadway. The six qualitative categories of Level of Service have been defined along with the corresponding Volume to Capacity (V/C) value range and are shown in *Table 3-2*.

The roadway segments' daily capacities of each street classification according to the *City of Corona General Plan Technical Background Report Page 3-27, dated March 2004* and *City of Corona Public Works Department Traffic Impact Study Guidelines Exhibit C, dated July 2006*, are presented in *Table 3-3*.

3.4 Impact Criteria and Thresholds

3.4.1 Intersections

The City of Corona considers LOS D to be the minimum acceptable LOS for all intersections that consist of collector and arterial roadways and LOS E for the Weirick Road at I-15 Ramp intersections based on the City of Corona General Plan Circulation Element Policy 6.1.6. In addition, the City of Corona considers LOS C to be the minimum acceptable LOS for local and collector streets in residential and industrial areas.

The City of Corona General Plan Circulation Element Policy 6.1.6 (adopted March 17, 2004) states:

• Maintain Level of Service D or better on arterial streets wherever possible. At some key locations, such as at heavily traveled freeway interchanges, LOS E may be adopted as the acceptable standard, on a case-by-case basis. Locations that may warrant the LOS E standard include Lincoln Avenue at SR-91, Main Street at SR-91, McKinley Avenue at SR-91, Hidden Valley Parkway at I-15, Cajalco Road at I-15, and Weirick Road at I-15. A higher standard such as Level of Service C or better may be adopted for local and collector streets in residential areas.

3.4.2 Roadway Segments

Similar to the above discussion, the City of Corona considers LOS D to be the minimum acceptable LOS for all roadway segments that consist of collector and arterial roadways.

Table 3-1

Level of Service Criteria For Signalized Intersections (HCM Methodology)¹

Level of Service (LOS)	Control Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
В	$> 10.0 \text{ and} \le 20.0$	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
С	$> 20.0 \text{ and} \le 35.0$	Average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	$> 35.0 \text{ and} \le 55.0$	Long traffic delays At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high <i>v/c</i> ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55.0 and ≤ 80.0	Very long traffic delays This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent occurrences.
F	≥ 80.0	Severe congestion This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

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Source: Highway Capacity Manual 6, Chapter 19: Signalized Intersections.

Table 3-2
Level of Service Criteria For Roadway Segments (V/C Methodology)²

Level of Service (LOS)	Volume to Capacity Ratio (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT . Describes primarily free flow operations at average travel speeds, usually about 90% of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
В	0.601 – 0.700	VERY GOOD . Represents reasonably unimpeded operations at average travel speeds, usually about 70% of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.
С	0.701 – 0.800	GOOD. Represents stable conditions; however, ability to maneuver and change lanes in mid-block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50% of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving.
D	0.801 – 0.900	FAIR . Borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40% of free flow speed.
Е	0.901 – 1.000	POOR . Characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	> 1.000	FAILURE . Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.

² Source: Transportation Research Board 2000.

TABLE 3-3 DAILY ROADWAY SEGMENT CAPACITIES³

Roadway	Number of	Maximum Two-Way Traffic Volume (ADT) Level of Service					
Classification	Lanes	C	D	E			
Local	2-lanes	5,200	5,850	6,500			
Collector	2-lanes	10,400	11,700	13,000			
Secondary	4-lanes	20,700	23,300	25,900			
Major	4-lanes	27,300	30,700	34,100			
Arterial	2-lanes	14,400	16,200	18,000			
Urban Arterial	6-lanes	43,100	48,500	53,900			
Urban Arterial	8-lanes	57,400	64,600	71,800			

Traffic Impact Study Guidelines Exhibit C, dated July 2006.

Source: City of Corona General Plan Technical Background Report Page 3-27, dated March 2004 and City of Corona Public Works Department

4.0 Future Traffic Conditions

4.1 Existing With Project Traffic Volumes

Given that no additional Project-related traffic generation is anticipated with the proposed quarry amendment, the Existing traffic conditions reflect the Existing With Project traffic conditions. *Figures 4-1* presents the anticipated AM and PM peak hour Existing With Project traffic volumes at the one (1) key study intersection, as well as the daily traffic volumes for the two (2) key study roadway segments.

4.2 Year 2040 With Project Traffic Volumes

Same as with the Existing with Project traffic condition, given that no additional Project-related traffic generation is anticipated with the proposed quarry amendment, the Year 2040 traffic conditions reflect the Year 2040 With Project traffic conditions. *Figure 4-2* presents the Year 2040 With Project AM and PM peak hours traffic volumes at the one (1) key study intersection, as well as the Year 2040 With Project daily traffic volumes for the two (2) key study roadway segments. The Year 2040 AM and PM peak hour traffic volumes were developed by applying a specific growth rate to through movement by direction at the one (1) study intersection based on the City of Corona Traffic Analysis Model. In addition, the Year 2040 traffic daily volumes were developed by applying a specific growth rate to each direction of the two (2) roadway segments based on the City of Corona Traffic Analysis Model.

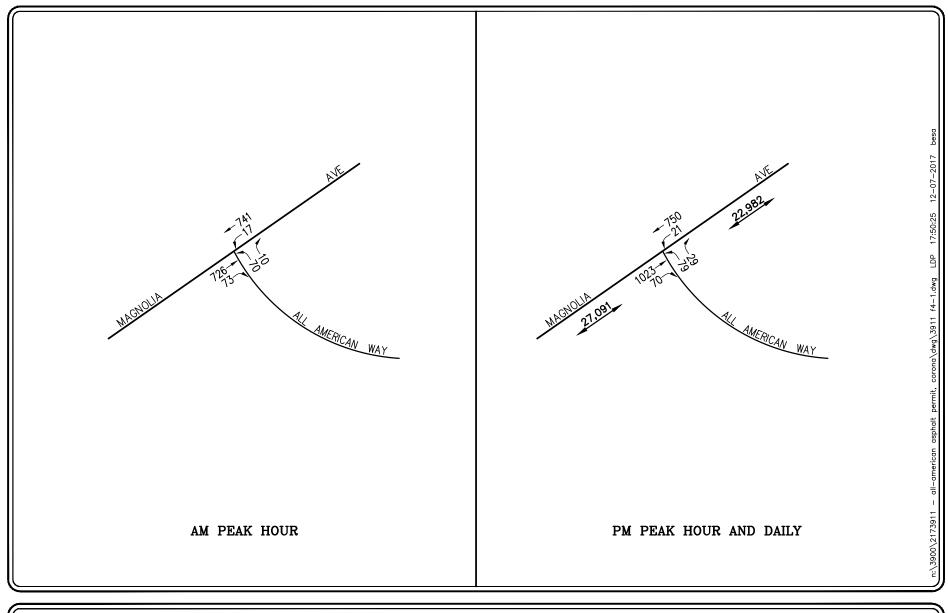




FIGURE 4-1

EXISTING AM & PM PEAK HOUR AND DAILY TRAFFIC VOLUMES

ALL AMERICAN ASPHALT QUARRY, CORONA

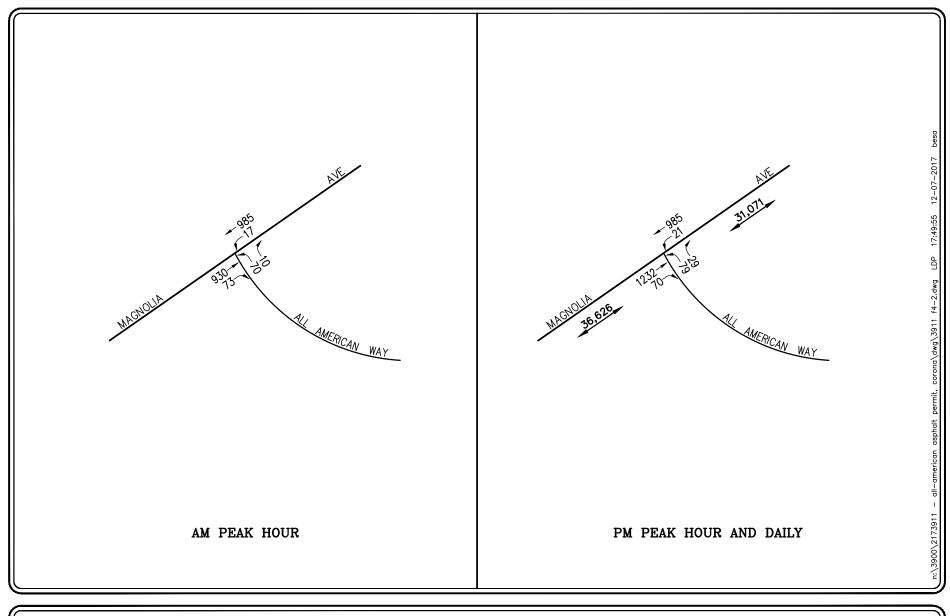






FIGURE 4-2

YEAR 2040 AM & PM PEAK HOUR AND DAILY TRAFFIC VOLUMES

ALL AMERICAN ASPHALT QUARRY, CORONA

5.0 FUTURE CONDITIONS TRAFFIC IMPACT ANALYSIS

The relative impact of the proposed Project (none) during the AM and PM peak hours and daily timeframe was evaluated based on analysis of future operating conditions at the one (1) key study intersection and two (2) key study roadway segments. The previously discussed capacity analysis procedures were utilized to investigate the future delay and service level characteristics at each study intersection and roadway segment. The significance of the potential impacts of the Project at each key intersection and roadway segment was then evaluated using traffic impact criteria published in the *City of Corona Traffic Impact Study Guidelines*, dated July 2006.

5.1 Impact Criteria and Thresholds

The City of Corona considers LOS D to be the minimum acceptable LOS for all intersections that consist of collector and arterial roadways based on the City of Corona General Plan Circulation Element Policy 6.1.6.

5.2 Traffic Impact Analysis Scenarios

The following scenarios are those for which Delay and corresponding LOS calculations have been performed at the key intersections for existing and long-term traffic conditions:

- A. Existing With Project Traffic Conditions,
- B. Scenario (A) With Recommended Improvements, if any,
- C. Year 2040 With Project Traffic Conditions, and
- D. Scenario (C) With Recommended Improvements, if any.

5.3 Existing and Long-Term (2040) With Project Intersection Capacity Analysis

Table 5-1 summarizes the AM and PM peak hour Level of Service results at the one (1) key study intersection during a "typical" weekday for the Existing With Project and year 2040 With Project traffic conditions. The first column (1) of Delay/LOS values in *Table 5-1* presents a summary of Existing With Project traffic conditions and the second column (2) of Delay/LOS values in *Table 5-1* presents a summary of Year 204 With Project traffic conditions.

Review of column (1) of *Table 5-1* indicates that for Existing With Project traffic conditions, the one (1) key study intersection is forecast to operate at acceptable levels of service during the AM and PM peak hours when compared to the LOS standards defined in this report.

Review of column (2) of *Table 5-1* indicates that for Year 2040 With Project traffic conditions, the one (1) key study intersection is forecast to operate at acceptable levels of service during the AM and PM peak hours when compared to the LOS standards defined in this report.

Appendix B contains the Delay/LOS calculation worksheets for the Existing and Year 2040 Traffic Conditions.

5.4 Existing and Long-Term (2040) Conditions Roadway Segment Analysis

Table 5-2 summarizes the daily level of service results at the two (2) key study roadway segments during a "typical" weekday for the existing traffic and Year 2040 conditions with the Project. The first column (1) of LOS E Capacity values in Table 5-2 presents the daily roadway segment capacities from the City of Corona General Plan Technical Background Report Page 3-27, dated March 2004 and City of Corona Public Works Department Traffic Impact Study Guidelines Exhibit C, dated July 2006. The second column (2) forecasts the Existing With Project traffic conditions and the third column (3) of Table 5-2 presents the Year 2040 With Project traffic conditions at the two (2) key study roadway segments.

Review of column (2) of *Table 5-2* indicates that for the Existing With Project traffic conditions, the two (2) key study roadway segments are forecast to operate at an acceptable level of service on a daily basis when compared to the LOS standards defined in this report.

Review of column (3) of *Table 5-2* indicates that the two (2) key study roadway segments will operate at an acceptable level of service under the Year 2040 With Project traffic conditions when compared to the LOS criteria defined in this report. It should be noted that the roadway capacity of Magnolia Avenue at the two (2) study roadway segments for Year 2040 traffic conditions is based on the six-lane Urban Arterial roadway classification consistent with the *City of Corona General Plan Circulation Element*.

Table 5-1
PEAK HOUR INTERSECTION CAPACITY ANALYSIS SUMMARY⁴

		(1) Existing With Project Traffic Conditions		(2)		
				Year 2040 With Project Traffic Conditions		
Key Intersection	Time Period	Delay (s/v)	LOS	Delay (s/v)	LOS	
All American Way at	AM	5.4	A	5.5	A	
1. Magnolia Avenue	PM	6.7	A	7.0	A	

Notes:

- s/v = seconds per vehicle (delay)
- LOS = Level of Service
- Bold Delay/LOS values indicate adverse service levels

⁴ Appendix B contains the Delay/LOS calculation worksheets for the study intersection.

TABLE 5-2
DAILY ROADWAY SEGMENT ANALYSIS SUMMARY

(1)			(2)				(3)						
			Existir	ng With Pr	oject Traffio	c Conditio	ons	Y	Year 2040 Wit	h Project	Traffic Con	ditions	
Key	Roadway Segment	Type of Arterial	LOS E Capacity (VPD)	Lanes	Daily Volume	V/C Ratio	LOS	Type of Arterial	LOS E Capacity (VPD)	Lanes	Daily Volume	V/C Ratio	LOS
1.	Magnolia Avenue, west of All American Way	Major Arterial	34,100	4D	27,091	0.794	С	Urban Arterial	53,900	6D	36,626	0.680	В
2.	Magnolia Avenue, east of All American Way	Major Arterial	34,100	4D	22,982	0.674	В	Urban Arterial	53,900	6D	31,071	0.576	A

Notes:

- VPD = Vehicles Per Day
- D = Divided; U = Undivided
- V/C = Volume to Capacity Ratio
- LOS = Level of Service
- **Bold "V/C"/LOS values** indicate adverse service levels

	APPENDIX A
EXISTING TRAFF	IC COUNT DATA

APPENDIX A-I

INTERSECTION COUNTS

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name : 102_COR_All Amer_Mag AM Site Code : 05617610

Start Date : 10/5/2017 Page No : 1

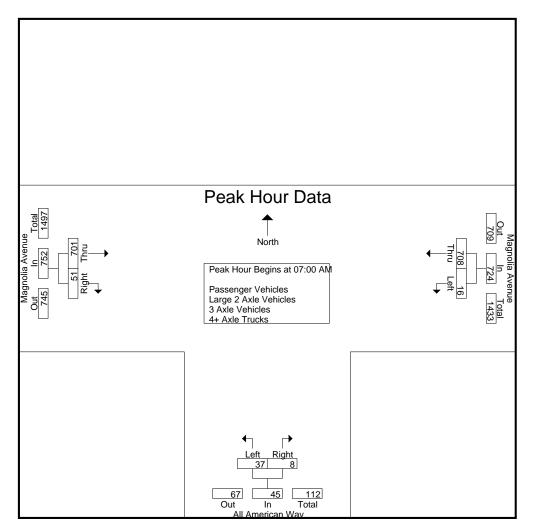
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks										
		agnolia Ave			American V			nue		
		Westbound	k	1	Northbound	ı k		Eastbound	d l	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	6	102	108	19	5	24	65	11	76	208
06:15 AM	13	120	133	10	2	12	70	18	88	233
06:30 AM	4	128	132	16	1	17	77	9	86	235
06:45 AM	7	151	158	12	3	15	117	19	136	309
Total	30	501	531	57	11	68	329	57	386	985
07:00 AM	6	215	221	13	1	14	102	17	119	354
07:15 AM	2	196	198	12	4	16	153	9	162	376
07:30 AM	1	157	158	4	1	5	207	12	219	382
07:45 AM	7	140	147	8	2	10	239	13	252	409
Total	16	708	724	37	8	45	701	51	752	1521
			1							
Grand Total	46	1209	1255	94	19	113	1030	108	1138	2506
Apprch %	3.7	96.3		83.2	16.8		90.5	9.5		
Total %	1.8	48.2	50.1	3.8	0.8	4.5	41.1	4.3	45.4	
Passenger Vehicles	44	1137	1181	22	12	34	982	71	1053	2268
% Passenger Vehicles	95.7	94	94.1	23.4	63.2	30.1	95.3	65.7	92.5	90.5
Large 2 Axle Vehicles	2	41	43	7	4	11	29	6	35	89
% Large 2 Axle Vehicles	4.3	3.4	3.4	7.4	21.1	9.7	2.8	5.6	3.1	3.6
3 Axle Vehicles	0	19	19	51	3	54	4	12	16	89
% 3 Axle Vehicles	0	1.6	1.5	54.3	15.8	47.8	0.4	11.1	1.4	3.6
4+ Axle Trucks	0	12	12	14	0	14	15	19	34	60
% 4+ Axle Trucks	0	1	1	14.9	0	12.4	1.5	17.6	3	2.4

	Magnolia Avenue				American V	,	Ma			
		<u>Westbound</u>			Northbound	d		Eastbound		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Int	tersection Beg	gins at 07:0	0 AM							
07:00 AM	6	215	221	13	1	14	102	17	119	354
07:15 AM	2	196	198	12	4	16	153	9	162	376
07:30 AM	1	157	158	4	1	5	207	12	219	382
07:45 AM	7	140	147	8	2	10	239	13	252	409
Total Volume	16	708	724	37	8	45	701	51	752	1521
% App. Total	2.2	97.8		82.2	17.8		93.2	6.8		
PHF	.571	.823	.819	.712	.500	.703	.733	.750	.746	.930

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name : 102_COR_All Amer_Mag AM Site Code : 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

T Call Hour for Each 7 kg	cak flodi for Each Approach Degins at:										
	06:45 AM			06:00 AM			07:00 AM				
+0 mins.	7	151	158	19	5	24	102	17	119		
+15 mins.	6	215	221	10	2	12	153	9	162		
+30 mins.	2	196	198	16	1	17	207	12	219		
+45 mins.	1	157	158	12	3	15	239	13	252		
Total Volume	16	719	735	57	11	68	701	51	752		
% App. Total	2.2	97.8		83.8	16.2		93.2	6.8			
PHF	.571	.836	.831	.750	.550	.708	.733	.750	.746		

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- Passenger Vehicles

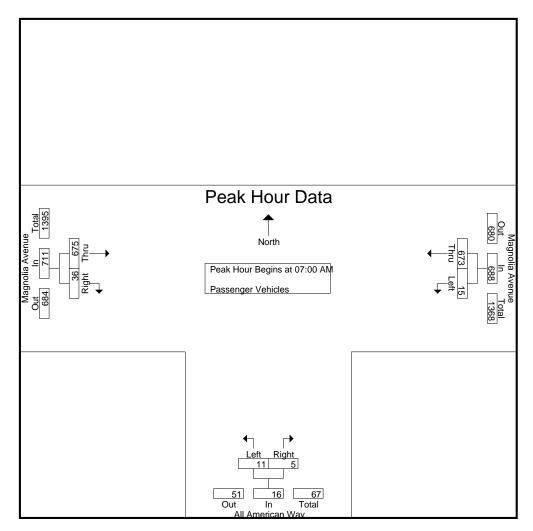
 			Gro	<u>ups Printed-</u>	· Passenger	Vehicles				
	Ma	agnolia Ave	nue	All	American V	Vay	Ma	agnolia Ave	nue	
		Westbound	b		Northbound	d .		Eastbound		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	6	93	99	6	3	9	61	5	66	174
06:15 AM	13	106	119	0	1	1	63	9	72	192
06:30 AM	4	120	124	3	1	4	73	5	78	206
 06:45 AM	6	145	151	2	2	4	110	16	126	281
Total	29	464	493	11	7	18	307	35	342	853
07:00 AM	6	199	205	3	0	3	97	15	112	320
07:15 AM	2	190	192	4	3	7	145	7	152	351
07:30 AM	1	147	148	1	0	1	200	6	206	355
07:45 AM	6	137	143	3	2	5	233	8	241	389
 Total	15	673	688	11	5	16	675	36	711	1415
Grand Total	44	1137	1181	22	12	34	982	71	1053	2268
Apprch %	3.7	96.3		64.7	35.3		93.3	6.7		
Total %	1.9	50.1	52.1	1	0.5	1.5	43.3	3.1	46.4	

	Ma	agnolia Ave	nue	Al	l American	Way	Ma	agnolia Ave	nue	
		Westbound	b		Northboun	d		Eastbound	d	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 Al	M to 07:45	AM - Peak 1 c	of 1	-			-		
Peak Hour for Entire In	tersection B	egins at 07	:00 AM							
07:00 AM	6	199	205	3	0	3	97	15	112	320
07:15 AM	2	190	192	4	3	7	145	7	152	351
07:30 AM	1	147	148	1	0	1	200	6	206	355
07:45 AM	6	137	143	3	2	5	233	8	241	389
Total Volume	15	673	688	11	5	16	675	36	711	1415
% App. Total	2.2	97.8		68.8	31.2		94.9	5.1		
PHF	.625	.845	.839	.688	.417	.571	.724	.600	.738	.909

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

reak Hour for Lacif A	privacii begi	ns at.							
	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	6	199	205	3	0	3	97	15	112
+15 mins.	2	190	192	4	3	7	145	7	152
+30 mins.	1	147	148	1	0	1	200	6	206
+45 mins.	6	137	143	3	2	5	233	8	241
Total Volume	15	673	688	11	5	16	675	36	711
% App. Total	2.2	97.8		68.8	31.2		94.9	5.1	
PHF	.625	.845	.839	.688	.417	.571	.724	.600	.738

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- Large 2 Ayle Vehicles

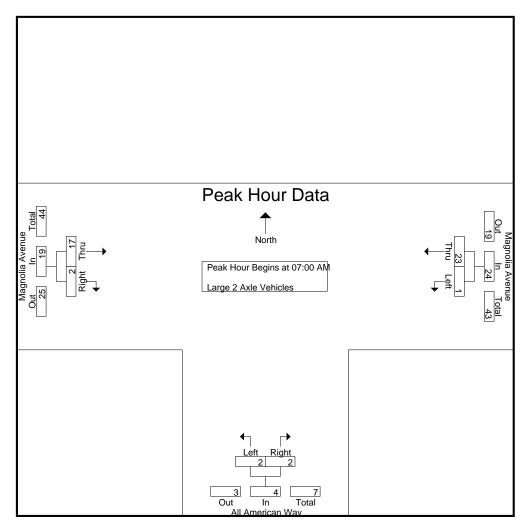
			Grou							
	Ma	agnolia Ave	nue	All	American \	Nay	M	agnolia Ave	nue	
		Westbound	d		Northboun	d		Eastbound	1	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	0	3	3	1	1	2	3	1	4	9
06:15 AM	0	6	6	2	0	2	3	2	5	13
06:30 AM	0	4	4	1	0	1	1	1	2	7
06:45 AM	1	5	6	1	1	2	5	0	5	13
Total	1	18	19	5	2	7	12	4	16	42
07:00 AM	0	11	11	1	0	1	2	1	3	15
07:15 AM	0	2	2	0	1	1	7	0	7	10
07:30 AM	0	8	8	0	1	1	4	0	4	13
07:45 AM	1	2	3	1	0	1	4	1	5	9
Total	1	23	24	2	2	4	17	2	19	47
·										
Grand Total	2	41	43	7	4	11	29	6	35	89
Apprch %	4.7	95.3		63.6	36.4		82.9	17.1		
Total %	2.2	46.1	48.3	7.9	4.5	12.4	32.6	6.7	39.3	
	06:00 AM 06:15 AM 06:30 AM 06:45 AM Total 07:00 AM 07:15 AM 07:30 AM 07:45 AM Total Grand Total Apprch %	Start Time Left 06:00 AM 0 06:15 AM 0 06:30 AM 0 06:45 AM 1 Total 1 07:00 AM 0 07:15 AM 0 07:30 AM 0 07:45 AM 1 Total 1 Grand Total 2 Apprch % 4.7	Start Time Left Thru 06:00 AM 0 3 06:15 AM 0 6 06:30 AM 0 4 06:45 AM 1 5 Total 1 18 07:00 AM 0 11 07:15 AM 0 2 07:30 AM 0 8 07:45 AM 1 2 Total 1 23 Grand Total Apprch % 2 41 4.7 95.3	Magnolia Avenue Westbound	Magnolia Avenue Westbound Start Time Left Thru App. Total Left	Magnolia Avenue Westbound Northbound Northbound Northbound	Magnolia Avenue Westbound All American Way Northbound Start Time Left Thru App. Total Left Right App. Total 06:00 AM 0 3 3 1 1 2 06:15 AM 0 6 6 2 0 2 06:30 AM 0 4 4 1 0 1 06:45 AM 1 5 6 1 1 2 Total 1 18 19 5 2 7 07:00 AM 0 11 11 1 0 1 07:15 AM 0 2 2 0 1 1 07:30 AM 0 8 8 0 1 1 07:45 AM 1 2 3 1 0 1 Total 1 23 24 2 2 4 Grand Total 4.7 95.3 63.6 36.4	Magnolia Avenue Westbound Northbound Northbound Northbound	Westbound Northbound Eastbound Start Time Left Thru App. Total Left Right App. Total Thru Right 06:00 AM 0 3 3 1 1 2 3 1 06:15 AM 0 6 6 2 0 2 3 2 06:30 AM 0 4 4 1 0 1 1 1 1 06:45 AM 1 5 6 1 1 2 5 0 Total 1 18 19 5 2 7 12 4 07:00 AM 0 11 11 1 0 1 2 1 07:15 AM 0 2 2 0 1 1 7 0 07:45 AM 0 8 8 0 1 1 4 1 Total 1 2	Magnolia Avenue Westbound All American Way Northbound Magnolia Avenue Eastbound Start Time Left Thru App. Total Left Right App. Total Thru Right App. Total 06:00 AM 0 3 3 1 1 2 3 1 4 06:15 AM 0 6 6 2 0 2 3 2 5 06:30 AM 0 4 4 1 0 1 1 1 2 06:45 AM 1 5 6 1 1 2 5 0 5 Total 1 18 19 5 2 7 12 4 16 07:00 AM 0 11 11 1 0 1 2 1 3 07:15 AM 0 2 2 0 1 1 7 0 7 07:30 AM 0 8

	M	agnolia Ave	nue	Al	I American \	Way	Magnolia Avenue			
		Westbound	t		Northboun	d		Eastbound	k	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 A	M to 07:45 /	AM - Peak 1 d	of 1				_		
Peak Hour for Entire Ir	ntersection E	Begins at 07	:00 AM							
07:00 AM	0	11	11	1	0	1	2	1	3	15
07:15 AM	0	2	2	0	1	1	7	0	7	10
07:30 AM	0	8	8	0	1	1	4	0	4	13
07:45 AM	1	2	3	1	0	1	4	1	5	9
Total Volume	1	23	24	2	2	4	17	2	19	47
% App. Total	4.2	95.8		50	50		89.5	10.5		
PHF	.250	.523	.545	.500	.500	1.00	.607	.500	.679	.783

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Cak Hour for Lacit A	sprodon bogi	nio at.							
	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	11	11	1	0	1	2	1	3
+15 mins.	0	2	2	0	1	1	7	0	7
+30 mins.	0	8	8	0	1	1	4	0	4
+45 mins.	1	2	3	1	0	1	4	1	5
Total Volume	1	23	24	2	2	4	17	2	19
% App. Total	4.2	95.8		50	50		89.5	10.5	
PHF	.250	.523	.545	.500	.500	1.000	.607	.500	.679

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- 3 Ayle Vehicles

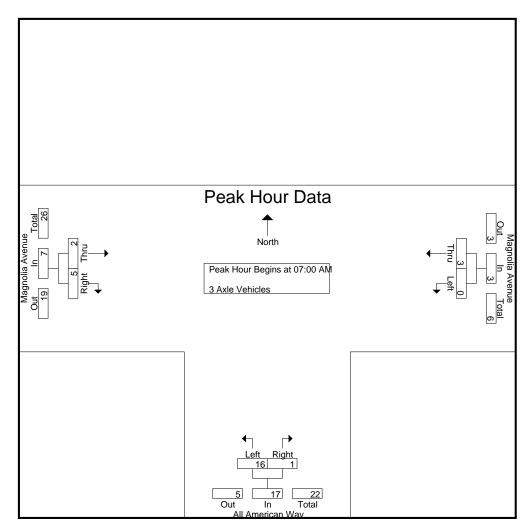
						ed- 3 Axle V					
			ıgnolia Aver		All	American \		M:	agnolia Ave		
			Westbound			Northbound	d		Eastbound		
Start Tim	e l	_eft	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 A	Λ	0	4	4	11	1	12	0	2	2	18
06:15 Al	Λ	0	8	8	8	1	9	1	3	4	21
06:30 Al	Λ	0	4	4	9	0	9	0	1	1	14
06:45 Al	Λ .	0	0	0	7	0	7	1	1	2	9_
Tota	ıl	0	16	16	35	2	37	2	7	9	62
07:00 Al	Λ	0	3	3	6	1	7	0	1	1	11
07:15 Al	Λ	0	0	0	6	0	6	1	0	1	7
07:30 Af	Λ	0	0	0	3	0	3	0	1	1	4
07:45 Al	Λ	0	0	0	1	0	1	1	3	4	5
Tota	ıl	0	3	3	16	1	17	2	5	7	27
Grand Tota	ıl	0	19	19	51	3	54	4	12	16	89
Apprch 9	6	0	100		94.4	5.6		25	75		
Total 9		0	21.3	21.3	57.3	3.4	60.7	4.5	13.5	18	

	M	agnolia Ave	nue	Al	I American	Way	Magnolia Avenue			
		Westbound	b		Northboun	d		Eastbound	t	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 A	M to 07:45 A	AM - Peak 1 d	of 1						
Peak Hour for Entire Ir	tersection I	Begins at 07	:00 AM							
07:00 AM	0	3	3	6	1	7	0	1	1	11
07:15 AM	0	0	0	6	0	6	1	0	1	7
07:30 AM	0	0	0	3	0	3	0	1	1	4
07:45 AM	0	0	0	1	0	1	1	3	4	5_
Total Volume	0	3	3	16	1	17	2	5	7	27
% App. Total	0	100		94.1	5.9		28.6	71.4		
PHF	.000	.250	.250	.667	.250	.607	.500	.417	.438	.614

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Cak Hoar for Each A	oprodon bogi	no at.							
	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	3	3	6	1	7	0	1	1
+15 mins.	0	0	0	6	0	6	1	0	1
+30 mins.	0	0	0	3	0	3	0	1	1
+45 mins.	0	0	0	1	0	1	1	3	4
Total Volume	0	3	3	16	1	17	2	5	7
% App. Total	0	100		94.1	5.9		28.6	71.4	
PHF	.000	.250	.250	.667	.250	.607	.500	.417	.438

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

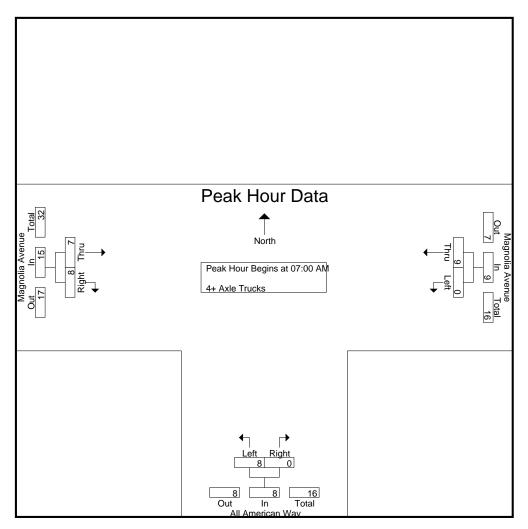
			(-	roups Print	<u>ed- 4+ Axle</u>	Trucks				
	l N	lagnolia Ave	enue	Al	I American '	Way	M	lagnolia Ave	nue	
		Westboun	d		Northboun	d		Eastbound	d l	
Start Tim	e Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:00 AM	Λ O	2	2	1	0	1	1	3	4	7
06:15 AN	<i>I</i> 0	0	0	0	0	0	3	4	7	7
06:30 AM	<i>I</i> 0	0	0	3	0	3	3	2	5	8
06:45 AN	Λ O	1	1	2	0	2	1	2	3	6_
Tota	ıl O	3	3	6	0	6	8	11	19	28
07:00 AM	<i>I</i> 0	2	2	3	0	3	3	0	3	8
07:15 AN	<i>I</i> 0	4	4	2	0	2	0	2	2	8
07:30 AM	<i>I</i> 0	2	2	0	0	0	3	5	8	10
07:45 AN	<i>I</i> 0	1	1	3	0	3	1	1	2	6
Tota	ıl 0	9	9	8	0	8	7	8	15	32
Grand Tota	ıl O	12	12	14	0	14	15	19	34	60
Apprch 9	6 0	100		100	0		44.1	55.9		
Total 9		20	20	23.3	0	23.3	25	31.7	56.7	

	Ma	agnolia Ave	nue	Al	l American	Way	Ma	agnolia Ave	nue	
		Westbound	b		Northboun	d		Eastbound		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 07:00 Al	M to 07:45 /	AM - Peak 1 o	f 1	_			_		
Peak Hour for Entire In	tersection E	Begins at 07	:00 AM							
07:00 AM	0	2	2	3	0	3	3	0	3	8
07:15 AM	0	4	4	2	0	2	0	2	2	8
07:30 AM	0	2	2	0	0	0	3	5	8	10
07:45 AM	0	11	1	3	0	3	1	1	2	6
Total Volume	0	9	9	8	0	8	7	8	15	32
% App. Total	0	100		100	0		46.7	53.3		
PHF	.000	.563	.563	.667	.000	.667	.583	.400	.469	.800

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag AM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Cak Hour for Lacif A	oprodon bogi	no at.							
	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	3	0	3	3	0	3
+15 mins.	0	4	4	2	0	2	0	2	2
+30 mins.	0	2	2	0	0	0	3	5	8
+45 mins.	0	1	1	3	0	3	1	1	2
Total Volume	0	9	9	8	0	8	7	8	15
% App. Total	0	100		100	0		46.7	53.3	
PHF	.000	.563	.563	.667	.000	.667	.583	.400	.469

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

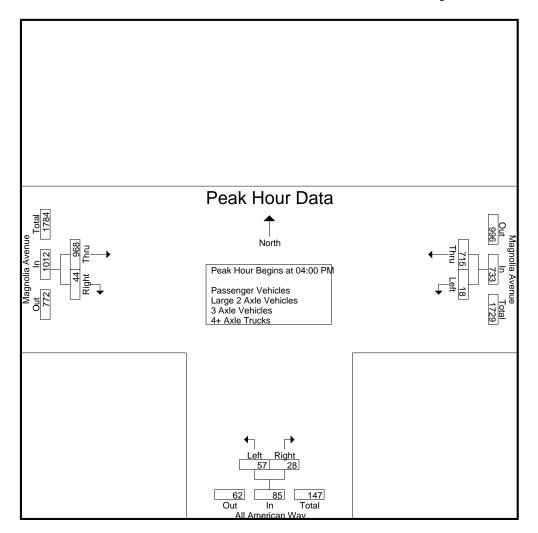
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks										
		agnolia Ave			American \			gnolia Ave		
		Westbound	k		Northbound			Eastbound	t	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	6	211	217	19	13	32	241	16	257	506
04:15 PM	1	148	149	12	4	16	234	10	244	409
04:30 PM	9	179	188	13	4	17	240	12	252	457
04:45 PM	2	177	179	13	7	20	253	6	259	458
Total	18	715	733	57	28	85	968	44	1012	1830
05:00 PM	3	169	172	18	6	24	234	6	240	436
05:15 PM	0	167	167	12	4	16	250	1	251	434
05:30 PM	2	187	189	11	8	19	258	5	263	471
05:45 PM	3	162	165	12	4	16	223	7	230	411
Total	8	685	693	53	22	75	965	19	984	1752
Grand Total	26	1400	1426	110	50	160	1933	63	1996	3582
Apprch %	1.8	98.2		68.8	31.2		96.8	3.2		
Total %	0.7	39.1	39.8	3.1	1.4	4.5	54	1.8	55.7	
Passenger Vehicles	19	1352	1371	85	48	133	1833	23	1856	3360
% Passenger Vehicles	73.1	96.6	96.1	77.3	96	83.1	94.8	36.5	93	93.8
Large 2 Axle Vehicles	4	25	29	5	2	7	34	17	51	87
% Large 2 Axle Vehicles	15.4	1.8	2	4.5	4	4.4	1.8	27	2.6	2.4
3 Axle Vehicles	3	9	12	1	0	1	43	19	62	75
% 3 Axle Vehicles	11.5	0.6	0.8	0.9	0	0.6	2.2	30.2	3.1	2.1
4+ Axle Trucks	0	14	14	19	0	19	23	4	27	60
% 4+ Axle Trucks	0	1	1	17.3	0	11.9	1.2	6.3	1.4	1.7

	Mag	gnolia Aver	nue	All	American V	Vay	Ma	agnolia Avei	nue	
	\	Westbound			Northbound	t		Eastbound		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fro	m 04:00 PM t	to 05:45 PN	/I - Peak 1 of	1	-			-		
Peak Hour for Entire Int	tersection Beg	gins at 04:0	0 PM							
04:00 PM	6	211	217	19	13	32	241	16	257	506
04:15 PM	1	148	149	12	4	16	234	10	244	409
04:30 PM	9	179	188	13	4	17	240	12	252	457
04:45 PM	2	177	179	13	7	20	253	6	259	458
Total Volume	18	715	733	57	28	85	968	44	1012	1830
% App. Total	2.5	97.5		67.1	32.9		95.7	4.3		
PHF	.500	.847	.844	.750	.538	.664	.957	.688	.977	.904

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

reak Hour for Lacif A	pproacri begi	iis at.							
	04:00 PM			04:00 PM			04:45 PM		
+0 mins.	6	211	217	19	13	32	253	6	259
+15 mins.	1	148	149	12	4	16	234	6	240
+30 mins.	9	179	188	13	4	17	250	1	251
+45 mins.	2	177	179	13	7	20	258	5	263
Total Volume	18	715	733	57	28	85	995	18	1013
% App. Total	2.5	97.5		67.1	32.9		98.2	1.8	
PHF	.500	.847	.844	.750	.538	.664	.964	.750	.963

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- Passenger Vehicles

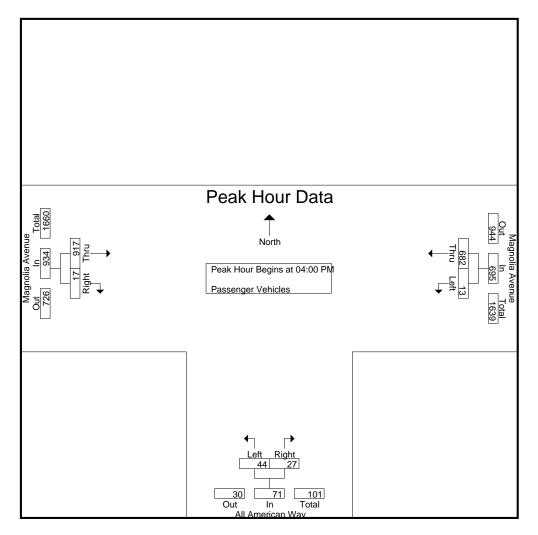
				Gro	<u>ups Printed</u>	<u>- Passenge</u> i	r Vehicles				
		Ma	agnolia Ave	enue	Al	I American \	Nay	M	agnolia Ave	nue	
			Westbound	d		Northboun	d		Eastbound		
Start T	ime	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00	РМ	4	201	205	18	13	31	229	8	237	473
04:15	PM	1	141	142	10	3	13	221	4	225	380
04:30	PM	6	170	176	10	4	14	226	2	228	418
04:45	РМ	2	170	172	6	7	13	241	3	244	429
T	otal	13	682	695	44	27	71	917	17	934	1700
05:00	PM	3	165	168	14	6	20	224	2	226	414
05:15	PM	0	166	166	7	4	11	241	0	241	418
05:30	PM	1	181	182	10	8	18	234	0	234	434
05:45	PM	2	158	160	10	3	13	217	4	221	394
Ī	otal	6	670	676	41	21	62	916	6	922	1660
Grand T	otal	19	1352	1371	85	48	133	1833	23	1856	3360
Appro	h %	1.4	98.6		63.9	36.1		98.8	1.2		
Tota	al %	0.6	40.2	40.8	2.5	1.4	4	54.6	0.7	55.2	

	M	Magnolia Avenue		Al	I American	Way	Magnolia Avenue			
		Westbound	b		Northboun	d		Eastbound	d	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 04:00 P	M to 04:45 I	PM - Peak 1 d	of 1	_			_		
Peak Hour for Entire Ir	ntersection E	Begins at 04	:00 PM							
04:00 PM	4	201	205	18	13	31	229	8	237	473
04:15 PM	1	141	142	10	3	13	221	4	225	380
04:30 PM	6	170	176	10	4	14	226	2	228	418
04:45 PM	2	170	172	6	7	13	241	3	244	429
Total Volume	13	682	695	44	27	71	917	17	934	1700
% App. Total	1.9	98.1		62	38		98.2	1.8		
PHF	.542	.848	.848	.611	.519	.573	.951	.531	.957	.899

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for E	Each Ap	proach	Begins at:

Cak Hour for Lacit A	oprodon bogn	io at.								
	04:00 PM			04:00 PM			04:00 PM			
+0 mins.	4	201	205	18	13	31	229	8	237	
+15 mins.	1	141	142	10	3	13	221	4	225	
+30 mins.	6	170	176	10	4	14	226	2	228	
+45 mins.	2	170	172	6	7	13	241	3	244	
Total Volume	13	682	695	44	27	71	917	17	934	
% App. Total	1.9	98.1		62	38		98.2	1.8		
PHF	.542	.848	.848	.611	.519	.573	.951	.531	.957	

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- Large 2 Ayle Vehicles

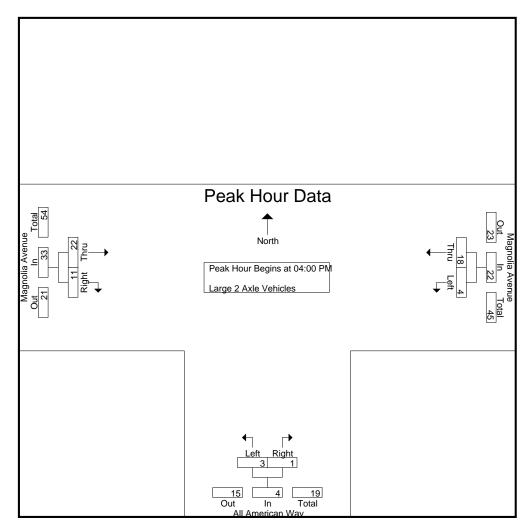
		Groups Printed- Large 2 Axie Vehicles									
	M	agnolia Ave	enue	Al	American \	Nay	M	agnolia Ave	nue		
		Westbound	d		Northbound	d		Eastbound	d l		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total	
04:00 PM	2	6	8	1	0	1	7	3	10	19	
04:15 PM	0	4	4	1	1	2	3	3	6	12	
04:30 PM	2	4	6	1	0	1	8	3	11	18	
04:45 PM	0	4	4	0	0	0	4	2	6	10_	
Total	4	18	22	3	1	4	22	11	33	59	
05:00 PM	0	1	1	0	0	0	2	2	4	5	
05:15 PM	0	1	1	0	0	0	4	0	4	5	
05:30 PM	0	3	3	1	0	1	3	2	5	9	
05:45 PM	0	2	2	1	1	2	3	2	5	9	
Total	0	7	7	2	1	3	12	6	18	28	
Grand Total	4	25	29	5	2	7	34	17	51	87	
Apprch %	13.8	86.2		71.4	28.6		66.7	33.3			
Total %	4.6	28.7	33.3	5.7	2.3	8	39.1	19.5	58.6		

	Mag	gnolia Ave	nue	All	American \	Way	Ma	nue		
	1	Nestbound	t t		Northboun	d		Eastbound	d	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 04:00 PM	to 04:45 F	PM - Peak 1 of	1	_			_		
Peak Hour for Entire In	tersection Be	egins at 04	:00 PM							
04:00 PM	2	6	8	1	0	1	7	3	10	19
04:15 PM	0	4	4	1	1	2	3	3	6	12
04:30 PM	2	4	6	1	0	1	8	3	11	18
04:45 PM	0	4	4	0	0	0	4	2	6	10
Total Volume	4	18	22	3	1	4	22	11	33	59
% App. Total	18.2	81.8		75	25		66.7	33.3		
PHF	.500	.750	.688	.750	.250	.500	.688	.917	.750	.776

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

I call float for Each /	prodon bog	nio at.								
	04:00 PM			04:00 PM			04:00 PM			
+0 mins.	2	6	8	1	0	1	7	3	10	
+15 mins.	0	4	4	1	1	2	3	3	6	
+30 mins.	2	4	6	1	0	1	8	3	11	
+45 mins.	0	4	4	0	0	0	4	2	6	
Total Volume	4	18	22	3	1	4	22	11	33	
% App. Total	18.2	81.8		75	25		66.7	33.3		
PHF	.500	.750	.688	.750	.250	.500	.688	.917	.750	

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- 3 Ayle Vehicles

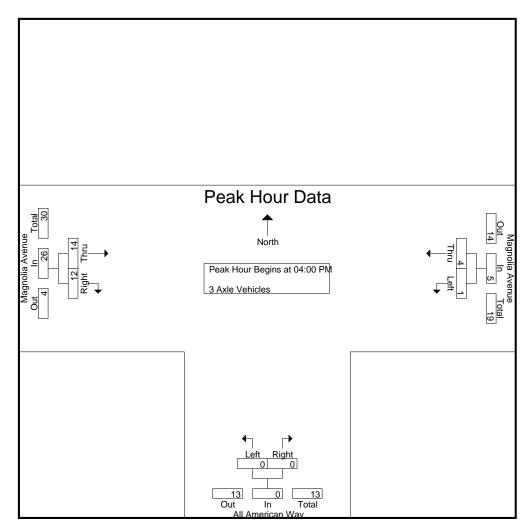
		11 6		roups Printe						
	Ma	agnolia Ave		All	American V		M	agnolia Ave		
		Westbound	t		Northbound	b		Eastbound		
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	0	0	0	3	5	8	10
04:15 PM	0	0	0	0	0	0	3	2	5	5
04:30 PM	1	1	2	0	0	0	4	5	9	11
04:45 PM	0	1	1	0	0	0	4	0	4	5_
Total	1	4	5	0	0	0	14	12	26	31
05:00 PM	0	3	3	1	0	1	8	2	10	14
05:15 PM	0	0	0	0	0	0	2	1	3	3
05:30 PM	1	1	2	0	0	0	16	3	19	21
05:45 PM	1	1	2	0	0	0	3	1	4	6
Total	2	5	7	1	0	1	29	7	36	44
Grand Total	3	9	12	1	0	1	43	19	62	75
Apprch %	25	75		100	0		69.4	30.6		
Total %	4	12	16	1.3	0	1.3	57.3	25.3	82.7	

	M	agnolia Ave	nue	Al	I American	Way	Magnolia Avenue			
		Westbound	t		Northboun	ıd		Eastbound	d	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 04:00 P	M to 04:45 F	PM - Peak 1 d	of 1	_			_		
Peak Hour for Entire Ir	tersection I	Begins at 04	:00 PM							
04:00 PM	0	2	2	0	0	0	3	5	8	10
04:15 PM	0	0	0	0	0	0	3	2	5	5
04:30 PM	1	1	2	0	0	0	4	5	9	11
04:45 PM	0	1	1	0	0	0	4	0	4	5_
Total Volume	1	4	5	0	0	0	14	12	26	31
% App. Total	20	80		0	0		53.8	46.2		
PHF	.250	.500	.625	.000	.000	.000	.875	.600	.722	.705

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

Cak Hour for Lacit A	sprodon begi	io at.							
	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	2	2	0	0	0	3	5	8
+15 mins.	0	0	0	0	0	0	3	2	5
+30 mins.	1	1	2	0	0	0	4	5	9
+45 mins.	0	1	1	0	0	0	4	0	4
Total Volume	1	4	5	0	0	0	14	12	26
% App. Total	20	80		0	0		53.8	46.2	
PHF	.250	.500	.625	.000	.000	.000	.875	.600	.722

Counts Unlimited PO Box 1178 Corona, CA 92878 (951) 268-6268

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 1

Groups Printed- 1+ Ayla Trucks

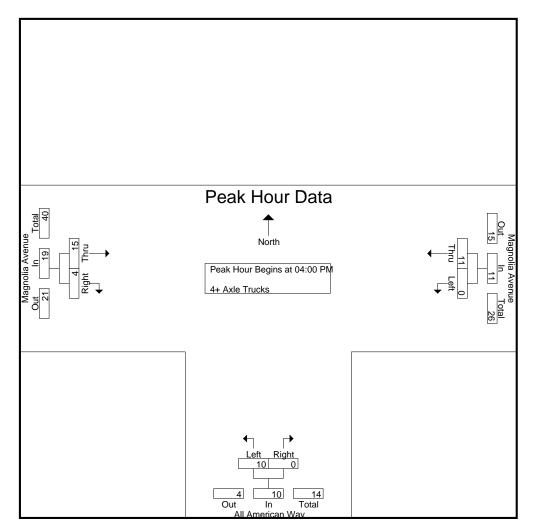
			G	roups Print	<u>ed- 4+ Axle</u>	Trucks				
	Ma	agnolia Ave	enue	All	American \	Nay	M	agnolia Ave	nue	
		Westbound	d		Northbound	d		Eastbound	d l	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	0	0	0	2	0	2	4
04:15 PM	0	3	3	1	0	1	7	1	8	12
04:30 PM	0	4	4	2	0	2	2	2	4	10
04:45 PM	0	2	2	7	0	7	4	1	5	14_
Total	0	11	11	10	0	10	15	4	19	40
05:00 PM	0	0	0	3	0	3	0	0	0	3
05:15 PM	0	0	0	5	0	5	3	0	3	8
05:30 PM	0	2	2	0	0	0	5	0	5	7
05:45 PM	0	1	1	1	0	1	0	0	0	2
Total	0	3	3	9	0	9	8	0	8	20
Grand Total	0	14	14	19	0	19	23	4	27	60
Apprch %	0	100		100	0		85.2	14.8		
Total %	0	23.3	23.3	31.7	0	31.7	38.3	6.7	45	

	М	agnolia Ave	nue	Al	I American	Way	Ma	agnolia Ave	nue	
		Westbound	b		Northboun	d		Eastbound	d	
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis Fr	om 04:00 P	M to 04:45	PM - Peak 1 d	of 1						
Peak Hour for Entire Ir	ntersection I	Begins at 04	:00 PM							
04:00 PM	0	2	2	0	0	0	2	0	2	4
04:15 PM	0	3	3	1	0	1	7	1	8	12
04:30 PM	0	4	4	2	0	2	2	2	4	10
04:45 PM	0	2	2	7	0	7	4	1	5	14_
Total Volume	0	11	11	10	0	10	15	4	19	40
% App. Total	0	100		100	0		78.9	21.1		
PHF	.000	.688	.688	.357	.000	.357	.536	.500	.594	.714

City of Corona N/S: All American Way E/W: Magnolia Avenue Weather: Clear

File Name: 102_COR_All Amer_Mag PM Site Code: 05617610

Start Date : 10/5/2017 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:

reak Hour for Lacif A	pproacri beg	iiio al.							
	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	2	2	0	0	0	2	0	2
+15 mins.	0	3	3	1	0	1	7	1	8
+30 mins.	0	4	4	2	0	2	2	2	4
+45 mins.	0	2	2	7	0	7	4	1	5
Total Volume	0	11	11	10	0	10	15	4	19
% App. Total	0	100		100	0		78.9	21.1	
PHF	.000	.688	.688	.357	.000	.357	.536	.500	.594

APPENDIX A-II

ROADWAY SEGMENT COUNTS

CORMAWAA Site Code: 057-17745

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of Corona Magnolia Avenue W/ All American Way 24 Hour Directional Classification Count

Eastbound

Eastbound														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	5	47	31	1	10	2	0	2	1	0	1	0	0	100
01:00	1	29	14	3	5	0	0	1	1	0	1	0	0	55
02:00	1	28	13	9	9	2	0	2	0	0	1	0	0	65
03:00	3	39	24	5	15	4	0	1	2	0	1	0	0	94
04:00	6	96	59	5	39	6	1	7	2	0	3	0	0	224
05:00	7	154	70	8	44	5	1	13	4	0	6	1	0	313
06:00	11	161	96	15	53	6	1	11	8	0	5	0	0	367
07:00	13	235	169	12	68	11	5	35	7	1	8	0	0	564
08:00	12	262	185	24	67	11	2	47	10	6	12	0	0	638
09:00	21	225	137	34	54	11	0	37	6	2	12	0	0	539
10:00	16	193	115	33	72	12	1	24	7	3	15	2	0	493
11:00	11	250	132	39	79	3	1	27	12	0	10	0	1	565
12 PM	12	238	153	29	75	6	2	32	12	4	13	1	0	577
13:00	11	271	142	40	76	11	4	45	7	7	13	0	0	627
14:00	19	266	181	35	68	14	1	56	5	4	9	1	1	660
15:00	10	419	203	32	103	12	4	78	4	16	6	0	1	888
16:00	16	412	213	24	101	15	2	84	3	8	3	2	0	883
17:00	11	438	252	9	80	18	6	73	4	5	3	1	0	900
18:00	2	274	180	10	48	14	1	35	3	1	3	0	0	571
19:00	1	205	192	5	26	5	0	10	2	1	4	0	0	451
20:00	4	166	115	8	21	3	1	14	1	0	7	0	0	340
21:00	3	137	79	8	15	2	0	8	2	0	4	2	0	260
22:00	3	96	44	2	9	1	0	2	0	0	6	0	0	163
23:00	2	75	29	2	12	2	0	2	2	0	6	0	0	132
Total	201	4716	2828	392	1149	176	33	646	105	58	152	10	3	10469
Percent	1.9%	45.0%	27.0%	3.7%	11.0%	1.7%	0.3%	6.2%	1.0%	0.6%	1.5%	0.1%	0.0%	
AM Peak	09:00	08:00	08:00	11:00	11:00	10:00	07:00	08:00	11:00	08:00	10:00	10:00	11:00	08:00
Vol.	21	262	185	39	79	12	5_	47	12	6	15	2	1_	638
PM Peak	14:00	17:00	17:00	13:00	15:00	17:00	17:00	16:00	12:00	15:00	12:00	16:00	14:00	17:00
Vol.	19	438	252	40	103	18	6	84	12	16	13	2	1	900
0 '														
Grand	201	4716	2828	392	1149	176	33	646	105	58	152	10	3	10469
Total														
Percent	1.9%	45.0%	27.0%	3.7%	11.0%	1.7%	0.3%	6.2%	1.0%	0.6%	1.5%	0.1%	0.0%	

CORMAWAA Site Code: 057-17745

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of Corona Magnolia Avenue W/ All American Way 24 Hour Directional Classification Count

Westbound

Westbound														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	2	48	11	1	0	2	0	0	1	0	0	0	0	65
01:00	1	28	7	0	5	2	0	2	0	0	1	0	0	46
02:00	1	27	5	2	2	1	0	2	2	0	1	0	0	43
03:00	0	43	10	2	4	5	0	4	7	0	3	0	0	78
04:00	7	97	37	2	26	9	0	14	9	0	9	0	0	210
05:00	7	266	87	16	37	25	0	22	7	0	26	0	1	494
06:00	13	329	84	22	23	39	1	23	14	3	6	0	0	557
07:00	26	421	114	21	29	19	3	21	11	0	14	2	0	681
08:00	29	535	120	19	31	14	2	20	8	3	11	0	2	794
09:00	12	289	109	12	27	15	4	25	14	0	14	0	0	521
10:00	16	299	69	12	28	8	2	25	9	1	16	0	0	485
11:00	5	315	95	14	33	9	0	29	11	1	19	0	0	531
12 PM	16	367	73	14	21	3	0	19	16	0	6	0	1	536
13:00	10	411	94	18	28	9	0	10	10	0	3	1	1	595
14:00	24	522	130	9	41	15	2	12	6	2	2	0	0	765
15:00	18	486	126	5	30	12	1	11	0	1	1	0	0	691
16:00	17	547	118	7	34	6	0	14	2	0	5	0	0	750
17:00	20	537	100	5	20	10	2	12	2	0	7	1	1	717
18:00	8	363	56	3	19	3	1	13	0	1	1	0	0	468
19:00	8	250	48	4	8	3	0	5	1	0	6	0	0	333
20:00	6	181	27	2	7	1	0	4	1	0	10	0	0	239
21:00	5	144	27	7	1	4	0	6	2	0	4	0	0	200
22:00	3	120	24	1	6	2	0	2	1	0	6	0	0	165
23:00	3	68	15	2	2	2	0	1_	1	0	7	0	0	101
Total	257	6693	1586	200	462	218	18	296	135	12	178	4	6	10065
Percent	2.6%	66.5%	15.8%	2.0%	4.6%	2.2%	0.2%	2.9%	1.3%	0.1%	1.8%	0.0%	0.1%	
AM Peak	08:00	08:00	08:00	06:00	05:00	06:00	09:00	11:00	06:00	06:00	05:00	07:00	08:00	08:00
Vol.	29	535	120	22	37	39	4	29	14	3	26	2	2	794
PM Peak	14:00	16:00	14:00	13:00	14:00	14:00	14:00	12:00	12:00	14:00	20:00	13:00	12:00	14:00
Vol.	24	547	130	18	41	15	2	19	16	2	10	1	1	765
0.00.0														
Grand	257	6693	1586	200	462	218	18	296	135	12	178	4	6	10065
Total	2 60/	66 E0/	1E 00/		4 60/		0.20/		1 20/		1 00/	0.00/	0.40/	
Percent	2.6%	66.5%	15.8%	2.0%	4.6%	2.2%	0.2%	2.9%	1.3%	0.1%	1.8%	0.0%	0.1%	

CORMAWAA Site Code: 057-17745

Counts Unlimited, Inc.

PO Box 1178 Corona, CA 92878 Phone: (951) 268-6268 email: counts@countsunlimited.com

City of Corona Magnolia Avenue W/ All American Way 24 Hour Directional Classification Count

Eastbound, Westbound

Eastbound, \	Westbound	d												
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	7	95	42	2	10	4	0	2	2	0	1	0	0	165
01:00	2	57	21	3	10	2	0	3	1	0	2	0	0	101
02:00	2	55	18	11	11	3	0	4	2	0	2	0	0	108
03:00	3	82	34	7	19	9	0	5	9	0	4	0	0	172
04:00	13	193	96	7	65	15	1	21	11	0	12	0	0	434
05:00	14	420	157	24	81	30	1	35	11	0	32	1	1	807
06:00	24	490	180	37	76	45	2	34	22	3	11	0	0	924
07:00	39	656	283	33	97	30	8	56	18	1	22	2	0	1245
08:00	41	797	305	43	98	25	4	67	18	9	23	0	2	1432
09:00	33	514	246	46	81	26	4	62	20	2	26	0	0	1060
10:00	32	492	184	45	100	20	3	49	16	4	31	2	0	978
11:00	16	565	227	53	112	12	1	56	23	1	29	0	1	1096
12 PM	28	605	226	43	96	9	2	51	28	4	19	1	1	1113
13:00	21	682	236	58	104	20	4	55	17	7	16	1	1	1222
14:00	43	788	311	44	109	29	3	68	11	6	11	1	1	1425
15:00	28	905	329	37	133	24	5	89	4	17	7	0	1	1579
16:00	33	959	331	31	135	21	2	98	5	8	8	2	0	1633
17:00	31	975	352	14	100	28	8	85	6	5	10	2	1	1617
18:00	10	637	236	13	67	17	2	48	3	2	4	0	0	1039
19:00	9	455	240	9	34	8	0	15	3	1	10	0	0	784
20:00	10	347	142	10	28	4	1	18	2	0	17	0	0	579
21:00	8	281	106	15	16	6	0	14	4	0	8	2	0	460
22:00	6	216	68	3	15	3	0	4	1	0	12	0	0	328
23:00	5	143	44	4	14	4	0	3	3	0	13	0	0	233
Total	458	11409	4414	592	1611	394	51	942	240	70	330	14	9	20534
Percent	2.2%	55.6%	21.5%	2.9%	7.8%	1.9%	0.2%	4.6%	1.2%	0.3%	1.6%	0.1%	0.0%	
AM Peak	08:00	08:00	08:00	11:00	11:00	06:00	07:00	08:00	11:00	08:00	05:00	07:00	08:00	08:00
Vol.	41	797	305	53	112	45	8	67	23	9	32	2	2	1432
PM Peak	14:00	17:00	17:00	13:00	16:00	14:00	17:00	16:00	12:00	15:00	12:00	16:00	12:00	16:00
Vol.	43	975	352	58	135	29	8	98	28	17	19	2	1	1633
0														
Grand	458	11409	4414	592	1611	394	51	942	240	70	330	14	9	20534
Total	2.2%	EE 60/	21.5%	2.9%	7.8%	1.9%	0.2%	4.6%	1.2%	0.3%	1.6%	0.1%	0.00/	
Percent	2.2%	55.6%	21.5%	2.9%	7.0%	1.9%	0.2%	4.0%	1.2%	0.3%	1.0%	U. 1%	0.0%	

CORMAEAA Site Code: 057-17745

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City of Corona Magnolia Avenue E/ All American Way 24 Hour Directional Classification Count

Eastbound

Eastbound														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	0	39	15	0	1	0	0	1	1	0	0	0	0	57
01:00	10	38	8	0	0	2	0	0	0	0	0	0	0	58
02:00	3	26	7	0	1	2	0	1	0	0	0	0	0	40
03:00	0	32	7	0	4	0	0	1	1	0	0	0	0	45
04:00	1	80	26	1	17	1	0	0	1	1	0	0	0	128
05:00	8	176	49	1	22	3	2	2	1	0	0	0	0	264
06:00	16	204	69	3	28	8	0	3	5	0	0	0	0	336
07:00	9	316	114	4	37	4	1	15	3	0	0	0	0	503
08:00	8	423	148	8	54	3	0	16	5	1	1	0	0	667
09:00	12	347	109	8	34	6	0	9	2	1	0	0	0	528
10:00	11	278	82	10	38	7	0	9	4	0	0	0	0	439
11:00	17	340	104	13	52	9	0	17	4	0	0	0	0	556
12 PM	16	349	117	10	46	4	1	10	6	2	0	0	0	561
13:00	9	383	121	11	41	8	0	21	4	3	0	0	0	601
14:00	10	422	141	7	67	7	1	13	8	1	2	1	0	680
15:00	15	683	189	6	82	10	0	20	2	2	1	1	0	1011
16:00	18	680	186	6	75	12	2	24	4	2	1	0	0	1010
17:00	9	719	191	2	58	15	1	17	3	1	1	1	2	1020
18:00	6	435	113	1	32	14	0	13	1	0	0	0	0	615
19:00	5	344	106	3	13	6	0	1	1	1	0	0	0	480
20:00	6	246	65	1	8	3	0	2	0	0	0	0	0	331
21:00	2	198	41	0	7	0	0	2	0	0	0	0	0	250
22:00	2	136	20	0	4	1	0	0	0	0	0	0	0	163
23:00	0	97	20	11	6	0	0	11	2	0	0	0	0	127
Total	193	6991	2048	96	727	125	8	198	58	15	6	3	2	10470
Percent	1.8%	66.8%	19.6%	0.9%	6.9%	1.2%	0.1%	1.9%	0.6%	0.1%	0.1%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	11:00	08:00	11:00	05:00	11:00	06:00	04:00	08:00			08:00
Vol.	17	423	148	13	54	9	2	17	5	1	1			667
PM Peak	16:00	17:00	17:00	13:00	15:00	17:00	16:00	16:00	14:00	13:00	14:00	14:00	17:00	17:00
Vol.	18	719	191	11	82	15	2	24	8	3	2	1	2	1020
Grand Total	193	6991	2048	96	727	125	8	198	58	15	6	3	2	10470
Percent	1.8%	66.8%	19.6%	0.9%	6.9%	1.2%	0.1%	1.9%	0.6%	0.1%	0.1%	0.0%	0.0%	

CORMAEAA Site Code: 057-17745

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City of Corona Magnolia Avenue E/ All American Way 24 Hour Directional Classification Count

Westbound

Westbound														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	0	46	10	0	0	0	0	0	1	0	0	0	0	57
01:00	5	29	6	0	3	2	0	0	0	0	0	0	0	45
02:00	2	25	3	0	1	1	0	0	0	0	0	0	0	32
03:00	1	47	14	0	2	2	0	0	4	0	0	0	0	70
04:00	2	116	28	1	10	1	0	3	3	0	0	0	0	164
05:00	1	268	76	2	23	14	0	5	4	1	0	0	0	394
06:00	13	354	76	4	22	30	0	6	1	1	1	0	0	508
07:00	15	453	98	8	21	15	1	7	5	0	0	0	0	623
08:00	27	608	119	12	21	14	0	4	7	3	1	0	0	816
09:00	4	321	99	3	22	6	1	7	6	1	3	0	0	473
10:00	15	303	68	8	18	11	0	6	2	1	0	0	0	432
11:00	15	311	81	11	22	14	0	10	3	0	1	1	0	469
12 PM	5	362	60	11	14	6	0	6	10	0	2	1	1	478
13:00	7	397	77	14	20	10	0	10	7	0	2	1	2	547
14:00	7	512	104	4	28	7	0	11	8	0	2	0	0	683
15:00	6	514	96	4	27	3	0	13	5	2	0	0	1	671
16:00	10	546	96	8	29	4	0	4	2	0	0	0	0	699
17:00	14	540	107	2	13	5	1	14	2	1	0	0	1	700
18:00	3	356	55	1	19	0	0	7	0	0	0	1	0	442
19:00	2	258	39	0	6	0	0	1	1	0	0	0	0	307
20:00	2	186	26	1	1	1	0	1	0	0	0	0	1	219
21:00	4	145	19	0	2	0	0	2	0	0	0	1	0	173
22:00	0	109	17	0	1	0	0	0	2	0	0	0	0	129
23:00	1_	70	13	0	4	0	0	0	1_	0	0	0	0	89
Total	161	6876	1387	94	329	146	3	117	74	10	12	5	6	9220
Percent	1.7%	74.6%	15.0%	1.0%	3.6%	1.6%	0.0%	1.3%	0.8%	0.1%	0.1%	0.1%	0.1%	
AM Peak	08:00	08:00	08:00	08:00	05:00	06:00	07:00	11:00	08:00	08:00	09:00	11:00		08:00
Vol.	27	608	119	12	23	30	1 1	10	7	3	3	1 10 00	10.00	816
PM Peak	17:00	16:00	17:00	13:00	16:00	13:00	17:00	17:00	12:00	15:00	12:00	12:00	13:00	17:00
Vol.	14	546	107	14	29	10	1	14	10	2	2	1	2	700
Crond														
Grand Total	161	6876	1387	94	329	146	3	117	74	10	12	5	6	9220
Percent	1.7%	74.6%	15.0%	1.0%	3.6%	1.6%	0.0%	1.3%	0.8%	0.1%	0.1%	0.1%	0.1%	
L CICCIII	1.7 /0	14.0/0	13.070	1.0/0	3.070	1.0/0	0.070	1.0/0	0.070	U. I /0	U. I /0	U. I /0	U. I /0	

CORMAEAA

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City of Corona Magnolia Avenue E/ All American Way 24 Hour Directional Classification Count

Eastbound, Westbound

Eastbound, \	<u>Westboun</u>	d												
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 AxI	5 Axle	>6 Axl	<6 AxI	6 Axle	>6 AxI	
Time	Bikes	Trailers	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total
11/01/17	0	85	25	0	1	0	0	1	2	0	0	0	0	114
01:00	15	67	14	0	3	4	0	0	0	0	0	0	0	103
02:00	5	51	10	0	2	3	0	1	0	0	0	0	0	72
03:00	1	79	21	0	6	2	0	1	5	0	0	0	0	115
04:00	3	196	54	2	27	2	0	3	4	1	0	0	0	292
05:00	9	444	125	3	45	17	2	7	5	1	0	0	0	658
06:00	29	558	145	7	50	38	0	9	6	1	1	0	0	844
07:00	24	769	212	12	58	19	2	22	8	0	0	0	0	1126
08:00	35	1031	267	20	75	17	0	20	12	4	2	0	0	1483
09:00	16	668	208	11	56	12	1	16	8	2	3	0	0	1001
10:00	26	581	150	18	56	18	0	15	6	1	0	0	0	871
11:00	32	651	185	24	74	23	0	27	7	0	1	1	0	1025
12 PM	21	711	177	21	60	10	1	16	16	2	2	1	1	1039
13:00	16	780	198	25	61	18	0	31	11	3	2	1	2	1148
14:00	17	934	245	11	95	14	1	24	16	1	4	1	0	1363
15:00	21	1197	285	10	109	13	0	33	7	4	1	1	1	1682
16:00	28	1226	282	14	104	16	2	28	6	2	1	0	0	1709
17:00	23	1259	298	4	71	20	2	31	5	2	1	1	3	1720
18:00	9	791	168	2	51	14	0	20	1	0	0	1	0	1057
19:00	7	602	145	3	19	6	0	2	2	1	0	0	0	787
20:00	8	432	91	2	9	4	0	3	0	0	0	0	1	550
21:00	6	343	60	0	9	0	0	4	0	0	0	1	0	423
22:00	2	245	37	0	5	1	0	0	2	0	0	0	0	292
23:00	1	167	33	1	10	0	0	1	3	0	0	0	0	216
Total	354	13867	3435	190	1056	271	11	315	132	25	18	8	8	19690
Percent	1.8%	70.4%	17.4%	1.0%	5.4%	1.4%	0.1%	1.6%	0.7%	0.1%	0.1%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	11:00	08:00	06:00	05:00	11:00	08:00	08:00	09:00	11:00		08:00
Vol.	35	1031	267	24	75	38	2	27	12	4	3	11		1483
PM Peak	16:00	17:00	17:00	13:00	15:00	17:00	16:00	15:00	12:00	15:00	14:00	12:00	17:00	17:00
Vol.	28	1259	298	25	109	20	2	33	16	4	4	1	3	1720
Grand Total	354	13867	3435	190	1056	271	11	315	132	25	18	8	8	19690
Percent	1.8%	70.4%	17.4%	1.0%	5.4%	1.4%	0.1%	1.6%	0.7%	0.1%	0.1%	0.0%	0.0%	

APPENDIX B

EXISTING & 2040 TRAFFIC CONDITIONS
INTERSECTION LEVEL OF SERVICE
CALCULATION WORKSHEETS

APPENDIX B-I

EXISTING TRAFFIC CONDITIONS

Version 5.00-04 Scenario 1: 1 AM Ex

Intersection Level Of Service Report Intersection 1: All American Way at Magnolia Avenue

Control Type:SignalizedDelay (sec / veh):5.4Analysis Method:HCM 6th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.335

Intersection Setup

Name	All Ameri	ican Way	Magnolia	a Avenue	Magnolia	a Avenue
Approach	North	bound	Eastb	oound	West	bound
Lane Configuration	7	→	11	H	7	11
Turning Movement	Left Right		Thru	Right	Left	Thru
Lane Width [ft]	12.00 12.00		12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30	.00	30.	.00	30	.00
Grade [%]	0.00		0.00		0.	00
Curb Present	N	lo	N	lo	N	lo
Crosswalk	Yes		N	lo	Y	es

Volumes

Name	All Ame	rican Way	Magnoli	a Avenue	Magnoli	a Avenue
Base Volume Input [veh/h]	70	10	726	73	17	741
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	70	10	726	73	17	741
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	3	191	19	4	195
Total Analysis Volume [veh/h]	74	11	764	77	18	780
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0		0		0
v_di, Inbound Pedestrian Volume crossing m	ı	0		0		0
v_co, Outbound Pedestrian Volume crossing		0		0		0
v_ci, Inbound Pedestrian Volume crossing mi	i	0		0		0
v_ab, Corner Pedestrian Volume [ped/h]	0			0		0
Bicycle Volume [bicycles/h]	•	0		0		0

Intersection Settings		
Located in CBD	No	
Signal Coordination Group	-	
Cycle Length [s]	90	
Coordination Type	Time of Day Pattern Coordinated	
Actuation Type	Fully actuated	
Offset [s]	0.0	
Offset Reference	LeadGreen	
Permissive Mode	SingleBand	
Lost time [s]	12.00	

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	29	0	50	0	11	61
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	0
Pedestrian Clearance [s]	18	0	7	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Version 5.00-04 Scenario 1: 1 AM Ex

Lane Group Calculations

Lane Group	С	С	С	L	С
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	69	69	3	76
g / C, Green / Cycle	0.07	0.77	0.77	0.03	0.84
(v / s)_i Volume / Saturation Flow Rate	0.05	0.22	0.23	0.01	0.22
s, saturation flow rate [veh/h]	1754	1870	1811	1781	3560
c, Capacity [veh/h]	122	1436	1391	52	2996
d1, Uniform Delay [s]	40.96	3.13	3.16	42.85	1.45
k, delay calibration	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.97	0.52	0.56	3.84	0.21
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

V 1 1 11	0 =0	0.00	2.22	2.24	
X, volume / capacity	0.70	0.29	0.30	0.34	0.26
d, Delay for Lane Group [s/veh]	47.94	3.65	3.72	46.68	1.66
Lane Group LOS	D	Α	Α	D	Α
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.06	1.78	1.80	0.44	0.62
50th-Percentile Queue Length [ft/In]	51.46	44.44	45.05	11.12	15.48
95th-Percentile Queue Length [veh/ln]	3.70	3.20	3.24	0.80	1.11
95th-Percentile Queue Length [ft/In]	92.62	79.99	81.09	20.02	27.87

Version 5.00-04 Scenario 1: 1 AM Ex

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	47.94	47.94	3.68	3.72	46.68	1.66	
Movement LOS	D	D	A	Α	D	A	
d_A, Approach Delay [s/veh]	47	47.94 3.69 2.67		67			
Approach LOS	[)	A	4	Α		
d_I, Intersection Delay [s/veh]			5.	40			
Intersection LOS	A						
Intersection V/C			0.3	335			

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	n 1.802	0.000	2.606
Crosswalk LOS	Α	F	В
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h) 0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.273	4.826	4.791
Bicycle LOS	Е	Е	E

Sequence

-		_		_												
Ring 1	-	-	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	2 5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	_	_	-	-	-	-	-	-	-	-	-	-	_	_	-



Intersection Level Of Service Report

Intersection 1: All American Way at Magnolia Avenue

Control Type: Signalized Delay (sec / veh): 6.7 Analysis Method: HCM 6th Edition Level Of Service: Α Analysis Period: 0.454 15 minutes Volume to Capacity (v/c):

Intersection Setup

Name	All Ameri	ican Way	Magnolia Avenue		Magnolia	a Avenue	
Approach	Northi	bound	Eastb	oound	Westbound		
Lane Configuration	T		Ψ		H	7	11
Turning Movement	Left	Right	Thru	Right	Left	Thru	
Lane Width [ft]	12.00 12.00		12.00	12.00	12.00	12.00	
No. of Lanes in Pocket	0	0	0	0	0	0	
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
Speed [mph]	30	.00	30.	.00	30	.00	
Grade [%]	0.0	00	0.00		0.00		
Curb Present	No		No		No		
Crosswalk	Ye	es	N	lo	Yes		

Volumes

Name	All Ame	rican Way	Magnoli	a Avenue	Magnolia Avenue	
Base Volume Input [veh/h]	79	29	1023	70	21	750
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	29	1023	70	21	750
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	8	269	18	6	197
Total Analysis Volume [veh/h]	83	31	1077	74	22	789
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0		0		0
v_di, Inbound Pedestrian Volume crossing m	ı	0		0		0
v_co, Outbound Pedestrian Volume crossing		0		0		0
v_ci, Inbound Pedestrian Volume crossing m	i	0		0		0
v_ab, Corner Pedestrian Volume [ped/h]		0		0		0
Bicycle Volume [bicycles/h]	•	0		0		0

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	_	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	61	0	18	0	11	29
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	0
Pedestrian Clearance [s]	18	0	7	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	С	С	С	L	С
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	67	67	3	74
g / C, Green / Cycle	0.09	0.75	0.75	0.03	0.83
(v / s)_i Volume / Saturation Flow Rate	0.07	0.31	0.31	0.01	0.22
s, saturation flow rate [veh/h]	1724	1870	1828	1781	3560
c, Capacity [veh/h]	148	1397	1366	61	2940
d1, Uniform Delay [s]	40.32	4.16	4.20	42.53	1.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.30	0.90	0.96	3.58	0.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.41	0.42	0.36	0.27
d, Delay for Lane Group [s/veh]	48.61	5.06	5.16	46.11	1.98
Lane Group LOS	D	Α	А	D	Α
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.78	3.19	3.23	0.53	0.84
50th-Percentile Queue Length [ft/ln]	69.51	79.74	80.81	13.36	20.88
95th-Percentile Queue Length [veh/ln]	5.01	5.74	5.82	0.96	1.50
95th-Percentile Queue Length [ft/ln]	125.13	143.54	145.45	24.06	37.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.61	48.61	5.11	5.16	46.11	1.98	
Movement LOS	D D		Α	A A		А	
d_A, Approach Delay [s/veh]	48	.61	5.11		3.18		
Approach LOS	1)	A		A	4	
d_I, Intersection Delay [s/veh]			6.	75			
Intersection LOS	A						
Intersection V/C	0.454						

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.67	0.00	34.67
I_p,int, Pedestrian LOS Score for Intersection	n 1.817	0.000	2.674
Crosswalk LOS	А	F	В
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h) 0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.321	5.082	4.801
Bicycle LOS	E	F	E

Sequence

-		_		_												
Ring 1	-	-	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	2 5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	_	_	-	-	-	-	-	-	-	-	-	-	_	_	-



APPENDIX B-II

YEAR 2040 TRAFFIC CONDITIONS

Intersection Level Of Service Report Intersection 1: All American Way at Magnolia Avenue

Control Type:SignalizedDelay (sec / veh):5.5Analysis Method:HCM 6th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.391

Intersection Setup

Name	All Ameri	ican Way	Magnolia Avenue		Magnolia Avenue	
Approach	North	bound	Eastb	oound	Westbound	
Lane Configuration	₩.		11-		пĦ	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00 12.00		12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30	.00	30.00		30.00	
Grade [%]	0.0	00	0.00		0.00	
Curb Present	No		No		N	lo
Crosswalk	Ye	es	No		Yes	

Volumes

Name	All American Way		Magnoli	a Avenue	Magnoli	Magnolia Avenue	
Base Volume Input [veh/h]	70	10	930	73	17	985	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	
In-Process Volume [veh/h]	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	0	0	0	0	
Diverted Trips [veh/h]	0	0	0	0	0	0	
Pass-by Trips [veh/h]	0	0	0	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	70	10	930	73	17	985	
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	18	3	245	19	4	259	
Total Analysis Volume [veh/h]	74	11	979	77	18	1037	
Presence of On-Street Parking	No	No	No	No	No	No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing		0		0		0	
v_di, Inbound Pedestrian Volume crossing m		0		0		0	
v_co, Outbound Pedestrian Volume crossing	9 0			0		0	
v_ci, Inbound Pedestrian Volume crossing mi		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]		0		0	0		
Bicycle Volume [bicycles/h]		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	81	0	18	0	11	29
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	0
Pedestrian Clearance [s]	18	0	7	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	С	С	С	L	С
C, Cycle Length [s]	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	88	88	3	95
g / C, Green / Cycle	0.06	0.80	0.80	0.03	0.86
(v / s)_i Volume / Saturation Flow Rate	0.05	0.28	0.29	0.01	0.29
s, saturation flow rate [veh/h]	1754	1870	1823	1781	3560
c, Capacity [veh/h]	110	1497	1460	49	3078
d1, Uniform Delay [s]	50.75	3.05	3.08	52.55	1.43
k, delay calibration	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.74	0.65	0.70	4.59	0.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.35	0.36	0.37	0.34
d, Delay for Lane Group [s/veh]	61.49	3.70	3.77	57.14	1.72
Lane Group LOS	E	Α	А	E	А
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	2.63	2.62	2.66	0.55	1.05
50th-Percentile Queue Length [ft/In]	65.73	65.59	66.46	13.76	26.14
95th-Percentile Queue Length [veh/ln]	4.73	4.72	4.79	0.99	1.88
95th-Percentile Queue Length [ft/ln]	118.32	118.06	119.63	24.76	47.05

Version 5.00-04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	61.49	61.49	3.73	3.77	57.14	1.72	
Movement LOS	E	E	Α	Α	E	A	
d_A, Approach Delay [s/veh]	61.49		3.	74	2.	67	
Approach LOS	E	E		Α		Α	
d_I, Intersection Delay [s/veh]			5.	46			
Intersection LOS		A					
Intersection V/C		0.391					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.55	0.00	44.55
I_p,int, Pedestrian LOS Score for Intersection	n 1.812	0.000	2.708
Crosswalk LOS	А	F	В
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h) 0	0	0
d_b, Bicycle Delay [s]	55.00	55.00	55.00
I_b,int, Bicycle LOS Score for Intersection	4.273	5.004	5.003
Bicycle LOS	E	F	F

Sequence

-		_		_												
Ring 1	-	-	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	2 5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	_	_	-	-	-	-	-	-	-	-	-	-	_	_	-



Intersection Level Of Service Report

Intersection 1: All American Way at Magnolia Avenue

Control Type:SignalizedDelay (sec / veh):7.0Analysis Method:HCM 6th EditionLevel Of Service:AAnalysis Period:15 minutesVolume to Capacity (v/c):0.507

Intersection Setup

Name	All American Way		Magnolia Avenue		Magnolia Avenue		
Approach	Northbound		East	Eastbound		bound	
Lane Configuration	1	T		I I		τ∷	
Turning Movement	Left Right		Thru	Right	Left	Thru	
Lane Width [ft]	12.00 12.00		12.00	12.00	12.00	12.00	
No. of Lanes in Pocket	0	0	0	0	0	0	
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	
Speed [mph]	30	.00	30	30.00		.00	
Grade [%]	0.0	00	0.	00	0.00		
Curb Present	No		No		No		
Crosswalk	Ye	es	No		Yes		

Volumes

Name	All Amer	ican Way	Magnolia	a Avenue	Magnoli	a Avenue
Base Volume Input [veh/h]	79	29	1232	70	21	985
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	29	1232	70	21	985
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	8	324	18	6	259
Total Analysis Volume [veh/h]	83	31	1297	74	22	1037
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing)	0		0		0
v_di, Inbound Pedestrian Volume crossing r	n (0		0		0
v_co, Outbound Pedestrian Volume crossing	9 0			0		0
v_ci, Inbound Pedestrian Volume crossing n	ni (0		0		0
v_ab, Corner Pedestrian Volume [ped/h]	(0		0		0
Bicycle Volume [bicycles/h]	(0		0		0

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal group	5	0	8	0	7	4
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	7	0	7	0	7	7
Maximum Green [s]	30	0	30	0	30	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	81	0	18	0	11	29
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	7	0	7	0	0	0
Pedestrian Clearance [s]	18	0	7	0	0	0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		No	No
Maximum Recall	No		No		No	No
Pedestrian Recall	No		No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0



Lane Group Calculations

Lane Group	С	С	С	L	С
C, Cycle Length [s]	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00
I1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00
I2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	85	85	3	93
g / C, Green / Cycle	0.08	0.78	0.78	0.03	0.84
(v / s)_i Volume / Saturation Flow Rate	0.07	0.37	0.37	0.01	0.29
s, saturation flow rate [veh/h]	1724	1870	1835	1781	3560
c, Capacity [veh/h]	144	1450	1423	57	3005
d1, Uniform Delay [s]	49.48	4.37	4.42	52.16	1.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.49	1.11	1.17	4.21	0.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.47	0.48	0.39	0.35
d, Delay for Lane Group [s/veh]	58.97	5.48	5.59	56.37	2.20
Lane Group LOS	E	Α	Α	E	Α
Critical Lane Group	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.45	4.72	4.79	0.66	1.50
50th-Percentile Queue Length [ft/In]	86.14	118.08	119.68	16.54	37.60
95th-Percentile Queue Length [veh/ln]	6.20	8.29	8.38	1.19	2.71
95th-Percentile Queue Length [ft/ln]	155.06	207.19	209.38	29.77	67.67

<u>Version 5.00-04</u> Scenario 4: 4 PM 2040

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.97	58.97	5.53	5.59	56.37	2.20	
Movement LOS	E	E	Α	Α	E	A	
d_A, Approach Delay [s/veh]	58.97		5.	53	3.	33	
Approach LOS	E	E A		A	A		
d_I, Intersection Delay [s/veh]			7.	01			
Intersection LOS		A					
Intersection V/C		0.507					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	11.0	
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	
M_CW, Crosswalk Circulation Area [ft²/ped	0.00	0.00	0.00	
d_p, Pedestrian Delay [s]	44.55	0.00	44.55	
I_p,int, Pedestrian LOS Score for Intersection	n 1.827	0.000	2.775	
Crosswalk LOS	Α	F	С	
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	
c_b, Capacity of the bicycle lane [bicycles/h] 0	0	0	
d_b, Bicycle Delay [s]	55.00	55.00	55.00	
I_b,int, Bicycle LOS Score for Intersection	4.321	5.263	5.006	
Bicycle LOS	E	F	F	

Sequence

-		_		_												
Ring 1	-	-	4	-	-	-	-	-	ı	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	_	-	-	-	-	-	-	-	-	-	-	_	_	-

