Appendix J: Traffic Impact Analysis Report

Submitted by:

ITERIS

GRAND PARK SPECIFIC PLAN

Draft Traffic Impact Analysis Report

Submitted to:

City of Ontario

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

The purpose of this study is to assess the potential future traffic and circulation impacts resulting from the development of a new planned community in the New Model Colony area of the City of Ontario through the implementation of a specific plan. It also identifies the traffic mitigation measures necessary to maintain the established level of service standards for the elements of the impacted roadway system in compliance with the San Bernardino County Congestion Management Program (CMP) and the City of Ontario standards. The CMP requirement has been met per the *Ontario Sphere of Influence CMP TIA* (November 2000) and that this analysis is not intended to replace or supplement the CMP requirement. The CMP is referenced as a reminder of the CMP traffic study guidelines.

The scope of this traffic study was developed by Iteris in consultation with City of Ontario transportation and planning staff. The study is intended to quantify and analyze the potential future traffic and circulation impacts associated with project generated traffic on the street system within the area surrounding the project site during both the AM and PM peak hours.

The following traffic scenarios and horizon years are included in the analysis:

- Existing Conditions (2012)
- Existing (2012) + Project Conditions
- Horizon Year (2030) No Project Conditions
- Horizon Year (2030) With Project Conditions

1.2 PROJECT DESCRIPTION

Distinguished Homes and Richland Communities (the Applicants) are proposing a new planned community on approximately 320-acre site within the New Model Colony of the City of Ontario. The proposed project would provide residential neighborhoods, parks and recreational facilities, and schools. The community would provide 1,327 new residential dwelling units (consisting of 484 detached single-family units and 843 attached multi-family units), a 10-acre elementary school, a 50-acre high school, and approximately 131 acres of the City of Ontario "Grand Park."

Project Site Location

Figure 1 illustrates the location of the proposed project site, i.e., Specific Plan area, in relation to the surrounding street network. The project is bounded on the north, in general, by Edison Avenue and on the south by Eucalyptus Avenue. Archibald Avenue serves as the western boundary while Haven Avenue defines the eastern boundary.

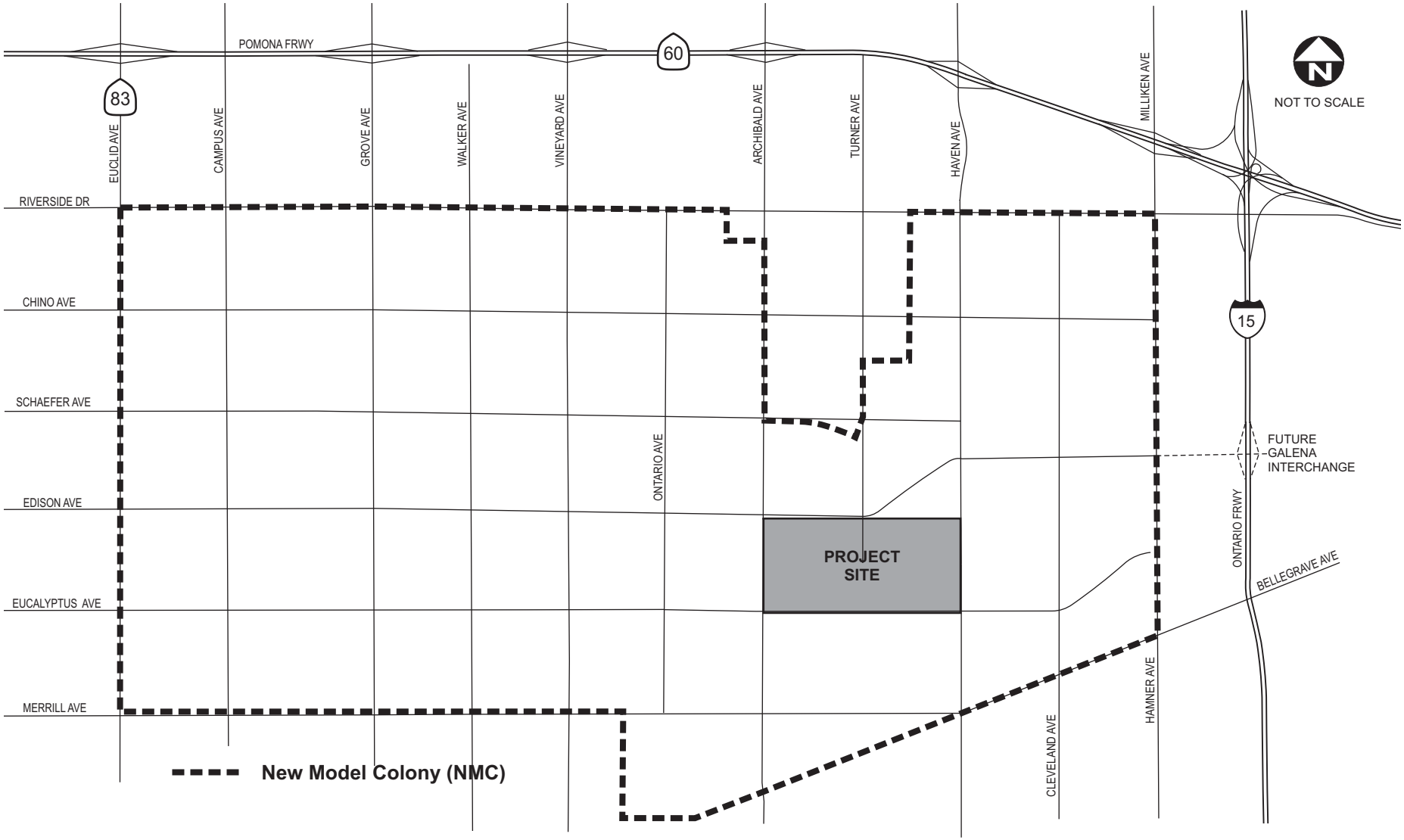

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FIGURE 1
Project Vicinity

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Land Use Plan

Figure 2 illustrates the land use plan; Residential, School, and Grand Park for the Grand Park Specific Plan. The Grand Park Land Use Plan is described below:

The Applicants propose to develop up to 1,327 dwelling units (484 detached single-family units and 843 attached multi-family units) within the 320 acres of the Specific Plan area defined by ten distinctive Planning Areas. The proposed project would develop a residential community within a larger master planned community by providing a broad array of spaces, including residential neighborhoods, parks and recreational facilities, and schools.

Site Access and Circulation

Figure 3 illustrates the proposed internal circulation and principal points of vehicular access to the surrounding street network for the residential and other components of the project. Principal vehicular access to the proposed project will be provided via Archibald Avenue, Turner Avenue, Haven Avenue, Edison Avenue, and Eucalyptus Avenue.

Park Street is an east-west primary local street connecting Archibald Avenue and Haven Avenue. It will provide internal access along the proposed City of Ontario Grand Park, and internal access and connectivity between residential areas and the proposed high school.

A Street is a north-south primary local street connecting Planning Areas 7, 8, 10, and the proposed City of Ontario Grand Park. It will provide access within the specific plan area adjacent to the residential areas and the proposed high school.

B Street is a north-south local street which will provide access within the specific plan area adjacent to residential areas and the proposed elementary school.

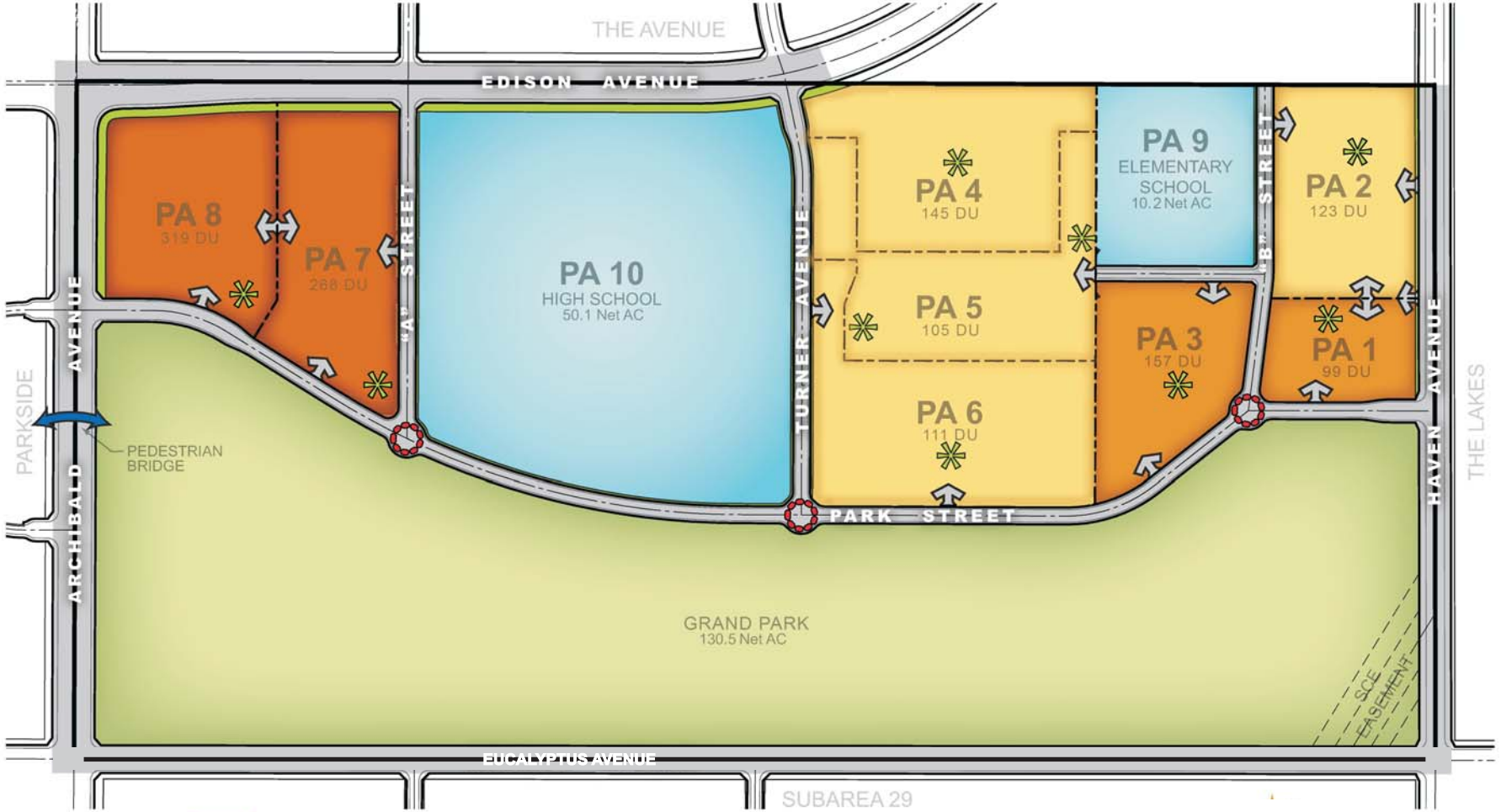

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FIGURE 2
Land Use Plan

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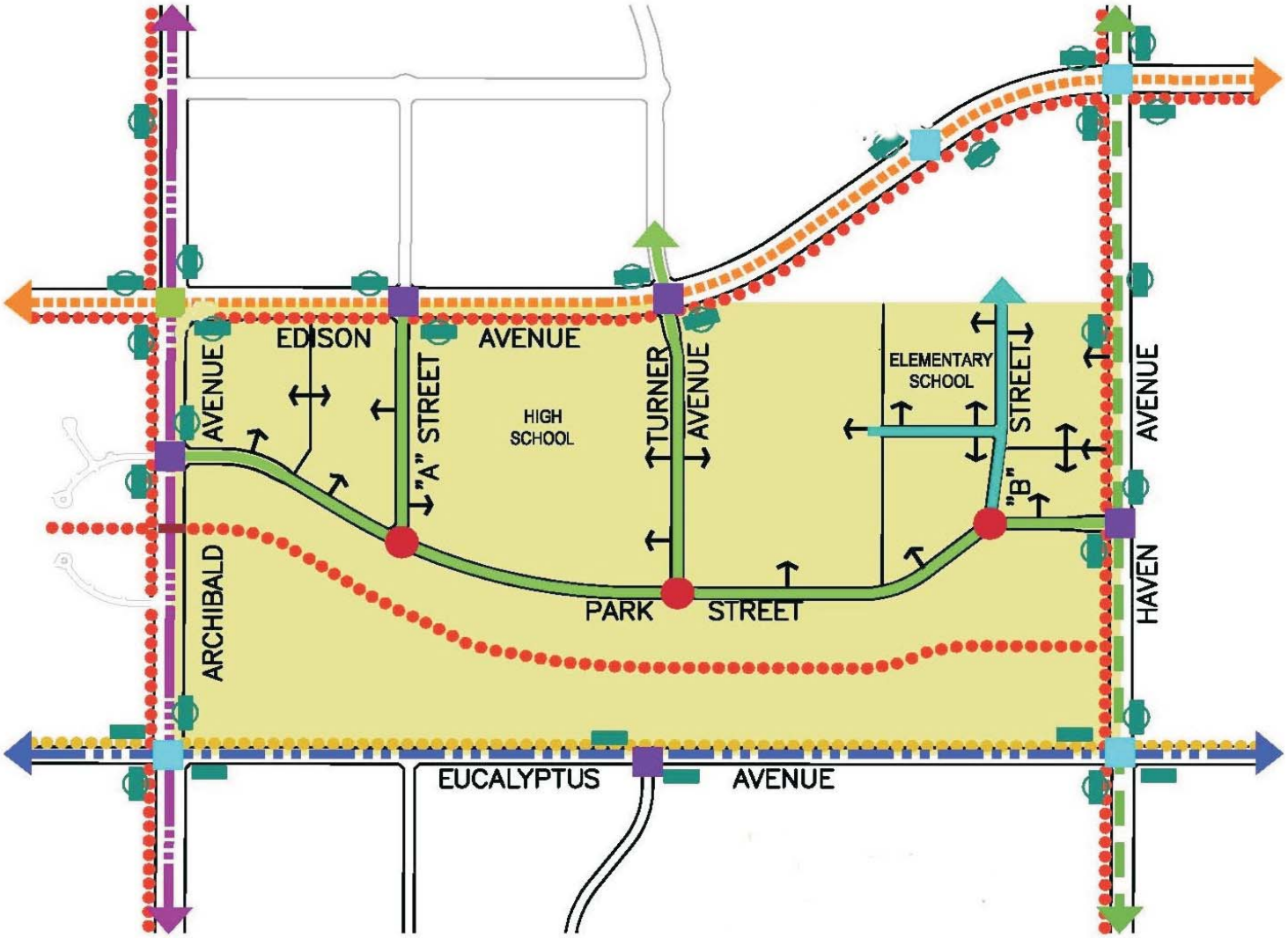

LEGEND

- SPECIFIC PLAN AREA
- ARCHIBALD AVENUE: DIVIDED ARTERIAL WITH SIDEWALK AND MULTI-PURPOSE TRAIL (148' R/W)
- EDISON AVENUE: DIVIDED ARTERIAL PARKWAY 1A (160' R/W)
- HAVEN AVENUE: DIVIDED ARTERIAL PARKWAY 2-2 (124' R/W)
- MERRILL AVENUE: STANDARD ARTERIAL (108' R/W)
- PRIMARY LOCAL STREET (66' R/W - ADDITIONAL R/W AND PAVEMENT WIDTHS MAY BE REQUIRED AT SIGNALIZED INTERSECTIONS TO ACCOMODATE ADDTIONAL LANES)
- LOCAL STREET (60' R/W) - CONCEPTUAL LOCATIONS
- INTERNAL CIRCULATION - CONCEPTUAL LOCATIONS
- REGIONAL TRAIL (CLASS 1 BIKE PATH) - LOCATION WITHIN THE "GREAT PARK" IS CONCEPTUAL
- REGIONAL TRAIL (MULTI-USE TRAIL)
- REGIONAL TRAIL BRIDGE
- EXISTING TRAFFIC SIGNAL WITH MODIFICATIONS
- MASTER PLANNED TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL
- ROUNDABOUT - CONCEPTUAL LOCATIONS
- BUS TURNOUT - CONCEPTUAL LOCATIONS
- BUS PAD - CONCEPTUAL LOCATIONS

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FIGURE 3
Project Site Access and Internal Circulation

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2.0 ANALYSIS METHODOLOGY

2.1 STUDY AREA

The study area for the analysis of potential traffic impacts of the project includes intersections in the project vicinity through which traffic would be likely to impact an intersection. The following intersections are included:

1. Archibald Avenue / SR-60 WB Ramps
2. Archibald Avenue / SR-60 EB Ramps
3. Archibald Avenue / Schaefer Avenue
4. Archibald Avenue / Park Street (future)
5. Archibald Avenue / Eucalyptus Avenue
6. A Street / Edison Avenue (future)
7. Turner Avenue / Edison Avenue (future)
8. Haven Avenue / Schaefer Avenue (future)
9. Haven Avenue / Park Street (future)
10. Haven Avenue / Eucalyptus Avenue (future)
11. A Street / Park Street (future)
12. Turner Avenue / Park Street (future)
13. B Street / Park Street (future)

Only four of the thirteen study intersections exist currently. The other intersections are either master planned intersections or proposed by the project. **Figure 4** illustrates the location of all study intersections, including the future and proposed intersections created by the project.

The horizon year for this analysis is 2030, which is consistent with The Ontario Plan (TOP). The Ontario Plan (General Plan) was adopted by the City of Ontario, which serves as the City's new business plan and includes a long term Vision and a principle based Policy Plan.

The following project scenarios were analyzed in this study:

- Existing Conditions (2012)
- Existing (2012) Plus Project Conditions
- Horizon Year (2030) No Project Conditions
- Horizon Year (2030) With Project Conditions

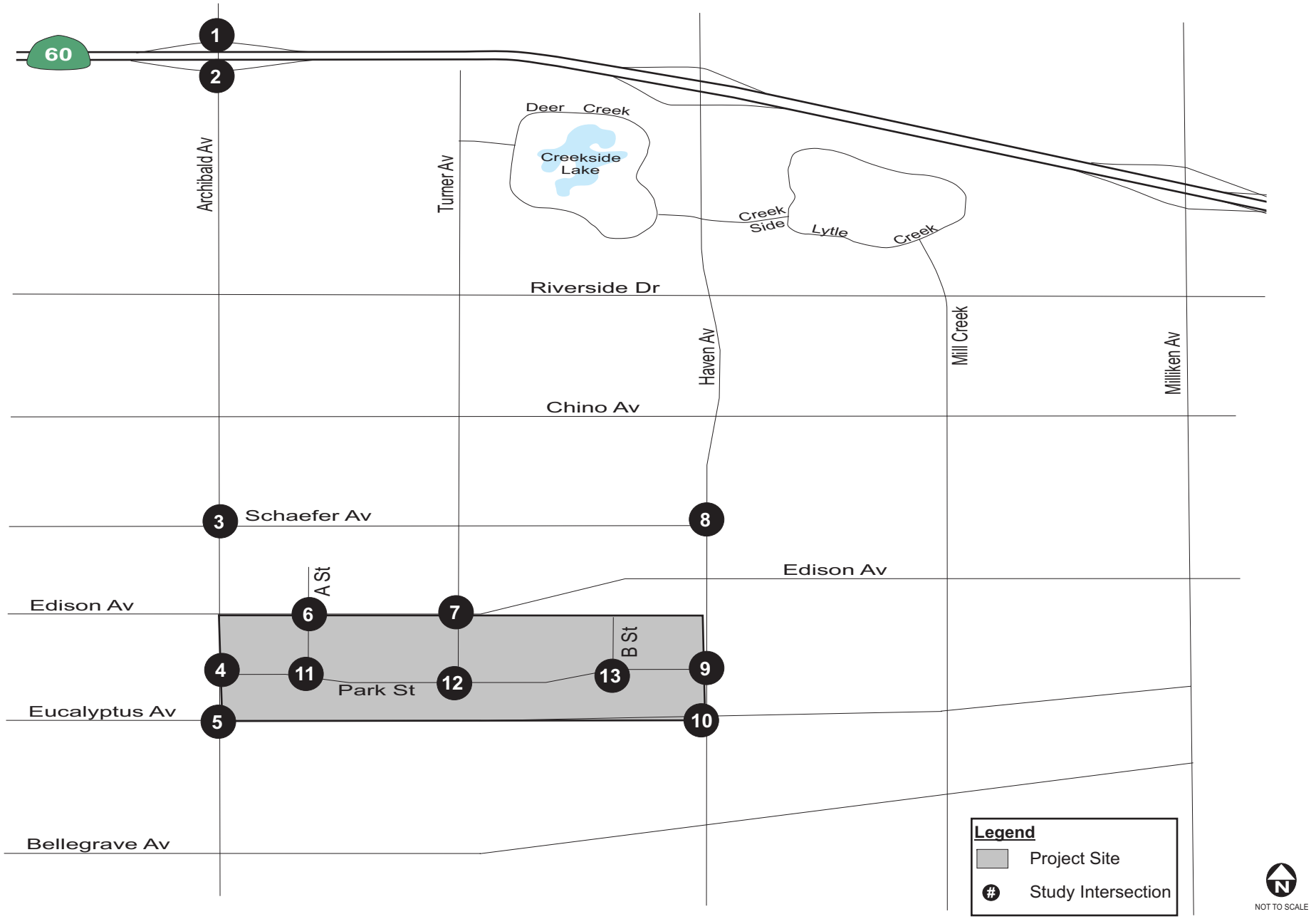

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FIGURE 4
Study Intersections

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2.2 INTERSECTION LEVEL OF SERVICE

Level of service (LOS) is a measure of the quality of operational conditions within a traffic stream, and is generally expressed in terms of such measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Levels range from A to F, with LOS A representing excellent (free-flow) conditions and LOS F representing extreme congestion.

The analysis of traffic operations at intersections was conducted according to the *Highway Capacity Manual* (HCM) delay methodology, which is described in the *Highway Capacity Manual,* Special Report 209 (Transportation Research Board, Washington, D.C., 2000). Under the HCM methodology, LOS is based on the average delay experienced by vehicles traveling through an intersection. The average delay methodology has been consistently applied for both signalized and unsignalized intersections. The analysis incorporates the effects of the lane geometry and signal phasing (e.g., protected or permitted left turns) at the intersection. **Table 1** presents a brief description of each level of service letter grade, as well as the range of delays associated with each grade. The analysis was conducted using Traffix 7.9 software.

TABLE 1: INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)	Unsignalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< 10	< 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and < 20	>10 and < 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and < 35	>15 and < 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and < 55	>25 and < 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and < 80	>35 and < 50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50

Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, DC, 2000.

2.3 LEVEL OF SERVICE STANDARD

Prior to commencing work on this traffic study, coordination meetings were held with City of Ontario staff as part of the scoping process to finalize the traffic study parameters and methodology. The CMP allows an intersection to operate at LOS E however the City of Ontario requires a more stringent LOS D. In this analysis minimum acceptable intersection operating conditions will follow the City of Ontario guidelines for all intersections. Intersections operating at LOS E or F are considered unsatisfactory.

2.4 DEVELOPMENT OF TRAFFIC VOLUMES

Existing Traffic Volumes

AM and PM peak period turning movement counts were conducted at the four existing study intersections in July 2012. Detailed vehicle turning movement data are included in **Appendix A.** Vehicle classification counts (e.g., passenger vehicle, 2-axle truck, 3-axle truck, and 4 or more axle truck), were conducted at four of the thirteen study intersections. The traffic counts at these four intersections were converted to passenger car equivalent (PCE) volumes using PCE factors of 1.5, 2.0, and 3.0 for 2-axle, 3-axle, and 4 or more axle trucks, respectively. Volume development worksheets are included in **Appendix B**. **Figure 5** shows the existing peak hour volumes at the study intersections.

Project Only Traffic Volumes

The project proposes to develop up to 1,327 dwelling units of residential, a high school with 2,500 students, an elementary school with 850 students, and a 131-acre park. The proposed development will generate additional traffic. The trip generation calculations for this project were based on rates published in the Institute of Transportation Engineer's (ITE) *Trip Generation, 8th Edition.* ITE trip generation rates and the trip generation calculations for the project are summarized in **Table 2**.

The directional distribution of the new trips generated by the project was developed using the "select zone" run of the City of Ontario's The Ontario Plan (TOP) model for the traffic analysis zone (TAZ) that represents the project (TAZ 226). Although the project is represented by two TAZs (226 and 227), the select zone run was conducted for only TAZ 226. Project trip distribution for the existing conditions varies slightly from the trip distribution for the future conditions because of the difference in roadway networks between the scenarios. **Figure 6** illustrates the project trip distribution for the existing plus project conditions and **Figure 7** illustrates the project trip distribution for the future with project conditions. The total percentage of trips that are going in and out of the Specific Plan area shown in these figures are not equal to 100%. This is because there are a few Specific Plan access points along Haven Avenue and Eucalyptus Avenue that contribute to the trip distribution, but are not study intersections. Hence, those intersections are not shown in these figures.

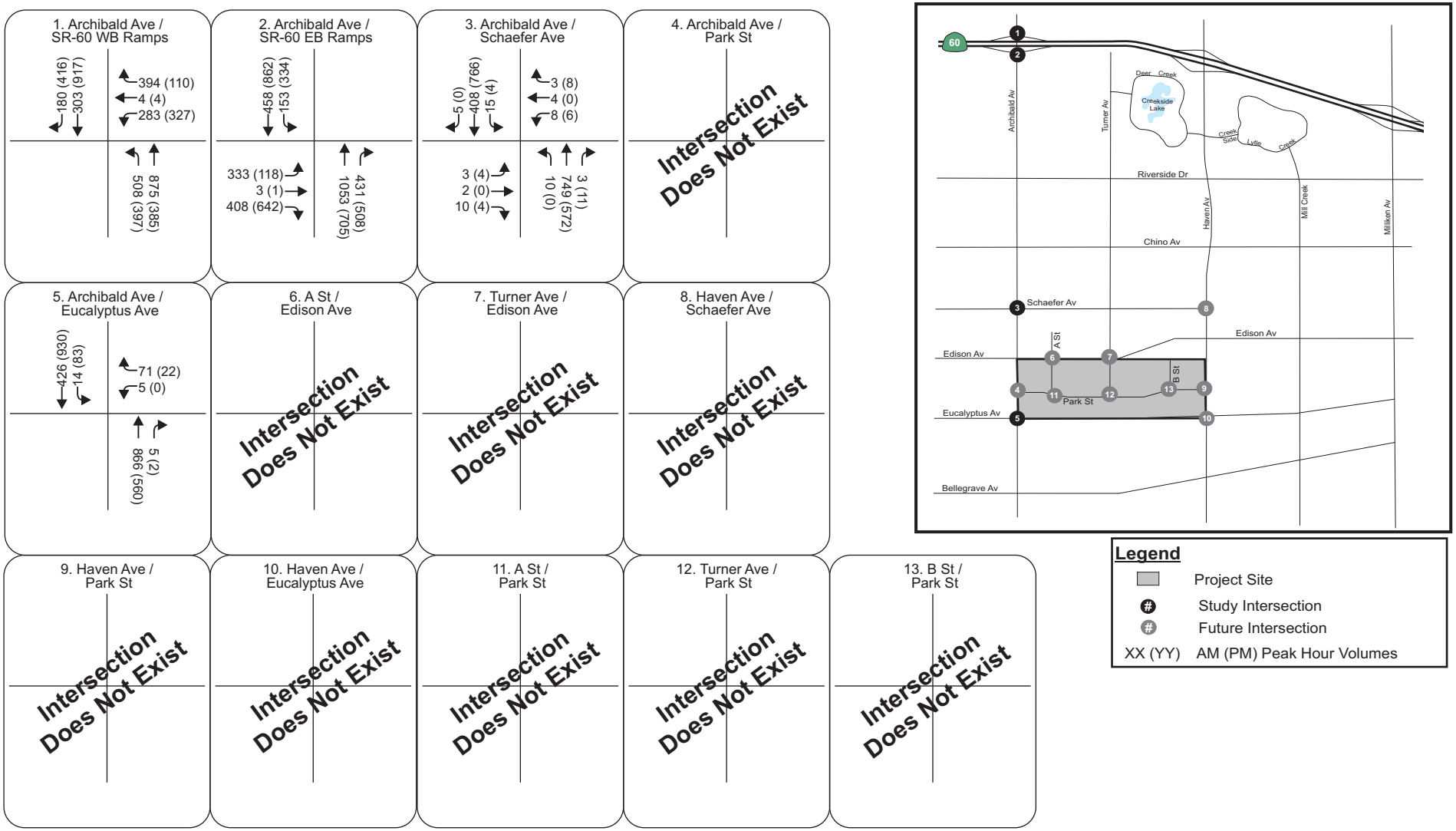

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FIGURE 5
Existing (2012) AM (PM) Peak Hour Volumes

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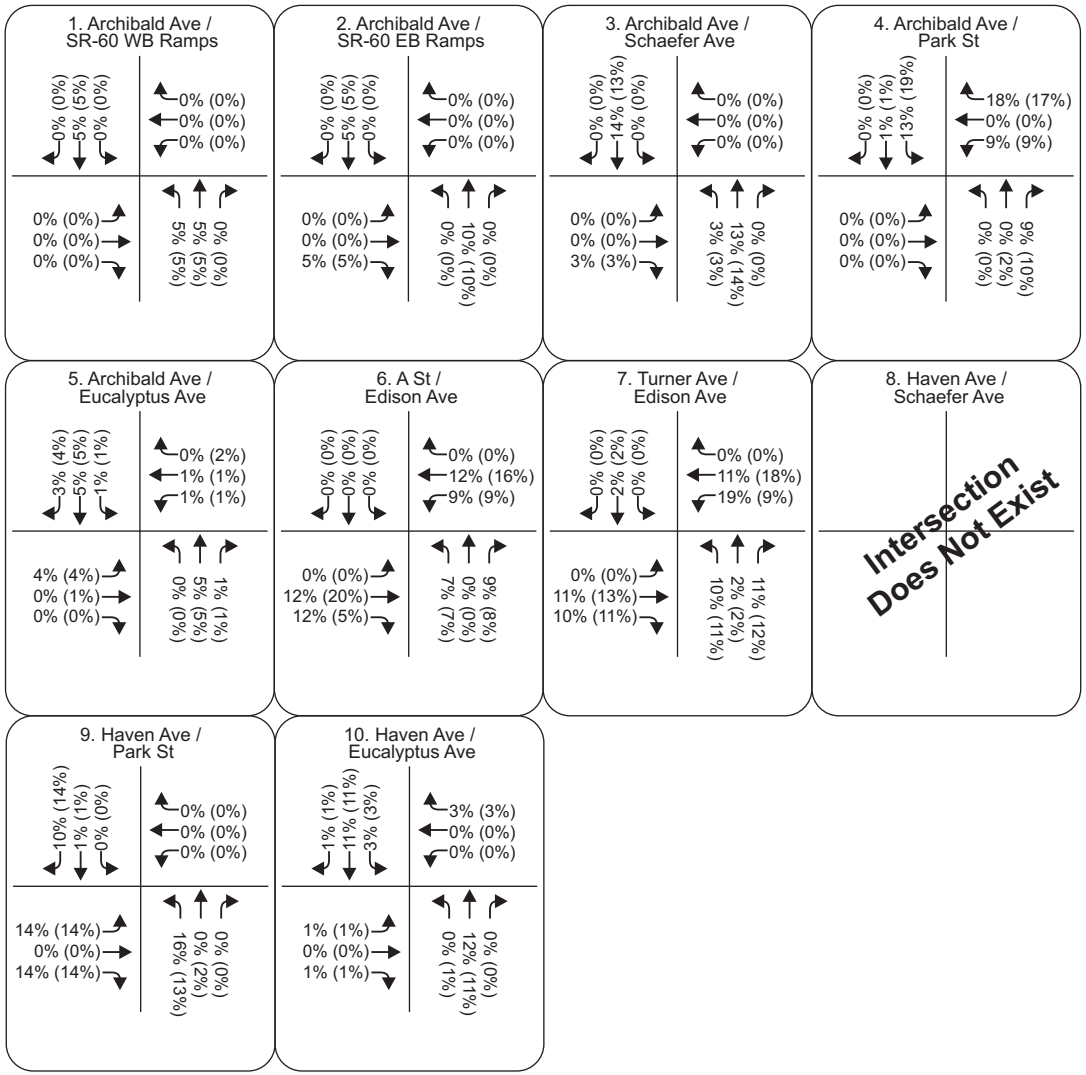
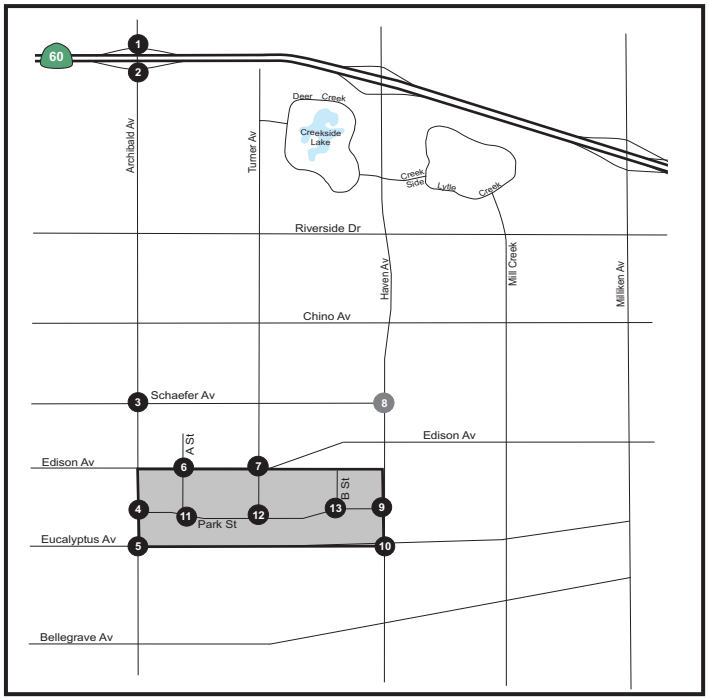
TABLE 2: TRIP GENERATION ESTIMATES

Land Use Planning Area	ITE Code	Quantity	Units	Peak Hour						Daily
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
PA-1										
Multi Family	230	99	DU	7	36	44	34	17	51	575
PA-2										
Single Family	210	123	DU	23	69	92	78	46	124	1,177
PA-3										
Multi Family	230	157	DU	12	57	69	55	27	82	912
PA-4										
Single Family	210	145	DU	27	82	109	92	54	146	1,388
PA-5										
Single Family	210	105	DU	20	59	79	67	39	106	1,005
PA-6										
Single Family	210	111	DU	21	62	83	71	41	112	1,062
PA-7										
Multi Family	230	268	DU	20	98	118	93	46	139	1,557
PA-8										
Multi Family	230	319	DU	24	116	140	111	55	166	1,853
PA-9										
Elementary School	520	850	STD	210	172	382	62	65	127	1,097
PA-10										
High School	530	2,500	STD	714	336	1,050	153	172	325	4,275
PA-11										
County Park	412	131	AC	1	0	1	3	5	8	299
TOTAL				**1,079**	**1,087**	**2,167**	**819**	**567**	**1,386**	**15,200**

Notes:

1. Trip Generation based on *ITE Trip Generation, 8th Edition*
2. Assuming Low Density Residential to be Single-Family and Medium and High Density Residential to be Multi-Family
3. Enrollment Assumptions: 850 for Elementary School and 2,500 for High School





Legend

	Project Site
#	Study Intersection
#	Future Intersection
XX (YY)	AM (PM) Percentage Trip Distribution

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FIGURE 6
2012 Project Percentage Trip Distribution

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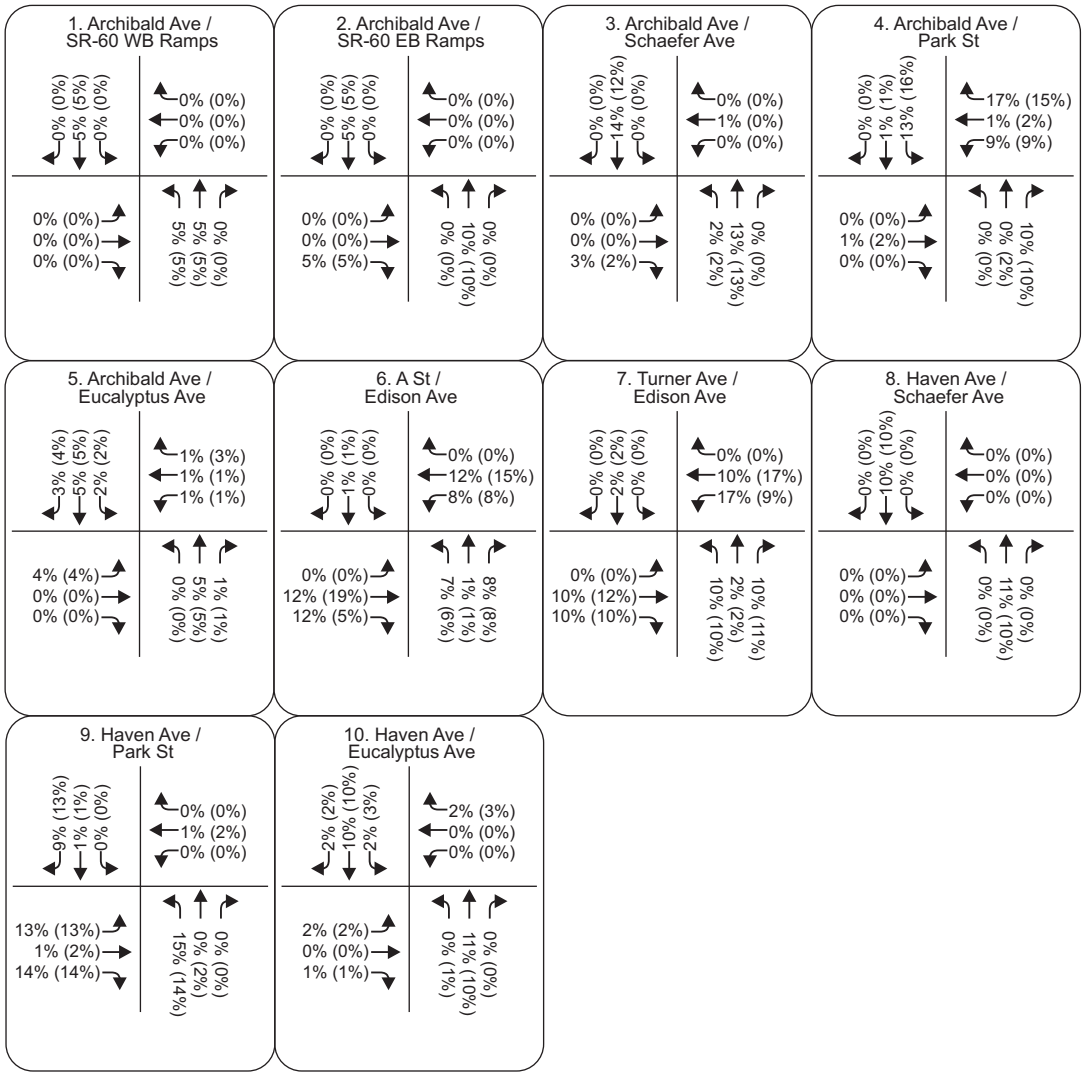

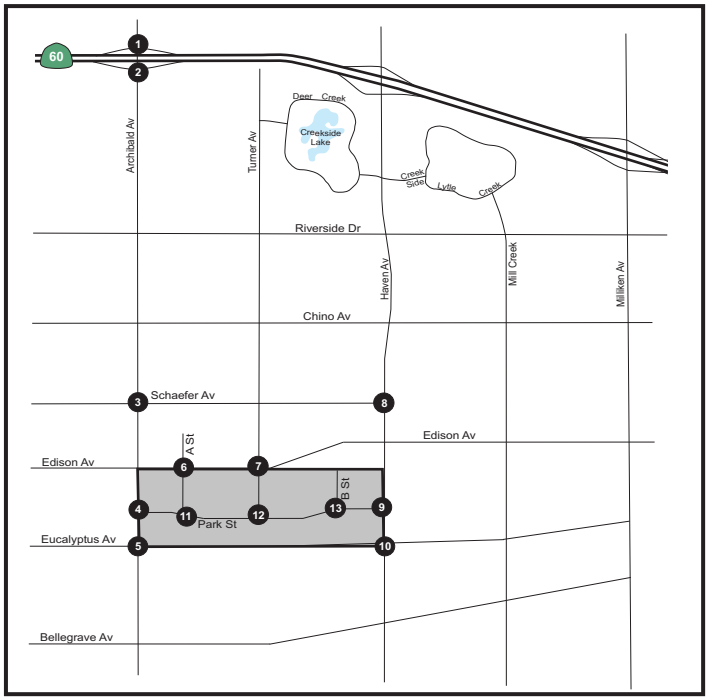

Legend

	Project Site
#	Study Intersection
XX (YY)	AM (PM) Percentage Trip Distribution

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FIGURE 7
2030 Project Percentage Trip Distribution

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Trip assignment is the product of trip generation multiplied by the trip distribution percentages. The assignment of new project trips at each of the study intersections during the weekday AM and PM peak hours for the existing plus project conditions is illustrated in **Figure 8**. The project only volumes for the future conditions are illustrated in **Figure 9**.

Existing Plus Project Traffic Volumes

To develop Existing Plus Project traffic volumes, trips generated by the proposed project during existing conditions were added to the existing traffic volumes at the study intersections. Volume development worksheets are included in **Appendix B**. **Figure 10** shows the existing plus project peak hour volumes at the study intersections.

Horizon Year (2030) With Project Traffic Volumes

The 2030 With Project traffic volumes for the project were developed using TOP model. The travel demand model was developed by Kimley-Horn and Associates, Inc. during the General Plan Update for the City of Ontario. It is a focused model based on the Ontario Airport Ground Access Model and the Southern California Association of Governments (SCAG) Riverside-San Bernardino (RIVSAN) Comprehensive Transportation Plan (CTP) traffic model. The land use data for the TAZs that represent the proposed project (TAZ 226, 227) were updated based on the Specific Plan land use data described previously. After the TAZs were updated, model run was conducted and the resulting trip estimates were further refined to reflect the anticipated trips from the Specific Plan, as shown in Table 2. Typically, a post-processing of the model generated traffic volumes based on existing traffic trends would be performed. However, due to the existing rural setting and the magnitude of the planned development in the area, the existing traffic circulation is expected to change dramatically, and therefore, the current traffic movement patterns cannot be used as the basis for future traffic volume adjustments. The horizon year (2030) turning movement volumes obtained directly from the TOP model were used for intersection level of service analysis. Manual adjustments were made to a few intersections that either didn't exist in the future year model highway network or if they had some missing legs at the intersections. For these intersections, model generated 2030 base year volumes were calculated and 2030 project only volumes were added to develop the 2030 with project traffic volumes. Volume development worksheets are included in **Appendix B**. **Figure 11** shows the horizon year (2030) with project peak hour volumes at the study intersections.

Horizon Year (2030) No Project Traffic Volumes

The 2030 No Project traffic volumes were calculated by subtracting the Project Only peak hour volumes from the 2030 With Project peak hour traffic volumes at the study intersections. This will serve as the basis for estimating impacts of the proposed project on background conditions for year 2030. Volume development worksheets are included in **Appendix B**. **Figure 12** shows the horizon year (2030) no project peak hour volumes at the study intersections.

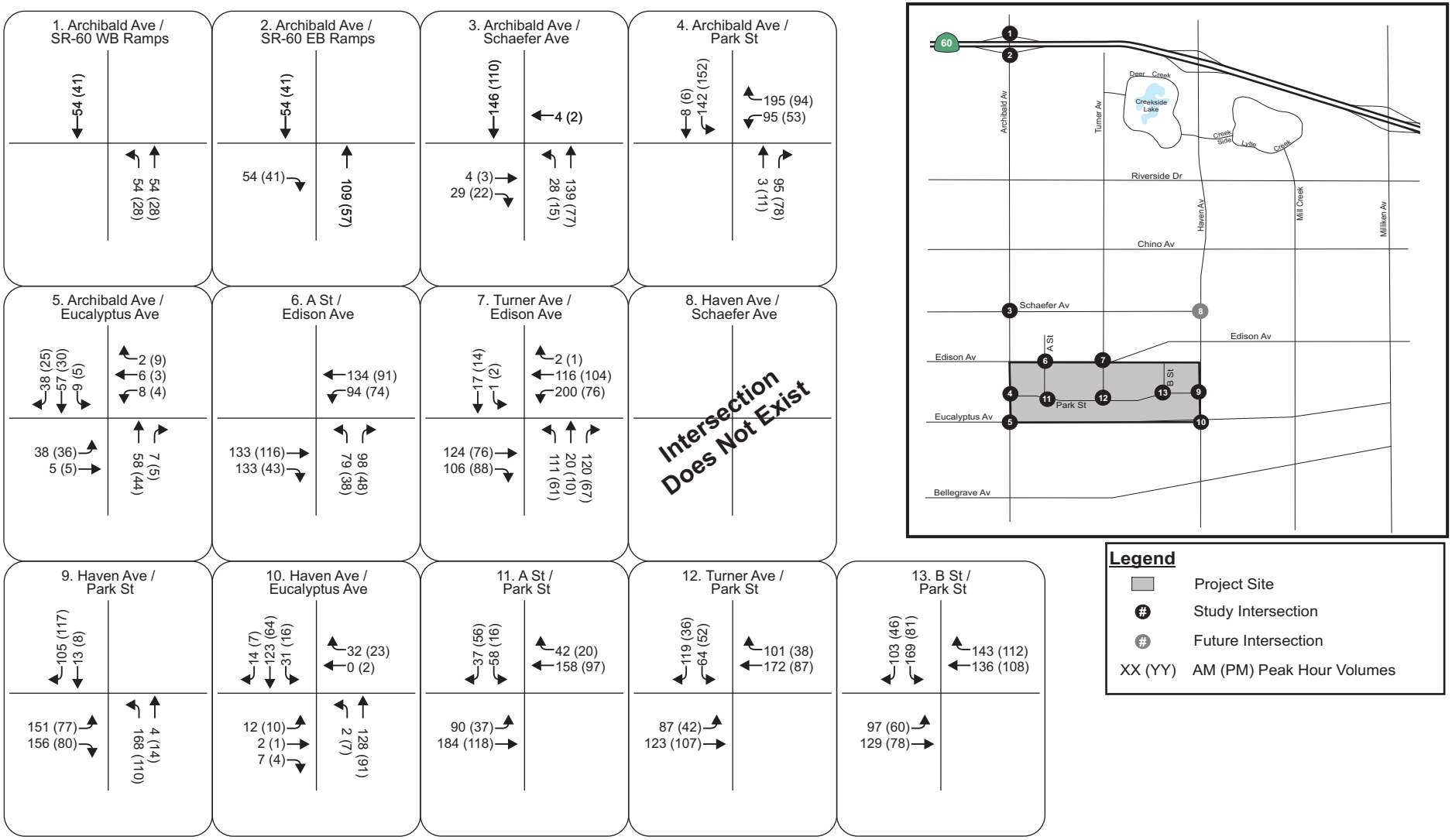

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FIGURE 8
2012 Project Only AM (PM) Peak Hour Volumes

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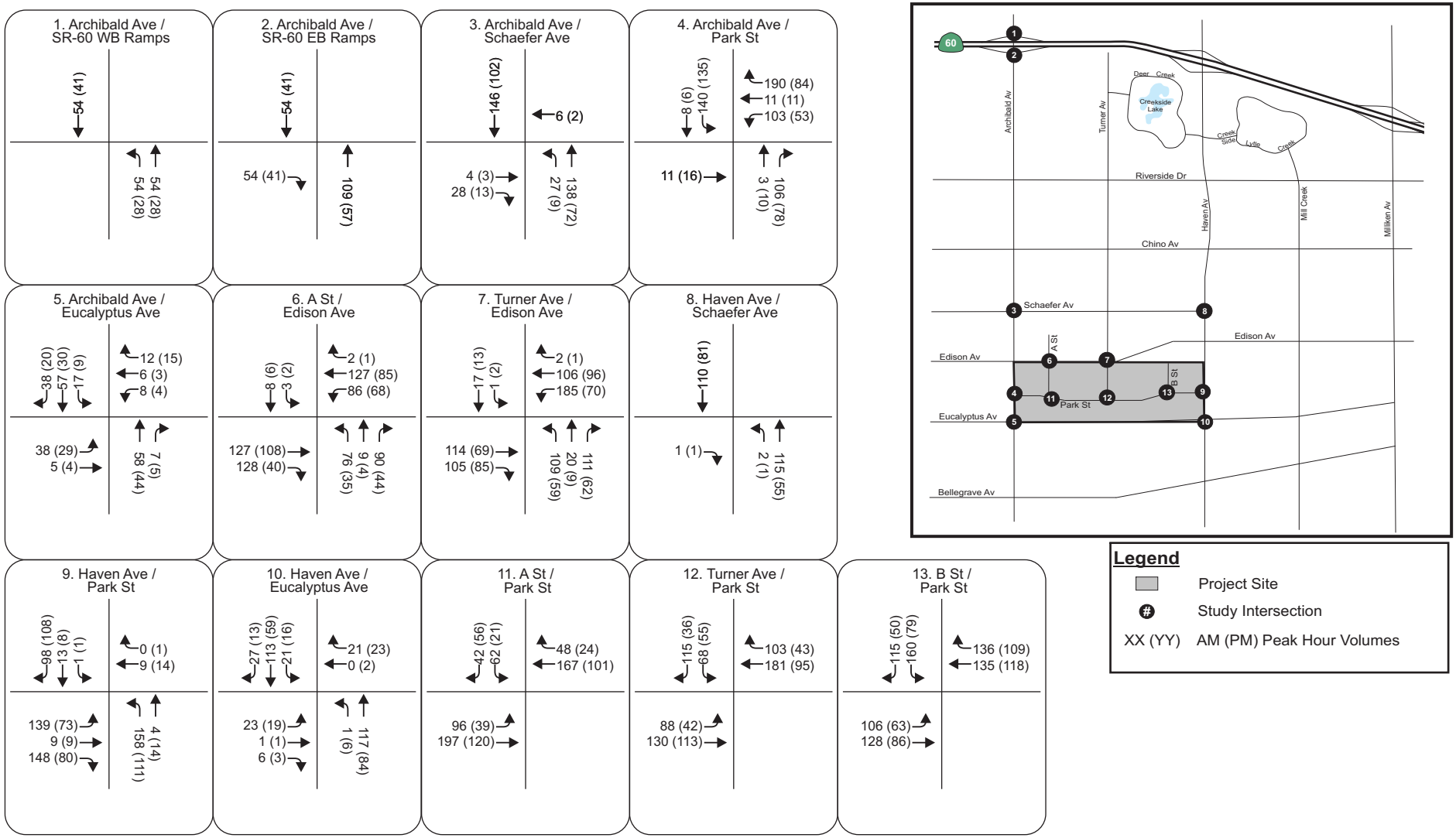

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FIGURE 9
2030 Project Only AM (PM) Peak Hour Volumes

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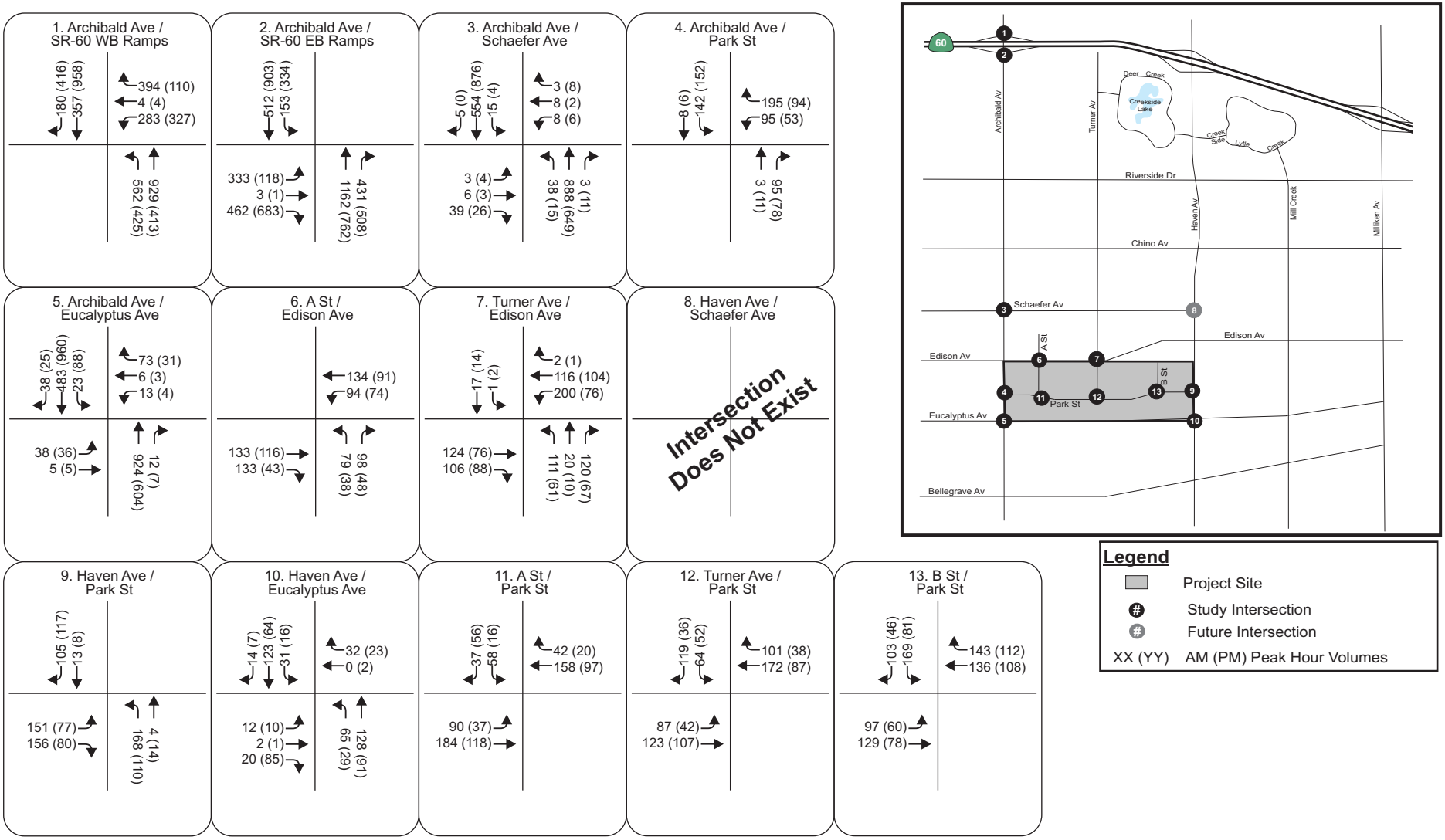

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FIGURE 10
Existing+Project AM (PM) Peak Hour Volumes

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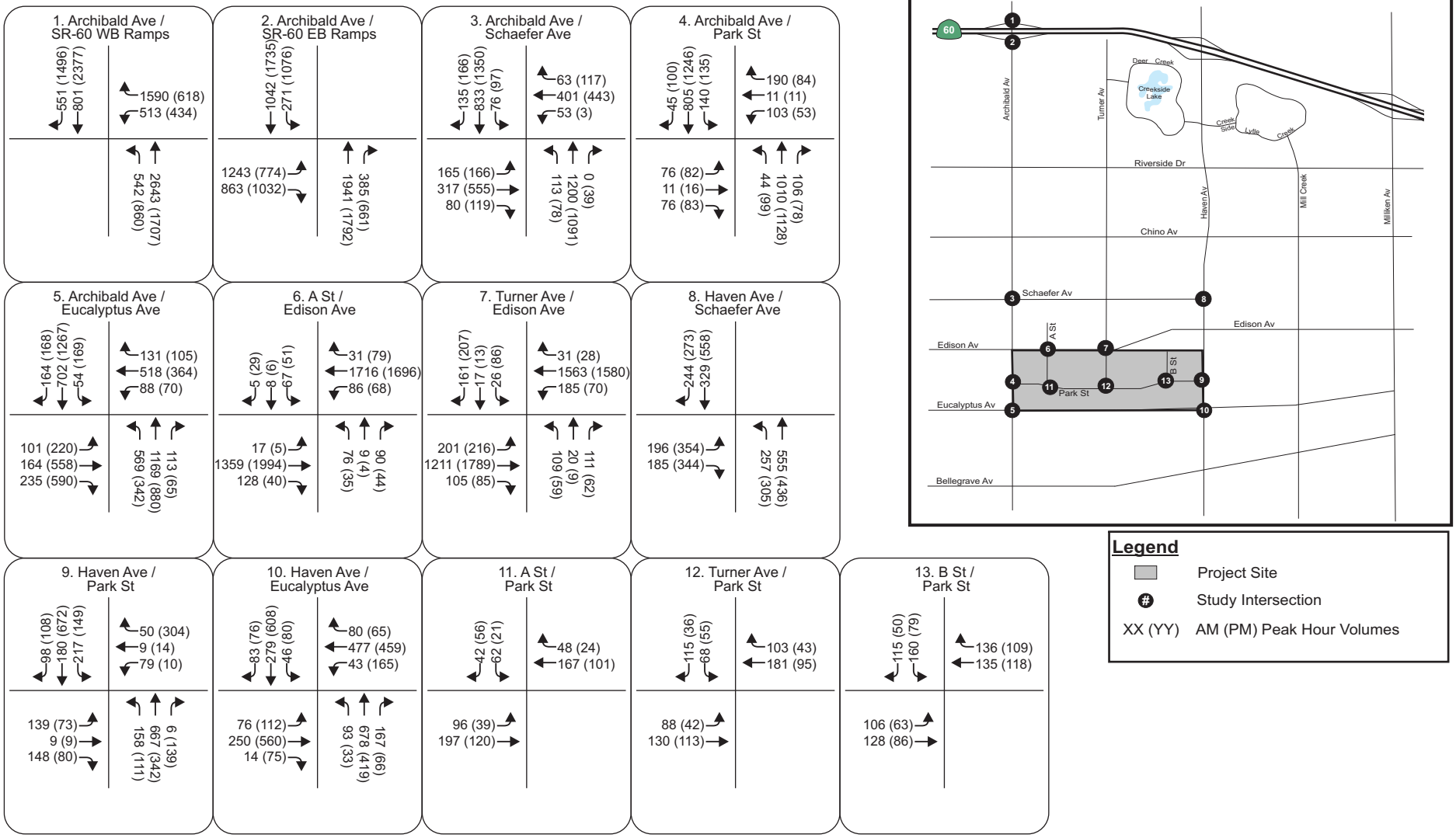

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FIGURE 11
2030 With Project AM (PM) Peak Hour Volumes

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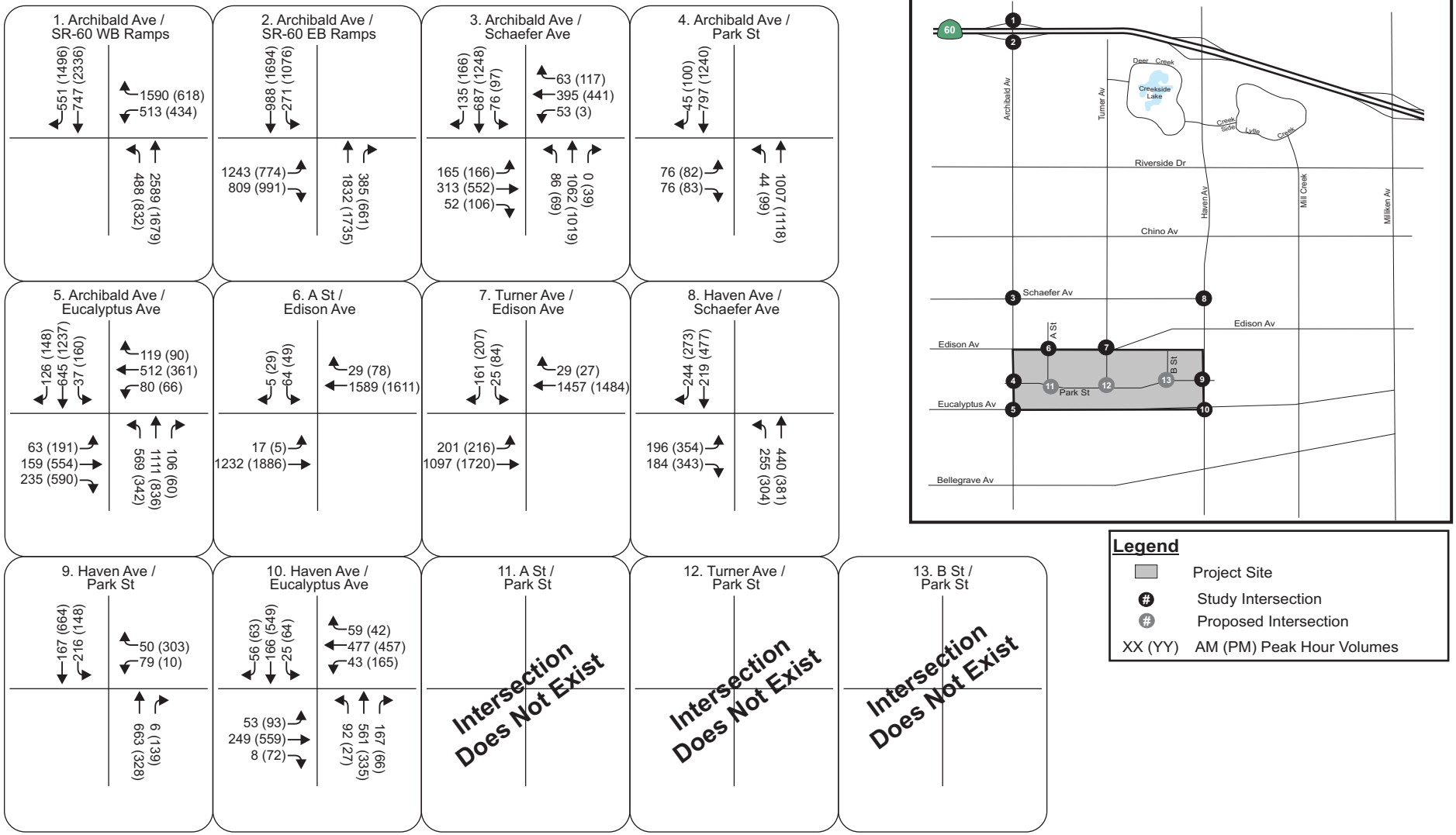

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FIGURE 12
2030 No Project AM (PM) Peak Hour Volumes

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3.0 EXISTING CONDITIONS

3.1 DESCRIPTION OF EXISTING INTERSECTIONS

Iteris conducted several site visits in order to thoroughly assess existing conditions at the project site and within the study area. The field inventory included review of existing intersection geometric layout, traffic control, lane configurations, posted speed limits, transit service, land use, and parking. This information is required for subsequent traffic impact analysis. **Figure 13** illustrates the existing lane configurations at the four existing analyzed intersections. A brief description of each study intersection follows.

Archibald Avenue and SR-60 WB Ramps is controlled by a 6-phase traffic signal with protected left-turn phasing for Archibald Avenue and the SR-60 WB Off-Ramp. The northbound approach is striped as an exclusive left-turn lane and three through lanes. The southbound approach is striped as three through lanes and a shared through/right-turn lane, however, one of the through lanes acts as an exclusive left-turn lane for the southbound approach at the adjacent SR-60 EB Ramps intersection. The westbound approach is striped as a shared left-turn/through lane and an exclusive right-turn lane.

Archibald Avenue and SR-60 EB Ramps is controlled by a 6-phase traffic signal with protected left-turn phasing for Archibald Avenue and the SR-60 EB Off-Ramp. The northbound approach is striped as three through lanes and a shared through/right-turn lane, however, one of the trhough lanes acts as an exclusive left-tun lane for the northbound approach at the adjacent SR-60 WB Ramps intersection. The southbound approach is striped as an exclusive left-turn lane and three through lanes. The eastbound approach is striped as a shared left-turn/through lane and an exclusive right-turn lane.

Archibald Avenue and Schaefer Avenue is a T-intersection and is stop controlled in the westbound direction. The northbound approach has one shared through/right-turn lane. The southbound approach has an exclusive left-turn lane and a through lane. The westbound approach has one shared left/through/right-turn lane.

Archibald Avenue and Eucalyptus Avenue is a T-intersection and is stop controlled in the westbound direction. The northbound approach has one shared through/right-turn lane. The southbound approach has an exclusive left-turn lane and a through lane. The westbound approach has one shared left/through/right-turn lane.

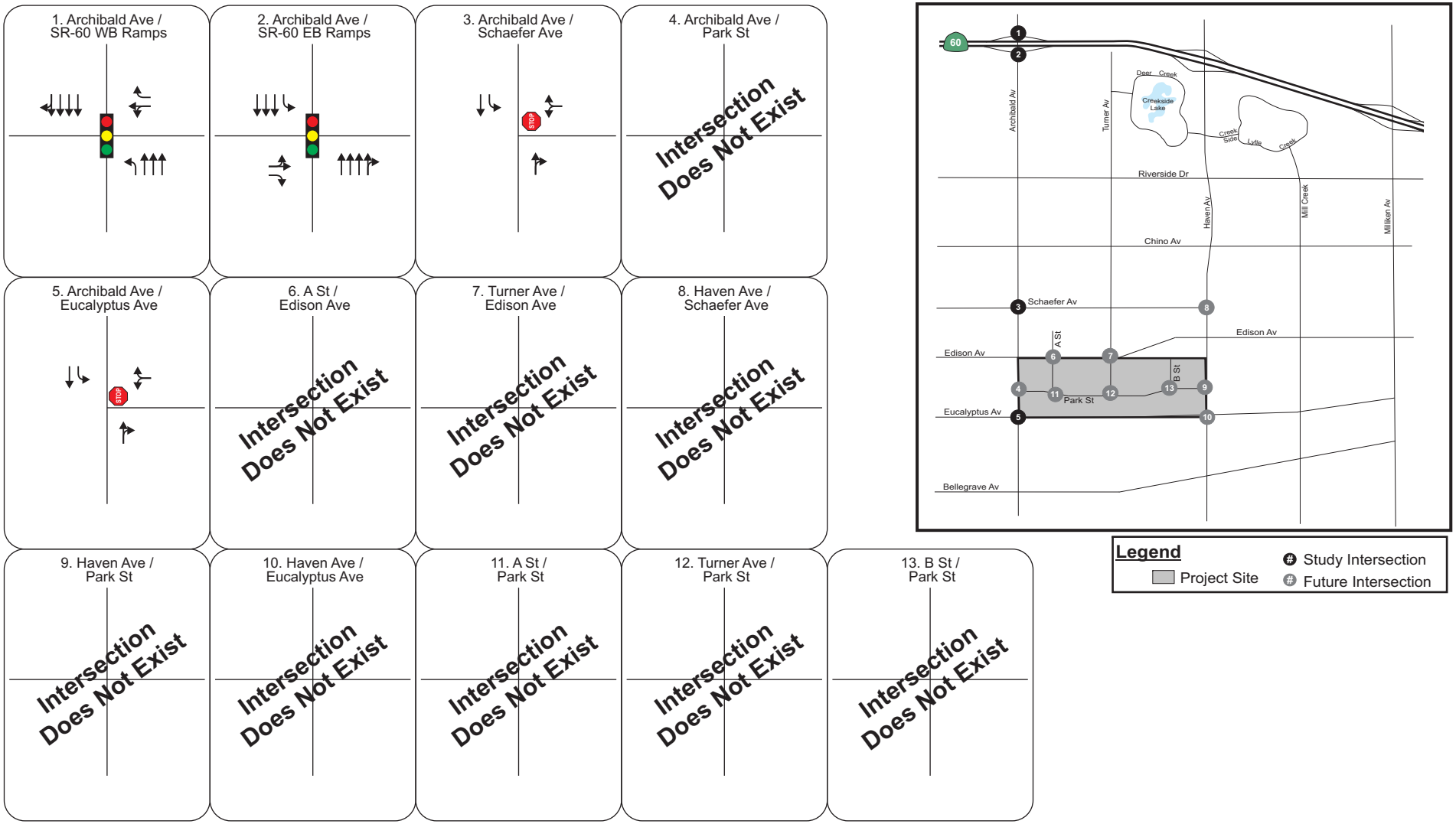

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FIGURE 13
Existing (2012) Lane Configuration

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3.2 DESCRIPTION OF EXISTING ROADWAY NETWORK

The following describes existing conditions at the major roadways within the study area.

Archibald Avenue is a north-south arterial located west of the project site. Archibald Avenue has two travel lanes in the study area.

Haven Avenue is a north-south arterial located east of the project site. Haven Avenue is currently unimproved in the study area.

Edison Avenue is an east-west arterial located north of the project site. Edison Avenue has two travel lanes throughout the study area.

Eucalyptus Avenue is an east-west arterial located south of the project site. Eucalyptus Avenue has two travel lanes in the study area.

3.3 TRANSIT SERVICES

Omnitrans, the public agency serving San Bernardino Valley, operates one line through the study area as illustrated in **Figure 14**.

Route 81 Ontario – Ontario Mills – Chaffey College: Route 81 travels mainly along Campus Avenue, Francis Avenue, Vineyard Avenue, Riverside Drive, Haven Avenue, Milliken Avenue and Foothill Boulevard. Popular destinations along this route include the Ontario Civic Center, the Ontario Mills Mall, East Ontario and Rancho Cucamonga Metrolink stations, the Victoria Gardens, and the Chaffey College. This route operates from Monday through Friday with headway of 60 minutes.

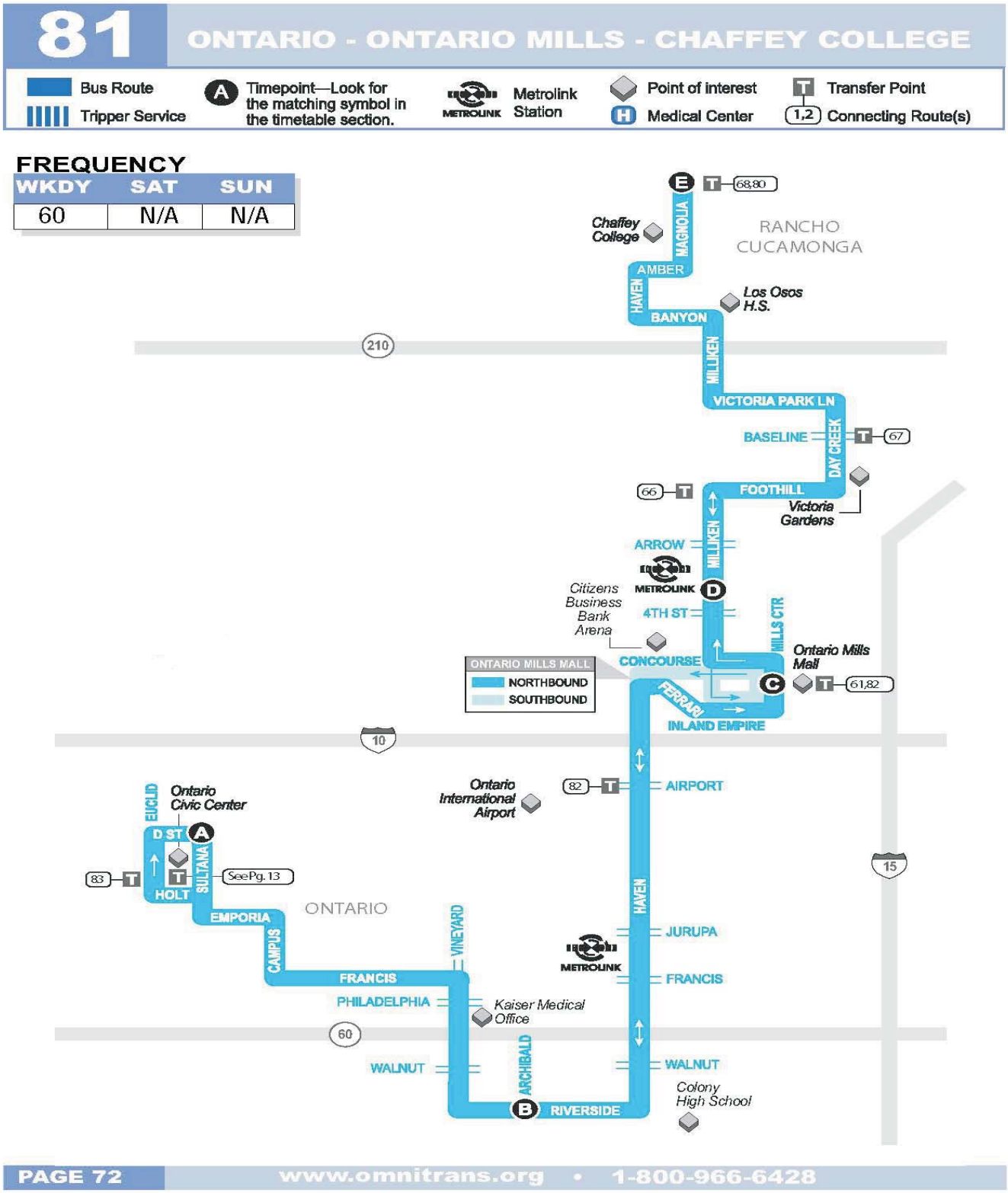

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FIGURE 14
Study Area Transit Route

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3.4 TRAFFIC OPERATIONS ANALYSIS

The AM and PM peak hour level of service analyses were conducted at the four existing study intersections based on the existing traffic volume counts. The level of service analysis was performed using TRAFFIX software using the HCM 2000 Operations Methodology.

Table 3 summarizes the resulting levels of service at the study intersections under existing conditions during the AM and PM peak hours. Level of service calculation worksheets are included in **Appendix C**. Results show that all four intersections are currently operating at acceptable levels of service during both AM and PM peak hours.

TABLE 3: EXISTING (2012) PEAK HOUR LEVELS OF SERVICE

Intersection Name	Control	AM Peak Hour			PM Peak Hour		
		LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Ave / SR-60 WB Ramps	Signal	C	25.2	0.757	C	28.6	.793
2. Archibald Ave / SR-60 EB Ramps	Signal	C	23.7	0.689	D	36.5	0.955
3. Archibald Ave / Schaefer Ave	2WSC	D	30.9	N/A	D	27.8	N/A
4. Archibald Ave / Park St	Future Intersection						
5. Archibald Ave / Eucalyptus Ave	2WSC	C	19.6	N/A	B	12.4	N/A
6. A St / Edison Ave	Future Intersection						
7. Turner Ave / Edison Ave	Future Intersection						
8. Haven Ave / Schaefer Ave	Future Intersection						
9. Haven Ave / Park St	Future Intersection						
10. Haven Ave / Eucalyptus Ave	Future Intersection						
11. A St / Park St	Future Intersection						
12. Turner Ave / Park St	Future Intersection						
13. B St / Park St	Future Intersection						

Notes:
LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio
2WSC - Two-Way Stop Control

4.0 EXISTING PLUS PROJECT CONDITIONS

This section analyzes the traffic conditions in the study area during existing conditions with the proposed Specific Plan. The existing plus project traffic volumes were developed as described in the "Analysis Methodology" section. The intersection lane geometrics for the existing plus project conditions are illustrated in **Figure 15**. The lane configurations at the existing intersections would remain the same and the proposed project would create a few more intersections as part of the development.

A level of service analysis was conducted to evaluate existing plus project intersection operations. Level of service calculation worksheets are included in **Appendix C**. **Table 4** summarizes the resulting levels of service at study intersections. Results show that all study intersections are projected to operate at satisfactory levels of service.

TABLE 4: EXISTING (2012) PLUS PROJECT PEAK HOUR LEVELS OF SERVICE

Intersection Name	Control	AM Peak Hour			PM Peak Hour		
		LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Ave / SR-60 WB Ramps	Signal	C	26.1	0.795	C	29.3	0.812
2. Archibald Ave / SR-60 EB Ramps	Signal	C	24.9	0.726	D	39.4	0.981
3. Archibald Ave / Schaefer Ave	2WSC	A	1.8	0.000	A	1.1	0.000
4. Archibald Ave / Park St	Signal	C	23.1	0.338	C	24.7	0.250
5. Archibald Ave / Eucalyptus Ave	2WSC	A	5.1	0.000	A	6.2	0.000
6. A St / Edison Ave	Signal	B	16.7	0.189	B	14.6	0.102
7. Turner Ave / Edison Ave	Signal	B	16.0	0.282	B	16.7	0.141
8. Haven Ave / Schaefer Ave	Future Intersection						
9. Haven Ave / Park St	Signal	B	16.2	0.295	B	15.4	0.176
10. Haven Ave / Eucalyptus Ave	2WSC	B	13.4	0.000	A	9.4	0.000
11. A St / Park St	Roundabout	A	6.7	0.000	A	5.4	0.000
12. Turner Ave / Park St	Roundabout	A	7.0	0.000	A	5.5	0.000
13. B St / Park St	Roundabout	A	7.8	0.000	A	6.1	0.000

Notes:
LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio
2WSC - Two-Way Stop Control

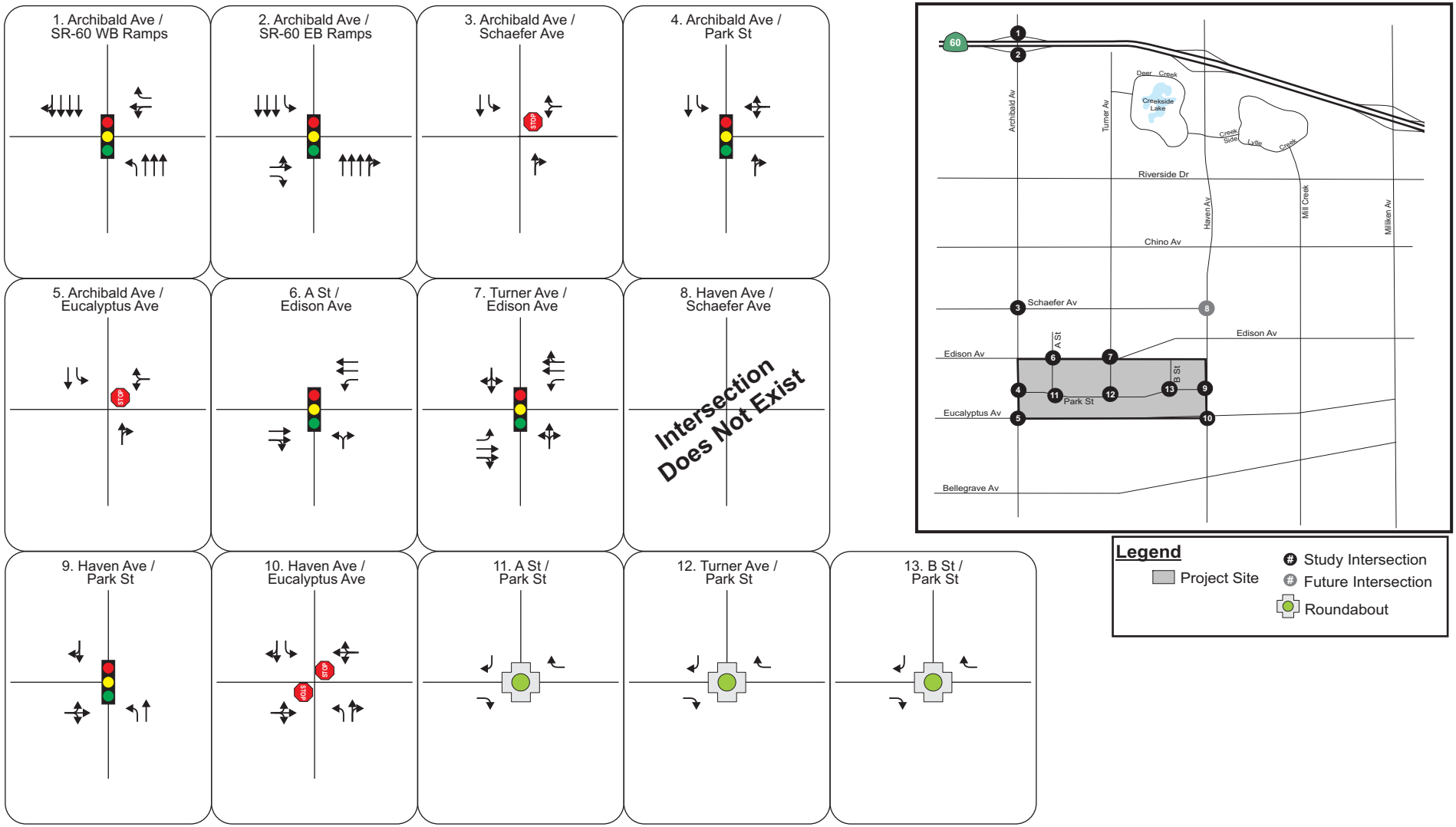

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FIGURE 15
Existing+Project Intersection Lane Configuration

B:\Projects\2012\17J121752_Grand Park Specific Plan\GRA\Revised_021813\Figure 4-18.cdr

5.0 HORIZON YEAR (2030) NO PROJECT CONDITIONS

This section analyzes the traffic conditions in the study area during the project's horizon year (2030) under No Project conditions. The 2030 No Project volumes were developed as described in the "Analysis Methodology" section. Intersection lane configuration assumptions for the 2030 No Project conditions were based on the recommended lane configurations described in The Ontario Plan. Intersection lane configurations at the study intersections for Year 2030 No Project conditions are illustrated in **Figure 16**.

A level of service analysis was conducted to evaluate 2030 No Project intersection operations. Level of service calculation worksheets are included in **Appendix C**. **Table 5** summarizes the resulting levels of service at study intersections. Results show that all study intersections are projected to operate at satisfactory levels of service, except for two intersections.

- Archibald Ave / SR-60 WB Ramps (LOS F in the AM and PM peak hours)
- Archibald Ave / SR-60 EB Ramps (LOS F in the AM and PM peak hours)

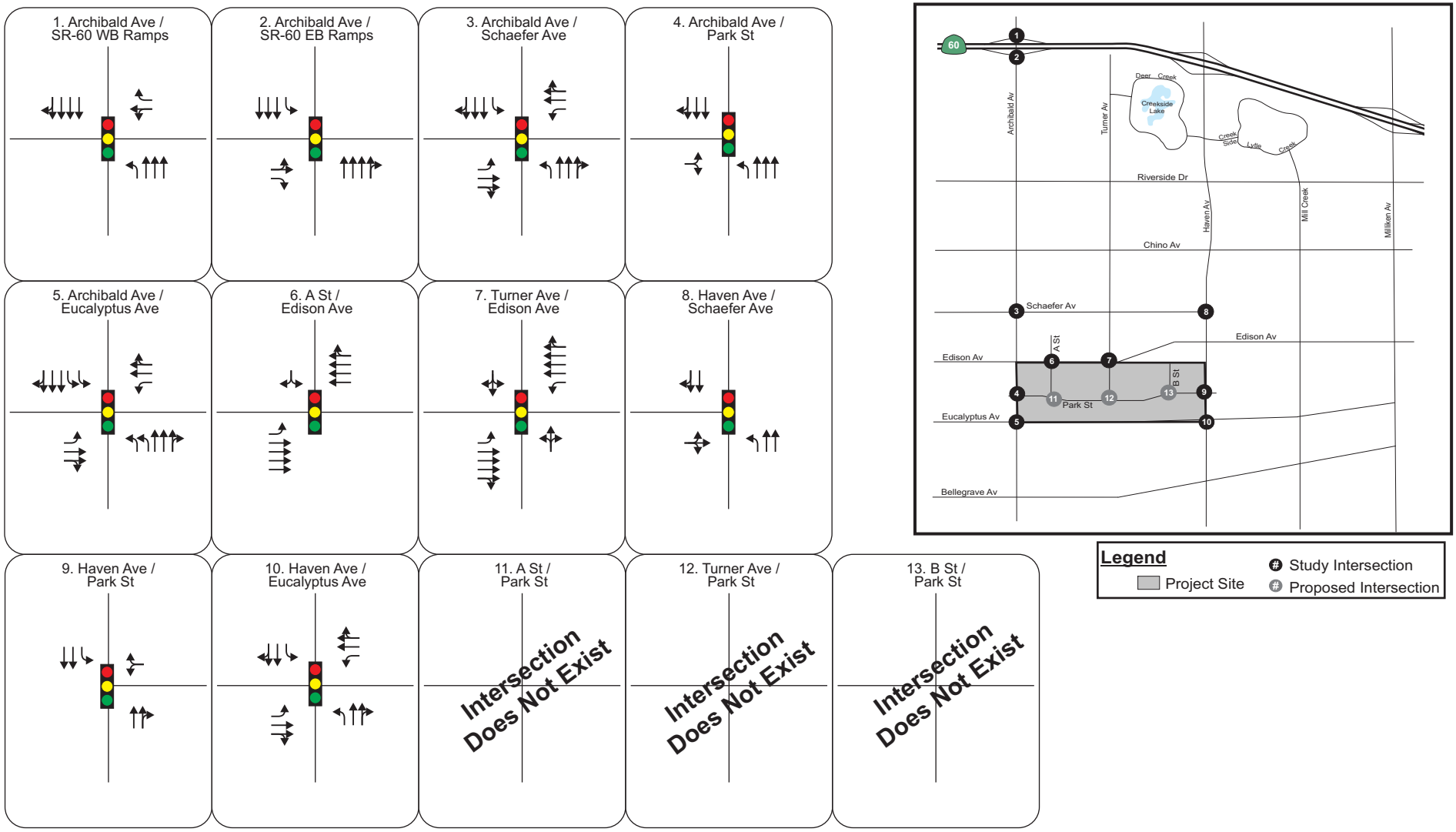

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FIGURE 16
2030 No Project Intersection Lane Configuration

B:\Projects\2012\17J121752_Grand Park Specific Plan\GRA\Revised_021813\Figure 4-18.cdr

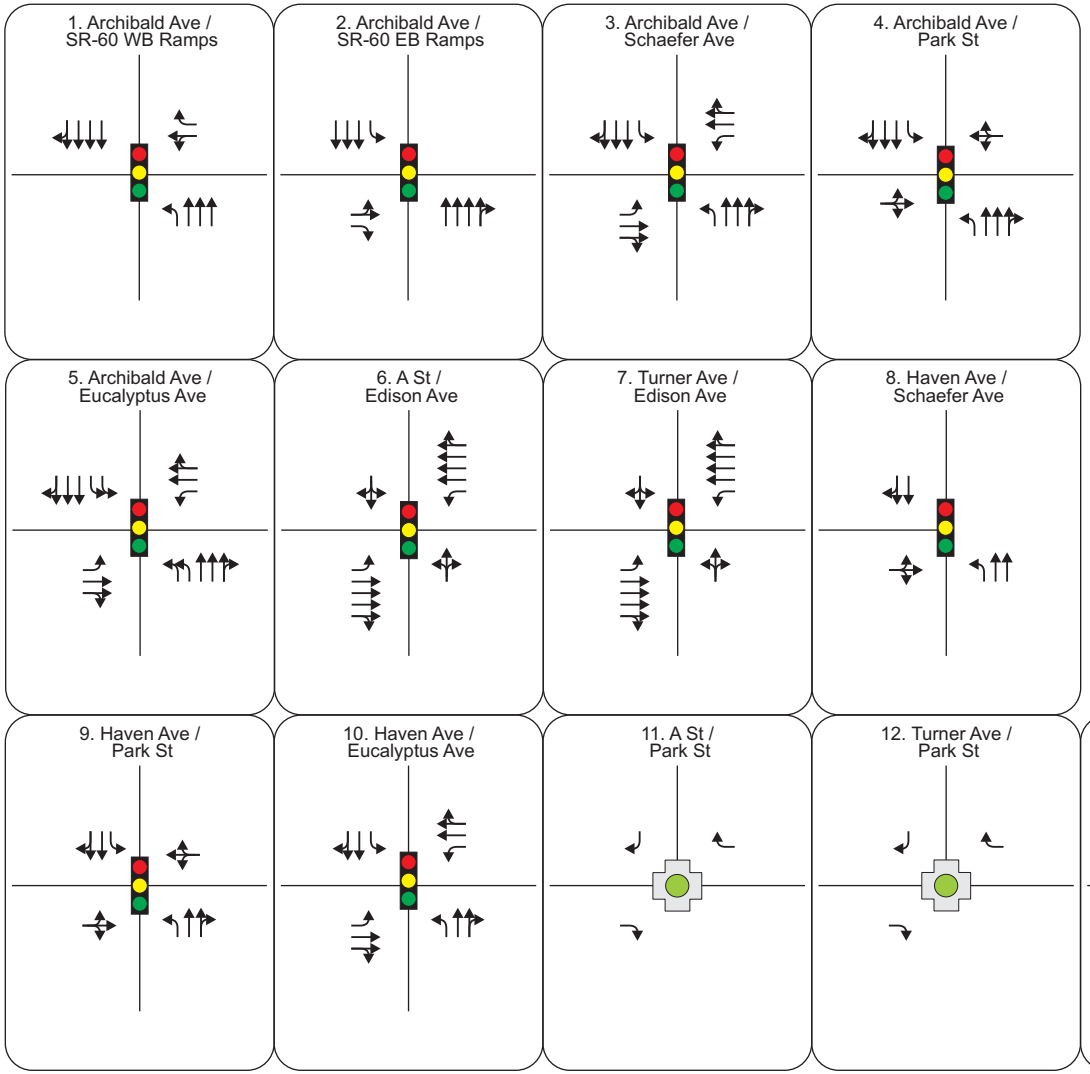
TABLE 5: 2030 NO PROJECT PEAK HOUR LEVELS OF SERVICE

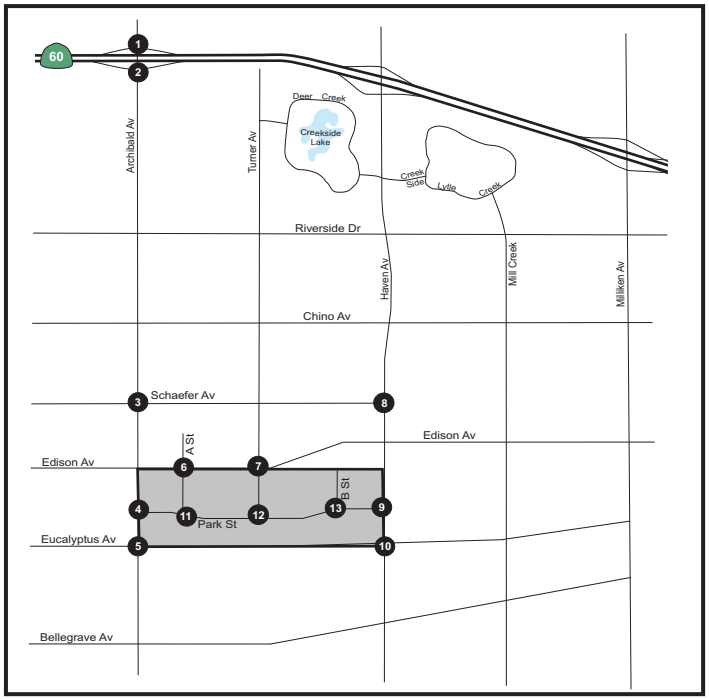
Intersection Name	Control	AM Peak Hour			PM Peak Hour		
		LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Ave / SR-60 WB Ramps	Signal	**F**	**185.4**	**1.556**	**F**	**173.7**	**1.753**
2. Archibald Ave / SR-60 EB Ramps	Signal	**F**	**116.7**	**1.261**	**F**	**214.7**	**1.634**
3. Archibald Ave / Schaefer Ave	Signal	B	18.8	0.394	B	19.3	0.518
4. Archibald Ave / Park St	Signal	B	11.2	0.289	B	10.6	0.431
5. Archibald Ave / Eucalyptus Ave	Signal	C	24.4	0.582	C	30.1	0.798
6. A St / Edison Ave	Signal	A	3.9	0.294	A	3.4	0.329
7. Turner Ave / Edison Ave	Signal	B	14.5	0.463	B	16.6	0.542
8. Haven Ave / Schaefer Ave	Signal	B	17.6	0.389	C	21.2	0.644
9. Haven Ave / Park St	Signal	A	7.7	0.273	B	14.7	0.384
10. Haven Ave / Eucalyptus Ave	Signal	B	14.2	0.366	B	14.4	0.360
11. A St / Park St	Intersection doesn't exist						
12. Turner Ave / Park St	Intersection doesn't exist						
13. B St / Park St	Intersection doesn't exist						

Notes:
LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio
BOLD indicates unsatisfactory

6.0 HORIZON YEAR (2030) WITH PROJECT CONDITIONS

This section analyzes the traffic conditions in the study area during the project's horizon year (2030) under With Project conditions. The 2030 With Project volumes were developed as described in the "Analysis Methodology" section. . Intersection lane configuration assumptions for the 2030 With Project conditions were based on the recommended lane configurations described in The Ontario Plan. Intersection lane configurations at the study intersections for Year 2030 With Project conditions are illustrated in **Figure 17**. The figure also includes the lane configurations for the intersections created by the proposed Specific Plan.





Legend

- Project Site
- Study Intersection
- Roundabout

NOT TO SCALE

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FIGURE 17
2030 With Project Intersection Lane Configuration

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A level of service analysis was conducted to evaluate 2030 With Project intersection operations. Level of service calculation worksheets are included in **Appendix C**. **Table 6** summarizes the resulting levels of service at study intersections. Results show that all study intersections are projected to operate at satisfactory levels of service except for two intersections.

- Archibald Ave / SR-60 WB Ramps (LOS F in the AM and PM peak hours)
- Archibald Ave / SR-60 EB Ramps (LOS F in the AM and PM peak hours)

TABLE 6: 2030 WITH PROJECT PEAK HOUR LEVELS OF SERVICE

Intersection Name	Control	AM Peak Hour			PM Peak Hour		
		LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Ave / SR-60 WB Ramps	Signal	**F**	**188.7**	**1.590**	**F**	**177.1**	**1.771**
2. Archibald Ave / SR-60 EB Ramps	Signal	**F**	**120.9**	**1.277**	**F**	**224.8**	**1.658**
3. Archibald Ave / Schaefer Ave	Signal	B	18.9	0.423	B	19.4	0.549
4. Archibald Ave / Park St	Signal	B	19.4	0.499	B	16.1	0.442
5. Archibald Ave / Eucalyptus Ave	Signal	C	25.8	0.631	C	30.7	0.811
6. A St / Edison Ave	Signal	B	11.8	0.384	A	6.1	0.398
7. Turner Ave / Edison Ave	Signal	C	26.7	0.641	C	23.4	0.647
8. Haven Ave / Schaefer Ave	Signal	B	17.8	0.399	C	21.2	0.668
9. Haven Ave / Park St	Signal	B	14.0	0.377	B	14.1	0.427
10. Haven Ave / Eucalyptus Ave	Signal	B	14.0	0.406	B	14.7	0.382
11. A St / Park St	Roundabout	A	6.9	0.000	A	5.4	0.000
12. Turner Ave / Park St	Roundabout	A	7.2	0.000	A	5.6	0.000
13. B St / Park St	Roundabout	A	7.9	0.000	A	6.2	0.000

Notes:
LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio
BOLD indicates unsatisfactory

7.0 RECOMMENDED MITIGATION MEASURES

The following mitigation measures are proposed to bring projected deficient intersections to acceptable operating conditions, (LOS D or better and V/C of less than 1.0) per City of Ontario standards. The mitigated level of service forecasts for the AM and PM peak hours are shown in **Table 7**.

Intersection #1. Archibald Ave / SR-60 WB Ramps

- Provide an additional exclusive NB left-turn lane
- Re-stripe the SB shared through/right-turn lane as an exclusive right-turn lane and provide an additional exclusive SB right-turn lane
- Re-stripe the WB shared left-turn/though lanes as a shared left-turn/right-turn lane and provide an additional exclusive WB left-turn lane

Intersection #2. Archibald Ave / SR-60 EB Ramps

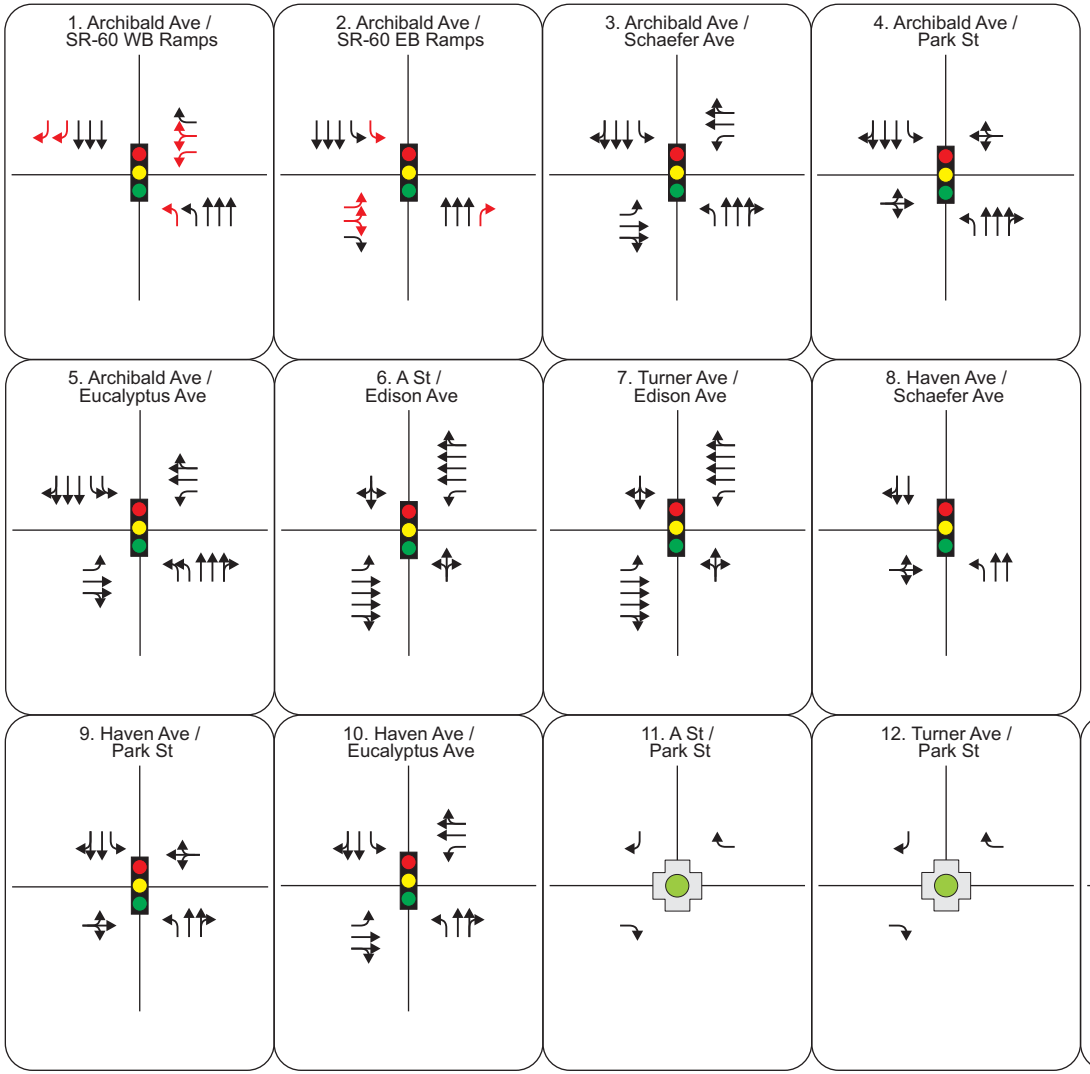
- Re-stripe the NB shared through/right-turn lane as an exclusive right-turn lane
- Provide an additional exclusive SB left-turn lane
- Re-stripe the EB shared left-turn/though lanes as a shared left-turn/right-turn lane and provide an additional exclusive EB left-turn lane

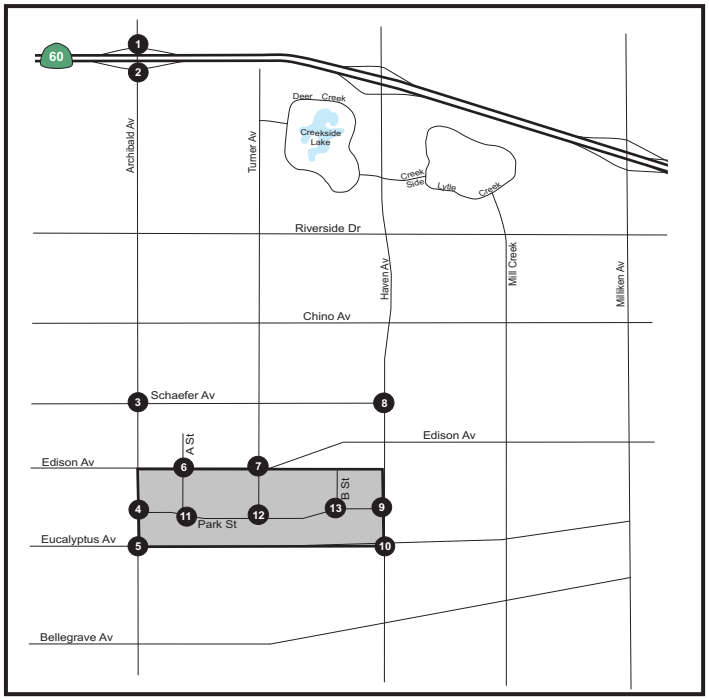
These proposed improvements are consistent with the recommended lane configurations identified in the *The Ontario Plan (January 26, 2010)*. The above proposed intersection improvement measures are illustrated in **Figure 18**. Levels of service calculation worksheets are included in **Appendix C**.

TABLE 7: 2030 WITH PROJECT WITH PROPOSED IMPROVEMENTS PEAK HOUR LEVELS OF SERVICE

Intersection Name	Control	AM Peak Hour			PM Peak Hour		
		LOS	Delay (Sec.)	V/C	LOS	Delay (Sec.)	V/C
1. Archibald Ave / SR-60 WB Ramps	Signal	D	50.6	1.064	D	37.4	0.993
2. Archibald Ave / SR-60 EB Ramps	Signal	C	29.0	0.960	D	52.3	1.150

Notes:
LOS = Level of Service, Delay = Average Vehicle Delay (Seconds), V/C = Volume-to-Capacity Ratio





Legend

- Project Site
- Study Intersection
- Roundabout
- Mitigation

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FIGURE 18
Future With Project Lane Configuration-With Proposed Mitigation

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8.0 ROUNDABOUT ANALYSIS

The Specific Plan proposes to build three roundabouts along Park Street. Two of them, A Street/Park Street and Turner Avenue/Park Street will be near the proposed High School in Planning Area 10. The other roundabout is at B Street/Park Street, which will be close to the proposed Elementary School in Planning Area 9. The analysis of traffic operations at the roundabouts was conducted using Federal Highway Administration (FHWA) Roundabout Methodology. Results of the analysis show that all the intersections are projected to operate at LOS A during AM and PM peak hours for all the project scenarios (Existing + Project and 2030 With Project). These results were summarized Table 4 and Table 6.

The roundabouts function at a LOS A, assuming approximately 25% of the students in attendance (838) are walking, and 100 students arrive by bicycle during both AM and PM peak hours. To further verify this, the same intersections were analyzed in a 'worst case' scenario, maintaining the same vehicular volumes, but assuming that 100% of the students (3,350) walked. Even in the worst case scenario, the roundabouts functioned at acceptable levels of service (LOS D or better). The LOS calculation worksheets for the roundabout 'worst case' scenario are included at the end of **Appendix C**.

Per the City of Ontario's instructions, a literature review was conducted to determine the feasibility of roundabouts near schools. From our research we have found that roundabouts have been installed near schools all throughout the U.S., including Montpelier, VT; Howard, WI; University Place, WA; and Kennewick, WA. None has reported any significant problems. We have learnt that prior to the opening of the roundabout at Howard, WI; the school required all school children to arrive by bicycle or car because it was unsafe to cross the street. Since the roundabout opened, children now have a safe crossing location, aided by a crossing guard.

Even in California, there are roundabouts near schools, such as the following:

- Encina Ave/Conejo Ave, Modesto, CA – near La Loma Jr. High School
- Casa Grande Rd and Ely Blvd, Petaluma, Sonoma County, CA – near Casa Grande Sr. High School

FHWA's Office of Safety has 'Roundabout Outreach and Education Toolbox' which is designed as reference for transportation professionals for outreach purposes to help obtain public support for roundabouts. Studies have shown that roundabouts work near schools and they are much safer. Roundabouts are used as a tool of traffic calming.

9.0 SUMMARY AND CONCLUSIONS

This section of the report summarizes the results and conclusions of the traffic analysis for the proposed Grand Park Specific Plan in the New Model Colony of the City of Ontario. The traffic impact analysis was conducted for Year 2030, for both AM and PM peak hour conditions. The Specific Plan analyzed in this study consists of 1,327 dwelling units (484 SFD and 843 MFA) and a 10-acre elementary school, a 50-acre high school, and approximately 131 acres of the City of Ontario Grand Park on a total of 320 acres.

The traffic study area is comprised of thirteen study intersections. This report analyzed traffic operations within the study area for the following scenarios:

- Existing Conditions (2012)
- Existing (2012) Plus Project Conditions
- Horizon Year No Project (2030)
- Horizon Year With Project (2030)

The following summarizes the conclusion of the analysis:

- Under existing conditions, all study intersections currently operate at acceptable levels of service.
- Under existing plus project conditions, all study intersections would operate at acceptable levels of service.
- Under 2030 No Project conditions, all study intersections would operate at acceptable levels of service except for Archibald Ave/SR-60 WB Ramps, and Archibald Ave/SR-60 EB Ramps.
- Under 2030 With Project conditions, all study intersections would operate at acceptable levels of service except for Archibald Ave/SR-60 WB Ramps, and Archibald Ave/SR-60 EB Ramps.
- Under 2030 With Project conditions with proposed improvements, all study intersections would operate at acceptable levels of service.
- Our research shows that roundabouts have been installed near schools throughout the country and that no significant problems have been reported.

Submitted by:

ITERIS

APPENDICES

GRAND PARK SPECIFIC PLAN

Draft Traffic Impact Analysis

Submitted to:

City of Ontario

February 20, 2013

APPENDIX A: TRAFFIC COUNT SHEETS

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

City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WAM
Site Code : 00000063
Start Date : 6/28/2012
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

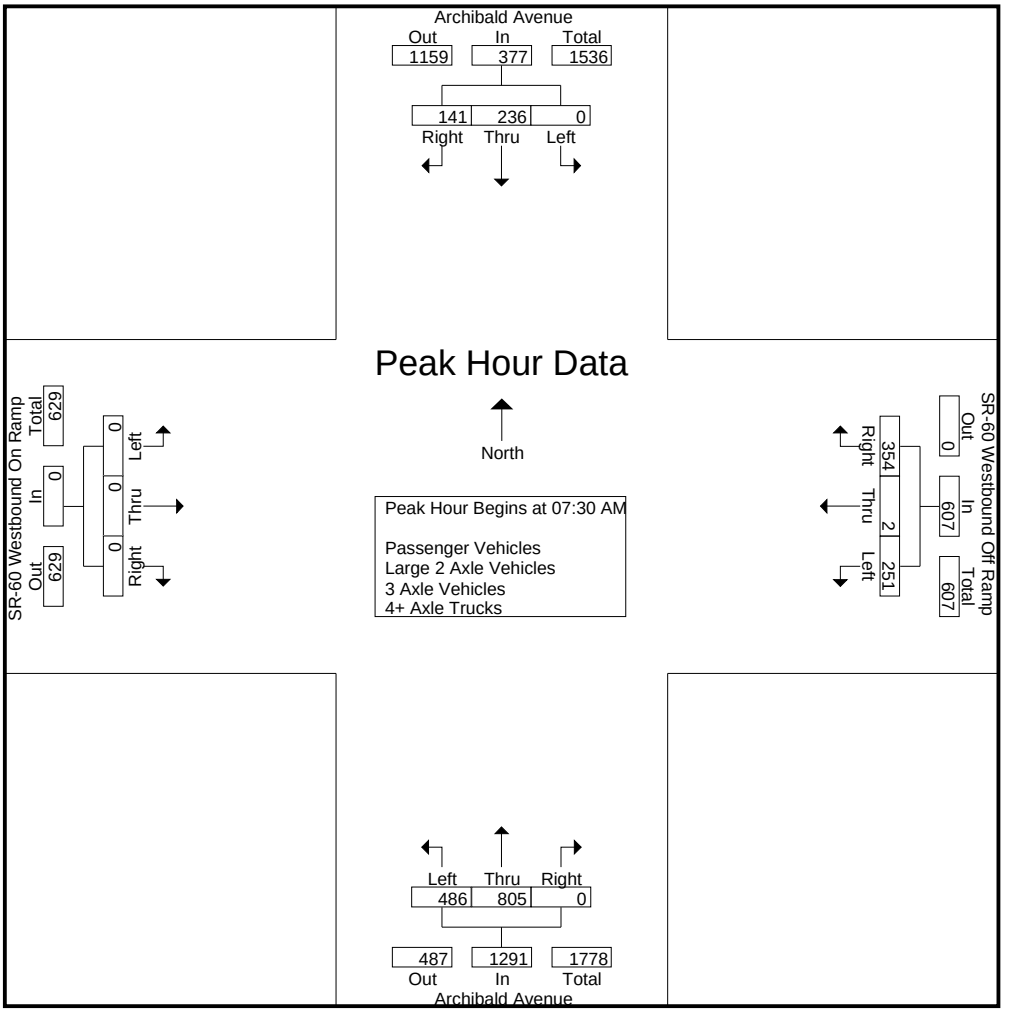
	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	35	36	71	53	1	45	99	114	119	0	233	0	0	0	0	403
07:15 AM	0	42	30	72	57	0	69	126	123	161	0	284	0	0	0	0	482
07:30 AM	0	64	28	92	75	1	78	154	119	192	0	311	0	0	0	0	557
07:45 AM	0	64	32	96	63	0	124	187	122	232	0	354	0	0	0	0	637
Total	0	205	126	331	248	2	316	566	478	704	0	1182	0	0	0	0	2079
08:00 AM	0	56	38	94	59	1	88	148	114	201	0	315	0	0	0	0	557
08:15 AM	0	52	43	95	54	0	64	118	131	180	0	311	0	0	0	0	524
08:30 AM	0	70	29	99	45	0	52	97	136	155	0	291	0	0	0	0	487
08:45 AM	0	47	33	80	34	1	43	78	135	160	0	295	0	0	0	0	453
Total	0	225	143	368	192	2	247	441	516	696	0	1212	0	0	0	0	2021
Grand Total	0	430	269	699	440	4	563	1007	994	1400	0	2394	0	0	0	0	4100
Apprch %	0	61.5	38.5		43.7	0.4	55.9		41.5	58.5	0		0	0	0		
Total %	0	10.5	6.6	17	10.7	0.1	13.7	24.6	24.2	34.1	0	58.4	0	0	0	0	
Passenger Vehicles	0	344	209	553	405	3	505	913	958	1305	0	2263	0	0	0	0	3729
% Passenger Vehicles	0	80	77.7	79.1	92	75	89.7	90.7	96.4	93.2	0	94.5	0	0	0	0	91
Large 2 Axle Vehicles	0	38	15	53	12	0	11	23	20	39	0	59	0	0	0	0	135
% Large 2 Axle Vehicles	0	8.8	5.6	7.6	2.7	0	2	2.3	2	2.8	0	2.5	0	0	0	0	3.3
3 Axle Vehicles	0	9	1	10	5	0	2	7	2	7	0	9	0	0	0	0	26
% 3 Axle Vehicles	0	2.1	0.4	1.4	1.1	0	0.4	0.7	0.2	0.5	0	0.4	0	0	0	0	0.6
4+ Axle Trucks	0	39	44	83	18	1	45	64	14	49	0	63	0	0	0	0	210
% 4+ Axle Trucks	0	9.1	16.4	11.9	4.1	25	8	6.4	1.4	3.5	0	2.6	0	0	0	0	5.1

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**64**	28	92	**75**	**1**	78	154	119	192	0	311	0	0	0	0	557
07:45 AM	0	64	32	**96**	63	0	**124**	**187**	122	**232**	0	**354**	0	0	0	0	**637**
08:00 AM	0	56	38	94	59	1	88	148	114	201	0	315	0	0	0	0	557
08:15 AM	0	52	**43**	95	54	0	64	118	**131**	180	0	311	0	0	0	0	524
Total Volume	0	236	141	377	251	2	354	607	486	805	0	1291	0	0	0	0	2275
% App. Total	0	62.6	37.4		41.4	0.3	58.3		37.6	62.4	0		0	0	0		
PHF	.000	.922	.820	.982	.837	.500	.714	.811	.927	.867	.000	.912	.000	.000	.000	.000	.893

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

City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WAM
Site Code : 00000063
Start Date : 6/28/2012
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**64**	28	92	**75**	**1**	78	154	119	192	0	311	0	0	0	0
+15 mins.	0	64	32	**96**	63	0	**124**	**187**	122	**232**	0	**354**	0	0	0	0
+30 mins.	0	56	38	94	59	1	88	148	114	201	0	315	0	0	0	0
+45 mins.	0	52	**43**	95	54	0	64	118	**131**	180	0	311	0	0	0	0
Total Volume	0	236	141	377	251	2	354	607	486	805	0	1291	0	0	0	0
% App. Total	0	62.6	37.4		41.4	0.3	58.3		37.6	62.4	0		0	0	0	
PHF	.000	.922	.820	.982	.837	.500	.714	.811	.927	.867	.000	.912	.000	.000	.000	.000

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WAM
Site Code : 00000063
Start Date : 6/28/2012
Page No : 1

Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	29	23	52	51	1	40	92	108	108	0	216	0	0	0	0	360
07:15 AM	0	32	24	56	56	0	64	120	120	148	0	268	0	0	0	0	444
07:30 AM	0	51	21	72	69	1	73	143	116	179	0	295	0	0	0	0	510
07:45 AM	0	55	29	84	59	0	113	172	116	220	0	336	0	0	0	0	592
Total	0	167	97	264	235	2	290	527	460	655	0	1115	0	0	0	0	1906
08:00 AM	0	43	33	76	54	0	80	134	109	188	0	297	0	0	0	0	507
08:15 AM	0	40	31	71	47	0	60	107	130	169	0	299	0	0	0	0	477
08:30 AM	0	58	22	80	40	0	40	80	131	145	0	276	0	0	0	0	436
08:45 AM	0	36	26	62	29	1	35	65	128	148	0	276	0	0	0	0	403
Total	0	177	112	289	170	1	215	386	498	650	0	1148	0	0	0	0	1823
Grand Total	0	344	209	553	405	3	505	913	958	1305	0	2263	0	0	0	0	3729
Apprch %	0	62.2	37.8		44.4	0.3	55.3		42.3	57.7	0		0	0	0		
Total %	0	9.2	5.6	14.8	10.9	0.1	13.5	24.5	25.7	35	0	60.7	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	51	21	72	**69**	**1**	73	143	116	179	0	295	0	0	0	0	510
07:45 AM	0	**55**	29	**84**	59	0	**113**	**172**	116	**220**	0	**336**	0	0	0	0	**592**
08:00 AM	0	43	**33**	76	54	0	80	134	109	188	0	297	0	0	0	0	507
08:15 AM	0	40	31	71	47	0	60	107	**130**	169	0	299	0	0	0	0	477
Total Volume	0	189	114	303	229	1	326	556	471	756	0	1227	0	0	0	0	2086
% App. Total	0	62.4	37.6		41.2	0.2	58.6		38.4	61.6	0		0	0	0		
PHF	.000	.859	.864	.902	.830	.250	.721	.808	.906	.859	.000	.913	.000	.000	.000	.000	.881

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WAM
Site Code : 00000063
Start Date : 6/28/2012
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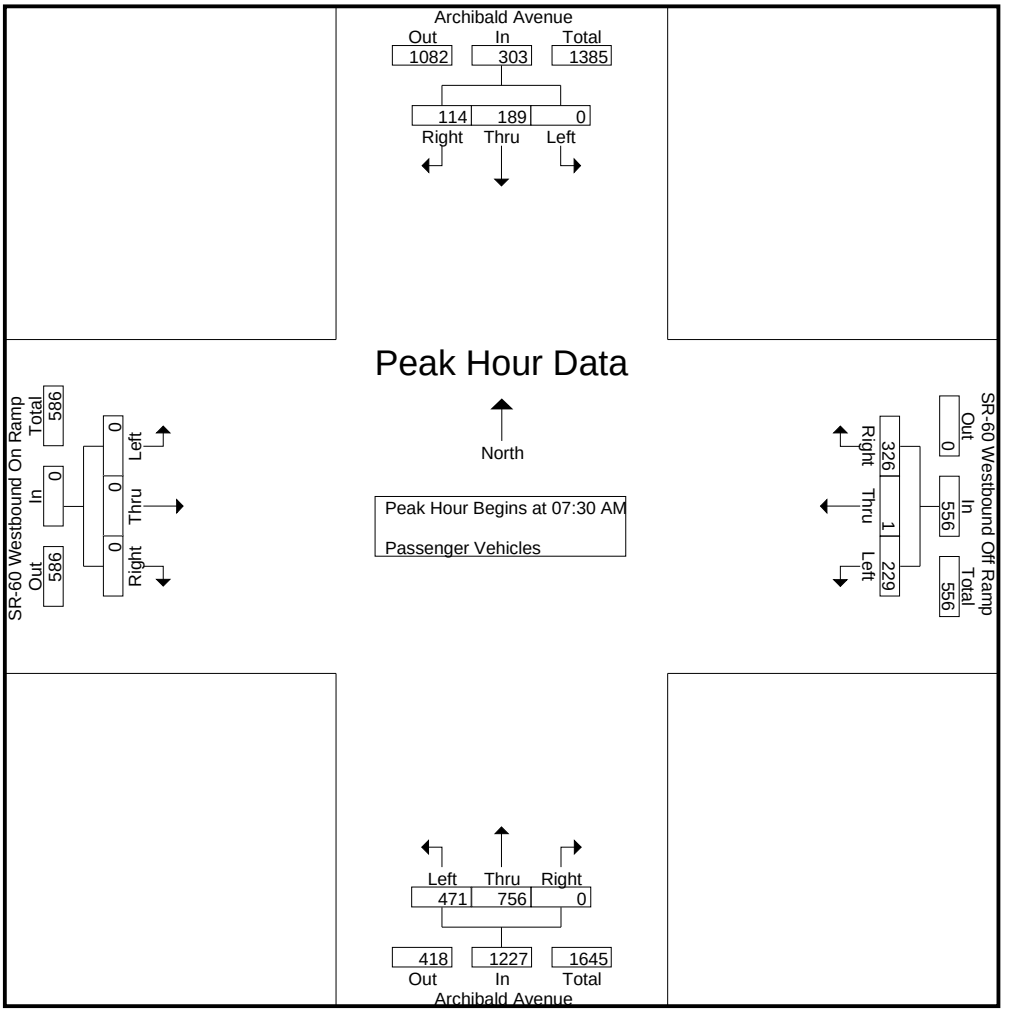

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	51	21	72	**69**	**1**	73	143	116	179	0	295	0	0	0	0
+15 mins.	0	**55**	29	**84**	59	0	**113**	**172**	116	**220**	0	**336**	0	0	0	0
+30 mins.	0	43	**33**	76	54	0	80	134	109	188	0	297	0	0	0	0
+45 mins.	0	40	31	71	47	0	60	107	**130**	169	0	299	0	0	0	0
Total Volume	0	189	114	303	229	1	326	556	471	756	0	1227	0	0	0	0
% App. Total	0	62.4	37.6		41.2	0.2	58.6		38.4	61.6	0		0	0	0	
PHF	.000	.859	.864	.902	.830	.250	.721	.808	.906	.859	.000	.913	.000	.000	.000	.000

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City of Ontario
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Weather: Sunny

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	3	6	1	0	2	3	3	4	0	7	0	0	0	0	16
07:15 AM	0	5	4	9	0	0	3	3	1	8	0	9	0	0	0	0	21
07:30 AM	0	7	2	9	2	0	1	3	2	5	0	7	0	0	0	0	19
07:45 AM	0	4	1	5	0	0	1	1	4	2	0	6	0	0	0	0	12
Total	0	19	10	29	3	0	7	10	10	19	0	29	0	0	0	0	68
08:00 AM	0	4	0	4	3	0	0	3	1	7	0	8	0	0	0	0	15
08:15 AM	0	6	2	8	3	0	0	3	1	4	0	5	0	0	0	0	16
08:30 AM	0	6	1	7	2	0	3	5	4	3	0	7	0	0	0	0	19
08:45 AM	0	3	2	5	1	0	1	2	4	6	0	10	0	0	0	0	17
Total	0	19	5	24	9	0	4	13	10	20	0	30	0	0	0	0	67
Grand Total	0	38	15	53	12	0	11	23	20	39	0	59	0	0	0	0	135
Apprch %	0	71.7	28.3		52.2	0	47.8		33.9	66.1	0		0	0	0		
Total %	0	28.1	11.1	39.3	8.9	0	8.1	17	14.8	28.9	0	43.7	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**7**	**2**	**9**	2	0	**1**	**3**	2	5	0	7	0	0	0	0	**19**
07:45 AM	0	4	1	5	0	0	1	1	**4**	2	0	6	0	0	0	0	12
08:00 AM	0	4	0	4	**3**	0	0	3	1	**7**	0	**8**	0	0	0	0	15
08:15 AM	0	6	2	8	3	0	0	3	1	4	0	5	0	0	0	0	16
Total Volume	0	21	5	26	8	0	2	10	8	18	0	26	0	0	0	0	62
% App. Total	0	80.8	19.2		80	0	20		30.8	69.2	0		0	0	0		
PHF	.000	.750	.625	.722	.667	.000	.500	.833	.500	.643	.000	.813	.000	.000	.000	.000	.816

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City of Ontario
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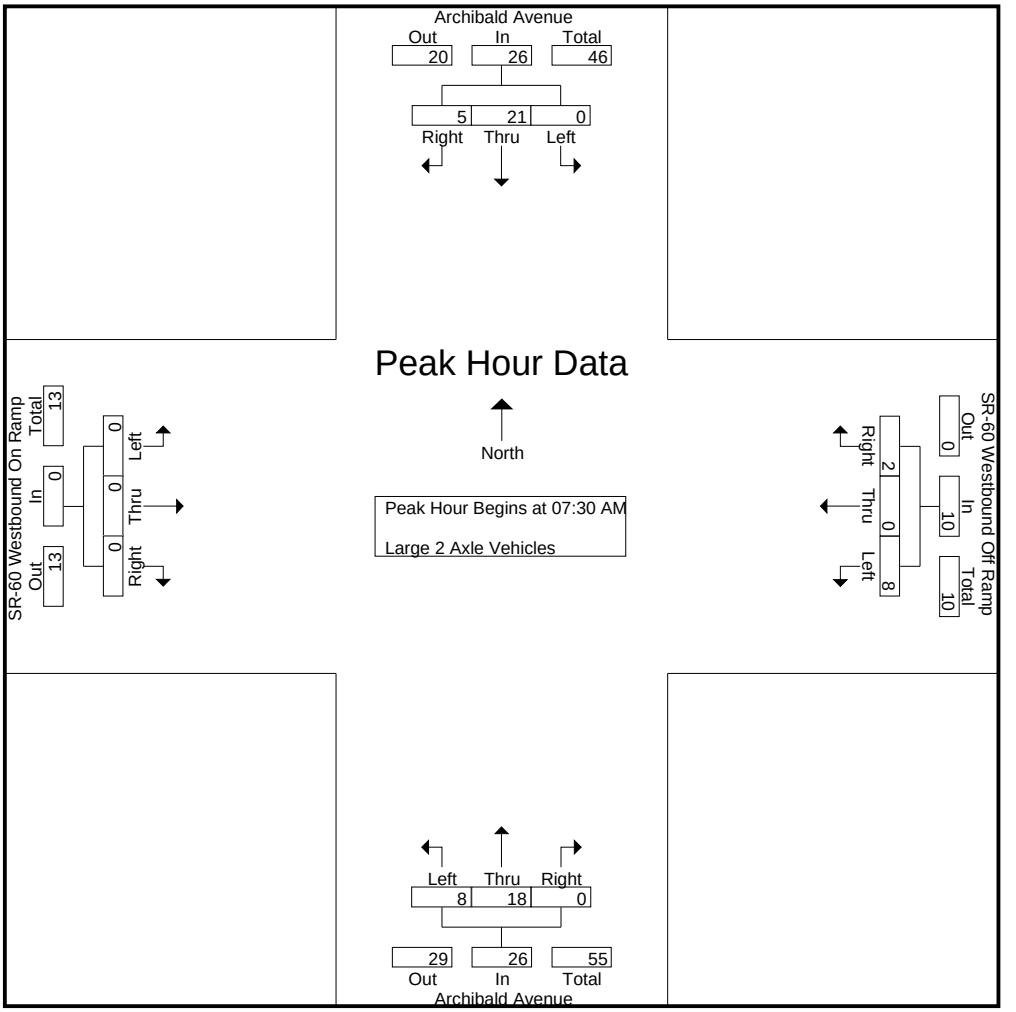

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**7**	**2**	**9**	2	0	**1**	**3**	2	5	0	7	0	0	0	0
+15 mins.	0	4	1	5	0	0	1	1	**4**	2	0	6	0	0	0	0
+30 mins.	0	4	0	4	**3**	0	0	3	1	**7**	0	**8**	0	0	0	0
+45 mins.	0	6	2	8	3	0	0	3	1	4	0	5	0	0	0	0
Total Volume	0	21	5	26	8	0	2	10	8	18	0	26	0	0	0	0
% App. Total	0	80.8	19.2		80	0	20		30.8	69.2	0		0	0	0	
PHF	.000	.750	.625	.722	.667	.000	.500	.833	.500	.643	.000	.813	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
07:30 AM	0	2	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	3	0	2	5	0	1	0	1	0	0	0	0	6
Total	0	3	0	3	4	0	2	6	1	2	0	3	0	0	0	0	12
08:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:15 AM	0	2	1	3	1	0	0	1	0	1	0	1	0	0	0	0	5
08:30 AM	0	1	0	1	0	0	0	0	1	1	0	2	0	0	0	0	3
08:45 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	6	1	7	1	0	0	1	1	5	0	6	0	0	0	0	14
Grand Total	0	9	1	10	5	0	2	7	2	7	0	9	0	0	0	0	26
Apprch %	0	90	10		71.4	0	28.6		22.2	77.8	0		0	0	0		
Total %	0	34.6	3.8	38.5	19.2	0	7.7	26.9	7.7	26.9	0	34.6	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**2**	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	**3**	0	**2**	**5**	0	1	0	1	0	0	0	0	**6**
08:00 AM	0	1	0	1	0	0	0	0	0	**2**	0	**2**	0	0	0	0	3
08:15 AM	0	2	**1**	**3**	1	0	0	1	0	1	0	1	0	0	0	0	5
Total Volume	0	5	1	6	5	0	2	7	0	4	0	4	0	0	0	0	17
% App. Total	0	83.3	16.7		71.4	0	28.6		0	100	0		0	0	0		
PHF	.000	.625	.250	.500	.417	.000	.250	.350	.000	.500	.000	.500	.000	.000	.000	.000	.708

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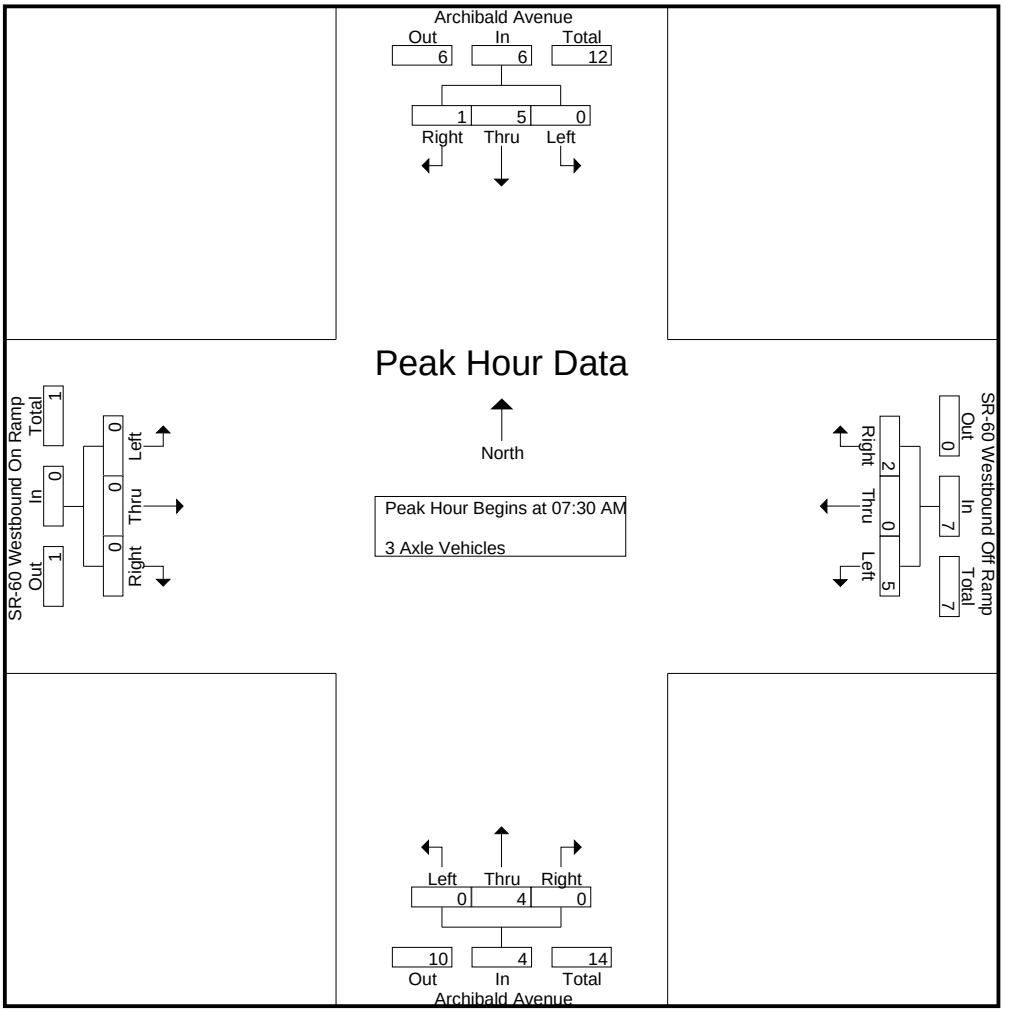

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**2**	0	2	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**3**	0	**2**	**5**	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	**2**	0	**2**	0	0	0	0
+45 mins.	0	2	**1**	**3**	1	0	0	1	0	1	0	1	0	0	0	0
Total Volume	0	5	1	6	5	0	2	7	0	4	0	4	0	0	0	0
% App. Total	0	83.3	16.7		71.4	0	28.6		0	100	0		0	0	0	
PHF	.000	.625	.250	.500	.417	.000	.250	.350	.000	.500	.000	.500	.000	.000	.000	.000

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Weather: Sunny

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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	10	13	1	0	3	4	3	6	0	9	0	0	0	0	26
07:15 AM	0	4	2	6	1	0	2	3	1	5	0	6	0	0	0	0	15
07:30 AM	0	4	5	9	3	0	4	7	1	8	0	9	0	0	0	0	25
07:45 AM	0	5	2	7	1	0	8	9	2	9	0	11	0	0	0	0	27
Total	0	16	19	35	6	0	17	23	7	28	0	35	0	0	0	0	93
08:00 AM	0	8	5	13	2	1	8	11	4	4	0	8	0	0	0	0	32
08:15 AM	0	4	9	13	3	0	4	7	0	6	0	6	0	0	0	0	26
08:30 AM	0	5	6	11	3	0	9	12	0	6	0	6	0	0	0	0	29
08:45 AM	0	6	5	11	4	0	7	11	3	5	0	8	0	0	0	0	30
Total	0	23	25	48	12	1	28	41	7	21	0	28	0	0	0	0	117
Grand Total	0	39	44	83	18	1	45	64	14	49	0	63	0	0	0	0	210
Apprch %	0	47	53		28.1	1.6	70.3		22.2	77.8	0		0	0	0		
Total %	0	18.6	21	39.5	8.6	0.5	21.4	30.5	6.7	23.3	0	30	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	5	9	**3**	0	4	7	1	8	0	9	0	0	0	0	25
07:45 AM	0	5	2	7	1	0	**8**	9	2	**9**	0	**11**	0	0	0	0	27
08:00 AM	0	**8**	5	**13**	2	**1**	8	**11**	**4**	4	0	8	0	0	0	0	**32**
08:15 AM	0	4	**9**	13	3	0	4	7	0	6	0	6	0	0	0	0	26
Total Volume	0	21	21	42	9	1	24	34	7	27	0	34	0	0	0	0	110
% App. Total	0	50	50		26.5	2.9	70.6		20.6	79.4	0		0	0	0		
PHF	.000	.656	.583	.808	.750	.250	.750	.773	.438	.750	.000	.773	.000	.000	.000	.000	.859

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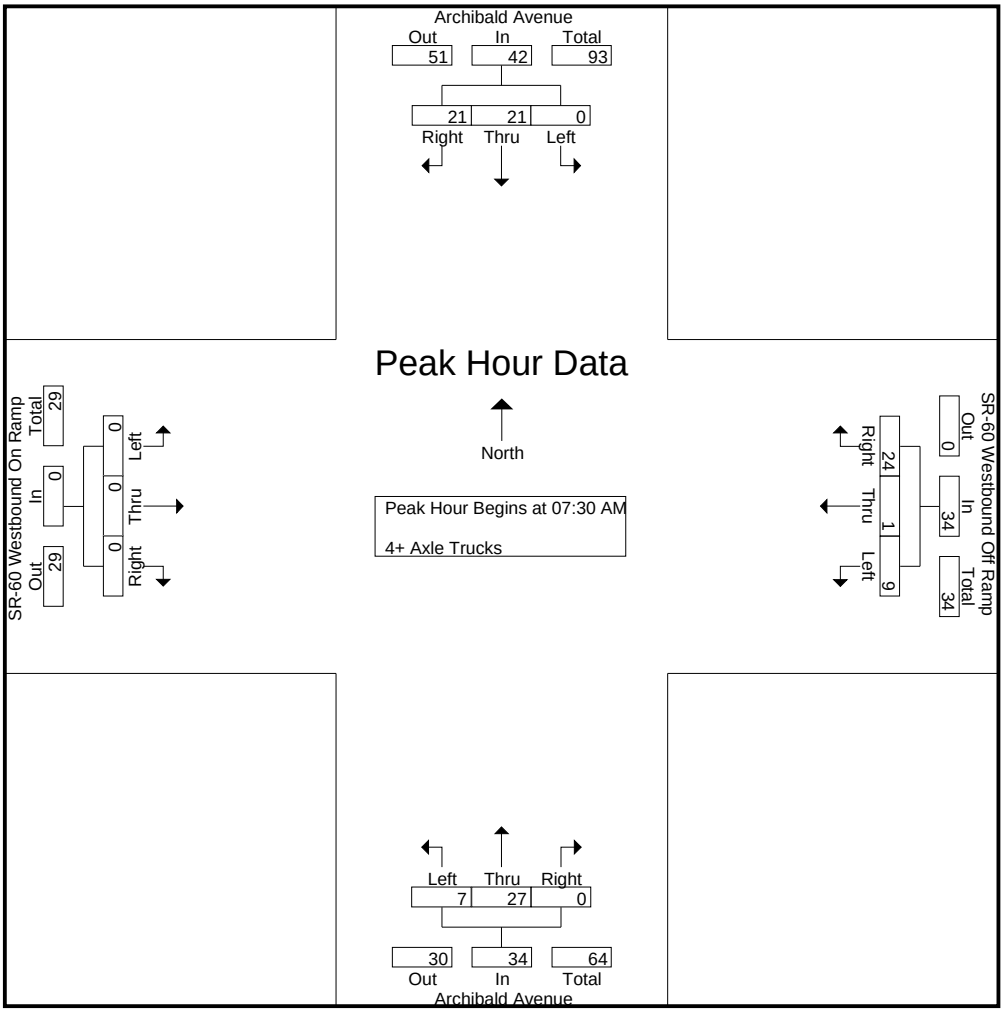

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	4	5	9	**3**	0	4	7	1	8	0	9	0	0	0	0
+15 mins.	0	5	2	7	1	0	**8**	9	2	**9**	0	**11**	0	0	0	0
+30 mins.	0	**8**	5	**13**	2	**1**	8	**11**	**4**	4	0	8	0	0	0	0
+45 mins.	0	4	**9**	13	3	0	4	7	0	6	0	6	0	0	0	0
Total Volume	0	21	21	42	9	1	24	34	7	27	0	34	0	0	0	0
% App. Total	0	50	50		26.5	2.9	70.6		20.6	79.4	0		0	0	0	
PHF	.000	.656	.583	.808	.750	.250	.750	.773	.438	.750	.000	.773	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	194	84	278	57	2	23	82	89	60	0	149	0	0	0	0	509
04:15 PM	0	185	71	256	65	0	22	87	100	74	0	174	0	0	0	0	517
04:30 PM	0	215	118	333	88	1	30	119	91	75	0	166	0	0	0	0	618
04:45 PM	0	171	75	246	71	0	22	93	103	83	0	186	0	0	0	0	525
Total	0	765	348	1113	281	3	97	381	383	292	0	675	0	0	0	0	2169
05:00 PM	0	248	123	371	68	0	16	84	102	96	0	198	0	0	0	0	653
05:15 PM	0	239	71	310	70	1	14	85	82	83	0	165	0	0	0	0	560
05:30 PM	0	190	55	245	69	0	15	84	104	81	0	185	0	0	0	0	514
05:45 PM	0	157	32	189	62	0	3	65	92	89	0	181	0	0	0	0	435
Total	0	834	281	1115	269	1	48	318	380	349	0	729	0	0	0	0	2162
Grand Total	0	1599	629	2228	550	4	145	699	763	641	0	1404	0	0	0	0	4331
Apprch %	0	71.8	28.2		78.7	0.6	20.7		54.3	45.7	0		0	0	0		
Total %	0	36.9	14.5	51.4	12.7	0.1	3.3	16.1	17.6	14.8	0	32.4	0	0	0	0	
Passenger Vehicles	0	1541	589	2130	505	3	107	615	737	578	0	1315	0	0	0	0	4060
% Passenger Vehicles	0	96.4	93.6	95.6	91.8	75	73.8	88	96.6	90.2	0	93.7	0	0	0	0	93.7
Large 2 Axle Vehicles	0	25	9	34	19	0	14	33	16	30	0	46	0	0	0	0	113
% Large 2 Axle Vehicles	0	1.6	1.4	1.5	3.5	0	9.7	4.7	2.1	4.7	0	3.3	0	0	0	0	2.6
3 Axle Vehicles	0	8	5	13	2	0	7	9	3	5	0	8	0	0	0	0	30
% 3 Axle Vehicles	0	0.5	0.8	0.6	0.4	0	4.8	1.3	0.4	0.8	0	0.6	0	0	0	0	0.7
4+ Axle Trucks	0	25	26	51	24	1	17	42	7	28	0	35	0	0	0	0	128
% 4+ Axle Trucks	0	1.6	4.1	2.3	4.4	25	11.7	6	0.9	4.4	0	2.5	0	0	0	0	3

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	215	118	333	**88**	**1**	**30**	**119**	91	75	0	166	0	0	0	0	618
04:45 PM	0	171	75	246	71	0	22	93	**103**	83	0	186	0	0	0	0	525
05:00 PM	0	**248**	**123**	**371**	68	0	16	84	102	**96**	0	**198**	0	0	0	0	**653**
05:15 PM	0	239	71	310	70	1	14	85	82	83	0	165	0	0	0	0	560
Total Volume	0	873	387	1260	297	2	82	381	378	337	0	715	0	0	0	0	2356
% App. Total	0	69.3	30.7		78	0.5	21.5		52.9	47.1	0		0	0	0		
PHF	.000	.880	.787	.849	.844	.500	.683	.800	.917	.878	.000	.903	.000	.000	.000	.000	.902

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
Site Code : 00000063
Start Date : 6/28/2012
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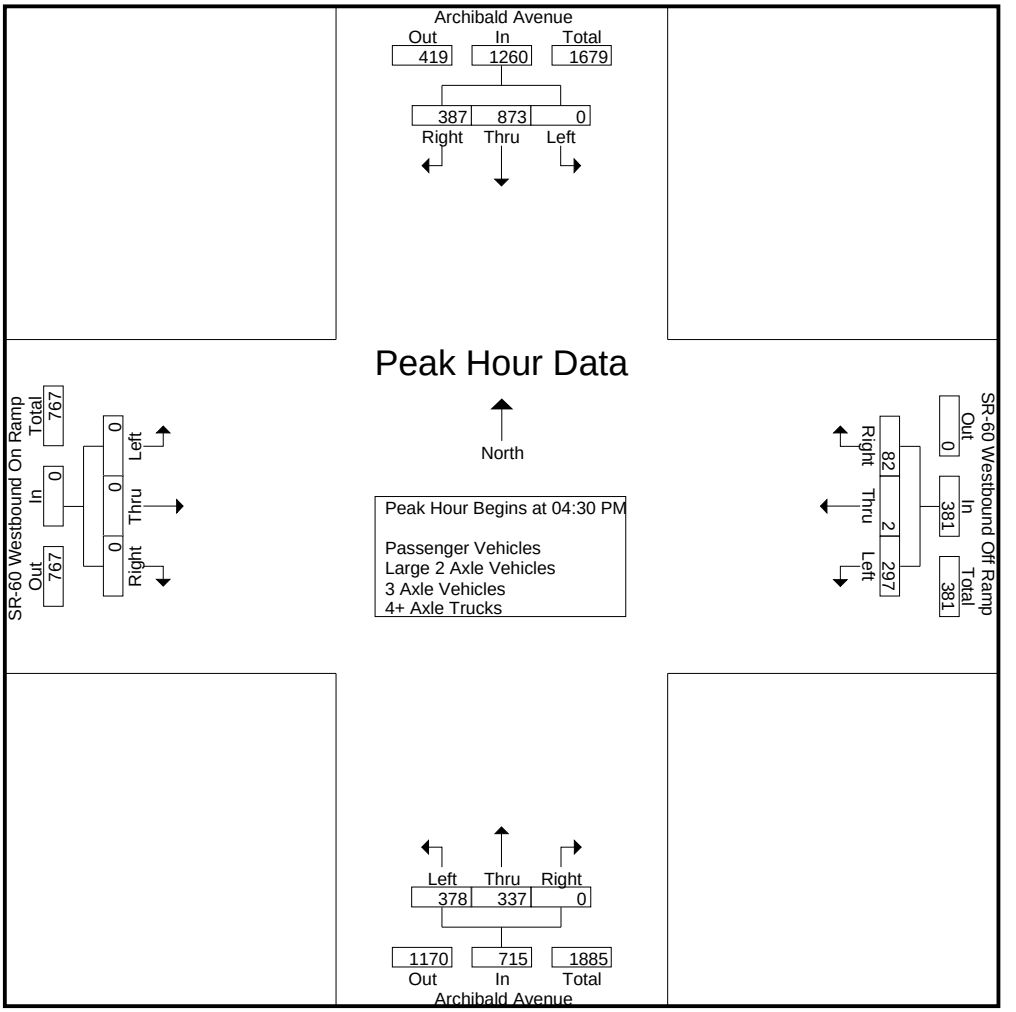

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	0	215	118	333	65	0	22	87	103	83	0	186	0	0	0	0
+15 mins.	0	171	75	246	**88**	**1**	**30**	**119**	102	**96**	0	**198**	0	0	0	0
+30 mins.	0	**248**	**123**	**371**	71	0	22	93	82	83	0	165	0	0	0	0
+45 mins.	0	239	71	310	68	0	16	84	**104**	81	0	185	0	0	0	0
Total Volume	0	873	387	1260	292	1	90	383	391	343	0	734	0	0	0	0
% App. Total	0	69.3	30.7		76.2	0.3	23.5		53.3	46.7	0		0	0	0	
PHF	.000	.880	.787	.849	.830	.250	.750	.805	.940	.893	.000	.927	.000	.000	.000	.000

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
Site Code : 00000063
Start Date : 6/28/2012
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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	187	80	267	54	2	16	72	88	58	0	146	0	0	0	0	485
04:15 PM	0	175	66	241	57	0	17	74	97	65	0	162	0	0	0	0	477
04:30 PM	0	206	114	320	80	0	23	103	87	66	0	153	0	0	0	0	576
04:45 PM	0	165	69	234	65	0	19	84	99	74	0	173	0	0	0	0	491
Total	0	733	329	1062	256	2	75	333	371	263	0	634	0	0	0	0	2029
05:00 PM	0	242	117	359	63	0	10	73	97	86	0	183	0	0	0	0	615
05:15 PM	0	225	64	289	65	1	8	74	80	73	0	153	0	0	0	0	516
05:30 PM	0	186	50	236	62	0	13	75	100	75	0	175	0	0	0	0	486
05:45 PM	0	155	29	184	59	0	1	60	89	81	0	170	0	0	0	0	414
Total	0	808	260	1068	249	1	32	282	366	315	0	681	0	0	0	0	2031
Grand Total	0	1541	589	2130	505	3	107	615	737	578	0	1315	0	0	0	0	4060
Apprch %	0	72.3	27.7		82.1	0.5	17.4		56	44	0		0	0	0		
Total %	0	38	14.5	52.5	12.4	0.1	2.6	15.1	18.2	14.2	0	32.4	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	206	114	320	**80**	0	**23**	**103**	87	66	0	153	0	0	0	0	576
04:45 PM	0	165	69	234	65	0	19	84	**99**	74	0	173	0	0	0	0	491
05:00 PM	0	**242**	**117**	**359**	63	0	10	73	97	**86**	0	**183**	0	0	0	0	**615**
05:15 PM	0	225	64	289	65	**1**	8	74	80	73	0	153	0	0	0	0	516
Total Volume	0	838	364	1202	273	1	60	334	363	299	0	662	0	0	0	0	2198
% App. Total	0	69.7	30.3		81.7	0.3	18		54.8	45.2	0		0	0	0		
PHF	.000	.866	.778	.837	.853	.250	.652	.811	.917	.869	.000	.904	.000	.000	.000	.000	.893

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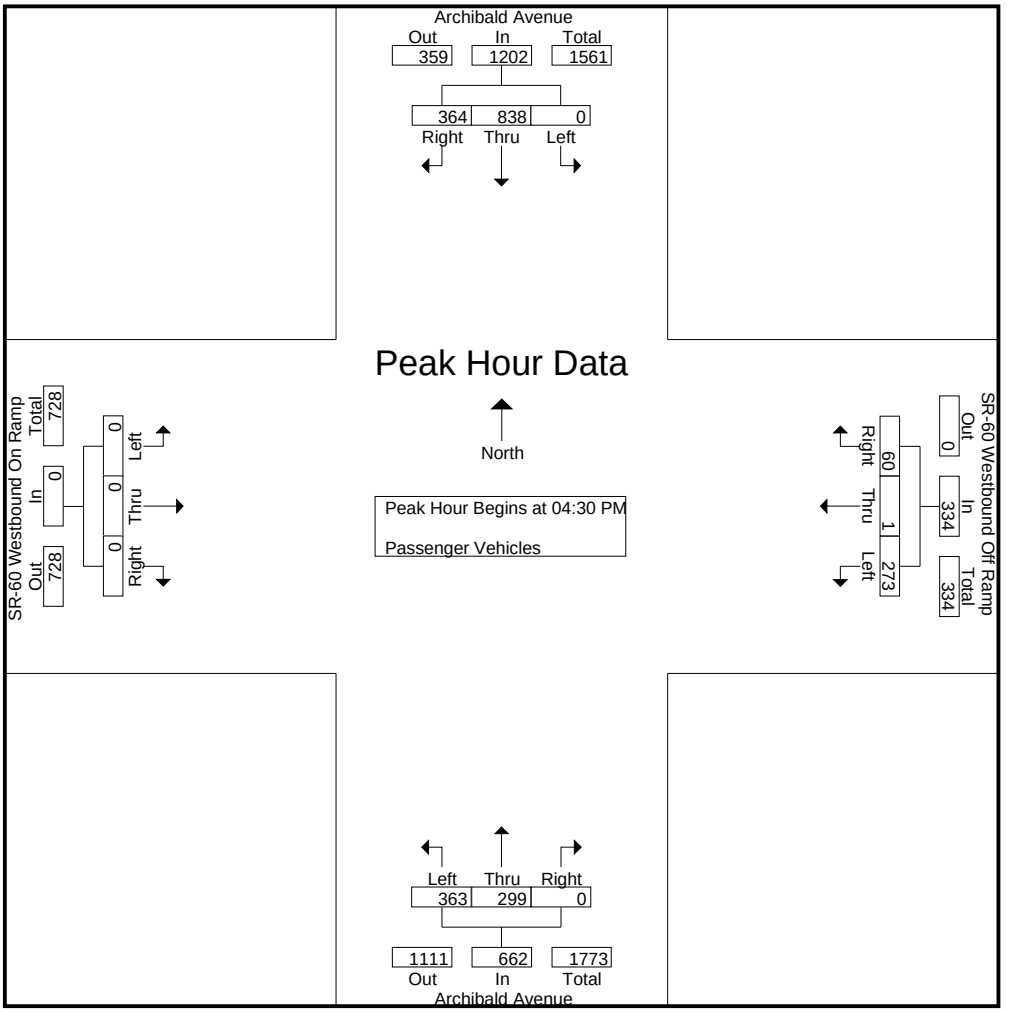
City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
Site Code : 00000063
Start Date : 6/28/2012
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	206	114	320	**80**	0	**23**	**103**	87	66	0	153	0	0	0	0
+15 mins.	0	165	69	234	65	0	19	84	**99**	74	0	173	0	0	0	0
+30 mins.	0	**242**	**117**	**359**	63	0	10	73	97	**86**	0	**183**	0	0	0	0
+45 mins.	0	225	64	289	65	**1**	8	74	80	73	0	153	0	0	0	0
Total Volume	0	838	364	1202	273	1	60	334	363	299	0	662	0	0	0	0
% App. Total	0	69.7	30.3		81.7	0.3	18		54.8	45.2	0		0	0	0	
PHF	.000	.866	.778	.837	.853	.250	.652	.811	.917	.869	.000	.904	.000	.000	.000	.000

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City of Ontario
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E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
Site Code : 00000063
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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	2	6	3	0	3	6	0	1	0	1	0	0	0	0	13
04:15 PM	0	4	0	4	2	0	2	4	2	3	0	5	0	0	0	0	13
04:30 PM	0	4	2	6	2	0	3	5	2	7	0	9	0	0	0	0	20
04:45 PM	0	3	0	3	3	0	0	3	3	5	0	8	0	0	0	0	14
Total	0	15	4	19	10	0	8	18	7	16	0	23	0	0	0	0	60
05:00 PM	0	4	2	6	3	0	2	5	3	5	0	8	0	0	0	0	19
05:15 PM	0	5	1	6	1	0	2	3	2	3	0	5	0	0	0	0	14
05:30 PM	0	1	2	3	4	0	2	6	2	3	0	5	0	0	0	0	14
05:45 PM	0	0	0	0	1	0	0	1	2	3	0	5	0	0	0	0	6
Total	0	10	5	15	9	0	6	15	9	14	0	23	0	0	0	0	53
Grand Total	0	25	9	34	19	0	14	33	16	30	0	46	0	0	0	0	113
Apprch %	0	73.5	26.5		57.6	0	42.4		34.8	65.2	0		0	0	0		
Total %	0	22.1	8	30.1	16.8	0	12.4	29.2	14.2	26.5	0	40.7	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	4	**2**	**6**	2	0	**3**	**5**	2	**7**	0	**9**	0	0	0	0	**20**
04:45 PM	0	3	0	3	**3**	0	0	3	**3**	5	0	8	0	0	0	0	14
05:00 PM	0	4	2	6	3	0	2	5	3	5	0	8	0	0	0	0	19
05:15 PM	0	**5**	1	6	1	0	2	3	2	3	0	5	0	0	0	0	14
Total Volume	0	16	5	21	9	0	7	16	10	20	0	30	0	0	0	0	67
% App. Total	0	76.2	23.8		56.2	0	43.8		33.3	66.7	0		0	0	0		
PHF	.000	.800	.625	.875	.750	.000	.583	.800	.833	.714	.000	.833	.000	.000	.000	.000	.838

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File Name : ONTAR60WPM
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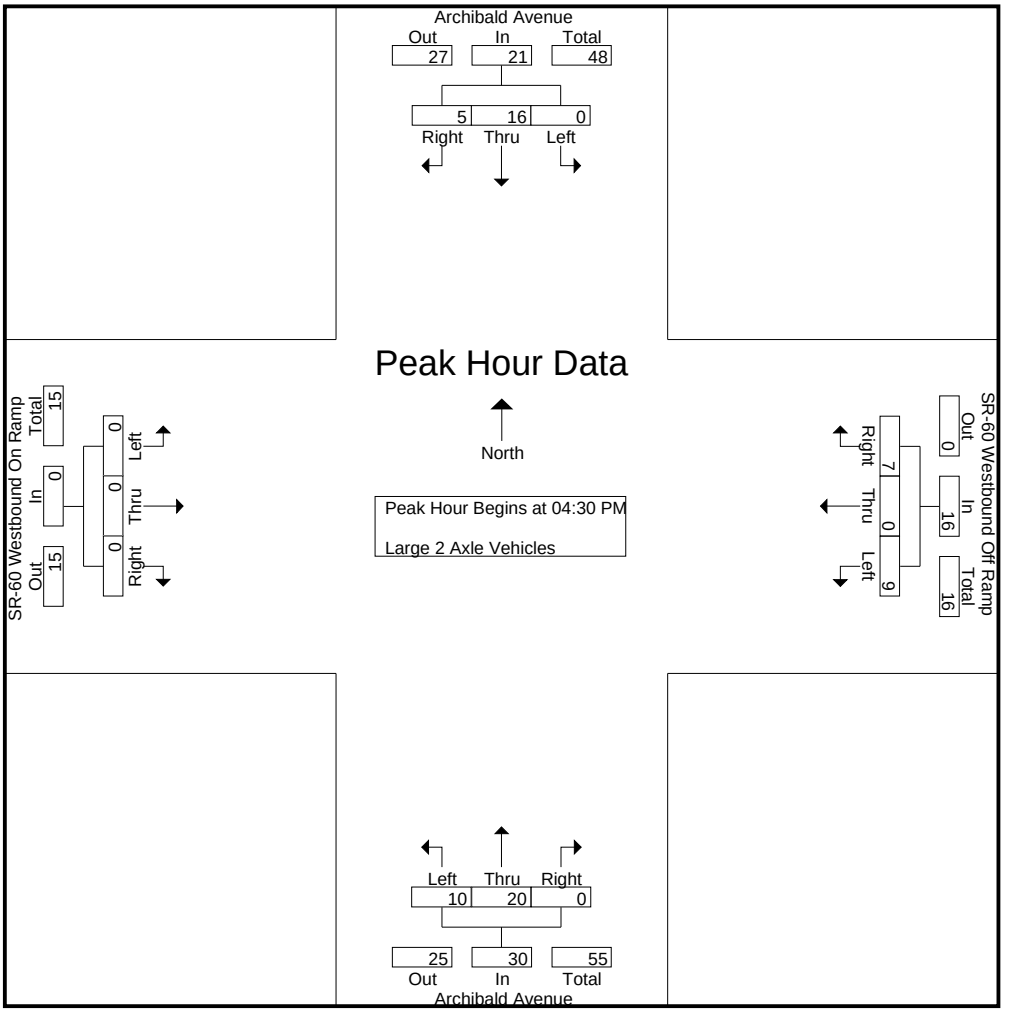

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	4	**2**	**6**	2	0	**3**	**5**	2	**7**	0	**9**	0	0	0	0
+15 mins.	0	3	0	3	**3**	0	0	3	**3**	5	0	8	0	0	0	0
+30 mins.	0	4	2	6	3	0	2	5	3	5	0	8	0	0	0	0
+45 mins.	0	**5**	1	6	1	0	2	3	2	3	0	5	0	0	0	0
Total Volume	0	16	5	21	9	0	7	16	10	20	0	30	0	0	0	0
% App. Total	0	76.2	23.8		56.2	0	43.8		33.3	66.7	0		0	0	0	
PHF	.000	.800	.625	.875	.750	.000	.583	.800	.833	.714	.000	.833	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	1	0	1	1	0	2	3	0	0	0	0	0	0	0	0	4
04:30 PM	0	1	0	1	1	0	2	3	1	0	0	1	0	0	0	0	5
04:45 PM	0	0	3	3	0	0	2	2	1	1	0	2	0	0	0	0	7
Total	0	3	4	7	2	0	6	8	2	1	0	3	0	0	0	0	18
05:00 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
05:15 PM	0	3	1	4	0	0	0	0	0	1	0	1	0	0	0	0	5
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	5	1	6	0	0	1	1	1	4	0	5	0	0	0	0	12
Grand Total	0	8	5	13	2	0	7	9	3	5	0	8	0	0	0	0	30
Apprch %	0	61.5	38.5		22.2	0	77.8		37.5	62.5	0		0	0	0		
Total %	0	26.7	16.7	43.3	6.7	0	23.3	30	10	16.7	0	26.7	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	0	1	**1**	0	**2**	**3**	**1**	0	0	1	0	0	0	0	5
04:45 PM	0	0	**3**	3	0	0	2	2	1	**1**	0	**2**	0	0	0	0	**7**
05:00 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
05:15 PM	0	**3**	1	**4**	0	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	0	4	4	8	1	0	5	6	3	3	0	6	0	0	0	0	20
% App. Total	0	50	50		16.7	0	83.3		50	50	0		0	0	0		
PHF	.000	.333	.333	.500	.250	.000	.625	.500	.750	.750	.000	.750	.000	.000	.000	.000	.714

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

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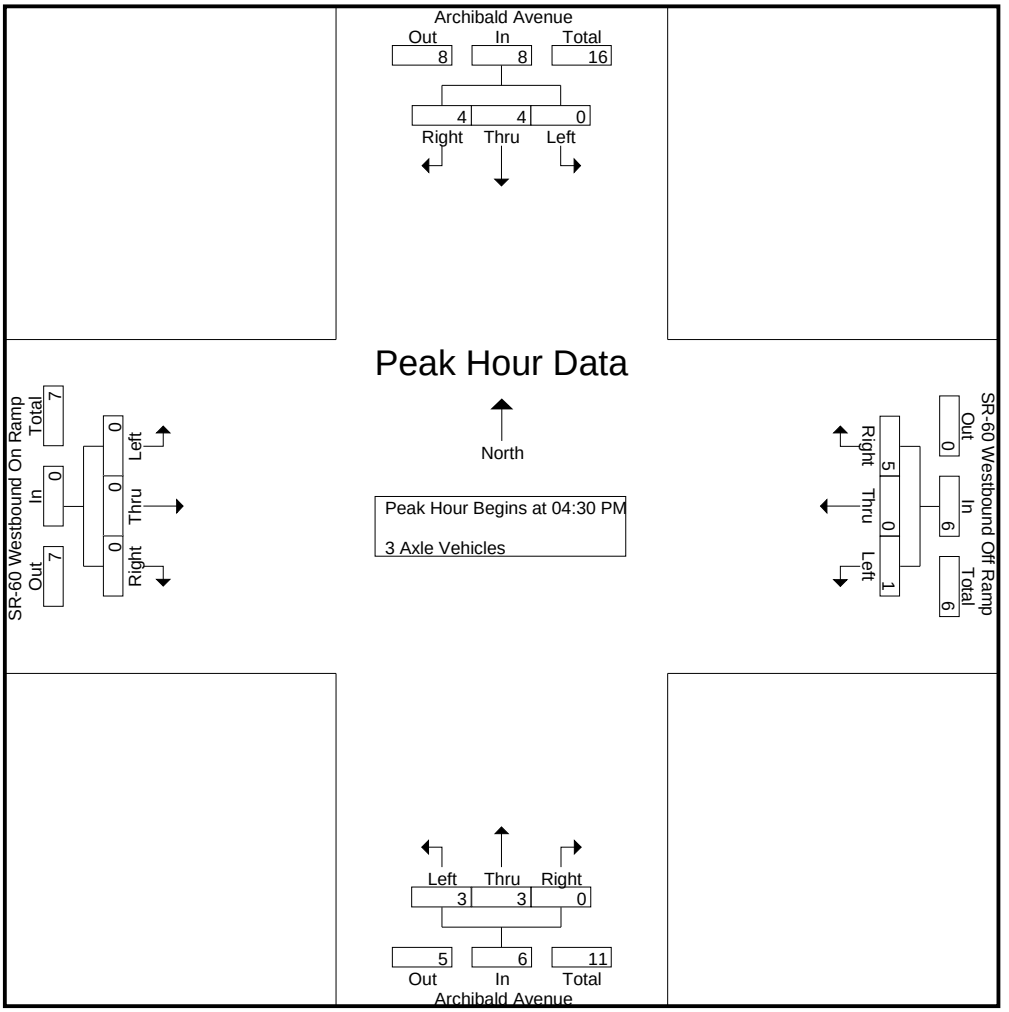

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	1	0	1	**1**	0	**2**	**3**	**1**	0	0	1	0	0	0	0
+15 mins.	0	0	**3**	3	0	0	2	2	1	**1**	0	**2**	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0
+45 mins.	0	**3**	1	**4**	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	4	4	8	1	0	5	6	3	3	0	6	0	0	0	0
% App. Total	0	50	50		16.7	0	83.3		50	50	0		0	0	0	
PHF	.000	.333	.333	.500	.250	.000	.625	.500	.750	.750	.000	.750	.000	.000	.000	.000

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City of Ontario
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E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	1	3	0	0	4	4	1	1	0	2	0	0	0	0	9
04:15 PM	0	5	5	10	5	0	1	6	1	6	0	7	0	0	0	0	23
04:30 PM	0	4	2	6	5	1	2	8	1	2	0	3	0	0	0	0	17
04:45 PM	0	3	3	6	3	0	1	4	0	3	0	3	0	0	0	0	13
Total	0	14	11	25	13	1	8	22	3	12	0	15	0	0	0	0	62
05:00 PM	0	2	4	6	2	0	3	5	1	4	0	5	0	0	0	0	16
05:15 PM	0	6	5	11	4	0	4	8	0	6	0	6	0	0	0	0	25
05:30 PM	0	2	3	5	3	0	0	3	2	2	0	4	0	0	0	0	12
05:45 PM	0	1	3	4	2	0	2	4	1	4	0	5	0	0	0	0	13
Total	0	11	15	26	11	0	9	20	4	16	0	20	0	0	0	0	66
Grand Total	0	25	26	51	24	1	17	42	7	28	0	35	0	0	0	0	128
Apprch %	0	49	51		57.1	2.4	40.5		20	80	0		0	0	0		
Total %	0	19.5	20.3	39.8	18.8	0.8	13.3	32.8	5.5	21.9	0	27.3	0	0	0	0	

	Archibald Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Archibald Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	4	2	6	**5**	**1**	2	**8**	**1**	2	0	3	0	0	0	0	17
04:45 PM	0	3	3	6	3	0	1	4	0	3	0	3	0	0	0	0	13
05:00 PM	0	2	4	6	2	0	3	5	1	4	0	5	0	0	0	0	16
05:15 PM	0	**6**	**5**	**11**	4	0	**4**	8	0	**6**	0	**6**	0	0	0	0	**25**
Total Volume	0	15	14	29	14	1	10	25	2	15	0	17	0	0	0	0	71
% App. Total	0	51.7	48.3		56	4	40		11.8	88.2	0		0	0	0		
PHF	.000	.625	.700	.659	.700	.250	.625	.781	.500	.625	.000	.708	.000	.000	.000	.000	.710

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Westbound Ramps
Weather: Sunny

File Name : ONTAR60WPM
Site Code : 00000063
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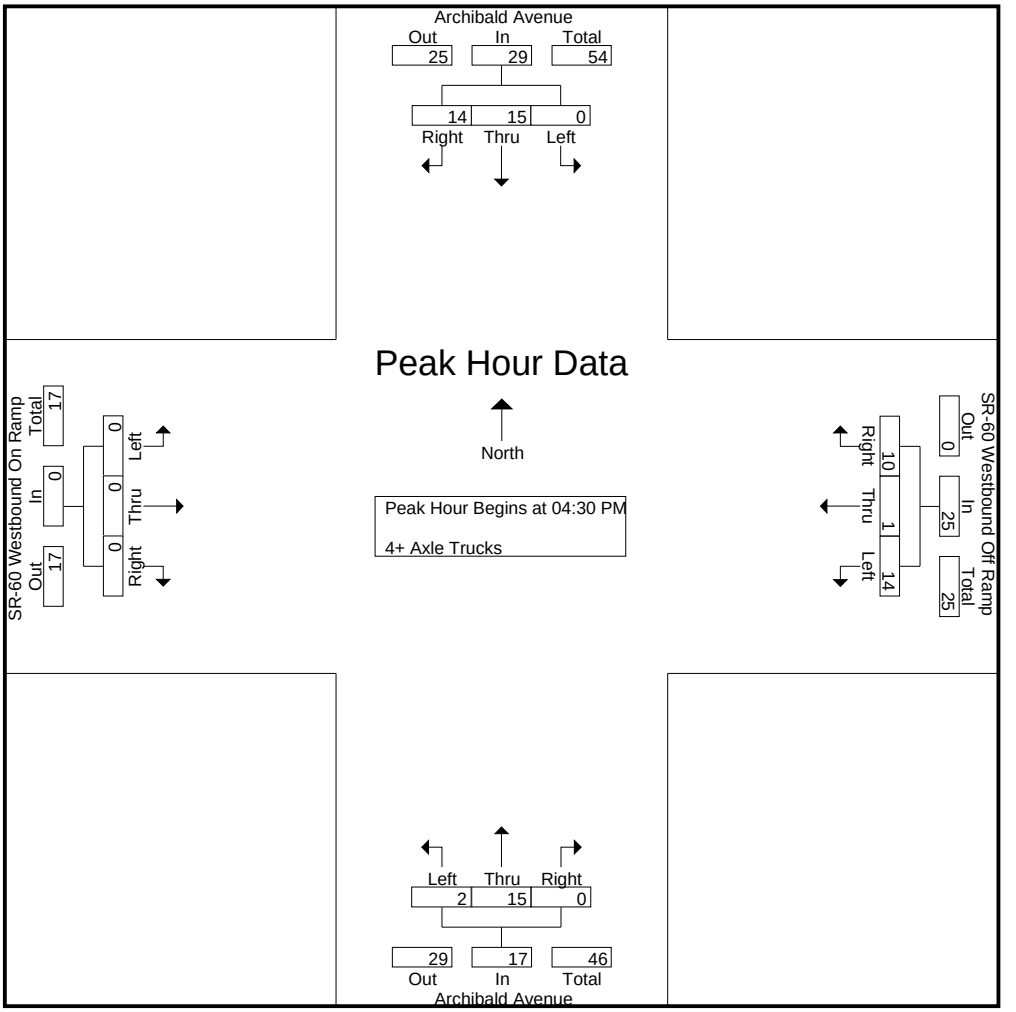

Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	4	2	6	**5**	**1**	2	**8**	**1**	2	0	3	0	0	0	0
+15 mins.	0	3	3	6	3	0	1	4	0	3	0	3	0	0	0	0
+30 mins.	0	2	4	6	2	0	3	5	1	4	0	5	0	0	0	0
+45 mins.	0	**6**	**5**	**11**	4	0	**4**	8	0	**6**	0	**6**	0	0	0	0
Total Volume	0	15	14	29	14	1	10	25	2	15	0	17	0	0	0	0
% App. Total	0	51.7	48.3		56	4	40		11.8	88.2	0		0	0	0	
PHF	.000	.625	.700	.659	.700	.250	.625	.781	.500	.625	.000	.708	.000	.000	.000	.000

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Eastbound Ramps
Weather: Sunny

File Name : ONTAR60EAM
Site Code : 00000051
Start Date : 6/28/2012
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	81	0	93	0	0	0	0	0	208	73	281	33	0	69	102	476
07:15 AM	11	81	0	92	0	0	0	0	0	239	97	336	53	1	62	116	544
07:30 AM	33	112	0	145	0	0	0	0	0	256	112	368	63	2	89	154	667
07:45 AM	26	112	0	138	0	0	0	0	0	257	116	373	104	0	108	212	723
Total	82	386	0	468	0	0	0	0	0	960	398	1358	253	3	328	584	2410
08:00 AM	24	99	0	123	0	0	0	0	0	249	71	320	62	1	85	148	591
08:15 AM	24	93	0	117	0	0	0	0	0	247	91	338	62	0	101	163	618
08:30 AM	28	95	0	123	0	0	0	0	0	250	80	330	58	1	86	145	598
08:45 AM	19	71	0	90	0	0	0	0	0	245	81	326	61	2	80	143	559
Total	95	358	0	453	0	0	0	0	0	991	323	1314	243	4	352	599	2366
Grand Total	177	744	0	921	0	0	0	0	0	1951	721	2672	496	7	680	1183	4776
Apprch %	19.2	80.8	0		0	0	0		0	73	27		41.9	0.6	57.5		
Total %	3.7	15.6	0	19.3	0	0	0	0	0	40.9	15.1	55.9	10.4	0.1	14.2	24.8	
Passenger Vehicles	114	686	0	800	0	0	0	0	0	1873	662	2535	430	6	644	1080	4415
% Passenger Vehicles	64.4	92.2	0	86.9	0	0	0	0	0	96	91.8	94.9	86.7	85.7	94.7	91.3	92.4
Large 2 Axle Vehicles	21	29	0	50	0	0	0	0	0	47	23	70	19	1	23	43	163
% Large 2 Axle Vehicles	11.9	3.9	0	5.4	0	0	0	0	0	2.4	3.2	2.6	3.8	14.3	3.4	3.6	3.4
3 Axle Vehicles	6	8	0	14	0	0	0	0	0	11	11	22	3	0	4	7	43
% 3 Axle Vehicles	3.4	1.1	0	1.5	0	0	0	0	0	0.6	1.5	0.8	0.6	0	0.6	0.6	0.9
4+ Axle Trucks	36	21	0	57	0	0	0	0	0	20	25	45	44	0	9	53	155
% 4+ Axle Trucks	20.3	2.8	0	6.2	0	0	0	0	0	1	3.5	1.7	8.9	0	1.3	4.5	3.2

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**33**	**112**	0	**145**	0	0	0	0	0	256	112	368	63	**2**	89	154	667
07:45 AM	26	112	0	138	0	0	0	0	0	**257**	**116**	**373**	**104**	0	**108**	**212**	**723**
08:00 AM	24	99	0	123	0	0	0	0	0	249	71	320	62	1	85	148	591
08:15 AM	24	93	0	117	0	0	0	0	0	247	91	338	62	0	101	163	618
Total Volume	107	416	0	523	0	0	0	0	0	1009	390	1399	291	3	383	677	2599
% App. Total	20.5	79.5	0		0	0	0		0	72.1	27.9		43	0.4	56.6		
PHF	.811	.929	.000	.902	.000	.000	.000	.000	.000	.982	.841	.938	.700	.375	.887	.798	.899

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Eastbound Ramps
Weather: Sunny

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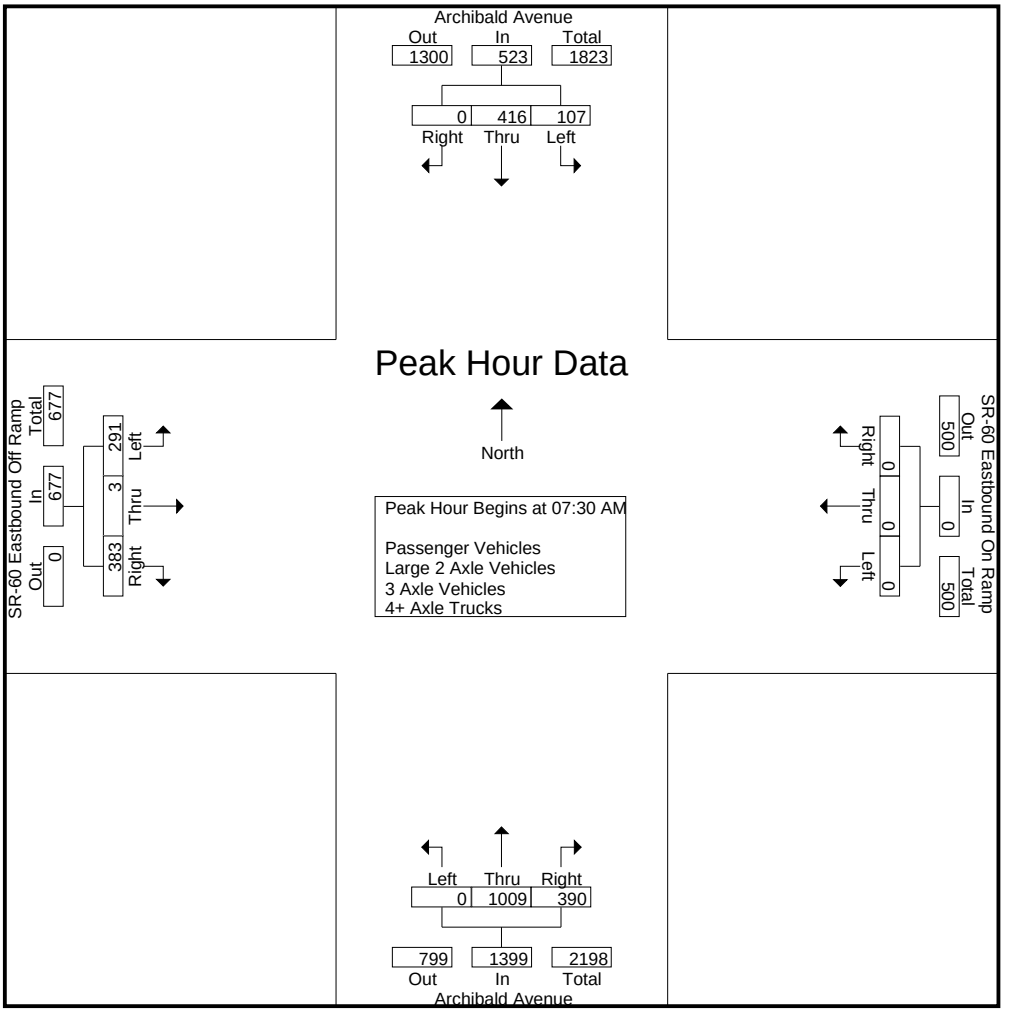

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:30 AM				07:30 AM			
+0 mins.	**33**	**112**	0	**145**	0	0	0	0	0	256	112	368	63	**2**	89	154
+15 mins.	26	112	0	138	0	0	0	0	0	**257**	**116**	**373**	**104**	0	**108**	**212**
+30 mins.	24	99	0	123	0	0	0	0	0	249	71	320	62	1	85	148
+45 mins.	24	93	0	117	0	0	0	0	0	247	91	338	62	0	101	163
Total Volume	107	416	0	523	0	0	0	0	0	1009	390	1399	291	3	383	677
% App. Total	20.5	79.5	0		0	0	0		0	72.1	27.9		43	0.4	56.6	
PHF	.811	.929	.000	.902	.000	.000	.000	.000	.000	.982	.841	.938	.700	.375	.887	.798

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	77	0	83	0	0	0	0	0	199	67	266	25	0	64	89	438
07:15 AM	6	78	0	84	0	0	0	0	0	229	91	320	47	1	58	106	510
07:30 AM	20	103	0	123	0	0	0	0	0	251	107	358	53	2	82	137	618
07:45 AM	20	106	0	126	0	0	0	0	0	242	105	347	95	0	103	198	671
Total	52	364	0	416	0	0	0	0	0	921	370	1291	220	3	307	530	2237
08:00 AM	14	91	0	105	0	0	0	0	0	239	64	303	53	1	79	133	541
08:15 AM	16	82	0	98	0	0	0	0	0	241	81	322	56	0	99	155	575
08:30 AM	22	84	0	106	0	0	0	0	0	239	76	315	48	0	80	128	549
08:45 AM	10	65	0	75	0	0	0	0	0	233	71	304	53	2	79	134	513
Total	62	322	0	384	0	0	0	0	0	952	292	1244	210	3	337	550	2178
Grand Total	114	686	0	800	0	0	0	0	0	1873	662	2535	430	6	644	1080	4415
Apprch %	14.2	85.8	0		0	0	0		0	73.9	26.1		39.8	0.6	59.6		
Total %	2.6	15.5	0	18.1	0	0	0	0	0	42.4	15	57.4	9.7	0.1	14.6	24.5	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**20**	103	0	123	0	0	0	0	0	**251**	**107**	**358**	53	**2**	82	137	618
07:45 AM	20	**106**	0	**126**	0	0	0	0	0	242	105	347	**95**	0	**103**	**198**	**671**
08:00 AM	14	91	0	105	0	0	0	0	0	239	64	303	53	1	79	133	541
08:15 AM	16	82	0	98	0	0	0	0	0	241	81	322	56	0	99	155	575
Total Volume	70	382	0	452	0	0	0	0	0	973	357	1330	257	3	363	623	2405
% App. Total	15.5	84.5	0		0	0	0		0	73.2	26.8		41.3	0.5	58.3		
PHF	.875	.901	.000	.897	.000	.000	.000	.000	.000	.969	.834	.929	.676	.375	.881	.787	.896

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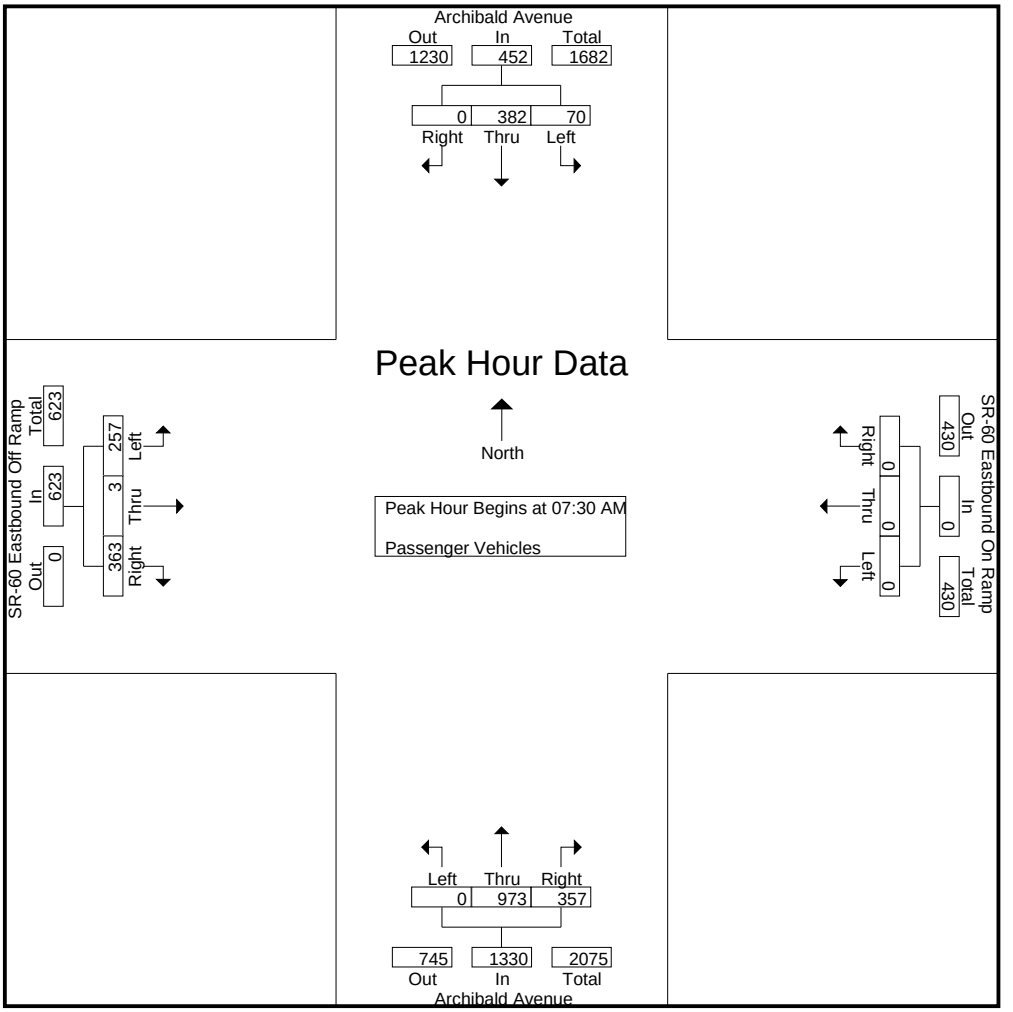

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	**20**	103	0	123	0	0	0	0	0	**251**	**107**	**358**	53	**2**	82	137
+15 mins.	20	**106**	0	**126**	0	0	0	0	0	242	105	347	**95**	0	**103**	**198**
+30 mins.	14	91	0	105	0	0	0	0	0	239	64	303	53	1	79	133
+45 mins.	16	82	0	98	0	0	0	0	0	241	81	322	56	0	99	155
Total Volume	70	382	0	452	0	0	0	0	0	973	357	1330	257	3	363	623
% App. Total	15.5	84.5	0		0	0	0		0	73.2	26.8		41.3	0.5	58.3	
PHF	.875	.901	.000	.897	.000	.000	.000	.000	.000	.969	.834	.929	.676	.375	.881	.787

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	4	0	6	0	0	0	0	0	6	2	8	3	0	2	5	19
07:15 AM	3	2	0	5	0	0	0	0	0	7	3	10	2	0	2	4	19
07:30 AM	6	4	0	10	0	0	0	0	0	4	1	5	3	0	6	9	24
07:45 AM	2	1	0	3	0	0	0	0	0	6	4	10	1	0	4	5	18
Total	13	11	0	24	0	0	0	0	0	23	10	33	9	0	14	23	80
08:00 AM	2	5	0	7	0	0	0	0	0	6	5	11	3	0	4	7	25
08:15 AM	2	5	0	7	0	0	0	0	0	3	2	5	3	0	1	4	16
08:30 AM	2	7	0	9	0	0	0	0	0	8	1	9	1	1	4	6	24
08:45 AM	2	1	0	3	0	0	0	0	0	7	5	12	3	0	0	3	18
Total	8	18	0	26	0	0	0	0	0	24	13	37	10	1	9	20	83
Grand Total	21	29	0	50	0	0	0	0	0	47	23	70	19	1	23	43	163
Apprch %	42	58	0		0	0	0		0	67.1	32.9		44.2	2.3	53.5		
Total %	12.9	17.8	0	30.7	0	0	0	0	0	28.8	14.1	42.9	11.7	0.6	14.1	26.4	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**6**	4	0	**10**	0	0	0	0	0	4	1	5	**3**	0	**6**	**9**	24
07:45 AM	2	1	0	3	0	0	0	0	0	**6**	4	10	1	0	4	5	18
08:00 AM	2	**5**	0	7	0	0	0	0	0	6	**5**	**11**	3	0	4	7	**25**
08:15 AM	2	5	0	7	0	0	0	0	0	3	2	5	3	0	1	4	16
Total Volume	12	15	0	27	0	0	0	0	0	19	12	31	10	0	15	25	83
% App. Total	44.4	55.6	0		0	0	0		0	61.3	38.7		40	0	60		
PHF	.500	.750	.000	.675	.000	.000	.000	.000	.000	.792	.600	.705	.833	.000	.625	.694	.830

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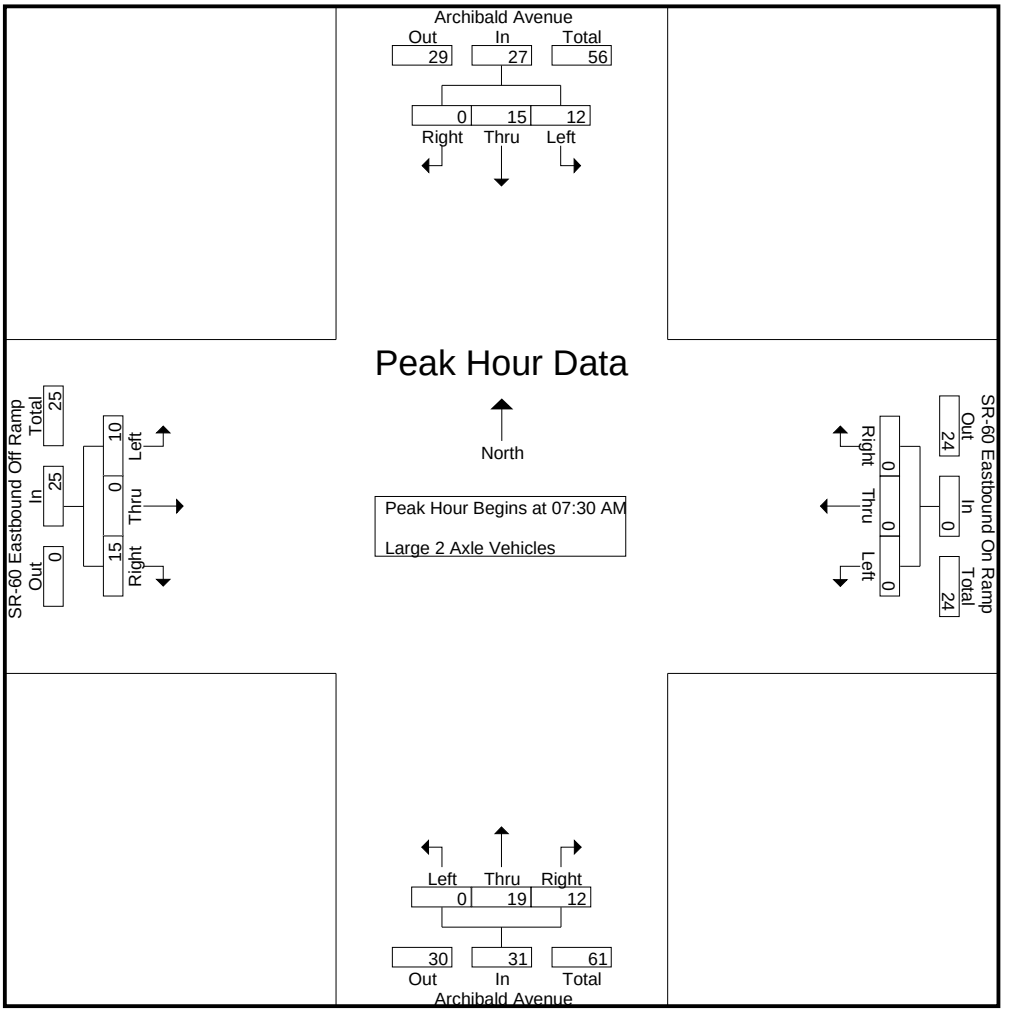

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	**6**	4	0	**10**	0	0	0	0	0	4	1	5	**3**	0	**6**	**9**
+15 mins.	2	1	0	3	0	0	0	0	0	**6**	4	10	1	0	4	5
+30 mins.	2	**5**	0	7	0	0	0	0	0	6	**5**	**11**	3	0	4	7
+45 mins.	2	5	0	7	0	0	0	0	0	3	2	5	3	0	1	4
Total Volume	12	15	0	27	0	0	0	0	0	19	12	31	10	0	15	25
% App. Total	44.4	55.6	0		0	0	0		0	61.3	38.7		40	0	60	
PHF	.500	.750	.000	.675	.000	.000	.000	.000	.000	.792	.600	.705	.833	.000	.625	.694

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File Name : ONTAR60EAM
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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	1	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
07:30 AM	1	2	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
07:45 AM	0	3	0	3	0	0	0	0	0	7	4	11	0	0	0	0	14
Total	1	5	0	6	0	0	0	0	0	8	7	15	0	0	2	2	23
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
08:15 AM	2	2	0	4	0	0	0	0	0	0	2	2	0	0	0	0	6
08:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	1	0	2	3	5
08:45 AM	1	1	0	2	0	0	0	0	0	2	2	4	0	0	0	0	6
Total	5	3	0	8	0	0	0	0	0	3	4	7	3	0	2	5	20
Grand Total	6	8	0	14	0	0	0	0	0	11	11	22	3	0	4	7	43
Apprch %	42.9	57.1	0		0	0	0		0	50	50		42.9	0	57.1		
Total %	14	18.6	0	32.6	0	0	0	0	0	25.6	25.6	51.2	7	0	9.3	16.3	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	2	0	3	0	0	0	0	0	0	1	1	0	0	0	0	4
07:45 AM	0	**3**	0	3	0	0	0	0	0	**7**	**4**	**11**	0	0	0	0	**14**
08:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	**2**	0	0	**2**	3
08:15 AM	**2**	2	0	**4**	0	0	0	0	0	0	2	2	0	0	0	0	6
Total Volume	4	7	0	11	0	0	0	0	0	7	7	14	2	0	0	2	27
% App. Total	36.4	63.6	0		0	0	0		0	50	50		100	0	0		
PHF	.500	.583	.000	.688	.000	.000	.000	.000	.000	.250	.438	.318	.250	.000	.000	.250	.482

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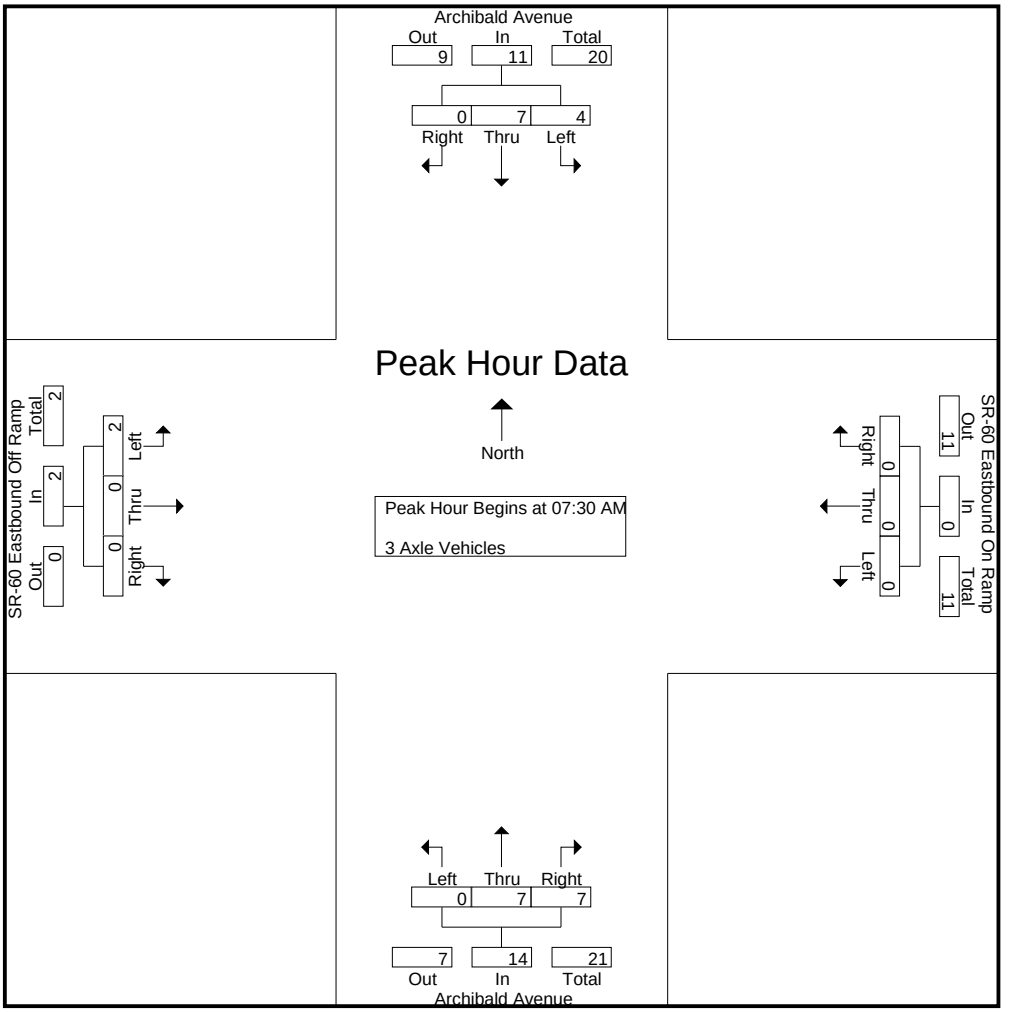

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	2	0	3	0	0	0	0	0	0	1	1	0	0	0	0
+15 mins.	0	**3**	0	3	0	0	0	0	0	**7**	**4**	**11**	0	0	0	0
+30 mins.	1	0	0	1	0	0	0	0	0	0	0	0	**2**	0	0	**2**
+45 mins.	**2**	2	0	**4**	0	0	0	0	0	0	2	2	0	0	0	0
Total Volume	4	7	0	11	0	0	0	0	0	7	7	14	2	0	0	2
% App. Total	36.4	63.6	0		0	0	0		0	50	50		100	0	0	
PHF	.500	.583	.000	.688	.000	.000	.000	.000	.000	.250	.438	.318	.250	.000	.000	.250

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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	0	0	4	0	0	0	0	0	3	2	5	5	0	2	7	16
07:15 AM	2	1	0	3	0	0	0	0	0	2	3	5	4	0	1	5	13
07:30 AM	6	3	0	9	0	0	0	0	0	1	3	4	7	0	1	8	21
07:45 AM	4	2	0	6	0	0	0	0	0	2	3	5	8	0	1	9	20
Total	16	6	0	22	0	0	0	0	0	8	11	19	24	0	5	29	70
08:00 AM	7	3	0	10	0	0	0	0	0	4	2	6	4	0	2	6	22
08:15 AM	4	4	0	8	0	0	0	0	0	3	6	9	3	0	1	4	21
08:30 AM	3	4	0	7	0	0	0	0	0	2	3	5	8	0	0	8	20
08:45 AM	6	4	0	10	0	0	0	0	0	3	3	6	5	0	1	6	22
Total	20	15	0	35	0	0	0	0	0	12	14	26	20	0	4	24	85
Grand Total	36	21	0	57	0	0	0	0	0	20	25	45	44	0	9	53	155
Apprch %	63.2	36.8	0		0	0	0		0	44.4	55.6		83	0	17		
Total %	23.2	13.5	0	36.8	0	0	0	0	0	12.9	16.1	29	28.4	0	5.8	34.2	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	3	0	9	0	0	0	0	0	1	3	4	7	0	1	8	21
07:45 AM	4	2	0	6	0	0	0	0	0	2	3	5	**8**	0	1	**9**	20
08:00 AM	**7**	3	0	**10**	0	0	0	0	0	**4**	2	6	4	0	**2**	6	**22**
08:15 AM	4	**4**	0	8	0	0	0	0	0	3	**6**	**9**	3	0	1	4	21
Total Volume	21	12	0	33	0	0	0	0	0	10	14	24	22	0	5	27	84
% App. Total	63.6	36.4	0		0	0	0		0	41.7	58.3		81.5	0	18.5		
PHF	.750	.750	.000	.825	.000	.000	.000	.000	.000	.625	.583	.667	.688	.000	.625	.750	.955

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Weather: Sunny

File Name : ONTAR60EAM
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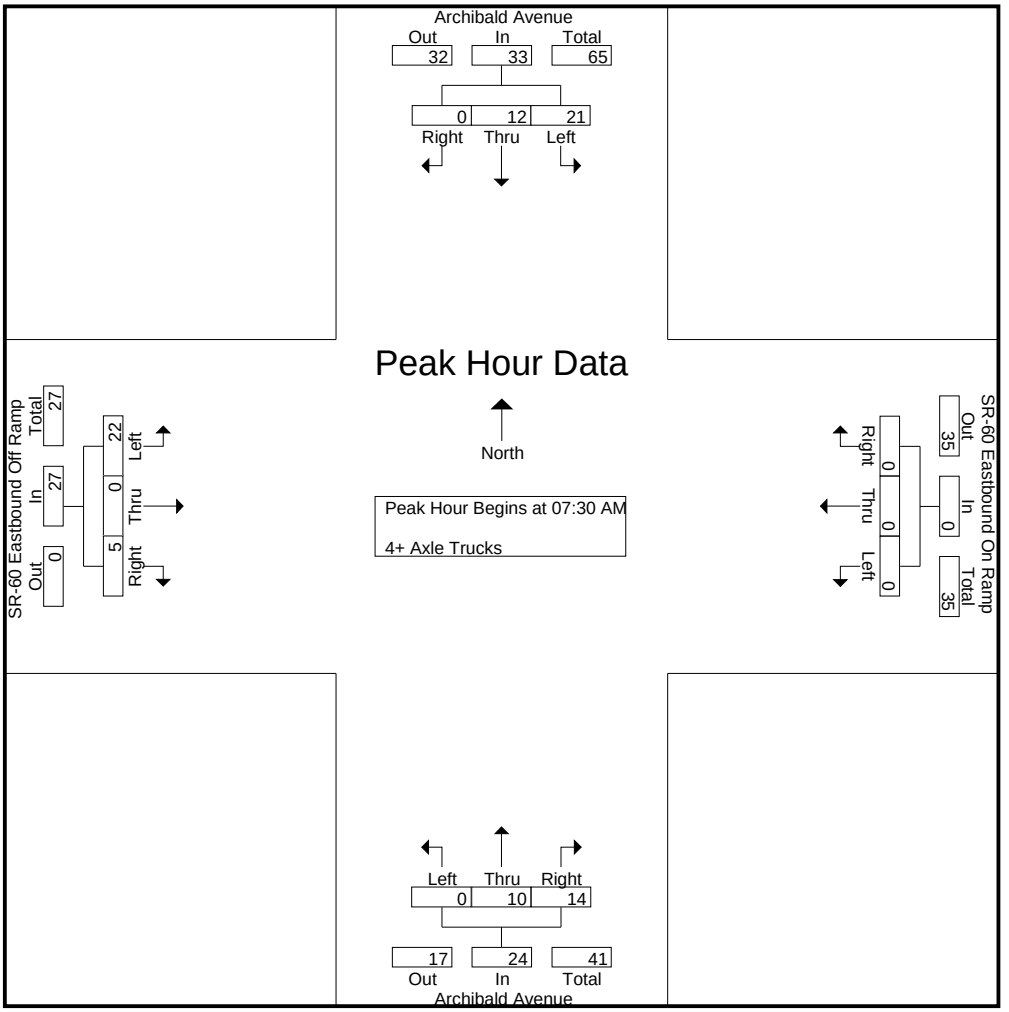

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	6	3	0	9	0	0	0	0	0	1	3	4	7	0	1	8
+15 mins.	4	2	0	6	0	0	0	0	0	2	3	5	**8**	0	1	**9**
+30 mins.	**7**	3	0	**10**	0	0	0	0	0	**4**	2	6	4	0	**2**	6
+45 mins.	4	**4**	0	8	0	0	0	0	0	3	**6**	**9**	3	0	1	4
Total Volume	21	12	0	33	0	0	0	0	0	10	14	24	22	0	5	27
% App. Total	63.6	36.4	0		0	0	0		0	41.7	58.3		81.5	0	18.5	
PHF	.750	.750	.000	.825	.000	.000	.000	.000	.000	.625	.583	.667	.688	.000	.625	.750

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	80	197	0	277	0	0	0	0	0	139	115	254	17	0	119	136	667
04:15 PM	82	180	0	262	0	0	0	0	0	182	103	285	15	0	101	116	663
04:30 PM	90	213	0	303	0	0	0	0	0	166	141	307	10	0	111	121	731
04:45 PM	60	186	0	246	0	0	0	0	0	175	130	305	19	1	155	175	726
Total	312	776	0	1088	0	0	0	0	0	662	489	1151	61	1	486	548	2787
05:00 PM	92	214	0	306	0	0	0	0	0	174	114	288	23	0	161	184	778
05:15 PM	93	221	0	314	0	0	0	0	0	151	127	278	21	0	138	159	751
05:30 PM	63	204	0	267	0	0	0	0	0	175	123	298	22	0	177	199	764
05:45 PM	29	186	0	215	0	0	0	0	0	155	108	263	15	0	175	190	668
Total	277	825	0	1102	0	0	0	0	0	655	472	1127	81	0	651	732	2961
Grand Total	589	1601	0	2190	0	0	0	0	0	1317	961	2278	142	1	1137	1280	5748
Apprch %	26.9	73.1	0		0	0	0		0	57.8	42.2		11.1	0.1	88.8		
Total %	10.2	27.9	0	38.1	0	0	0	0	0	22.9	16.7	39.6	2.5	0	19.8	22.3	
Passenger Vehicles	545	1539	0	2084	0	0	0	0	0	1269	936	2205	97	1	1121	1219	5508
% Passenger Vehicles	92.5	96.1	0	95.2	0	0	0	0	0	96.4	97.4	96.8	68.3	100	98.6	95.2	95.8
Large 2 Axle Vehicles	16	31	0	47	0	0	0	0	0	35	8	43	14	0	8	22	112
% Large 2 Axle Vehicles	2.7	1.9	0	2.1	0	0	0	0	0	2.7	0.8	1.9	9.9	0	0.7	1.7	1.9
3 Axle Vehicles	9	2	0	11	0	0	0	0	0	3	3	6	3	0	0	3	20
% 3 Axle Vehicles	1.5	0.1	0	0.5	0	0	0	0	0	0.2	0.3	0.3	2.1	0	0	0.2	0.3
4+ Axle Trucks	19	29	0	48	0	0	0	0	0	10	14	24	28	0	8	36	108
% 4+ Axle Trucks	3.2	1.8	0	2.2	0	0	0	0	0	0.8	1.5	1.1	19.7	0	0.7	2.8	1.9

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	60	186	0	246	0	0	0	0	0	**175**	**130**	**305**	19	**1**	155	175	726
05:00 PM	92	214	0	306	0	0	0	0	0	174	114	288	**23**	0	161	184	**778**
05:15 PM	**93**	**221**	0	**314**	0	0	0	0	0	151	127	278	21	0	138	159	751
05:30 PM	63	204	0	267	0	0	0	0	0	175	123	298	22	0	**177**	**199**	764
Total Volume	308	825	0	1133	0	0	0	0	0	675	494	1169	85	1	631	717	3019
% App. Total	27.2	72.8	0		0	0	0		0	57.7	42.3		11.9	0.1	88		
PHF	.828	.933	.000	.902	.000	.000	.000	.000	.000	.964	.950	.958	.924	.250	.891	.901	.970

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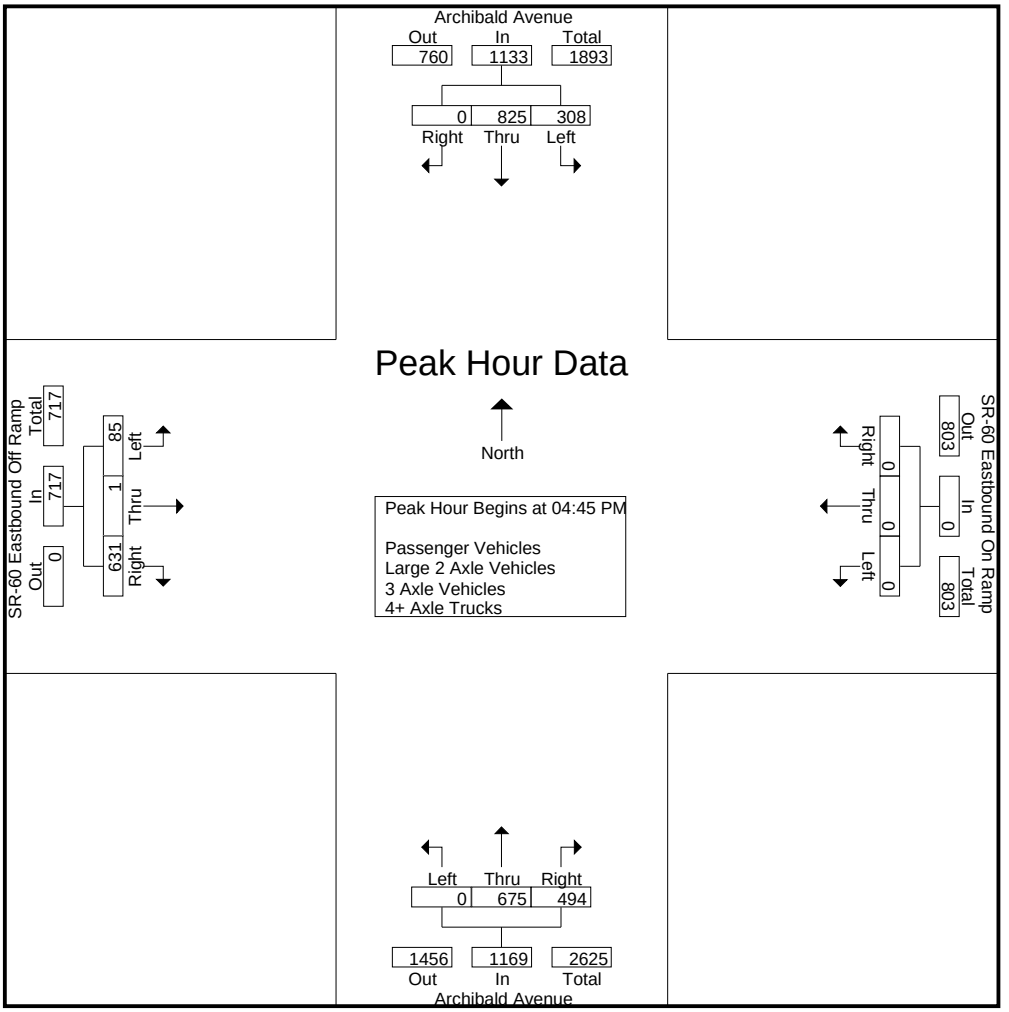

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:15 PM				05:00 PM			
+0 mins.	90	213	0	303	0	0	0	0	0	**182**	103	285	**23**	0	161	184
+15 mins.	60	186	0	246	0	0	0	0	0	166	**141**	**307**	21	0	138	159
+30 mins.	92	214	0	306	0	0	0	0	0	175	130	305	22	0	**177**	**199**
+45 mins.	**93**	**221**	0	**314**	0	0	0	0	0	174	114	288	15	0	175	190
Total Volume	335	834	0	1169	0	0	0	0	0	697	488	1185	81	0	651	732
% App. Total	28.7	71.3	0		0	0	0		0	58.8	41.2		11.1	0	88.9	
PHF	.901	.943	.000	.931	.000	.000	.000	.000	.000	.957	.865	.965	.880	.000	.919	.920

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	74	190	0	264	0	0	0	0	0	137	110	247	14	0	116	130	641
04:15 PM	79	172	0	251	0	0	0	0	0	176	100	276	9	0	99	108	635
04:30 PM	79	200	0	279	0	0	0	0	0	158	140	298	6	0	110	116	693
04:45 PM	56	180	0	236	0	0	0	0	0	165	128	293	16	1	153	170	699
Total	288	742	0	1030	0	0	0	0	0	636	478	1114	45	1	478	524	2668
05:00 PM	85	207	0	292	0	0	0	0	0	167	112	279	14	0	159	173	744
05:15 PM	89	209	0	298	0	0	0	0	0	147	123	270	12	0	137	149	717
05:30 PM	57	198	0	255	0	0	0	0	0	171	120	291	16	0	173	189	735
05:45 PM	26	183	0	209	0	0	0	0	0	148	103	251	10	0	174	184	644
Total	257	797	0	1054	0	0	0	0	0	633	458	1091	52	0	643	695	2840
Grand Total	545	1539	0	2084	0	0	0	0	0	1269	936	2205	97	1	1121	1219	5508
Apprch %	26.2	73.8	0		0	0	0		0	57.6	42.4		8	0.1	92		
Total %	9.9	27.9	0	37.8	0	0	0	0	0	23	17	40	1.8	0	20.4	22.1	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	56	180	0	236	0	0	0	0	0	165	**128**	**293**	**16**	**1**	153	170	699
05:00 PM	85	207	0	292	0	0	0	0	0	167	112	279	14	0	159	173	**744**
05:15 PM	**89**	**209**	0	**298**	0	0	0	0	0	147	123	270	12	0	137	149	717
05:30 PM	57	198	0	255	0	0	0	0	0	**171**	120	291	16	0	**173**	**189**	735
Total Volume	287	794	0	1081	0	0	0	0	0	650	483	1133	58	1	622	681	2895
% App. Total	26.5	73.5	0		0	0	0		0	57.4	42.6		8.5	0.1	91.3		
PHF	.806	.950	.000	.907	.000	.000	.000	.000	.000	.950	.943	.967	.906	.250	.899	.901	.973

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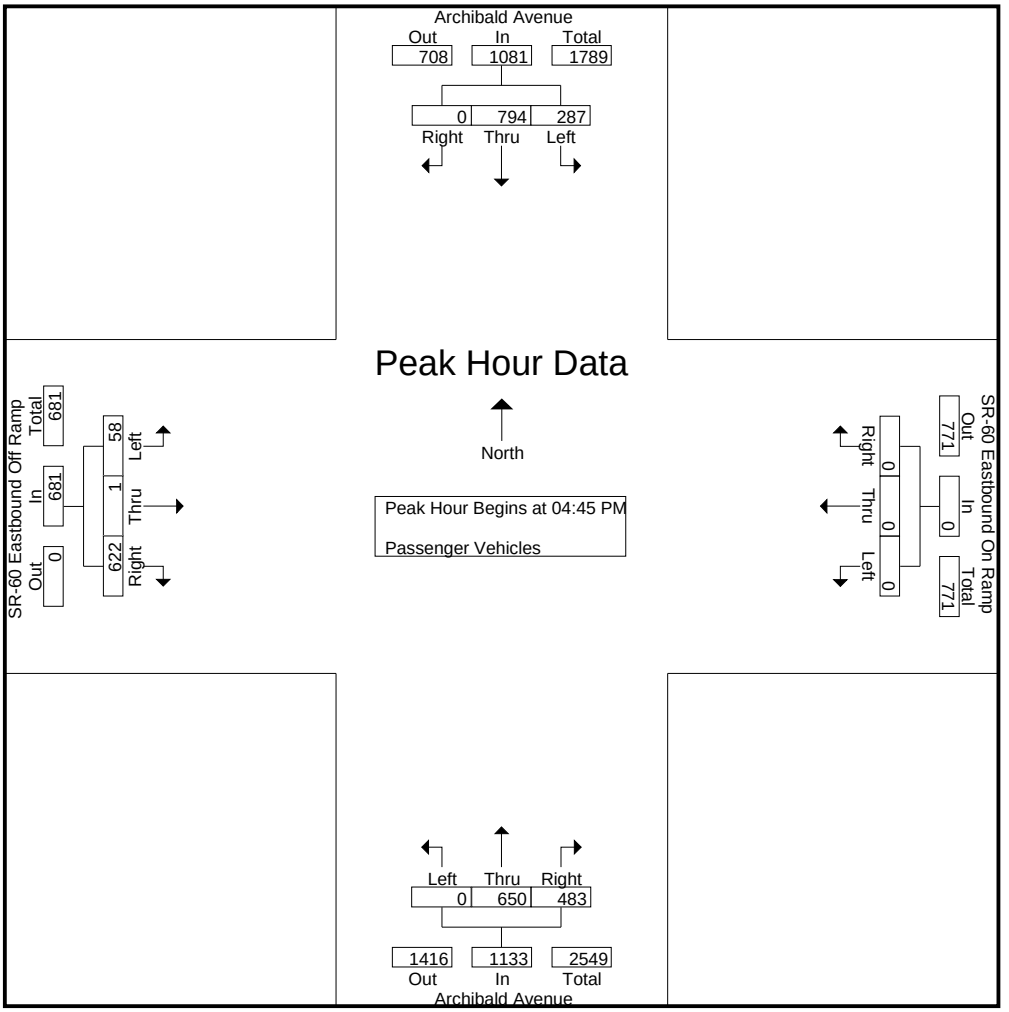

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	56	180	0	236	0	0	0	0	0	165	**128**	**293**	**16**	**1**	153	170
+15 mins.	85	207	0	292	0	0	0	0	0	167	112	279	14	0	159	173
+30 mins.	**89**	**209**	0	**298**	0	0	0	0	0	147	123	270	12	0	137	149
+45 mins.	57	198	0	255	0	0	0	0	0	**171**	120	291	16	0	**173**	**189**
Total Volume	287	794	0	1081	0	0	0	0	0	650	483	1133	58	1	622	681
% App. Total	26.5	73.5	0		0	0	0		0	57.4	42.6		8.5	0.1	91.3	
PHF	.806	.950	.000	.907	.000	.000	.000	.000	.000	.950	.943	.967	.906	.250	.899	.901

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	7	0	10	0	0	0	0	0	1	1	2	2	0	1	3	15
04:15 PM	1	4	0	5	0	0	0	0	0	4	0	4	1	0	0	1	10
04:30 PM	4	3	0	7	0	0	0	0	0	6	0	6	3	0	0	3	16
04:45 PM	1	3	0	4	0	0	0	0	0	7	2	9	1	0	1	2	15
Total	9	17	0	26	0	0	0	0	0	18	3	21	7	0	2	9	56
05:00 PM	4	5	0	9	0	0	0	0	0	6	1	7	3	0	1	4	20
05:15 PM	1	4	0	5	0	0	0	0	0	4	2	6	3	0	1	4	15
05:30 PM	2	3	0	5	0	0	0	0	0	2	0	2	0	0	3	3	10
05:45 PM	0	2	0	2	0	0	0	0	0	5	2	7	1	0	1	2	11
Total	7	14	0	21	0	0	0	0	0	17	5	22	7	0	6	13	56
Grand Total	16	31	0	47	0	0	0	0	0	35	8	43	14	0	8	22	112
Apprch %	34	66	0		0	0	0		0	81.4	18.6		63.6	0	36.4		
Total %	14.3	27.7	0	42	0	0	0	0	0	31.2	7.1	38.4	12.5	0	7.1	19.6	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	3	0	4	0	0	0	0	0	**7**	**2**	**9**	1	0	1	2	15
05:00 PM	**4**	**5**	0	**9**	0	0	0	0	0	6	1	7	**3**	0	1	**4**	**20**
05:15 PM	1	4	0	5	0	0	0	0	0	4	2	6	3	0	1	4	15
05:30 PM	2	3	0	5	0	0	0	0	0	2	0	2	0	0	**3**	3	10
Total Volume	8	15	0	23	0	0	0	0	0	19	5	24	7	0	6	13	60
% App. Total	34.8	65.2	0		0	0	0		0	79.2	20.8		53.8	0	46.2		
PHF	.500	.750	.000	.639	.000	.000	.000	.000	.000	.679	.625	.667	.583	.000	.500	.813	.750

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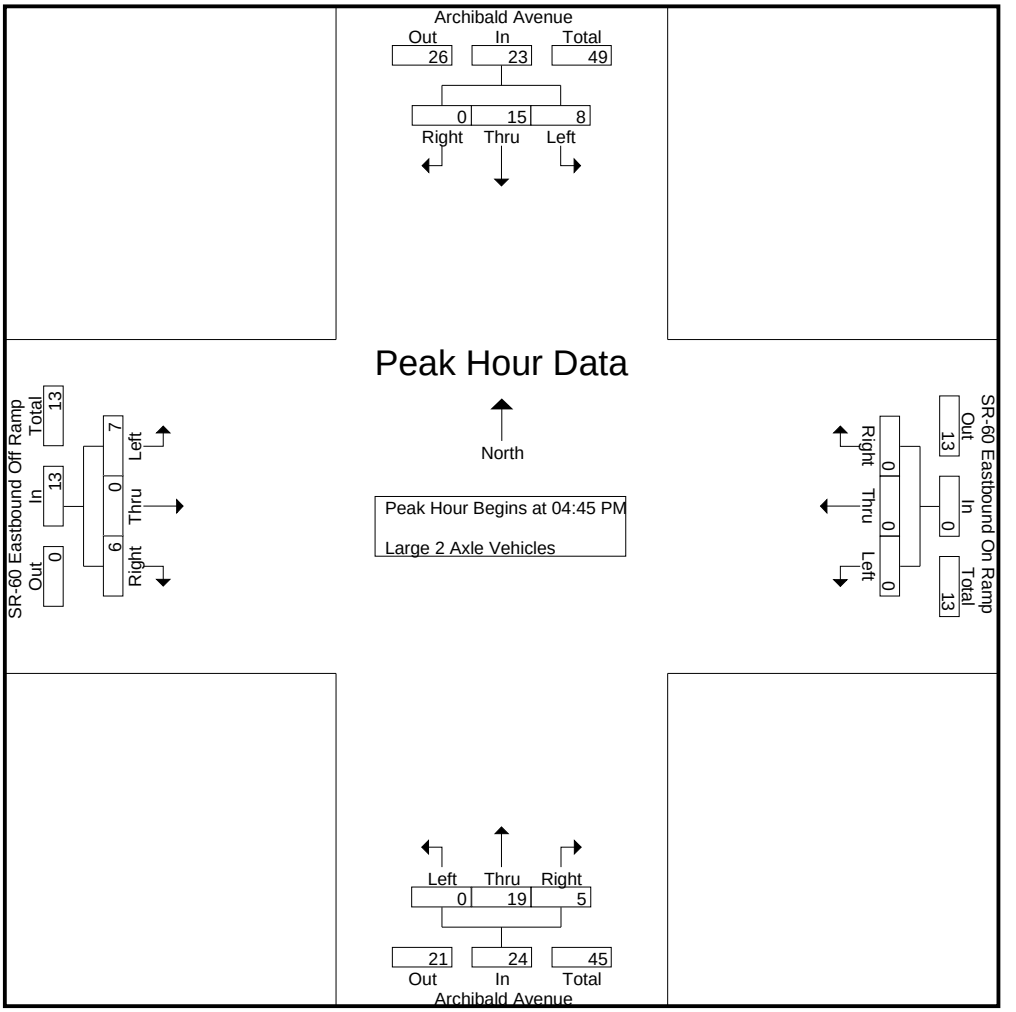

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	1	3	0	4	0	0	0	0	0	**7**	**2**	**9**	1	0	1	2
+15 mins.	**4**	**5**	0	**9**	0	0	0	0	0	6	1	7	**3**	0	1	**4**
+30 mins.	1	4	0	5	0	0	0	0	0	4	2	6	3	0	1	4
+45 mins.	2	3	0	5	0	0	0	0	0	2	0	2	0	0	**3**	3
Total Volume	8	15	0	23	0	0	0	0	0	19	5	24	7	0	6	13
% App. Total	34.8	65.2	0		0	0	0		0	79.2	20.8		53.8	0	46.2	
PHF	.500	.750	.000	.639	.000	.000	.000	.000	.000	.679	.625	.667	.583	.000	.500	.813

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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
04:15 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	2	0	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	4	1	0	5	0	0	0	0	0	2	2	4	1	0	0	1	10
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
05:30 PM	2	0	0	2	0	0	0	0	0	0	1	1	1	0	0	1	4
05:45 PM	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	5	1	0	6	0	0	0	0	0	1	1	2	2	0	0	2	10
Grand Total	9	2	0	11	0	0	0	0	0	3	3	6	3	0	0	3	20
Apprch %	81.8	18.2	0		0	0	0		0	50	50		100	0	0		
Total %	45	10	0	55	0	0	0	0	0	15	15	30	15	0	0	15	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**	0	0	**1**	2
05:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	1	**1**	0	**2**	0	0	0	0	0	0	0	0	1	0	0	1	3
05:30 PM	**2**	0	0	2	0	0	0	0	0	0	**1**	1	1	0	0	1	**4**
Total Volume	4	1	0	5	0	0	0	0	0	1	1	2	3	0	0	3	10
% App. Total	80	20	0		0	0	0		0	50	50		100	0	0		
PHF	.500	.250	.000	.625	.000	.000	.000	.000	.000	.250	.250	.500	.750	.000	.000	.750	.625

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City of Ontario
N/S: Archibald Avenue
E/W: SR-60 Eastbound Ramps
Weather: Sunny

File Name : ONTAR60EPM
Site Code : 00000051
Start Date : 6/28/2012
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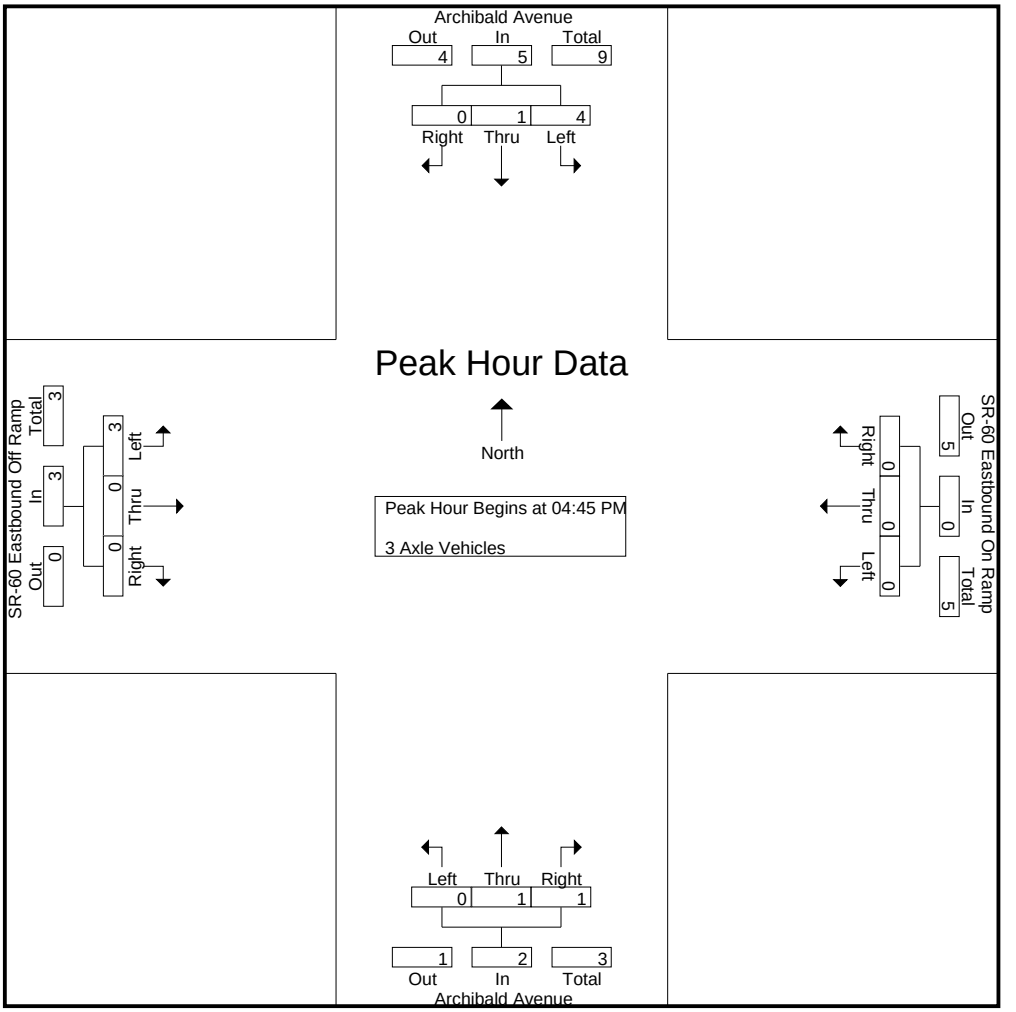

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	**1**	0	0	**1**
+15 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	**1**	0	**2**	0	0	0	0	0	0	0	0	1	0	0	1
+45 mins.	**2**	0	0	2	0	0	0	0	0	0	**1**	1	1	0	0	1
Total Volume	4	1	0	5	0	0	0	0	0	1	1	2	3	0	0	3
% App. Total	80	20	0		0	0	0		0	50	50		100	0	0	
PHF	.500	.250	.000	.625	.000	.000	.000	.000	.000	.250	.250	.500	.750	.000	.000	.750

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Weather: Sunny

File Name : ONTAR60EPM
Site Code : 00000051
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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	0	0	2	0	0	0	0	0	1	2	3	1	0	2	3	8
04:15 PM	1	3	0	4	0	0	0	0	0	2	3	5	5	0	2	7	16
04:30 PM	5	10	0	15	0	0	0	0	0	1	1	2	1	0	1	2	19
04:45 PM	3	3	0	6	0	0	0	0	0	2	0	2	1	0	1	2	10
Total	11	16	0	27	0	0	0	0	0	6	6	12	8	0	6	14	53
05:00 PM	2	2	0	4	0	0	0	0	0	1	1	2	6	0	1	7	13
05:15 PM	2	7	0	9	0	0	0	0	0	0	2	2	5	0	0	5	16
05:30 PM	2	3	0	5	0	0	0	0	0	2	2	4	5	0	1	6	15
05:45 PM	2	1	0	3	0	0	0	0	0	1	3	4	4	0	0	4	11
Total	8	13	0	21	0	0	0	0	0	4	8	12	20	0	2	22	55
Grand Total	19	29	0	48	0	0	0	0	0	10	14	24	28	0	8	36	108
Apprch %	39.6	60.4	0		0	0	0		0	41.7	58.3		77.8	0	22.2		
Total %	17.6	26.9	0	44.4	0	0	0	0	0	9.3	13	22.2	25.9	0	7.4	33.3	

	Archibald Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Archibald Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	3	0	6	0	0	0	0	0	**2**	0	2	1	0	**1**	2	10
05:00 PM	2	2	0	4	0	0	0	0	0	1	1	2	**6**	0	1	**7**	13
05:15 PM	2	**7**	0	**9**	0	0	0	0	0	0	**2**	2	5	0	0	5	**16**
05:30 PM	2	3	0	5	0	0	0	0	0	2	2	**4**	5	0	1	6	15
Total Volume	9	15	0	24	0	0	0	0	0	5	5	10	17	0	3	20	54
% App. Total	37.5	62.5	0		0	0	0		0	50	50		85	0	15		
PHF	.750	.536	.000	.667	.000	.000	.000	.000	.000	.625	.625	.625	.708	.000	.750	.714	.844

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File Name : ONTAR60EPM
Site Code : 00000051
Start Date : 6/28/2012
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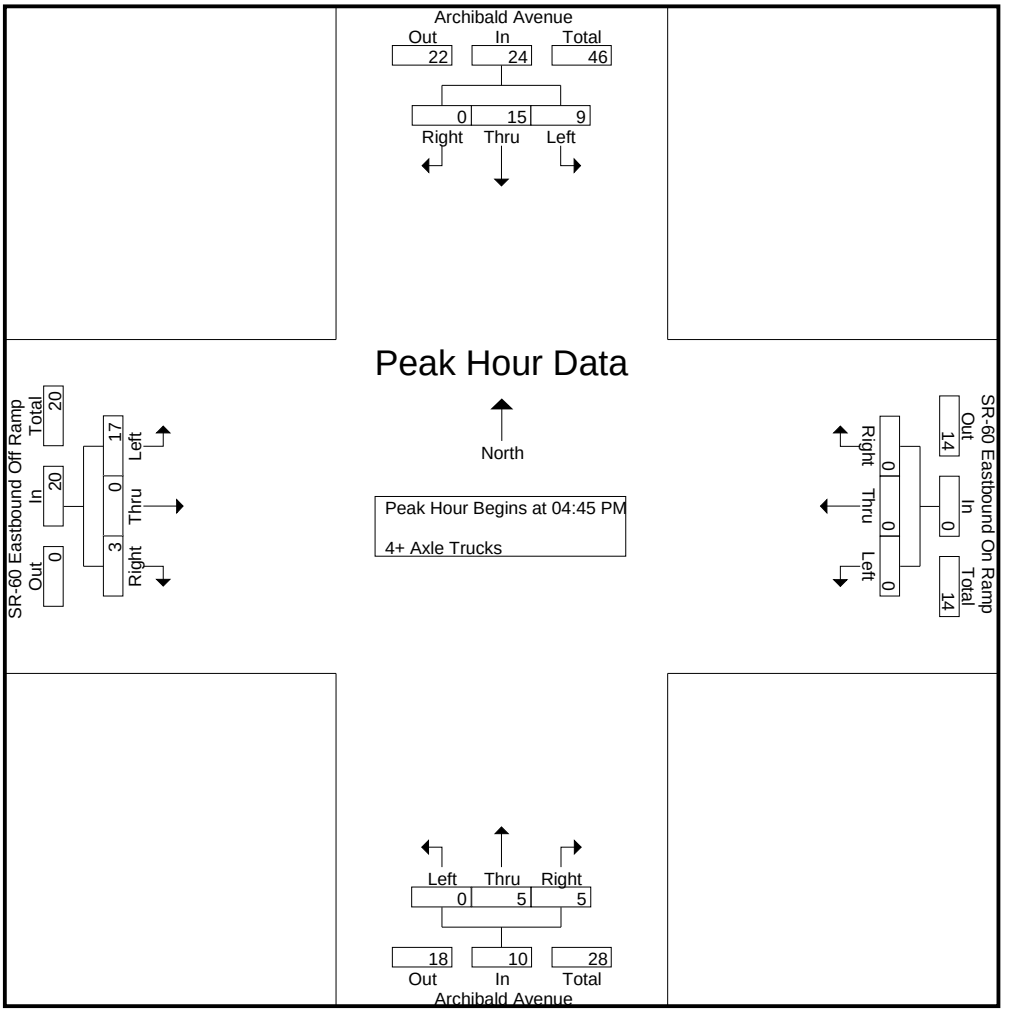

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**3**	3	0	6	0	0	0	0	0	**2**	0	2	1	0	**1**	2
+15 mins.	2	2	0	4	0	0	0	0	0	1	1	2	**6**	0	1	**7**
+30 mins.	2	**7**	0	**9**	0	0	0	0	0	0	**2**	2	5	0	0	5
+45 mins.	2	3	0	5	0	0	0	0	0	2	2	**4**	5	0	1	6
Total Volume	9	15	0	24	0	0	0	0	0	5	5	10	17	0	3	20
% App. Total	37.5	62.5	0		0	0	0		0	50	50		85	0	15	
PHF	.750	.536	.000	.667	.000	.000	.000	.000	.000	.625	.625	.625	.708	.000	.750	.714

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City of Ontario
N/S: Archibald Avenue
E/W: Schaefer Avenue
Weather: Sunny

File Name : ONTARSCAM
Site Code : 00000035
Start Date : 6/28/2012

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	92	2	96	1	1	0	2	0	121	0	121	0	0	1	1	220
07:15 AM	3	92	0	95	1	1	1	3	2	181	0	183	0	0	0	0	281
07:30 AM	4	103	3	110	1	1	1	3	4	185	1	190	1	2	4	7	310
07:45 AM	3	87	0	90	0	0	1	1	0	178	1	179	0	0	1	1	271
Total	12	374	5	391	3	3	3	9	6	665	2	673	1	2	6	9	1082
08:00 AM	2	103	0	105	3	0	0	3	0	169	1	170	0	0	0	0	278
08:15 AM	0	96	0	96	0	0	2	2	1	180	0	181	0	0	0	0	279
08:30 AM	1	100	0	101	1	0	3	4	0	152	1	153	0	0	0	0	258
08:45 AM	0	67	0	67	1	0	3	4	0	146	2	148	0	0	2	2	221
Total	3	366	0	369	5	0	8	13	1	647	4	652	0	0	2	2	1036
Grand Total	15	740	5	760	8	3	11	22	7	1312	6	1325	1	2	8	11	2118
Apprch %	2	97.4	0.7		36.4	13.6	50		0.5	99	0.5		9.1	18.2	72.7		
Total %	0.7	34.9	0.2	35.9	0.4	0.1	0.5	1	0.3	61.9	0.3	62.6	0	0.1	0.4	0.5	
Passenger Vehicles	13	686	3	702	5	2	11	18	3	1255	6	1264	0	2	2	4	1988
% Passenger Vehicles	86.7	92.7	60	92.4	62.5	66.7	100	81.8	42.9	95.7	100	95.4	0	100	25	36.4	93.9
Large 2 Axle Vehicles	1	27	1	29	3	0	0	3	0	26	0	26	1	0	0	1	59
% Large 2 Axle Vehicles	6.7	3.6	20	3.8	37.5	0	0	13.6	0	2	0	2	100	0	0	9.1	2.8
3 Axle Vehicles	1	6	0	7	0	1	0	1	0	6	0	6	0	0	1	1	15
% 3 Axle Vehicles	6.7	0.8	0	0.9	0	33.3	0	4.5	0	0.5	0	0.5	0	0	12.5	9.1	0.7
4+ Axle Trucks	0	21	1	22	0	0	0	0	4	25	0	29	0	0	5	5	56
% 4+ Axle Trucks	0	2.8	20	2.9	0	0	0	0	57.1	1.9	0	2.2	0	0	62.5	45.5	2.6

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	3	92	0	95	1	**1**	**1**	**3**	2	181	0	183	0	0	0	0	281
07:30 AM	**4**	**103**	**3**	**110**	1	1	1	3	**4**	**185**	**1**	**190**	**1**	**2**	**4**	**7**	**310**
07:45 AM	3	87	0	90	0	0	1	1	0	178	1	179	0	0	1	1	271
08:00 AM	2	103	0	105	**3**	0	0	3	0	169	1	170	0	0	0	0	278
Total Volume	12	385	3	400	5	2	3	10	6	713	3	722	1	2	5	8	1140
% App. Total	3	96.2	0.8		50	20	30		0.8	98.8	0.4		12.5	25	62.5		
PHF	.750	.934	.250	.909	.417	.500	.750	.833	.375	.964	.750	.950	.250	.250	.313	.286	.919

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Site Code : 00000035
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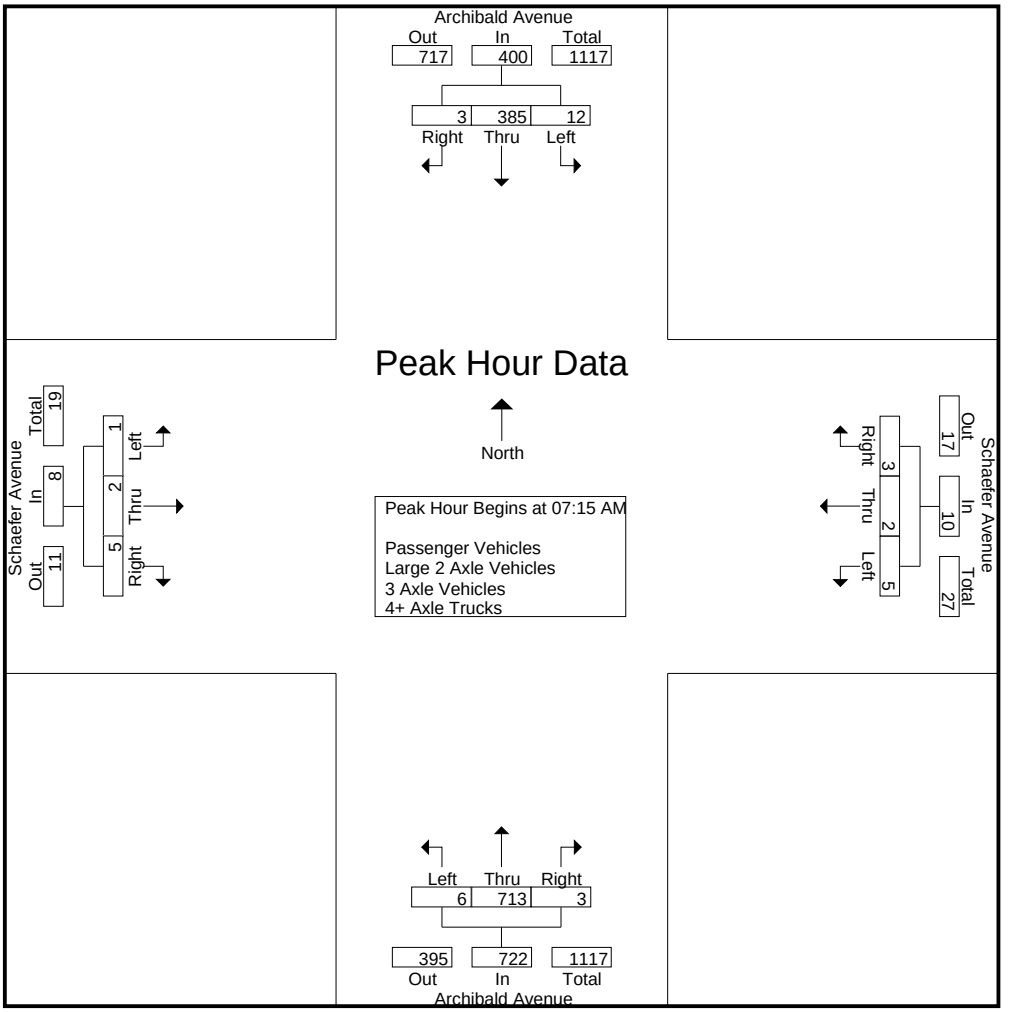

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	92	0	95	1	**1**	**1**	**3**	2	181	0	183	0	0	0	0
+15 mins.	**4**	**103**	**3**	**110**	1	1	1	3	**4**	**185**	**1**	**190**	**1**	**2**	**4**	**7**
+30 mins.	3	87	0	90	0	0	1	1	0	178	1	179	0	0	1	1
+45 mins.	2	103	0	105	**3**	0	0	3	0	169	1	170	0	0	0	0
Total Volume	12	385	3	400	5	2	3	10	6	713	3	722	1	2	5	8
% App. Total	3	96.2	0.8		50	20	30		0.8	98.8	0.4		12.5	25	62.5	
PHF	.750	.934	.250	.909	.417	.500	.750	.833	.375	.964	.750	.950	.250	.250	.313	.286

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	84	1	87	1	1	0	2	0	114	0	114	0	0	1	1	204
07:15 AM	1	90	0	91	1	0	1	2	1	173	0	174	0	0	0	0	267
07:30 AM	4	98	2	104	0	1	1	2	2	178	1	181	0	2	1	3	290
07:45 AM	3	82	0	85	0	0	1	1	0	172	1	173	0	0	0	0	259
Total	10	354	3	367	2	2	3	7	3	637	2	642	0	2	2	4	1020
08:00 AM	2	96	0	98	2	0	0	2	0	161	1	162	0	0	0	0	262
08:15 AM	0	86	0	86	0	0	2	2	0	173	0	173	0	0	0	0	261
08:30 AM	1	87	0	88	1	0	3	4	0	147	1	148	0	0	0	0	240
08:45 AM	0	63	0	63	0	0	3	3	0	137	2	139	0	0	0	0	205
Total	3	332	0	335	3	0	8	11	0	618	4	622	0	0	0	0	968
Grand Total	13	686	3	702	5	2	11	18	3	1255	6	1264	0	2	2	4	1988
Apprch %	1.9	97.7	0.4		27.8	11.1	61.1		0.2	99.3	0.5		0	50	50		
Total %	0.7	34.5	0.2	35.3	0.3	0.1	0.6	0.9	0.2	63.1	0.3	63.6	0	0.1	0.1	0.2	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	90	0	91	1	0	**1**	**2**	1	173	0	174	0	0	0	0	267
07:30 AM	**4**	**98**	**2**	**104**	0	**1**	1	2	**2**	**178**	**1**	**181**	0	**2**	**1**	**3**	**290**
07:45 AM	3	82	0	85	0	0	1	1	0	172	1	173	0	0	0	0	259
08:00 AM	2	96	0	98	**2**	0	0	2	0	161	1	162	0	0	0	0	262
Total Volume	10	366	2	378	3	1	3	7	3	684	3	690	0	2	1	3	1078
% App. Total	2.6	96.8	0.5		42.9	14.3	42.9		0.4	99.1	0.4		0	66.7	33.3		
PHF	.625	.934	.250	.909	.375	.250	.750	.875	.375	.961	.750	.953	.000	.250	.250	.250	.929

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File Name : ONTARSCAM
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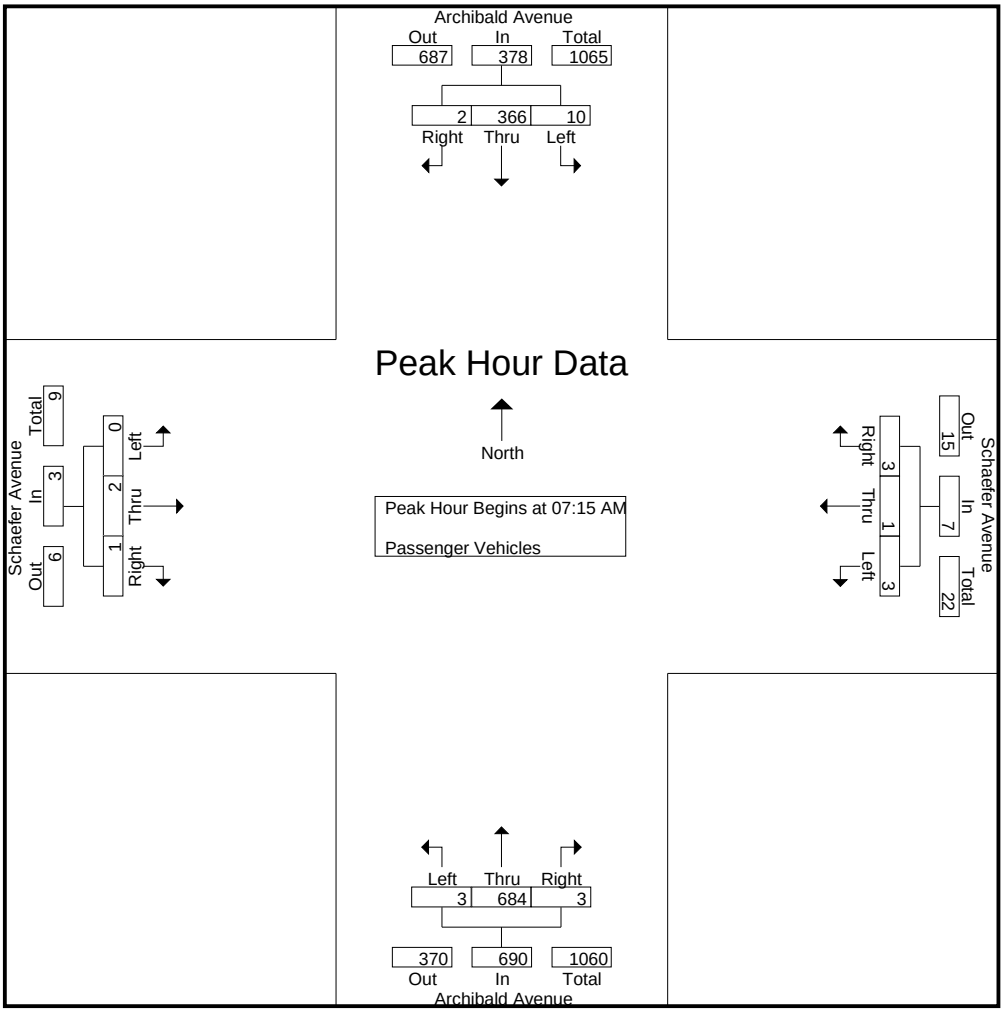

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	90	0	91	1	0	**1**	**2**	1	173	0	174	0	0	0	0
+15 mins.	**4**	**98**	**2**	**104**	0	**1**	1	2	**2**	**178**	**1**	**181**	0	**2**	**1**	**3**
+30 mins.	3	82	0	85	0	0	1	1	0	172	1	173	0	0	0	0
+45 mins.	2	96	0	98	**2**	0	0	2	0	161	1	162	0	0	0	0
Total Volume	10	366	2	378	3	1	3	7	3	684	3	690	0	2	1	3
% App. Total	2.6	96.8	0.5		42.9	14.3	42.9		0.4	99.1	0.4		0	66.7	33.3	
PHF	.625	.934	.250	.909	.375	.250	.750	.875	.375	.961	.750	.953	.000	.250	.250	.250

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City of Ontario
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Weather: Sunny

File Name : ONTARSCAM
Site Code : 00000035
Start Date : 6/28/2012

Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
07:15 AM	1	1	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
07:30 AM	0	2	1	3	1	0	0	1	0	3	0	3	1	0	0	1	8
07:45 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
Total	1	10	1	12	1	0	0	1	0	14	0	14	1	0	0	1	28
08:00 AM	0	3	0	3	1	0	0	1	0	4	0	4	0	0	0	0	8
08:15 AM	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
08:30 AM	0	7	0	7	0	0	0	0	0	2	0	2	0	0	0	0	9
08:45 AM	0	2	0	2	1	0	0	1	0	4	0	4	0	0	0	0	7
Total	0	17	0	17	2	0	0	2	0	12	0	12	0	0	0	0	31
Grand Total	1	27	1	29	3	0	0	3	0	26	0	26	1	0	0	1	59
Apprch %	3.4	93.1	3.4		100	0	0		0	100	0		100	0	0		
Total %	1.7	45.8	1.7	49.2	5.1	0	0	5.1	0	44.1	0	44.1	1.7	0	0	1.7	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	1	0	2	0	0	0	0	0	**5**	0	**5**	0	0	0	0	7
07:30 AM	0	2	**1**	**3**	**1**	0	0	**1**	0	3	0	3	**1**	0	0	**1**	**8**
07:45 AM	0	**3**	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:00 AM	0	3	0	3	1	0	0	1	0	4	0	4	0	0	0	0	8
Total Volume	1	9	1	11	2	0	0	2	0	14	0	14	1	0	0	1	28
% App. Total	9.1	81.8	9.1		100	0	0		0	100	0		100	0	0		
PHF	.250	.750	.250	.917	.500	.000	.000	.500	.000	.700	.000	.700	.250	.000	.000	.250	.875

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City of Ontario
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File Name : ONTARSCAM
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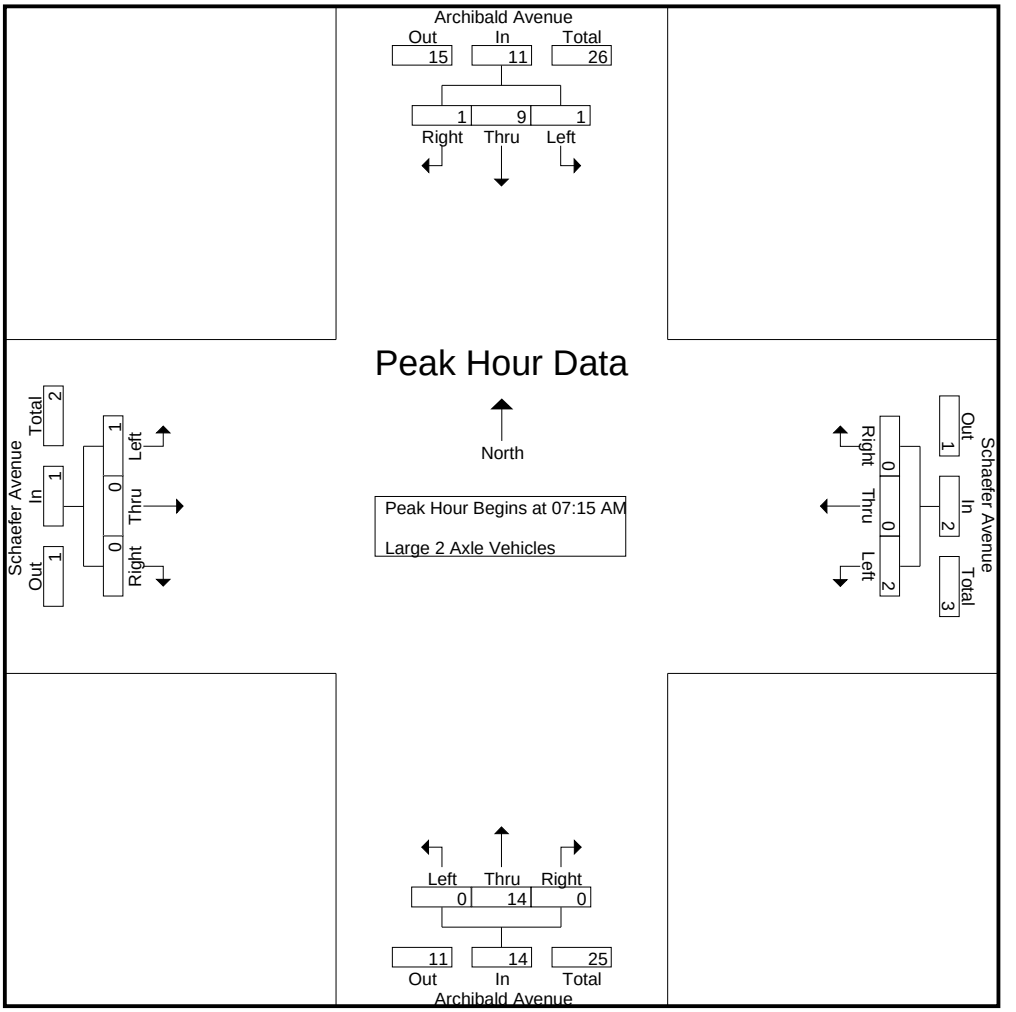

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	1	0	2	0	0	0	0	0	**5**	0	**5**	0	0	0	0
+15 mins.	0	2	**1**	**3**	**1**	0	0	**1**	0	3	0	3	**1**	0	0	**1**
+30 mins.	0	**3**	0	3	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	3	0	3	1	0	0	1	0	4	0	4	0	0	0	0
Total Volume	1	9	1	11	2	0	0	2	0	14	0	14	1	0	0	1
% App. Total	9.1	81.8	9.1		100	0	0		0	100	0		100	0	0	
PHF	.250	.750	.250	.917	.500	.000	.000	.500	.000	.700	.000	.700	.250	.000	.000	.250

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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	2	0	3	0	1	0	1	0	3	0	3	0	0	1	1	8
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
Grand Total	1	6	0	7	0	1	0	1	0	6	0	6	0	0	1	1	15
Apprch %	14.3	85.7	0		0	100	0		0	100	0		0	0	100		
Total %	6.7	40	0	46.7	0	6.7	0	6.7	0	40	0	40	0	0	6.7	6.7	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	0	0	**1**	0	**1**	0	**1**	0	0	0	0	0	0	0	0	2
07:30 AM	0	**1**	0	1	0	0	0	0	0	**1**	0	**1**	0	0	**1**	**1**	**3**
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	2	0	3	0	1	0	1	0	2	0	2	0	0	1	1	7
% App. Total	33.3	66.7	0		0	100	0		0	100	0		0	0	100		
PHF	.250	.500	.000	.750	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.250	.250	.583

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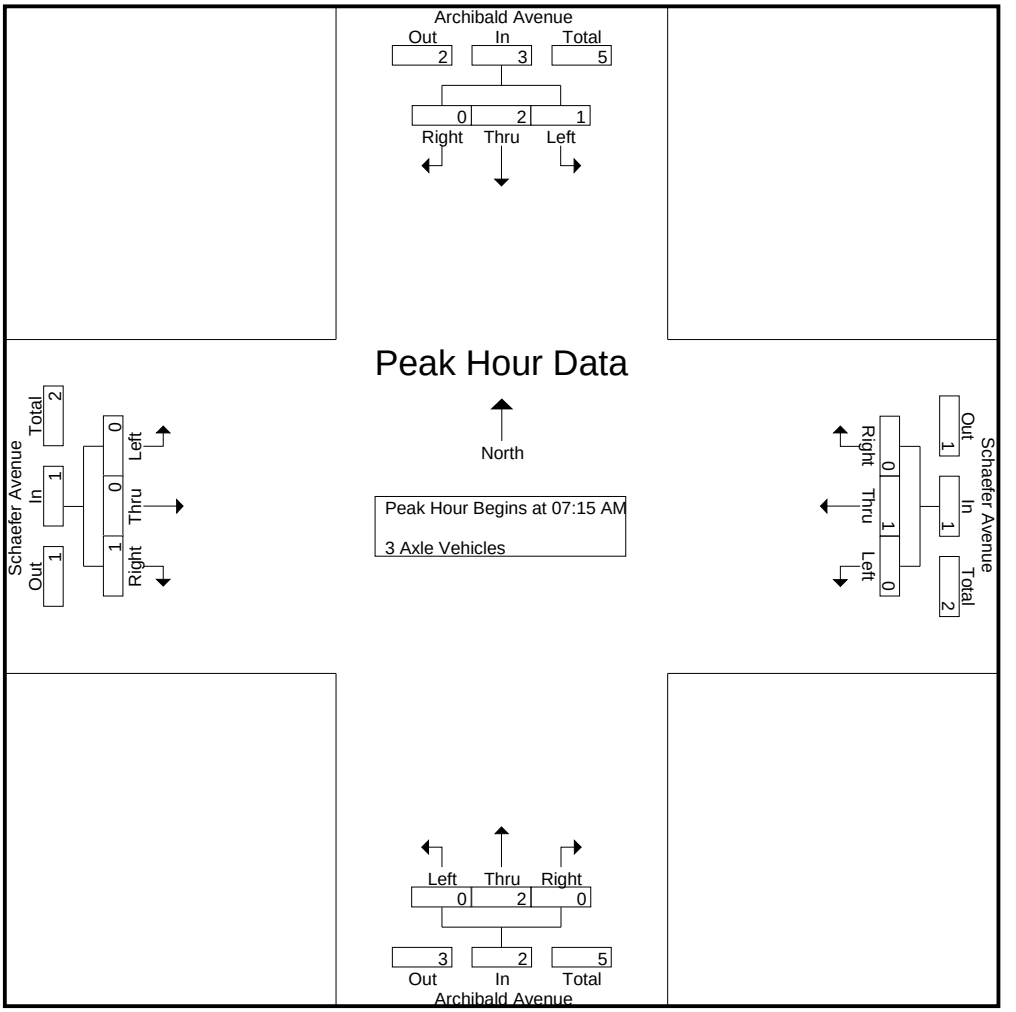

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**1**	0	0	**1**	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	0	1	0	0	0	0	0	**1**	0	**1**	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	0	3	0	1	0	1	0	2	0	2	0	0	1	1
% App. Total	33.3	66.7	0		0	100	0		0	100	0		0	0	100	
PHF	.250	.500	.000	.750	.000	.250	.000	.250	.000	.500	.000	.500	.000	.000	.250	.250

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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	1	4	0	0	0	0	0	2	0	2	0	0	0	0	6
07:15 AM	0	1	0	1	0	0	0	0	1	3	0	4	0	0	0	0	5
07:30 AM	0	2	0	2	0	0	0	0	2	3	0	5	0	0	2	2	9
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	1	1	6
Total	0	8	1	9	0	0	0	0	3	11	0	14	0	0	3	3	26
08:00 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
08:15 AM	0	4	0	4	0	0	0	0	1	5	0	6	0	0	0	0	10
08:30 AM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
08:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	2	2	7
Total	0	13	0	13	0	0	0	0	1	14	0	15	0	0	2	2	30
Grand Total	0	21	1	22	0	0	0	0	4	25	0	29	0	0	5	5	56
Apprch %	0	95.5	4.5		0	0	0		13.8	86.2	0		0	0	100		
Total %	0	37.5	1.8	39.3	0	0	0	0	7.1	44.6	0	51.8	0	0	8.9	8.9	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	1	3	0	4	0	0	0	0	5
07:30 AM	0	2	0	2	0	0	0	0	**2**	3	0	**5**	0	0	**2**	**2**	**9**
07:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	1	1	6
08:00 AM	0	**3**	0	**3**	0	0	0	0	0	**4**	0	4	0	0	0	0	7
Total Volume	0	8	0	8	0	0	0	0	3	13	0	16	0	0	3	3	27
% App. Total	0	100	0		0	0	0		18.8	81.2	0		0	0	100		
PHF	.000	.667	.000	.667	.000	.000	.000	.000	.375	.813	.000	.800	.000	.000	.375	.375	.750

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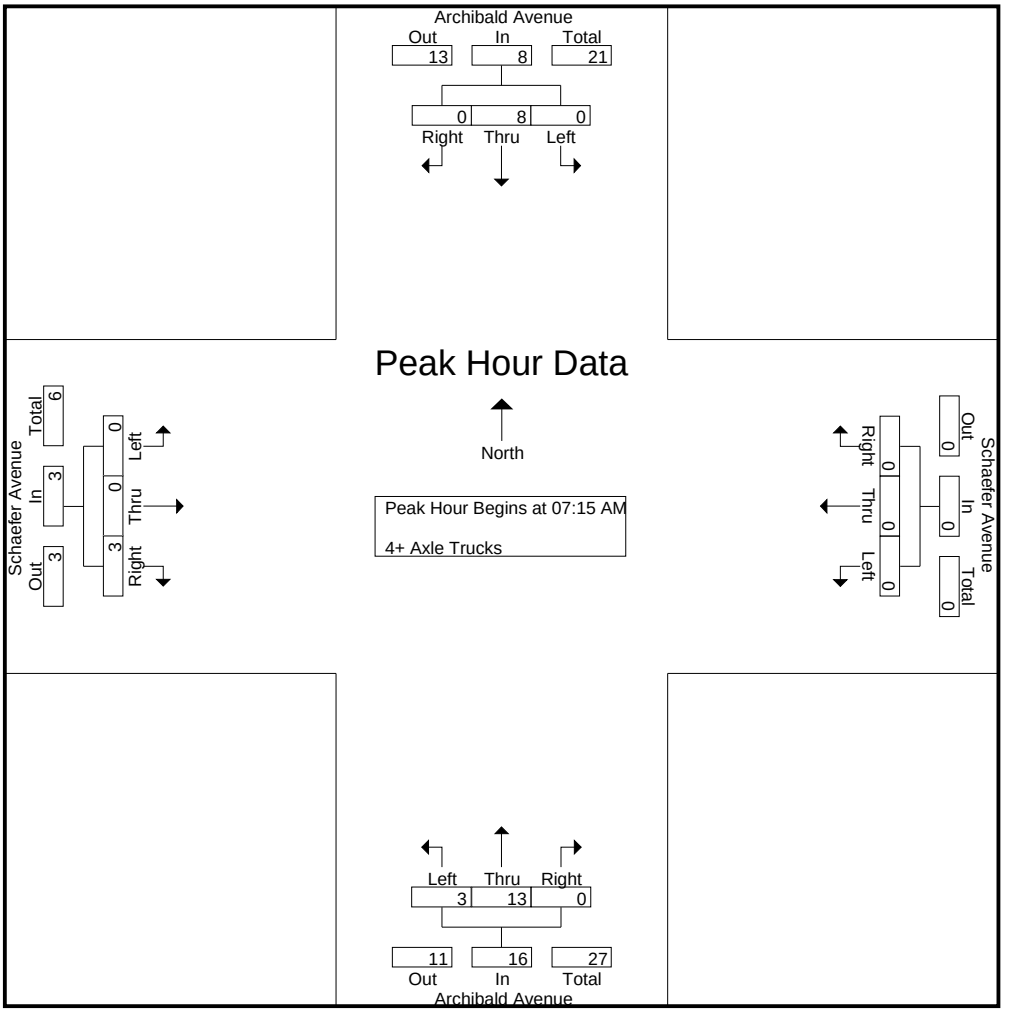

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	0	1	0	0	0	0	1	3	0	4	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	**2**	3	0	**5**	0	0	**2**	**2**
+30 mins.	0	2	0	2	0	0	0	0	0	3	0	3	0	0	1	1
+45 mins.	0	**3**	0	**3**	0	0	0	0	0	**4**	0	4	0	0	0	0
Total Volume	0	8	0	8	0	0	0	0	3	13	0	16	0	0	3	3
% App. Total	0	100	0		0	0	0		18.8	81.2	0		0	0	100	
PHF	.000	.667	.000	.667	.000	.000	.000	.000	.375	.813	.000	.800	.000	.000	.375	.375

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	166	0	166	1	0	7	8	1	108	5	114	0	0	0	0	288
04:15 PM	3	150	0	153	2	0	3	5	1	143	1	145	0	0	0	0	303
04:30 PM	2	178	0	180	3	0	5	8	0	126	0	126	0	0	0	0	314
04:45 PM	4	159	0	163	1	0	1	2	0	136	1	137	0	0	1	1	303
Total	9	653	0	662	7	0	16	23	2	513	7	522	0	0	1	1	1208
05:00 PM	1	201	0	202	0	0	1	1	0	151	1	152	1	0	0	1	356
05:15 PM	1	183	0	184	3	0	3	6	0	138	2	140	3	0	1	4	334
05:30 PM	0	174	0	174	1	0	1	2	0	124	3	127	0	0	1	1	304
05:45 PM	2	186	0	188	2	0	3	5	0	135	5	140	0	0	0	0	333
Total	4	744	0	748	6	0	8	14	0	548	11	559	4	0	2	6	1327
Grand Total	13	1397	0	1410	13	0	24	37	2	1061	18	1081	4	0	3	7	2535
Apprch %	0.9	99.1	0		35.1	0	64.9		0.2	98.1	1.7		57.1	0	42.9		
Total %	0.5	55.1	0	55.6	0.5	0	0.9	1.5	0.1	41.9	0.7	42.6	0.2	0	0.1	0.3	
Passenger Vehicles	13	1344	0	1357	11	0	23	34	2	1018	17	1037	4	0	2	6	2434
% Passenger Vehicles	100	96.2	0	96.2	84.6	0	95.8	91.9	100	95.9	94.4	95.9	100	0	66.7	85.7	96
Large 2 Axle Vehicles	0	23	0	23	2	0	0	2	0	19	1	20	0	0	0	0	45
% Large 2 Axle Vehicles	0	1.6	0	1.6	15.4	0	0	5.4	0	1.8	5.6	1.9	0	0	0	0	1.8
3 Axle Vehicles	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	9
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0.4
4+ Axle Trucks	0	27	0	27	0	0	1	1	0	18	0	18	0	0	1	1	47
% 4+ Axle Trucks	0	1.9	0	1.9	0	0	4.2	2.7	0	1.7	0	1.7	0	0	33.3	14.3	1.9

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	**201**	0	**202**	0	0	1	1	0	**151**	1	**152**	1	0	0	1	**356**
05:15 PM	1	183	0	184	**3**	0	**3**	**6**	0	138	2	140	**3**	0	**1**	**4**	334
05:30 PM	0	174	0	174	1	0	1	2	0	124	3	127	0	0	1	1	304
05:45 PM	**2**	186	0	188	2	0	3	5	0	135	**5**	140	0	0	0	0	333
Total Volume	4	744	0	748	6	0	8	14	0	548	11	559	4	0	2	6	1327
% App. Total	0.5	99.5	0		42.9	0	57.1		0	98	2		66.7	0	33.3		
PHF	.500	.925	.000	.926	.500	.000	.667	.583	.000	.907	.550	.919	.333	.000	.500	.375	.932

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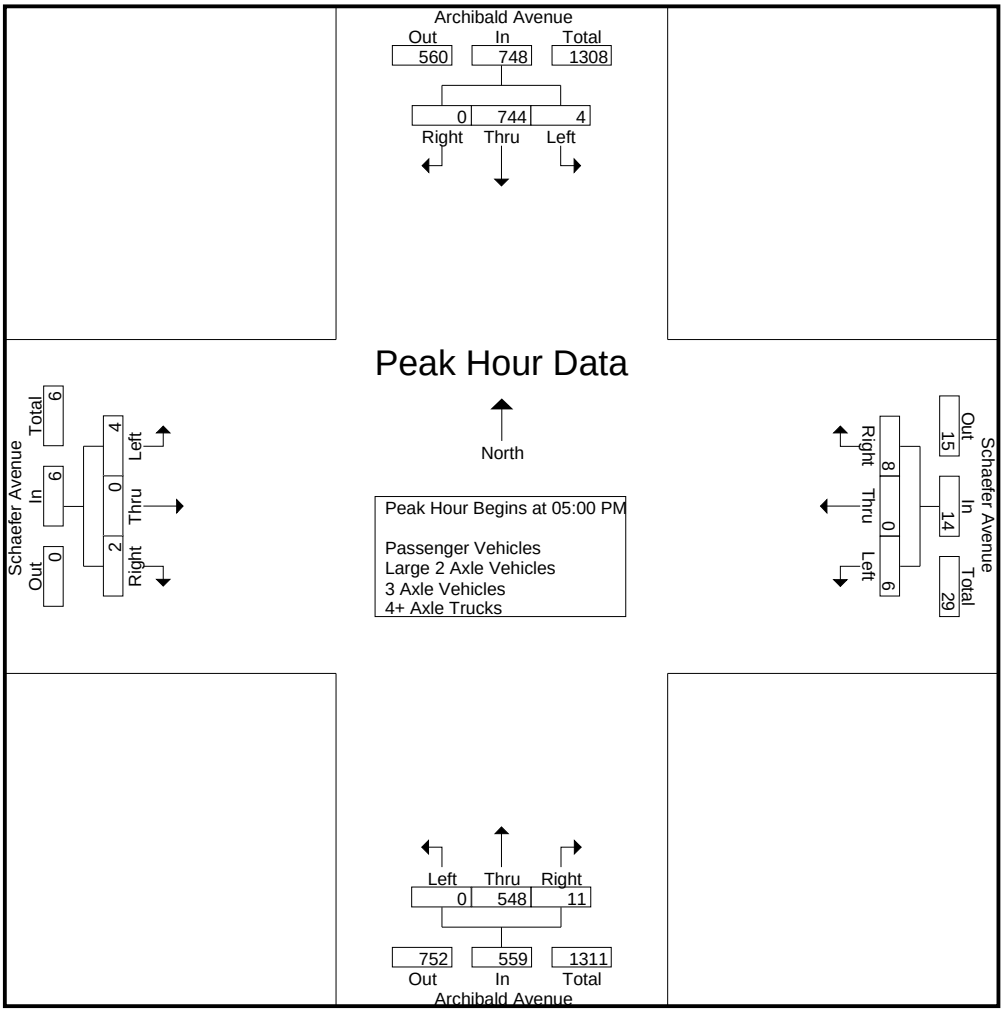

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:15 PM				04:45 PM			
+0 mins.	1	**201**	0	**202**	1	0	**7**	**8**	**1**	143	**1**	145	0	0	**1**	1
+15 mins.	1	183	0	184	2	0	3	5	0	126	0	126	1	0	0	1
+30 mins.	0	174	0	174	**3**	0	5	8	0	136	1	137	**3**	0	1	**4**
+45 mins.	**2**	186	0	188	1	0	1	2	0	**151**	1	**152**	0	0	1	1
Total Volume	4	744	0	748	7	0	16	23	1	556	3	560	4	0	3	7
% App. Total	0.5	99.5	0		30.4	0	69.6		0.2	99.3	0.5		57.1	0	42.9	
PHF	.500	.925	.000	.926	.583	.000	.571	.719	.250	.921	.750	.921	.333	.000	.750	.438

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	158	0	158	0	0	7	7	1	103	4	108	0	0	0	0	273
04:15 PM	3	144	0	147	2	0	3	5	1	138	1	140	0	0	0	0	292
04:30 PM	2	166	0	168	2	0	5	7	0	121	0	121	0	0	0	0	296
04:45 PM	4	151	0	155	1	0	0	1	0	129	1	130	0	0	1	1	287
Total	9	619	0	628	5	0	15	20	2	491	6	499	0	0	1	1	1148
05:00 PM	1	195	0	196	0	0	1	1	0	147	1	148	1	0	0	1	346
05:15 PM	1	177	0	178	3	0	3	6	0	131	2	133	3	0	0	3	320
05:30 PM	0	169	0	169	1	0	1	2	0	121	3	124	0	0	1	1	296
05:45 PM	2	184	0	186	2	0	3	5	0	128	5	133	0	0	0	0	324
Total	4	725	0	729	6	0	8	14	0	527	11	538	4	0	1	5	1286
Grand Total	13	1344	0	1357	11	0	23	34	2	1018	17	1037	4	0	2	6	2434
Apprch %	1	99	0		32.4	0	67.6		0.2	98.2	1.6		66.7	0	33.3		
Total %	0.5	55.2	0	55.8	0.5	0	0.9	1.4	0.1	41.8	0.7	42.6	0.2	0	0.1	0.2	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	**195**	0	**196**	0	0	1	1	0	**147**	1	**148**	1	0	0	1	**346**
05:15 PM	1	177	0	178	**3**	0	**3**	**6**	0	131	2	133	**3**	0	0	**3**	320
05:30 PM	0	169	0	169	1	0	1	2	0	121	3	124	0	0	**1**	1	296
05:45 PM	**2**	184	0	186	2	0	3	5	0	128	**5**	133	0	0	0	0	324
Total Volume	4	725	0	729	6	0	8	14	0	527	11	538	4	0	1	5	1286
% App. Total	0.5	99.5	0		42.9	0	57.1		0	98	2		80	0	20		
PHF	.500	.929	.000	.930	.500	.000	.667	.583	.000	.896	.550	.909	.333	.000	.250	.417	.929

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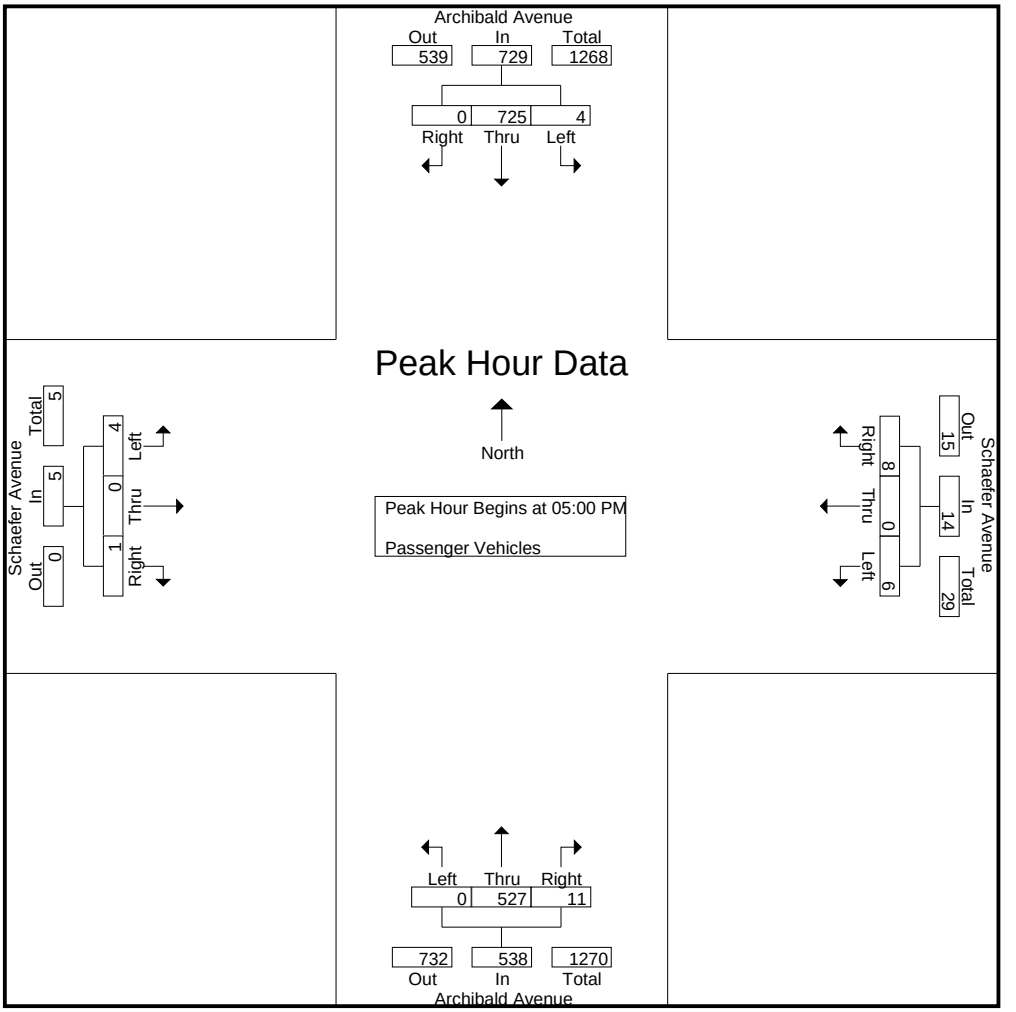

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	**195**	0	**196**	0	0	1	1	0	**147**	1	**148**	1	0	0	1
+15 mins.	1	177	0	178	**3**	0	**3**	**6**	0	131	2	133	**3**	0	0	**3**
+30 mins.	0	169	0	169	1	0	1	2	0	121	3	124	0	0	**1**	1
+45 mins.	**2**	184	0	186	2	0	3	5	0	128	**5**	133	0	0	0	0
Total Volume	4	725	0	729	6	0	8	14	0	527	11	538	4	0	1	5
% App. Total	0.5	99.5	0		42.9	0	57.1		0	98	2		80	0	20	
PHF	.500	.929	.000	.930	.500	.000	.667	.583	.000	.896	.550	.909	.333	.000	.250	.417

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	0	4	1	0	0	1	0	0	1	1	0	0	0	0	6
04:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
04:30 PM	0	1	0	1	1	0	0	1	0	2	0	2	0	0	0	0	4
04:45 PM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
Total	0	11	0	11	2	0	0	2	0	9	1	10	0	0	0	0	23
05:00 PM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:15 PM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
05:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	12	0	12	0	0	0	0	0	10	0	10	0	0	0	0	22
Grand Total	0	23	0	23	2	0	0	2	0	19	1	20	0	0	0	0	45
Apprch %	0	100	0		100	0	0		0	95	5		0	0	0		
Total %	0	51.1	0	51.1	4.4	0	0	4.4	0	42.2	2.2	44.4	0	0	0	0	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**4**	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0	6
05:15 PM	0	4	0	4	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**9**
05:30 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	12	0	12	0	0	0	0	0	10	0	10	0	0	0	0	22
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.611

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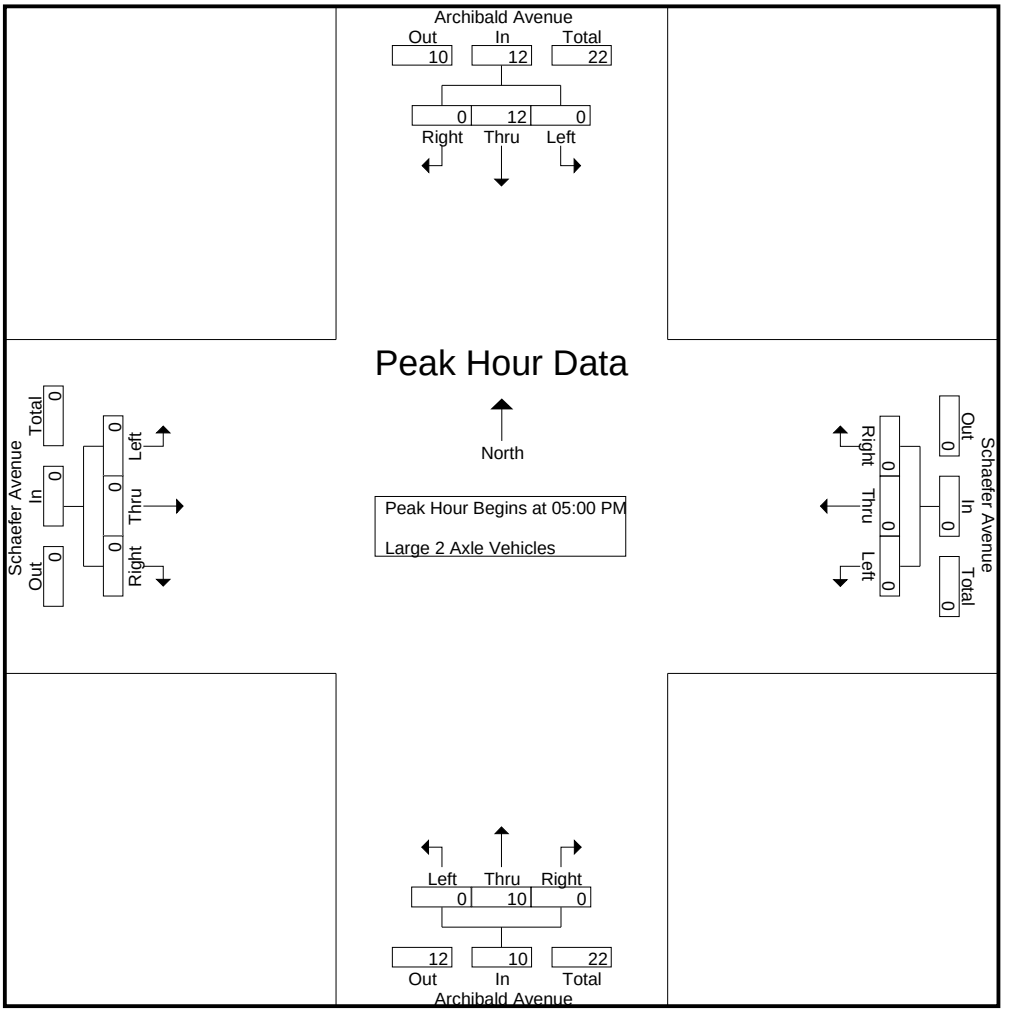

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**4**	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	4	0	4	0	0	0	0	0	**5**	0	**5**	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	12	0	12	0	0	0	0	0	10	0	10	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Grand Total	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	9
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	0	0	0	0	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.375

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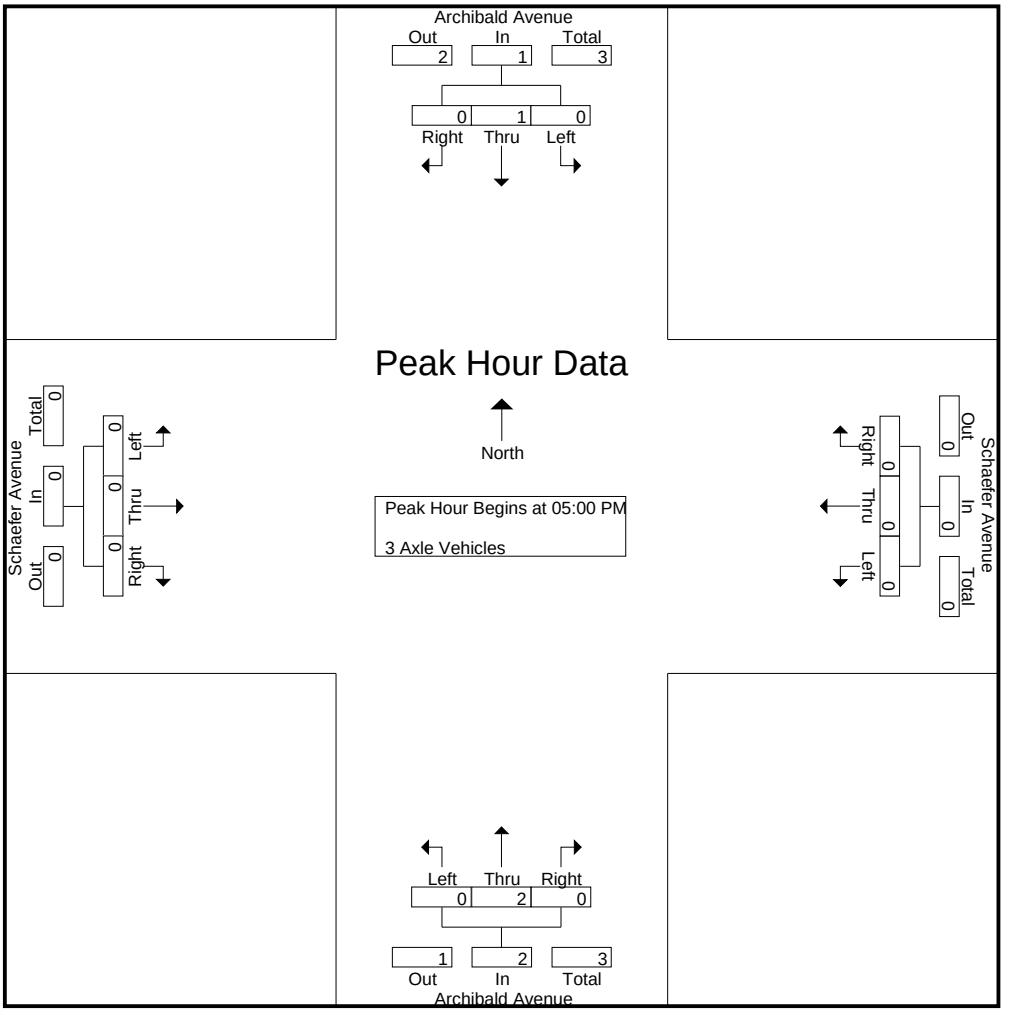

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
04:15 PM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
04:30 PM	0	10	0	10	0	0	0	0	0	2	0	2	0	0	0	0	12
04:45 PM	0	3	0	3	0	0	1	1	0	1	0	1	0	0	0	0	5
Total	0	21	0	21	0	0	1	1	0	9	0	9	0	0	0	0	31
05:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
05:30 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	5
Total	0	6	0	6	0	0	0	0	0	9	0	9	0	0	1	1	16
Grand Total	0	27	0	27	0	0	1	1	0	18	0	18	0	0	1	1	47
Apprch %	0	100	0		0	0	100		0	100	0		0	0	100		
Total %	0	57.4	0	57.4	0	0	2.1	2.1	0	38.3	0	38.3	0	0	2.1	2.1	

	Archibald Avenue Southbound				Schaefer Avenue Westbound				Archibald Avenue Northbound				Schaefer Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	**1**	**1**	3
05:30 PM	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
05:45 PM	0	0	0	0	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**5**
Total Volume	0	6	0	6	0	0	0	0	0	9	0	9	0	0	1	1	16
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.250	.250	.800

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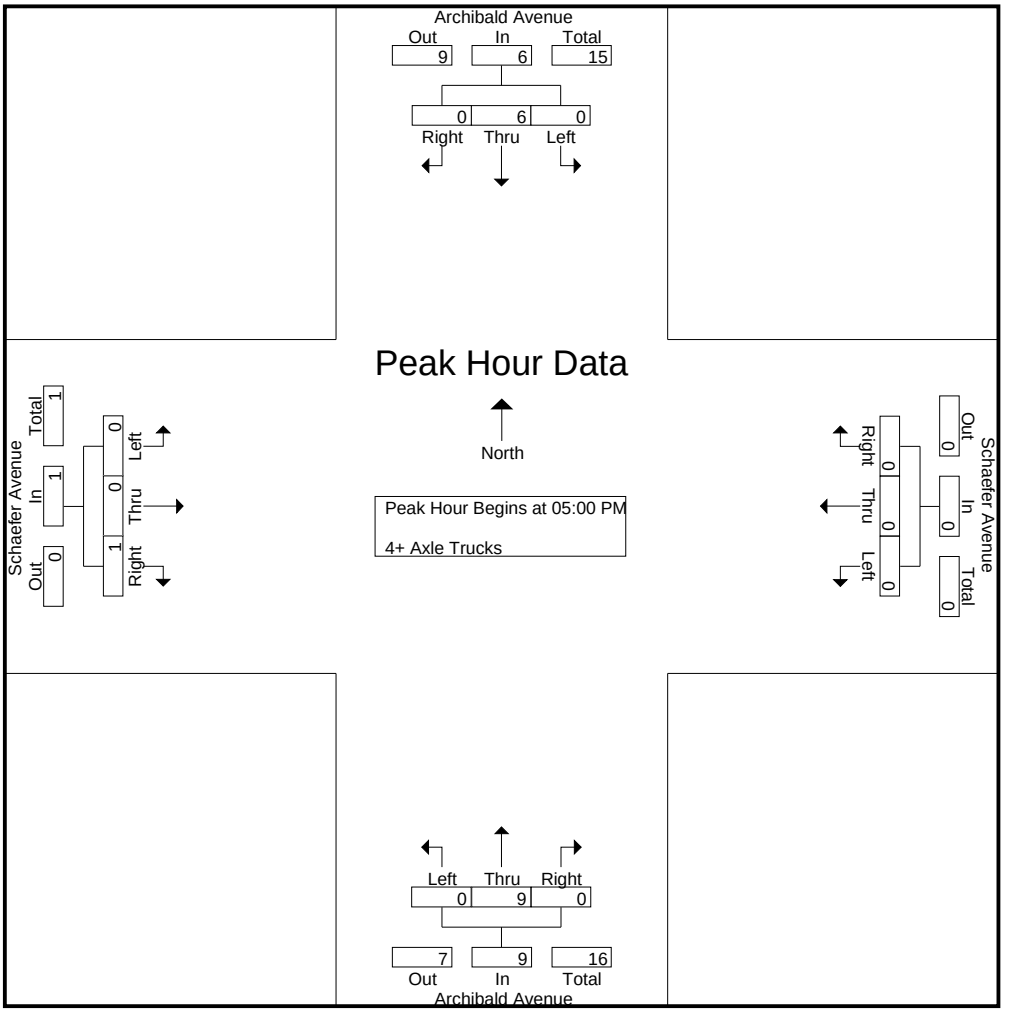

Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	**1**	**1**
+30 mins.	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**5**	0	**5**	0	0	0	0
Total Volume	0	6	0	6	0	0	0	0	0	9	0	9	0	0	1	1
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.450	.000	.450	.000	.000	.250	.250

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City of Ontario
N/S: Archibald Avenue
E/W: Eucalyptus Avenue
Weather: Sunny

File Name : ONTAREUAM
Site Code : 00000155
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	9	74	83	2	10	12	170	0	170	265
07:15 AM	1	96	97	1	11	12	217	1	218	327
07:30 AM	7	96	103	1	17	18	204	1	205	326
07:45 AM	2	100	102	0	10	10	222	0	222	334
Total	19	366	385	4	48	52	813	2	815	1252
08:00 AM	4	93	97	1	23	24	201	1	202	323
08:15 AM	5	97	102	1	10	11	212	0	212	325
08:30 AM	2	94	96	0	11	11	176	0	176	283
08:45 AM	0	77	77	1	1	2	184	1	185	264
Total	11	361	372	3	45	48	773	2	775	1195
Grand Total	30	727	757	7	93	100	1586	4	1590	2447
Apprch %	4	96		7	93		99.7	0.3		
Total %	1.2	29.7	30.9	0.3	3.8	4.1	64.8	0.2	65	
Passenger Vehicles	29	655	684	5	86	91	1538	3	1541	2316
% Passenger Vehicles	96.7	90.1	90.4	71.4	92.5	91	97	75	96.9	94.6
Large 2 Axle Vehicles	1	28	29	1	2	3	27	1	28	60
% Large 2 Axle Vehicles	3.3	3.9	3.8	14.3	2.2	3	1.7	25	1.8	2.5
3 Axle Vehicles	0	10	10	0	0	0	5	0	5	15
% 3 Axle Vehicles	0	1.4	1.3	0	0	0	0.3	0	0.3	0.6
4+ Axle Trucks	0	34	34	1	5	6	16	0	16	56
% 4+ Axle Trucks	0	4.7	4.5	14.3	5.4	6	1	0	1	2.3

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	96	97	**1**	11	12	217	**1**	218	327
07:30 AM	**7**	96	**103**	1	17	18	204	1	205	326
07:45 AM	2	**100**	102	0	10	10	**222**	0	**222**	**334**
08:00 AM	4	93	97	1	**23**	**24**	201	1	202	323
Total Volume	14	385	399	3	61	64	844	3	847	1310
% App. Total	3.5	96.5		4.7	95.3		99.6	0.4		
PHF	.500	.963	.968	.750	.663	.667	.950	.750	.954	.981

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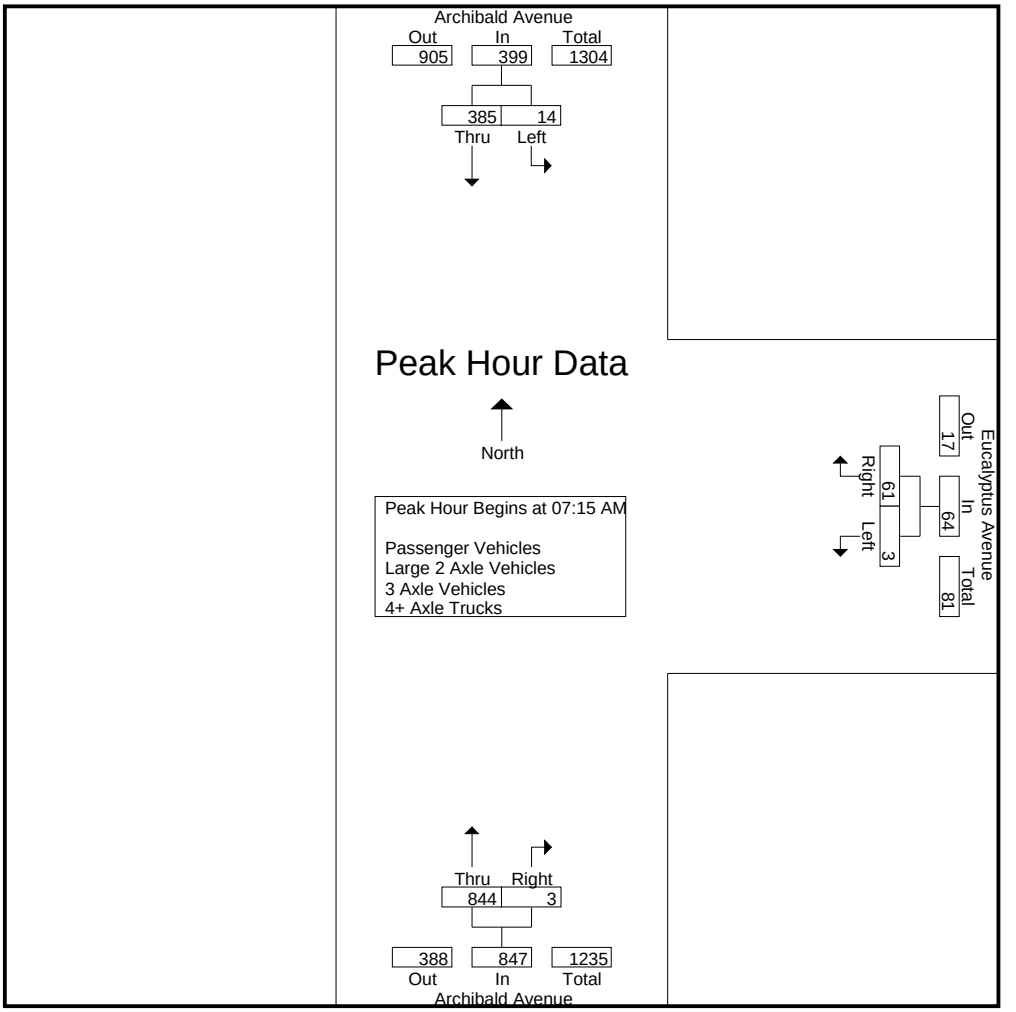

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			07:15 AM		
+0 mins.	**7**	96	**103**	**1**	11	12	217	**1**	218
+15 mins.	2	**100**	102	1	17	18	204	1	205
+30 mins.	4	93	97	0	10	10	**222**	0	**222**
+45 mins.	5	97	102	1	**23**	**24**	201	1	202
Total Volume	18	386	404	3	61	64	844	3	847
% App. Total	4.5	95.5		4.7	95.3		99.6	0.4	
PHF	.643	.965	.981	.750	.663	.667	.950	.750	.954

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	8	68	76	1	10	11	164	0	164	251
07:15 AM	1	94	95	1	9	10	214	0	214	319
07:30 AM	7	86	93	0	15	15	199	1	200	308
07:45 AM	2	93	95	0	8	8	217	0	217	320
Total	18	341	359	2	42	44	794	1	795	1198
08:00 AM	4	82	86	1	22	23	198	1	199	308
08:15 AM	5	85	90	1	10	11	203	0	203	304
08:30 AM	2	80	82	0	11	11	173	0	173	266
08:45 AM	0	67	67	1	1	2	170	1	171	240
Total	11	314	325	3	44	47	744	2	746	1118
Grand Total	29	655	684	5	86	91	1538	3	1541	2316
Apprch %	4.2	95.8		5.5	94.5		99.8	0.2		
Total %	1.3	28.3	29.5	0.2	3.7	3.9	66.4	0.1	66.5	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	1	**94**	**95**	**1**	9	10	214	0	214	319
07:30 AM	**7**	86	93	0	15	15	199	**1**	200	308
07:45 AM	2	93	95	0	8	8	**217**	0	**217**	**320**
08:00 AM	4	82	86	1	**22**	**23**	198	1	199	308
Total Volume	14	355	369	2	54	56	828	2	830	1255
% App. Total	3.8	96.2		3.6	96.4		99.8	0.2		
PHF	.500	.944	.971	.500	.614	.609	.954	.500	.956	.980

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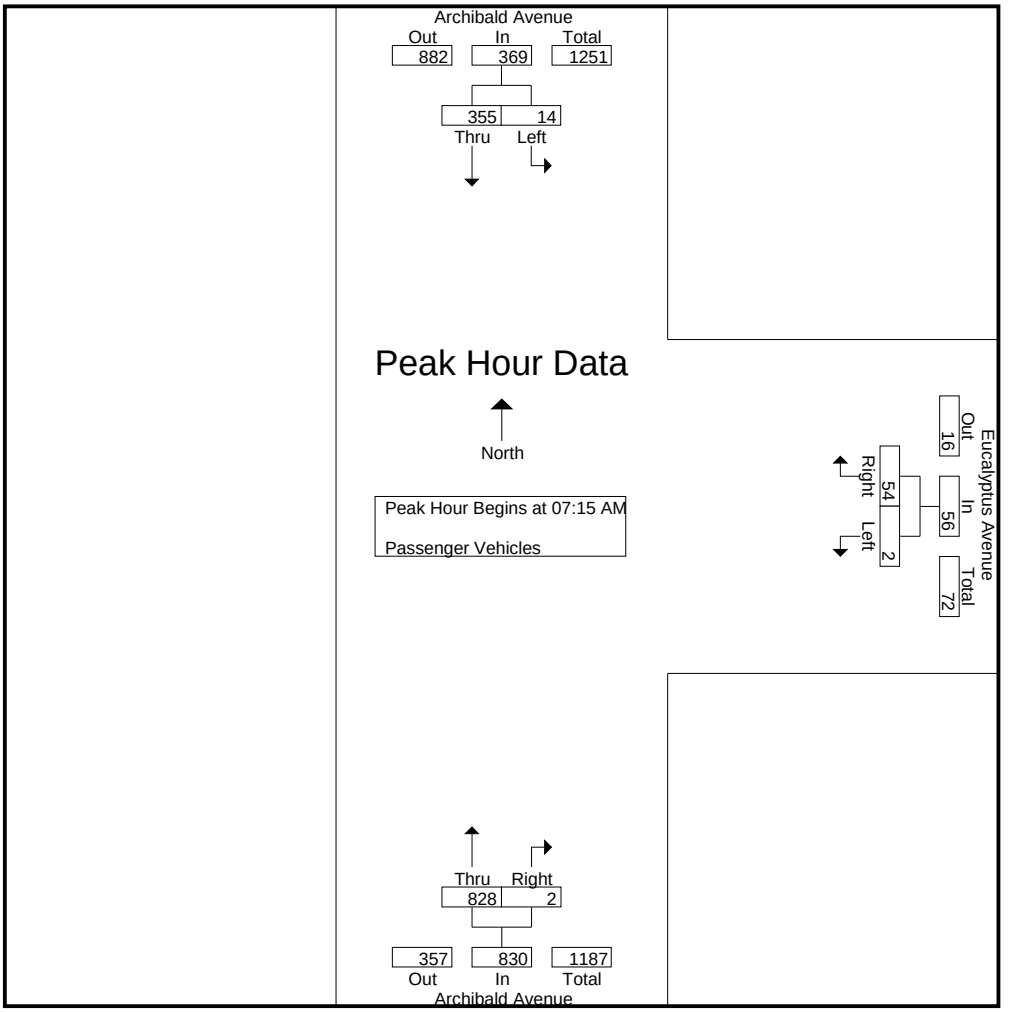

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	1	**94**	**95**	**1**	9	10	214	0	214
+15 mins.	**7**	86	93	0	15	15	199	**1**	200
+30 mins.	2	93	95	0	8	8	**217**	0	**217**
+45 mins.	4	82	86	1	**22**	**23**	198	1	199
Total Volume	14	355	369	2	54	56	828	2	830
% App. Total	3.8	96.2		3.6	96.4		99.8	0.2	
PHF	.500	.944	.971	.500	.614	.609	.954	.500	.956

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	4	5	1	0	1	5	0	5	11
07:15 AM	0	0	0	0	0	0	3	1	4	4
07:30 AM	0	1	1	0	0	0	2	0	2	3
07:45 AM	0	3	3	0	1	1	2	0	2	6
Total	1	8	9	1	1	2	12	1	13	24
08:00 AM	0	4	4	0	1	1	2	0	2	7
08:15 AM	0	5	5	0	0	0	4	0	4	9
08:30 AM	0	8	8	0	0	0	2	0	2	10
08:45 AM	0	3	3	0	0	0	7	0	7	10
Total	0	20	20	0	1	1	15	0	15	36
Grand Total	1	28	29	1	2	3	27	1	28	60
Apprch %	3.4	96.6		33.3	66.7		96.4	3.6		
Total %	1.7	46.7	48.3	1.7	3.3	5	45	1.7	46.7	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	**3**	**1**	**4**	4
07:30 AM	0	1	1	0	0	0	2	0	2	3
07:45 AM	0	3	3	0	**1**	**1**	2	0	2	6
08:00 AM	0	**4**	**4**	0	1	1	2	0	2	**7**
Total Volume	0	8	8	0	2	2	9	1	10	20
% App. Total	0	100		0	100		90	10		
PHF	.000	.500	.500	.000	.500	.500	.750	.250	.625	.714

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E/W: Eucalyptus Avenue
Weather: Sunny

File Name : ONTAREUAM
Site Code : 00000155
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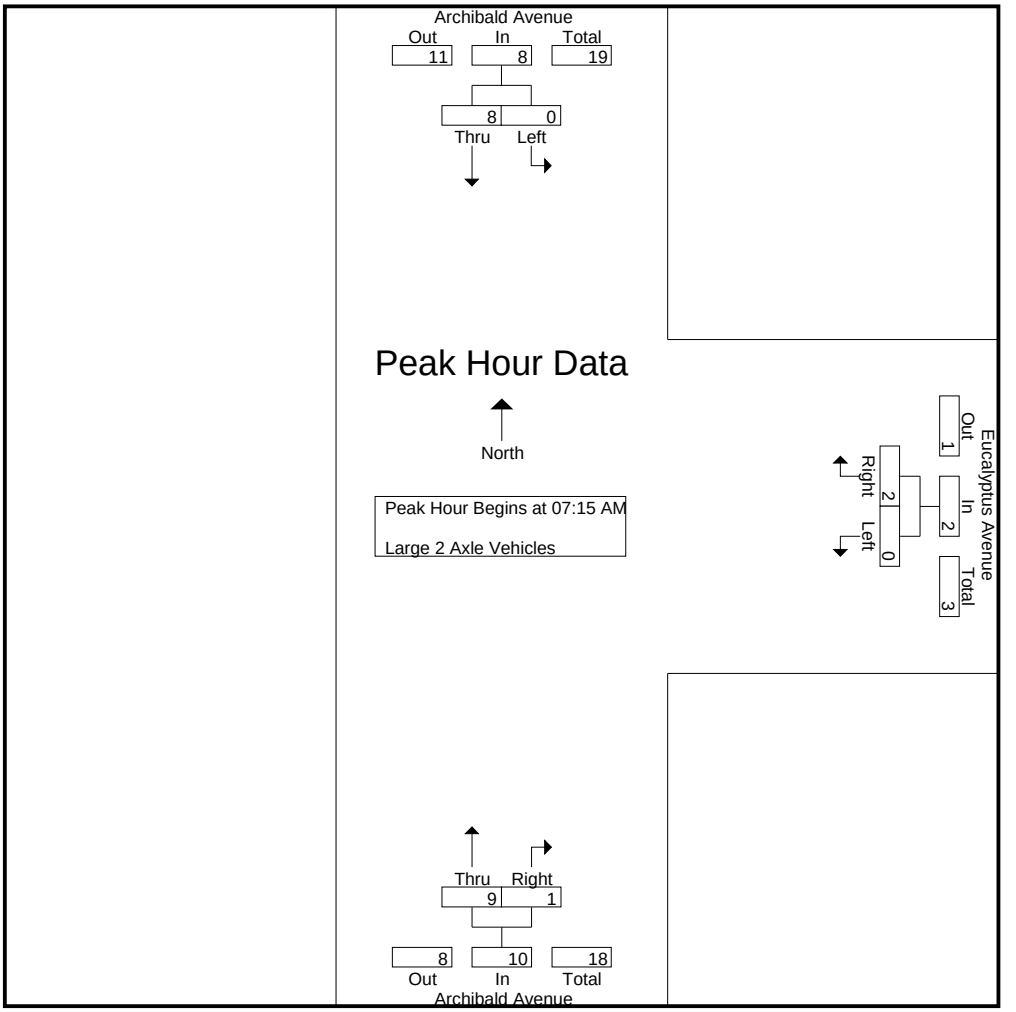

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	**3**	**1**	**4**
+15 mins.	0	1	1	0	0	0	2	0	2
+30 mins.	0	3	3	0	**1**	**1**	2	0	2
+45 mins.	0	**4**	**4**	0	1	1	2	0	2
Total Volume	0	8	8	0	2	2	9	1	10
% App. Total	0	100		0	100		90	10	
PHF	.000	.500	.500	.000	.500	.500	.750	.250	.625

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File Name : ONTAREUAM
Site Code : 00000155
Start Date : 6/28/2012

Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	3	3	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	3	3	0	0	0	1	0	1	4
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	2	2	0	0	0	0	0	0	2
08:30 AM	0	3	3	0	0	0	0	0	0	3
08:45 AM	0	1	1	0	0	0	3	0	3	4
Total	0	7	7	0	0	0	4	0	4	11
Grand Total	0	10	10	0	0	0	5	0	5	15
Apprch %	0	100		0	0		100	0		
Total %	0	66.7	66.7	0	0	0	33.3	0	33.3	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	**3**	**3**	0	0	0	0	0	0	**3**
07:45 AM	0	0	0	0	0	0	**1**	0	**1**	1
08:00 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	0	4	4	0	0	0	2	0	2	6
% App. Total	0	100		0	0		100	0		
PHF	.000	.333	.333	.000	.000	.000	.500	.000	.500	.500

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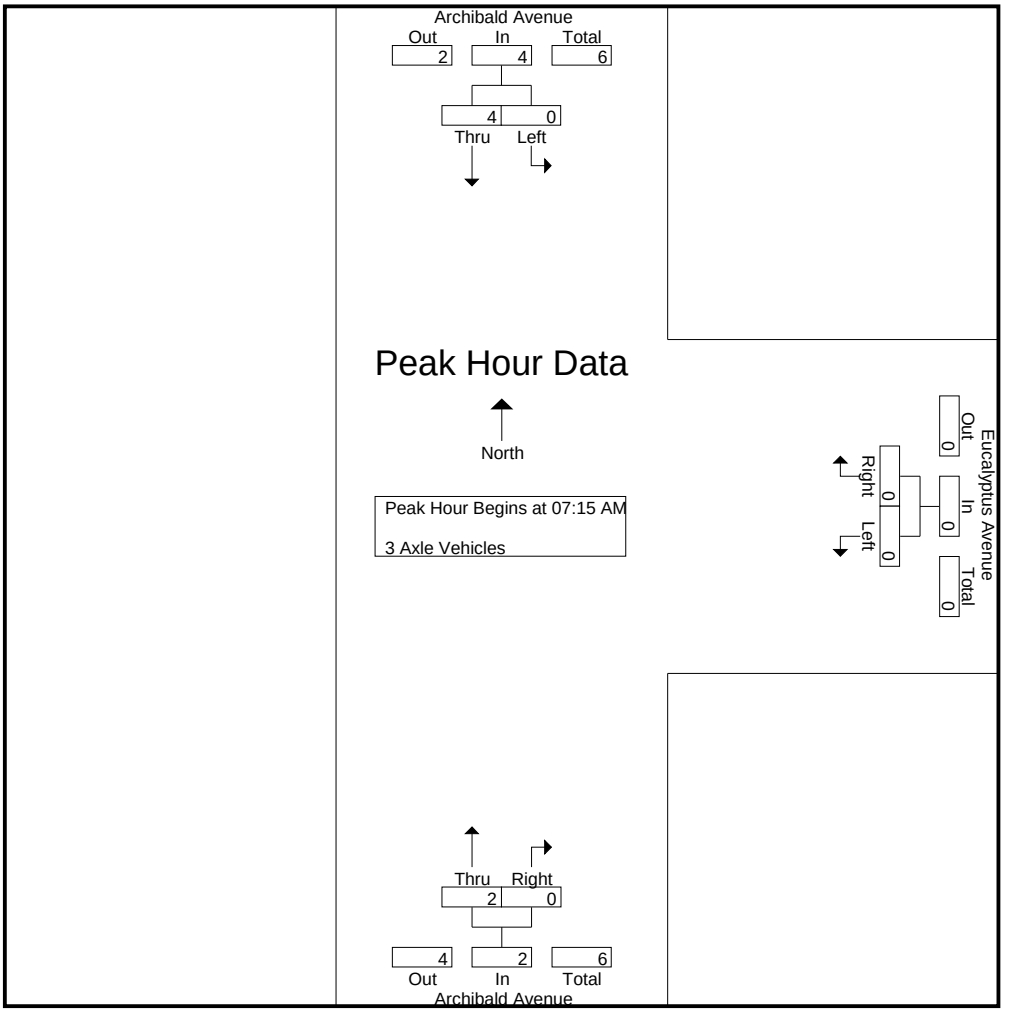

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**3**	**3**	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	**1**	0	**1**
+45 mins.	0	1	1	0	0	0	1	0	1
Total Volume	0	4	4	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.333	.333	.000	.000	.000	.500	.000	.500

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Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	2	0	0	0	1	0	1	3
07:15 AM	0	2	2	0	2	2	0	0	0	4
07:30 AM	0	6	6	1	2	3	3	0	3	12
07:45 AM	0	4	4	0	1	1	2	0	2	7
Total	0	14	14	1	5	6	6	0	6	26
08:00 AM	0	6	6	0	0	0	0	0	0	6
08:15 AM	0	5	5	0	0	0	5	0	5	10
08:30 AM	0	3	3	0	0	0	1	0	1	4
08:45 AM	0	6	6	0	0	0	4	0	4	10
Total	0	20	20	0	0	0	10	0	10	30
Grand Total	0	34	34	1	5	6	16	0	16	56
Apprch %	0	100		16.7	83.3		100	0		
Total %	0	60.7	60.7	1.8	8.9	10.7	28.6	0	28.6	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	2	2	0	**2**	2	0	0	0	4
07:30 AM	0	**6**	**6**	**1**	2	**3**	**3**	0	**3**	**12**
07:45 AM	0	4	4	0	1	1	2	0	2	7
08:00 AM	0	6	6	0	0	0	0	0	0	6
Total Volume	0	18	18	1	5	6	5	0	5	29
% App. Total	0	100		16.7	83.3		100	0		
PHF	.000	.750	.750	.250	.625	.500	.417	.000	.417	.604

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File Name : ONTAREUAM
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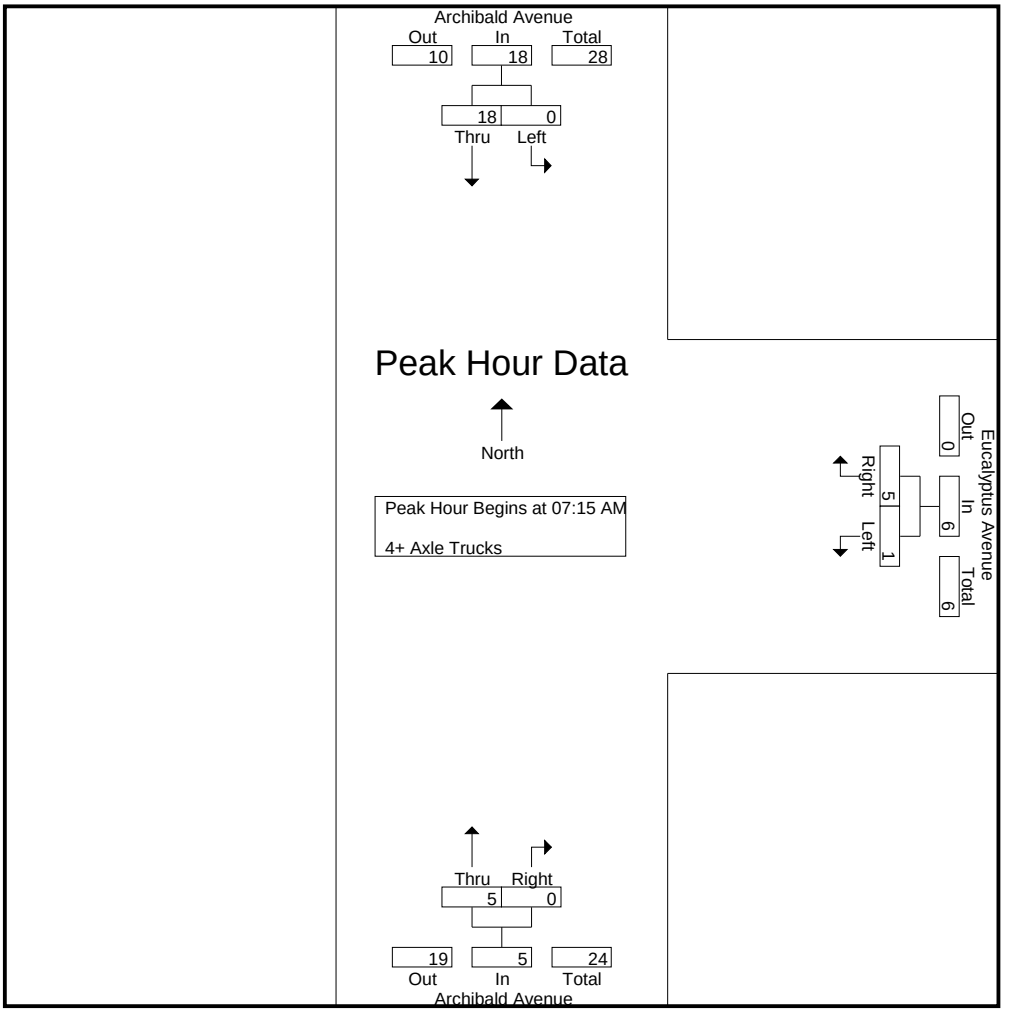

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	2	2	0	**2**	2	0	0	0
+15 mins.	0	**6**	**6**	**1**	2	**3**	**3**	0	**3**
+30 mins.	0	4	4	0	1	1	2	0	2
+45 mins.	0	6	6	0	0	0	0	0	0
Total Volume	0	18	18	1	5	6	5	0	5
% App. Total	0	100		16.7	83.3		100	0	
PHF	.000	.750	.750	.250	.625	.500	.417	.000	.417

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	7	185	192	0	2	2	109	0	109	303
04:15 PM	16	196	212	0	9	9	123	3	126	347
04:30 PM	9	189	198	0	10	10	125	0	125	333
04:45 PM	23	216	239	0	5	5	135	0	135	379
Total	55	786	841	0	26	26	492	3	495	1362
05:00 PM	14	215	229	0	2	2	141	0	141	372
05:15 PM	24	248	272	0	7	7	124	2	126	405
05:30 PM	19	228	247	0	5	5	136	0	136	388
05:45 PM	20	222	242	1	4	5	127	0	127	374
Total	77	913	990	1	18	19	528	2	530	1539
Grand Total	132	1699	1831	1	44	45	1020	5	1025	2901
Apprch %	7.2	92.8		2.2	97.8		99.5	0.5		
Total %	4.6	58.6	63.1	0	1.5	1.6	35.2	0.2	35.3	
Passenger Vehicles	126	1656	1782	1	42	43	981	5	986	2811
% Passenger Vehicles	95.5	97.5	97.3	100	95.5	95.6	96.2	100	96.2	96.9
Large 2 Axle Vehicles	3	19	22	0	2	2	20	0	20	44
% Large 2 Axle Vehicles	2.3	1.1	1.2	0	4.5	4.4	2	0	2	1.5
3 Axle Vehicles	0	2	2	0	0	0	6	0	6	8
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	0.6	0	0.6	0.3
4+ Axle Trucks	3	22	25	0	0	0	13	0	13	38
% 4+ Axle Trucks	2.3	1.3	1.4	0	0	0	1.3	0	1.3	1.3

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	23	216	239	0	5	5	135	0	135	379
05:00 PM	14	215	229	0	2	2	**141**	0	**141**	372
05:15 PM	**24**	**248**	**272**	0	**7**	**7**	124	**2**	126	**405**
05:30 PM	19	228	247	0	5	5	136	0	136	388
Total Volume	80	907	987	0	19	19	536	2	538	1544
% App. Total	8.1	91.9		0	100		99.6	0.4		
PHF	.833	.914	.907	.000	.679	.679	.950	.250	.954	.953

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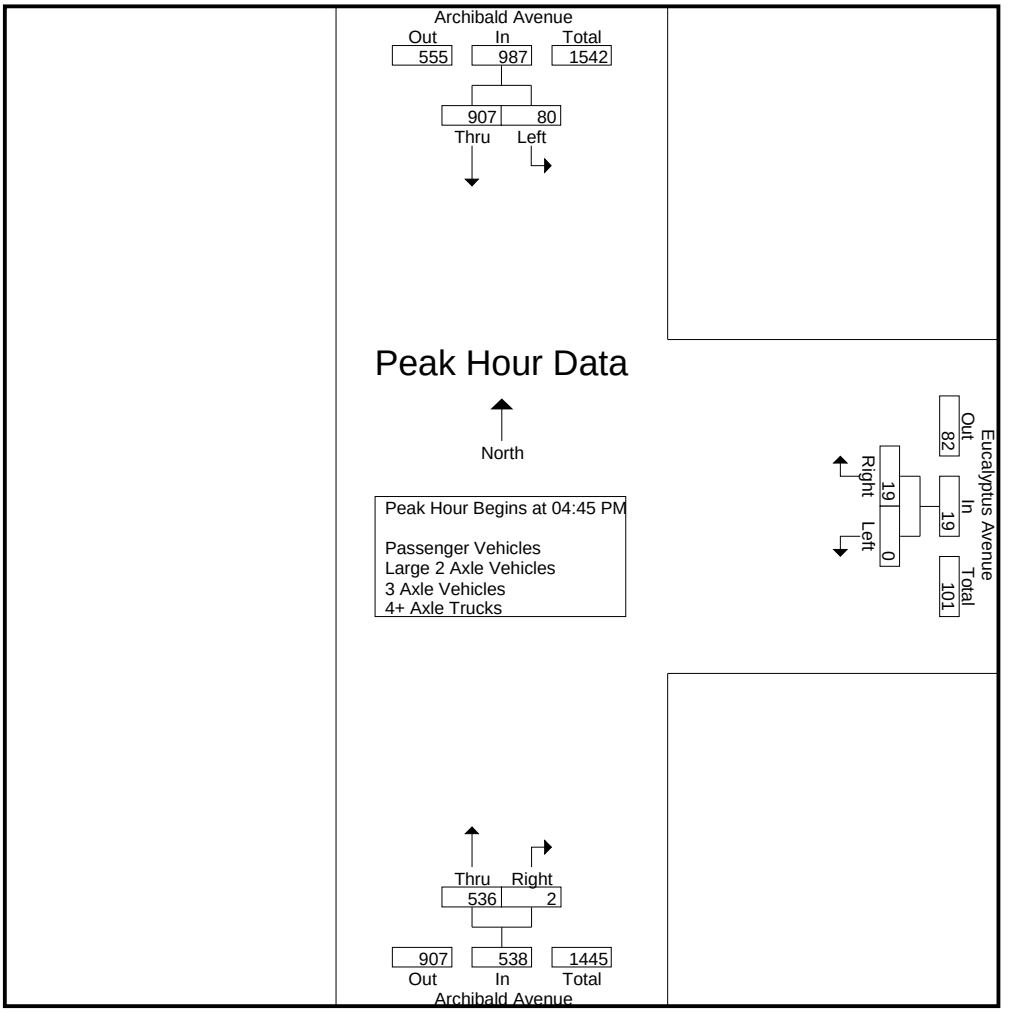

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	14	215	229	0	2	2	135	0	135
+15 mins.	**24**	**248**	**272**	0	9	9	**141**	0	**141**
+30 mins.	19	228	247	0	**10**	**10**	124	**2**	126
+45 mins.	20	222	242	0	5	5	136	0	136
Total Volume	77	913	990	0	26	26	536	2	538
% App. Total	7.8	92.2		0	100		99.6	0.4	
PHF	.802	.920	.910	.000	.650	.650	.950	.250	.954

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File Name : ONTAREUPM
Site Code : 00000155
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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	5	179	184	0	2	2	105	0	105	291
04:15 PM	15	190	205	0	9	9	120	3	123	337
04:30 PM	9	181	190	0	10	10	120	0	120	320
04:45 PM	22	208	230	0	4	4	125	0	125	359
Total	51	758	809	0	25	25	470	3	473	1307
05:00 PM	14	211	225	0	2	2	139	0	139	366
05:15 PM	23	244	267	0	7	7	118	2	120	394
05:30 PM	19	222	241	0	4	4	131	0	131	376
05:45 PM	19	221	240	1	4	5	123	0	123	368
Total	75	898	973	1	17	18	511	2	513	1504
Grand Total	126	1656	1782	1	42	43	981	5	986	2811
Apprch %	7.1	92.9		2.3	97.7		99.5	0.5		
Total %	4.5	58.9	63.4	0	1.5	1.5	34.9	0.2	35.1	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	22	208	230	0	4	4	125	0	125	359
05:00 PM	14	211	225	0	2	2	**139**	0	**139**	366
05:15 PM	**23**	**244**	**267**	0	**7**	**7**	118	**2**	120	**394**
05:30 PM	19	222	241	0	4	4	131	0	131	376
Total Volume	78	885	963	0	17	17	513	2	515	1495
% App. Total	8.1	91.9		0	100		99.6	0.4		
PHF	.848	.907	.902	.000	.607	.607	.923	.250	.926	.949

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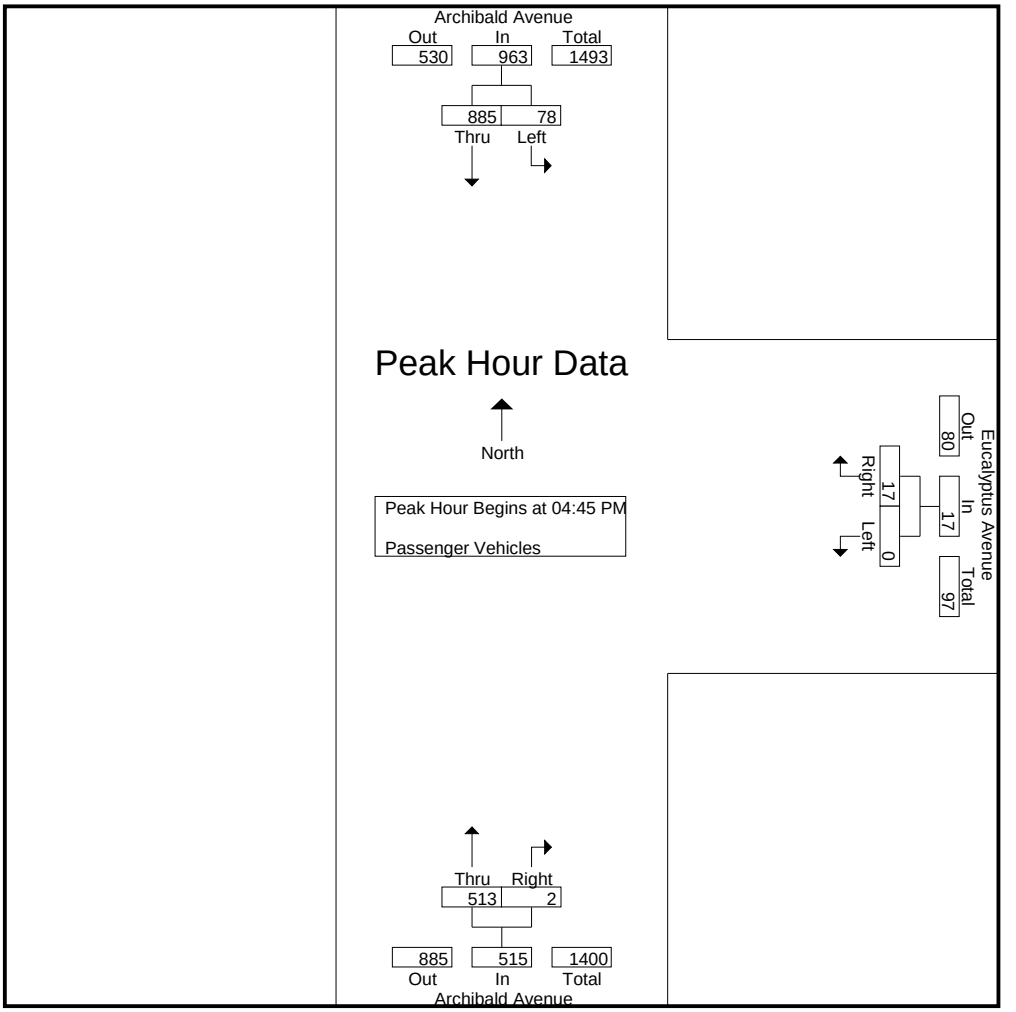

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	22	208	230	0	4	4	125	0	125
+15 mins.	14	211	225	0	2	2	**139**	0	**139**
+30 mins.	**23**	**244**	**267**	0	**7**	**7**	118	**2**	120
+45 mins.	19	222	241	0	4	4	131	0	131
Total Volume	78	885	963	0	17	17	513	2	515
% App. Total	8.1	91.9		0	100		99.6	0.4	
PHF	.848	.907	.902	.000	.607	.607	.923	.250	.926

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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	3	4	0	0	0	1	0	1	5
04:15 PM	1	2	3	0	0	0	0	0	0	3
04:30 PM	0	2	2	0	0	0	2	0	2	4
04:45 PM	0	3	3	0	1	1	6	0	6	10
Total	2	10	12	0	1	1	9	0	9	22
05:00 PM	0	3	3	0	0	0	2	0	2	5
05:15 PM	0	2	2	0	0	0	5	0	5	7
05:30 PM	0	4	4	0	1	1	2	0	2	7
05:45 PM	1	0	1	0	0	0	2	0	2	3
Total	1	9	10	0	1	1	11	0	11	22
Grand Total	3	19	22	0	2	2	20	0	20	44
Apprch %	13.6	86.4		0	100		100	0		
Total %	6.8	43.2	50	0	4.5	4.5	45.5	0	45.5	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	3	3	0	**1**	**1**	**6**	0	**6**	**10**
05:00 PM	0	3	3	0	0	0	2	0	2	5
05:15 PM	0	2	2	0	0	0	5	0	5	7
05:30 PM	0	**4**	**4**	0	1	1	2	0	2	7
Total Volume	0	12	12	0	2	2	15	0	15	29
% App. Total	0	100		0	100		100	0		
PHF	.000	.750	.750	.000	.500	.500	.625	.000	.625	.725

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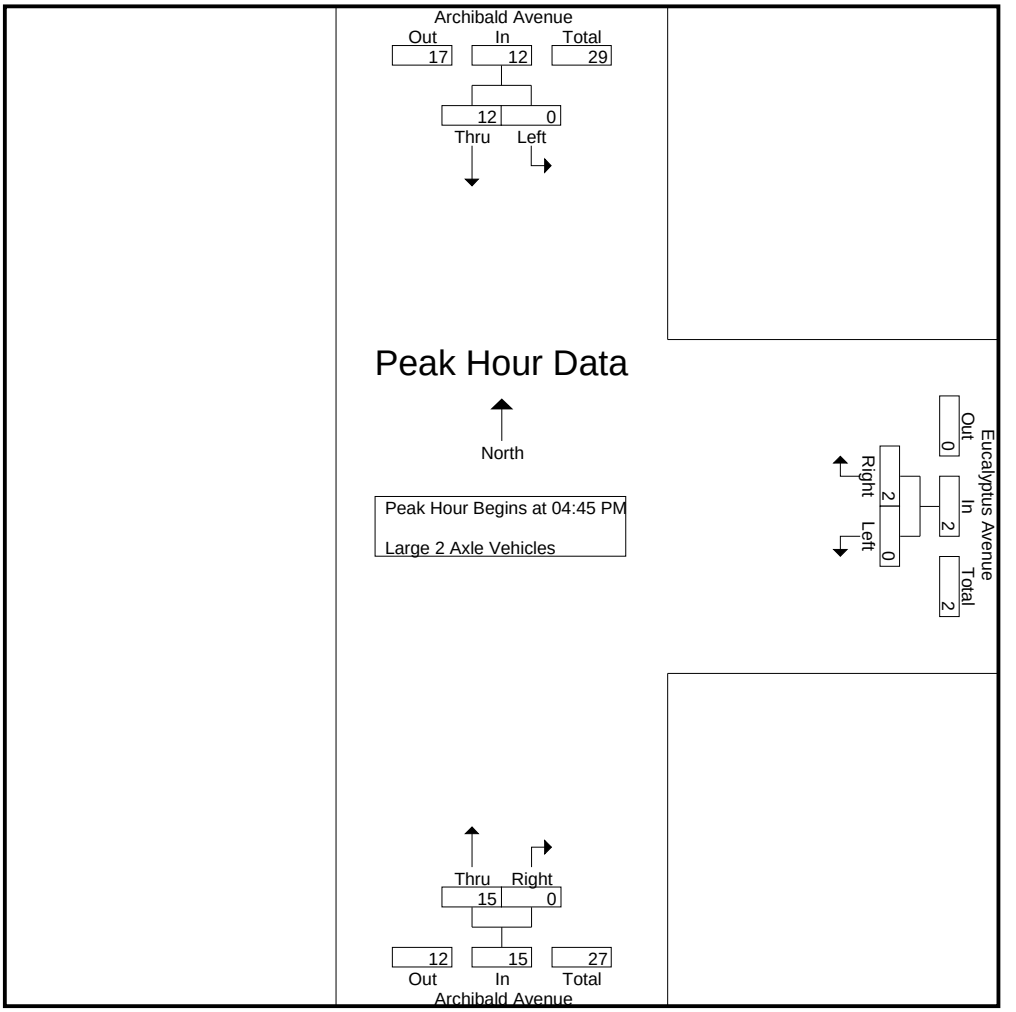

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	3	3	0	**1**	**1**	**6**	0	**6**
+15 mins.	0	3	3	0	0	0	2	0	2
+30 mins.	0	2	2	0	0	0	5	0	5
+45 mins.	0	**4**	**4**	0	1	1	2	0	2
Total Volume	0	12	12	0	2	2	15	0	15
% App. Total	0	100		0	100		100	0	
PHF	.000	.750	.750	.000	.500	.500	.625	.000	.625

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Groups Printed- 3 Axle Vehicles

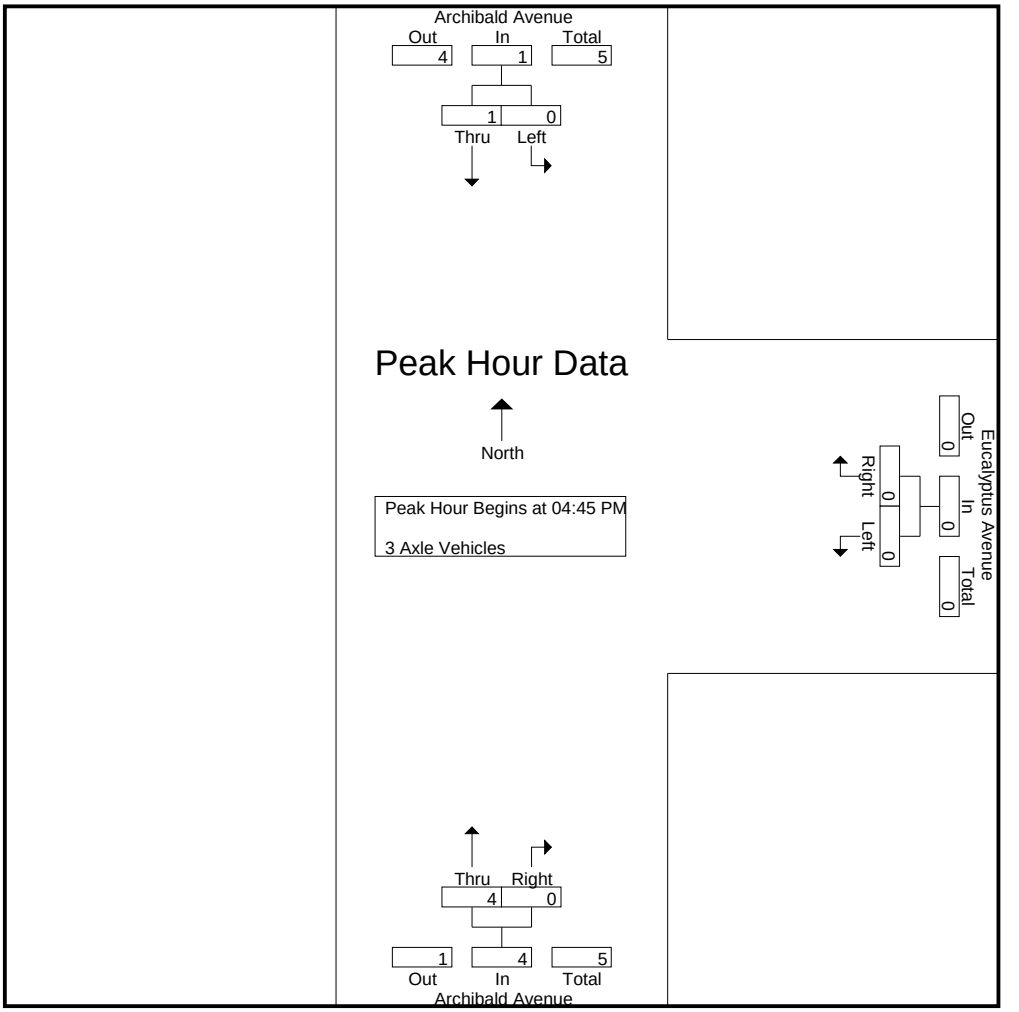
	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	1	1	0	0	0	3	0	3	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	1	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	2	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	3	0	3	4
Grand Total	0	2	2	0	0	0	6	0	6	8
Apprch %	0	100		0	0		100	0		
Total %	0	25	25	0	0	0	75	0	75	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	**1**	**1**	0	0	0	1	0	1	**2**
05:30 PM	0	0	0	0	0	0	**2**	0	**2**	2
Total Volume	0	1	1	0	0	0	4	0	4	5
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.625

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

City of Ontario
N/S: Archibald Avenue
E/W: Eucalyptus Avenue
Weather: Sunny

File Name : ONTAREUPM
Site Code : 00000155
Start Date : 6/28/2012
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	**1**	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	**2**	0	**2**
Total Volume	0	1	1	0	0	0	4	0	4
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

Counts Unlimited Inc.
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Corona, CA 92878
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City of Ontario
N/S: Archibald Avenue
E/W: Eucalyptus Avenue
Weather: Sunny

File Name : ONTAREUPM
Site Code : 00000155
Start Date : 6/28/2012

Groups Printed- 4+ Axle Trucks

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	2	3	0	0	0	2	0	2	5
04:15 PM	0	4	4	0	0	0	3	0	3	7
04:30 PM	0	6	6	0	0	0	2	0	2	8
04:45 PM	1	5	6	0	0	0	3	0	3	9
Total	2	17	19	0	0	0	10	0	10	29
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	1	1	2	0	0	0	0	0	0	2
05:30 PM	0	2	2	0	0	0	1	0	1	3
05:45 PM	0	1	1	0	0	0	2	0	2	3
Total	1	5	6	0	0	0	3	0	3	9
Grand Total	3	22	25	0	0	0	13	0	13	38
Apprch %	12	88		0	0		100	0		
Total %	7.9	57.9	65.8	0	0	0	34.2	0	34.2	

	Archibald Avenue Southbound			Eucalyptus Avenue Westbound			Archibald Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	**1**	**5**	**6**	0	0	0	**3**	0	**3**	**9**
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	1	1	2	0	0	0	0	0	0	2
05:30 PM	0	2	2	0	0	0	1	0	1	3
Total Volume	2	9	11	0	0	0	4	0	4	15
% App. Total	18.2	81.8		0	0		100	0		
PHF	.500	.450	.458	.000	.000	.000	.333	.000	.333	.417

Counts Unlimited Inc.
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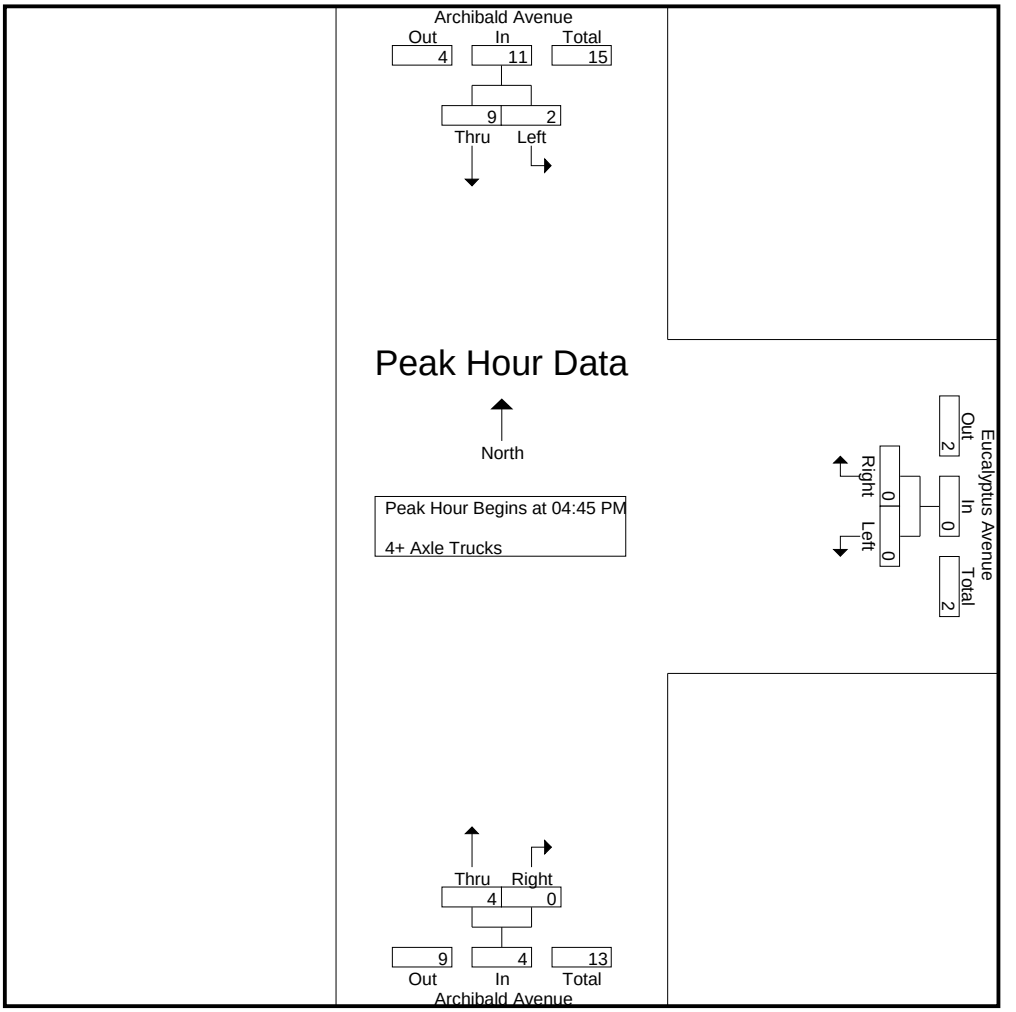
City of Ontario
N/S: Archibald Avenue
E/W: Eucalyptus Avenue
Weather: Sunny

File Name : ONTAREUPM
Site Code : 00000155
Start Date : 6/28/2012
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	**1**	**5**	**6**	0	0	0	**3**	0	**3**
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	1	1	2	0	0	0	0	0	0
+45 mins.	0	2	2	0	0	0	1	0	1
Total Volume	2	9	11	0	0	0	4	0	4
% App. Total	18.2	81.8		0	0		100	0	
PHF	.500	.450	.458	.000	.000	.000	.333	.000	.333

APPENDIX B: VOLUME DEVELOPMENT WORKSHEETS

EXISTING VOLUMES

	AM 2012 VEHICLE TURNING MOVEMENT COUNTS												
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	486	805	0	0	236	141	0	0	0	251	2	354	0.893
2. Archibald Ave / SR-60 EB Ramps	0	1009	390	107	416	0	291	3	383	0	0	0	0.899
3. Archibald Ave / Schaefer Ave	6	713	3	12	385	3	1	2	5	5	2	3	0.919
4. Archibald Ave / Park St													
5. Archibald Ave / Eucalyptus Ave	0	844	3	14	385	0	0	0	0	3	0	61	0.981
6. A St / Edison Ave													
7. Turner Ave / Edison Ave													
8. Haven Ave / Schaefer Ave													
9. Haven Ave / Park St													
10. Haven Ave / Eucalyptus Ave	56	0	0	0	0	0	0	0	13	0	0	0	0.639
11. A St / Park St													
12. Turner Ave / Park St													
13. B St / Park St													

	PM 2012 VEHICLE TURNING MOVEMENT COUNTS												
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	378	337	0	0	873	387	0	0	0	297	2	82	0.902
2. Archibald Ave / SR-60 EB Ramps	0	675	494	308	825	0	85	1	631	0	0	0	0.970
3. Archibald Ave / Schaefer Ave	0	548	11	4	744	0	4	0	2	6	0	8	0.932
4. Archibald Ave / Park St													
5. Archibald Ave / Eucalyptus Ave	0	536	2	80	907	0	0	0	0	0	0	19	0.953
6. A St / Edison Ave													
7. Turner Ave / Edison Ave													
8. Haven Ave / Schaefer Ave													
9. Haven Ave / Park St													
10. Haven Ave / Eucalyptus Ave	20	0	0	0	0	0	0	0	79	0	0	0	0.884
11. A St / Park St													
12. Turner Ave / Park St													
13. B St / Park St													

	AM 2012 AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	471	756	0	0	189	114	0	0	0	229	1	326
2. Archibald Ave / SR-60 EB Ramps	0	973	357	70	382	0	257	3	363	0	0	0
3. Archibald Ave / Schaefer Ave	3	684	3	10	366	2	0	2	1	3	1	3
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	828	2	14	355	0	0	0	0	2	0	54
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	52	0	0	0	0	0	0	0	13	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

	PM 2012 AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	363	299	0	0	838	364	0	0	0	273	1	60
2. Archibald Ave / SR-60 EB Ramps	0	650	483	287	794	0	58	1	622	0	0	0
3. Archibald Ave / Schaefer Ave	0	527	11	4	725	0	4	0	1	6	0	8
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	513	2	78	885	0	0	0	0	0	0	17
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	19	0	0	0	0	0	0	0	78	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

	AM 2012 TRUCK TURNING MOVEMENT COUNTS												AM PEAK PERCENT TRUCK	AM PEAK HOUR FACTOR
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R		
1. Archibald Ave / SR-60 WB Ramps	15	49	0	0	47	27	0	0	0	22	1	28	0.0831	0.893
2. Archibald Ave / SR-60 EB Ramps	0	36	33	37	34	0	34	0	20	0	0	0	0.0746	0.899
3. Archibald Ave / Schaefer Ave	3	29	0	2	19	1	1	0	4	2	1	0	0.0544	0.919
4. Archibald Ave / Park St														
5. Archibald Ave / Eucalyptus Ave	0	16	1	0	30	0	0	0	0	1	0	7	0.0420	0.981
6. A St / Edison Ave														
7. Turner Ave / Edison Ave														
8. Haven Ave / Schaefer Ave														
9. Haven Ave / Park St														
10. Haven Ave / Eucalyptus Ave	4	0	0	0	0	0	0	0	0	0	0	0		0.639
11. A St / Park St														
12. Turner Ave / Park St														
13. B St / Park St														

	PM 2012 TRUCK TURNING MOVEMENT COUNTS												AM PEAK PERCENT TRUCK	AM PEAK HOUR FACTOR
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R		
1. Archibald Ave / SR-60 WB Ramps	15	38	0	0	35	23	0	0	0	24	1	22	0.0671	0.902
2. Archibald Ave / SR-60 EB Ramps	0	25	11	21	31	0	27	0	9	0	0	0	0.0411	0.970
3. Archibald Ave / Schaefer Ave	0	21	0	0	19	0	0	0	1	0	0	0	0.0309	0.932
4. Archibald Ave / Park St														
5. Archibald Ave / Eucalyptus Ave	0	23	0	2	22	0	0	0	0	0	0	2	0.0317	0.953
6. A St / Edison Ave														
7. Turner Ave / Edison Ave														
8. Haven Ave / Schaefer Ave														
9. Haven Ave / Park St														
10. Haven Ave / Eucalyptus Ave	1	0	0	0	0	0	0	0	1	0	0	0	0.0202	0.884
11. A St / Park St														
12. Turner Ave / Park St														
13. B St / Park St														

	AM 2012 2 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	8	18	0	0	21	5	0	0	0	8	0	2
2. Archibald Ave / SR-60 EB Ramps	0	19	12	12	15	0	10	0	15	0	0	0
3. Archibald Ave / Schaefer Ave	0	14	0	1	9	1	1	0	0	2	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	9	1	0	8	0	0	0	0	0	0	2
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	1	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	PM 2012 2 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	10	20	0	0	16	5	0	0	0	9	0	7
2. Archibald Ave / SR-60 EB Ramps	0	19	5	8	15	0	7	0	6	0	0	0
3. Archibald Ave / Schaefer Ave	0	10	0	0	12	0	0	0	0	0	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	15	0	0	12	0	0	0	0	0	0	2
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	1	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	AM 2012 3 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	0	4	0	0	5	1	0	0	0	5	0	2
2. Archibald Ave / SR-60 EB Ramps	0	7	7	4	7	0	2	0	0	0	0	0
3. Archibald Ave / Schaefer Ave	0	2	0	1	2	0	0	0	1	0	1	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	2	0	0	4	0	0	0	0	0	0	0
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	0	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	PM 2012 3 AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	3	3	0	0	4	4	0	0	0	1	0	5
2. Archibald Ave / SR-60 EB Ramps	0	1	1	4	1	0	3	0	0	0	0	0
3. Archibald Ave / Schaefer Ave	0	2	0	0	1	0	0	0	0	0	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	4	0	0	1	0	0	0	0	0	0	0
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	0	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	AM 2012 4+ AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	7	27	0	0	21	21	0	0	0	9	1	24
2. Archibald Ave / SR-60 EB Ramps	0	10	14	21	12	0	22	0	5	0	0	0
3. Archibald Ave / Schaefer Ave	3	13	0	0	8	0	0	0	3	0	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	5	0	0	18	0	0	0	0	1	0	5
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	3	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	PM 2012 4+ AXLE TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	2	15	0	0	15	14	0	0	0	14	1	10
2. Archibald Ave / SR-60 EB Ramps	0	5	5	9	15	0	17	0	3	0	0	0
3. Archibald Ave / Schaefer Ave	0	9	0	0	6	0	0	0	1	0	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	4	0	2	9	0	0	0	0	0	0	0
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	0	0	0	0	0	0	0	0	1	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	AM 2012 TOTAL TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	15	49	0	0	47	27	0	0	0	22	1	28
2. Archibald Ave / SR-60 EB Ramps	0	36	33	37	34	0	34	0	20	0	0	0
3. Archibald Ave / Schaefer Ave	3	29	0	2	19	1	1	0	4	2	1	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	16	1	0	30	0	0	0	0	1	0	7
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	4	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	PM 2012 TOTAL TRUCKS TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	15	38	0	0	35	23	0	0	0	24	1	22
2. Archibald Ave / SR-60 EB Ramps	0	25	11	21	31	0	27	0	9	0	0	0
3. Archibald Ave / Schaefer Ave	0	21	0	0	19	0	0	0	1	0	0	0
4. Archibald Ave / Park St												
5. Archibald Ave / Eucalyptus Ave	0	23	0	2	22	0	0	0	0	0	0	2
6. A St / Edison Ave												
7. Turner Ave / Edison Ave												
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St												
10. Haven Ave / Eucalyptus Ave	1	0	0	0	0	0	0	0	1	0	0	0
11. A St / Park St												
12. Turner Ave / Park St												
13. B St / Park St												

	AM 2012 TOTAL PCE TRUCKS TURNING MOVEMENT COUNTS												AM TRUCKS AVERAGE PCE FACTOR
	2 AXLE= 1.5			3 AXLE= 2			4+ AXLE: 3						
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	33	116	0	0	105	73	0	0	0	49	3	79	2.4180
2. Archibald Ave / SR-60 EB Ramps	0	73	74	89	73	0	85	0	38	0	0	0	2.2191
3. Archibald Ave / Schaefer Ave	9	64	0	4	42	2	2	0	11	3	2	0	2.2097
4. Archibald Ave / Park St													
5. Archibald Ave / Eucalyptus Ave	0	33	2	0	74	0	0	0	0	3	0	18	2.3455
6. A St / Edison Ave													
7. Turner Ave / Edison Ave													
8. Haven Ave / Schaefer Ave													
9. Haven Ave / Park St													
10. Haven Ave / Eucalyptus Ave	11	0	0	0	0	0	0	0	0	0	0	0	2.6250
11. A St / Park St													
12. Turner Ave / Park St													
13. B St / Park St													

	PM 2012 TOTAL PCE TRUCKS TURNING MOVEMENT COUNTS												PM TRUCKS AVERAGE PCE FACTOR
	2 AXLE= 1.5			3 AXLE= 2			4+ AXLE: 3						
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
INTERSECTION	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	27	81	0	0	77	58	0	0	0	58	3	51	2.2373
2. Archibald Ave / SR-60 EB Ramps	0	46	25	47	70	0	68	0	18	0	0	0	2.1935
3. Archibald Ave / Schaefer Ave	0	46	0	0	38	0	0	0	3	0	0	0	2.1220
4. Archibald Ave / Park St													
5. Archibald Ave / Eucalyptus Ave	0	43	0	6	47	0	0	0	0	0	0	3	2.0102
6. A St / Edison Ave													
7. Turner Ave / Edison Ave													
8. Haven Ave / Schaefer Ave													
9. Haven Ave / Park St													
10. Haven Ave / Eucalyptus Ave	2	0	0	0	0	0	0	0	3	0	0	0	2.2500
11. A St / Park St													
12. Turner Ave / Park St													
13. B St / Park St													

Intersection	2012 AM AUTO TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	471	756	0	0	189	114	0	0	0	229	1	326	1.00
2. Archibald Ave / SR-60 EB Ramps	0	973	357	70	382	0	257	3	363	0	0	0	1.00
3. Archibald Ave / Schaefer Ave	3	684	3	10	366	2	0	2	1	3	1	3	1.00
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
5. Archibald Ave / Eucalyptus Ave	0	828	2	14	355	0	0	0	0	2	0	54	1.00
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
10. Haven Ave / Eucalyptus Ave	52	0	0	0	0	0	0	0	13	0	0	0	1.00
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection	2012 AM TRUCK TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	15	49	0	0	47	27	0	0	0	22	1	28	2.42
2. Archibald Ave / SR-60 EB Ramps	0	36	33	37	34	0	34	0	20	0	0	0	2.22
3. Archibald Ave / Schaefer Ave	3	29	0	2	19	1	1	0	4	2	1	0	2.21
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
5. Archibald Ave / Eucalyptus Ave	0	16	1	0	30	0	0	0	0	1	0	7	2.35
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
10. Haven Ave / Eucalyptus Ave	4	0	0	0	0	0	0	0	0	0	0	0	2.63
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00

Intersection	2012 AM AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	471	756	0	0	189	114	0	0	0	229	1	326
2. Archibald Ave / SR-60 EB Ramps	0	973	357	70	382	0	257	3	363	0	0	0
3. Archibald Ave / Schaefer Ave	3	684	3	10	366	2	0	2	1	3	1	3
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	828	2	14	355	0	0	0	0	2	0	54
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	52	0	0	0	0	0	0	0	13	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

Intersection	2012 AM PCE TRUCK TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	36	118	0	0	114	65	0	0	0	53	2	68
2. Archibald Ave / SR-60 EB Ramps	0	80	73	82	75	0	75	0	44	0	0	0
3. Archibald Ave / Schaefer Ave	7	64	0	4	42	2	2	0	9	4	2	0
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	38	2	0	70	0	0	0	0	2	0	16
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	11	0	0	0	0	0	0	0	0	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

Intersection	2012 AM TURNING MOVEMENT COUNTS - TOTAL (AUTO + PCE TRUCK)											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	507	874	0	0	303	179	0	0	0	282	3	394
2. Archibald Ave / SR-60 EB Ramps	0	1053	430	152	457	0	332	3	407	0	0	0
3. Archibald Ave / Schaefer Ave	10	748	3	14	408	4	2	2	10	7	3	3
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	866	4	14	425	0	0	0	0	4	0	70
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	63	0	0	0	0	0	0	0	13	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

Intersection	2012 PM AUTO TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	363	299	0	0	838	364	0	0	0	273	1	60	1.00
2. Archibald Ave / SR-60 EB Ramps	0	650	483	287	794	0	58	1	622	0	0	0	1.00
3. Archibald Ave / Schaefer Ave	0	527	11	4	725	0	4	0	1	6	0	8	1.00
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
5. Archibald Ave / Eucalyptus Ave	0	513	2	78	885	0	0	0	0	0	0	17	1.00
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0	1.00
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
10. Haven Ave / Eucalyptus Ave	19	0	0	0	0	0	0	0	78	0	0	0	1.00
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	1.00

Intersection	2012 PM TRUCK TURNING MOVEMENT COUNTS												PCE Factors
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	L	T	R	L	T	R	L	T	R	L	T	R	
1. Archibald Ave / SR-60 WB Ramps	15	38	0	0	35	23	0	0	0	24	1	22	2.24
2. Archibald Ave / SR-60 EB Ramps	0	25	11	21	31	0	27	0	9	0	0	0	2.19
3. Archibald Ave / Schaefer Ave	0	21	0	0	19	0	0	0	1	0	0	0	2.12
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
5. Archibald Ave / Eucalyptus Ave	0	23	0	2	22	0	0	0	0	0	0	2	2.01
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0	0.00
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
10. Haven Ave / Eucalyptus Ave	1	0	0	0	0	0	0	0	1	0	0	0	2.25
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0	0.00

Intersection	2012 PM AUTO TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	363	299	0	0	838	364	0	0	0	273	1	60
2. Archibald Ave / SR-60 EB Ramps	0	650	483	287	794	0	58	1	622	0	0	0
3. Archibald Ave / Schaefer Ave	0	527	11	4	725	0	4	0	1	6	0	8
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	513	2	78	885	0	0	0	0	0	0	17
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	19	0	0	0	0	0	0	0	78	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

Intersection	2012 PM PCE TRUCK TURNING MOVEMENT COUNTS											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	34	85	0	0	78	51	0	0	0	54	2	49
2. Archibald Ave / SR-60 EB Ramps	0	55	24	46	68	0	59	0	20	0	0	0
3. Archibald Ave / Schaefer Ave	0	45	0	0	40	0	0	0	2	0	0	0
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	46	0	4	44	0	0	0	0	0	0	4
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	2	0	0	0	0	0	0	0	2	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

Intersection	2012 PM TURNING MOVEMENT COUNTS - TOTAL (AUTO + PCE TRUCK)											
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	397	384	0	0	916	415	0	0	0	327	3	109
2. Archibald Ave / SR-60 EB Ramps	0	705	507	333	862	0	117	1	642	0	0	0
3. Archibald Ave / Schaefer Ave	0	572	11	4	765	0	4	0	3	6	0	8
4. Archibald Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
5. Archibald Ave / Eucalyptus Ave	0	559	2	82	929	0	0	0	0	0	0	21
6. A St / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
7. Turner Ave / Edison Ave	0	0	0	0	0	0	0	0	0	0	0	0
8. Haven Ave / Schaefer Ave	0	0	0	0	0	0	0	0	0	0	0	0
9. Haven Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
10. Haven Ave / Eucalyptus Ave	21	0	0	0	0	0	0	0	80	0	0	0
11. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
12. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
13. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

PROJECT ONLY VOLUMES

2012 PROJECT ONLY - AM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	54	54	0	0	54	0	0	0	0	0	0	0
2. Archibald Ave / SR-60 EB Ramps	0	109	0	0	54	0	0	0	54	0	0	0
3. Archibald Ave / Schaefer Ave	28	139	0	0	146	0	0	4	29	0	4	0
4. Archibald Ave / Park St	0	3	95	142	8	0	0	0	0	95	0	195
5. Archibald Ave / Eucalyptus Ave	0	58	7	9	57	38	38	5	0	8	6	2
6. A St / Edison Ave	79	0	98	0	0	0	0	133	133	94	134	0
7. Turner Ave / Edison Ave	111	20	120	1	17	0	0	124	106	200	116	2
8. Haven Ave / Schaefer Ave	0	137	0	0	131	0	0	0	0	0	0	0
9. Haven Ave / Park St	168	4	0	0	13	105	151	0	156	0	0	0
10. Haven Ave / Eucalyptus Ave	2	128	0	31	123	14	12	2	7	0	0	32

1. A St / Park St	0	0	0	58	0	37	90	184	0	0	158	42
2. Turner Ave / Park St	0	0	0	64	0	119	87	123	0	0	172	101
3. B St / Park St	0	0	0	169	0	103	97	129	0	0	136	143

2012 PROJECT ONLY - PM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	28	28	0	0	41	0	0	0	0	0	0	0
2. Archibald Ave / SR-60 EB Ramps	0	57	0	0	41	0	0	0	41	0	0	0
3. Archibald Ave / Schaefer Ave	15	77	0	0	110	0	0	3	22	0	2	0
4. Archibald Ave / Park St	0	11	78	152	6	0	0	0	0	53	0	94
5. Archibald Ave / Eucalyptus Ave	0	44	5	5	30	25	36	5	0	4	3	9
6. A St / Edison Ave	38	0	48	0	0	0	0	116	43	74	91	0
7. Turner Ave / Edison Ave	61	10	67	2	14	0	0	76	88	76	104	1
8. Haven Ave / Schaefer Ave	0	61	0	0	89	0	0	0	0	0	0	0
9. Haven Ave / Park St	110	14	0	0	8	117	77	0	80	0	0	0
10. Haven Ave / Eucalyptus Ave	7	91	0	16	64	7	10	1	4	0	2	23

1. A St / Park St	0	0	0	16	0	56	37	118	0	0	97	20
2. Turner Ave / Park St	0	0	0	52	0	36	42	107	0	0	87	38
3. B St / Park St	0	0	0	81	0	46	60	78	0	0	108	112

2030 PROJECT ONLY - AM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	54	54	0	0	54	0	0	0	0	0	0	0
2. Archibald Ave / SR-60 EB Ramps	0	109	0	0	54	0	0	0	54	0	0	0
3. Archibald Ave / Schaefer Ave	27	138	0	0	146	0	0	4	28	0	6	0
4. Archibald Ave / Park St	0	3	106	140	8	0	0	11	0	103	11	190
5. Archibald Ave / Eucalyptus Ave	0	58	7	17	57	38	38	5	0	8	6	12
6. A St / Edison Ave	76	9	90	3	8	0	0	127	128	86	127	2
7. Turner Ave / Edison Ave	109	20	111	1	17	0	0	114	105	185	106	2
8. Haven Ave / Schaefer Ave	2	115	0	0	110	0	0	0	1	0	0	0
9. Haven Ave / Park St	158	4	0	1	13	98	139	10	148	0	11	0
10. Haven Ave / Eucalyptus Ave	1	117	0	21	113	27	23	1	6	0	0	21

1. A St / Park St	0	0	0	62	0	42	96	197	0	0	167	48
2. Turner Ave / Park St	0	0	0	68	0	115	88	130	0	0	181	103
3. B St / Park St	0	0	0	161	0	115	106	128	0	0	135	138

2030 PROJECT ONLY - PM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	28	28	0	0	41	0	0	0	0	0	0	0
2. Archibald Ave / SR-60 EB Ramps	0	57	0	0	41	0	0	0	41	0	0	0
3. Archibald Ave / Schaefer Ave	9	72	0	0	102	0	0	3	13	0	2	0
4. Archibald Ave / Park St	0	10	78	135	6	0	0	16	0	53	11	84
5. Archibald Ave / Eucalyptus Ave	0	44	5	9	30	20	29	4	0	4	3	15
6. A St / Edison Ave	35	4	44	2	6	0	0	108	40	68	85	1
7. Turner Ave / Edison Ave	59	9	62	2	13	0	0	69	85	70	96	1
8. Haven Ave / Schaefer Ave	1	55	0	0	81	0	0	0	1	0	0	0
9. Haven Ave / Park St	111	14	0	1	8	108	73	11	80	0	15	1
10. Haven Ave / Eucalyptus Ave	6	84	0	16	59	13	19	1	3	0	2	23

1. A St / Park St	0	0	0	21	0	56	39	120	0	0	101	24
2. Turner Ave / Park St	0	0	0	55	0	36	42	113	0	0	95	43
3. B St / Park St	0	0	0	80	0	50	63	86	0	0	118	111

EXISTING + PROJECT VOLUMES

2012 EXISTING+PROJECT - AM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	562	929	0	0	357	180	0	0	0	283	4	394
2. Archibald Ave / SR-60 EB Ramps	0	1162	431	153	512	0	333	3	462	0	0	0
3. Archibald Ave / Schaefer Ave	38	888	3	15	554	5	3	6	39	8	8	3
4. Archibald Ave / Park St	0	3	95	142	8	0	0	0	0	95	0	195
5. Archibald Ave / Eucalyptus Ave	0	924	12	23	483	38	38	5	0	13	6	73
6. A St / Edison Ave	79	0	98	0	0	0	0	133	133	94	134	0
7. Turner Ave / Edison Ave	111	20	120	1	17	0	0	124	106	200	116	2
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St	168	4	0	0	13	105	151	0	156	0	0	0
10. Haven Ave / Eucalyptus Ave	65	128	0	31	123	14	12	2	20	0	0	32

1. A St / Park St	0	0	0	58	0	37	90	184	0	0	158	42
2. Turner Ave / Park St	0	0	0	64	0	119	87	123	0	0	172	101
3. B St / Park St	0	0	0	169	0	103	97	129	0	0	136	143

2012 EXISTING+PROJECT - PM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	425	413	0	0	958	416	0	0	0	327	4	110
2. Archibald Ave / SR-60 EB Ramps	0	762	508	334	903	0	118	1	683	0	0	0
3. Archibald Ave / Schaefer Ave	15	649	11	4	876	0	4	3	26	6	2	8
4. Archibald Ave / Park St	0	11	78	152	6	0	0	0	0	53	0	94
5. Archibald Ave / Eucalyptus Ave	0	604	7	88	960	25	36	5	0	4	3	31
6. A St / Edison Ave	38	0	48	0	0	0	0	116	43	74	91	0
7. Turner Ave / Edison Ave	61	10	67	2	14	0	0	76	88	76	104	1
8. Haven Ave / Schaefer Ave												
9. Haven Ave / Park St	110	14	0	0	8	117	77	0	80	0	0	0
10. Haven Ave / Eucalyptus Ave	29	91	0	16	64	7	10	1	85	0	2	23

1. A St / Park St	0	0	0	16	0	56	37	118	0	0	97	20
2. Turner Ave / Park St	0	0	0	52	0	36	42	107	0	0	87	38
3. B St / Park St	0	0	0	81	0	46	60	78	0	0	108	112

2030 NO PROJECT VOLUMES

2030 NO PROJECT - AM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	488	2589	0	0	747	551	0	0	0	513	0	1590
2. Archibald Ave / SR-60 EB Ramps	0	1832	385	271	988	0	1243	0	809	0	0	0
3. Archibald Ave / Schaefer Ave	86	1062	0	76	687	135	165	313	52	53	395	63
4. Archibald Ave / Park St	44	1007	0	0	797	45	76	0	76	0	0	0
5. Archibald Ave / Eucalyptus Ave	569	1111	106	37	645	126	63	159	235	80	512	119
6. A St / Edison Ave	0	0	0	64	0	5	17	1232	0	0	1589	29
7. Turner Ave / Edison Ave	0	0	0	25	0	161	201	1097	0	0	1457	29
8. Haven Ave / Schaefer Ave	255	440	0	0	219	244	196	0	184	0	0	0
9. Haven Ave / Park St	0	663	6	216	167	0	0	0	0	79	0	50
10. Haven Ave / Eucalyptus Ave	92	561	167	25	166	56	53	249	8	43	477	59
1. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
2. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
3. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

2030 NO PROJECT - PM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	832	1679	0	0	2336	1496	0	0	0	434	0	618
2. Archibald Ave / SR-60 EB Ramps	0	1735	661	1076	1694	0	774	0	991	0	0	0
3. Archibald Ave / Schaefer Ave	69	1019	39	97	1248	166	166	552	106	3	441	117
4. Archibald Ave / Park St	99	1118	0	0	1240	100	82	0	83	0	0	0
5. Archibald Ave / Eucalyptus Ave	342	836	60	160	1237	148	191	554	590	66	361	90
6. A St / Edison Ave	0	0	0	49	0	29	5	1886	0	0	1611	78
7. Turner Ave / Edison Ave	0	0	0	84	0	207	216	1720	0	0	1484	27
8. Haven Ave / Schaefer Ave	304	381	0	0	477	273	354	0	343	0	0	0
9. Haven Ave / Park St	0	328	139	148	664	0	0	0	0	10	0	303
10. Haven Ave / Eucalyptus Ave	27	335	66	64	549	63	93	559	72	165	457	42
1. A St / Park St	0	0	0	0	0	0	0	0	0	0	0	0
2. Turner Ave / Park St	0	0	0	0	0	0	0	0	0	0	0	0
3. B St / Park St	0	0	0	0	0	0	0	0	0	0	0	0

For Ints #1, 2, 3, 5, and 8:
Model generated 2030 WP turning movement vols were used and the ProjOnly vols were subtracted from 2030WP to obtain 2030NP vols

For Ints #7 and 10:
Model generated 2030NP turning movement vols were used and the ProjOnly vols were added to 2030NP to obtain 2030WP vols (to avoid negative vols)

For Ints #4, 6, and 9: Calculated the 2030NP turning movements vols and added the ProjOnly vols to obtain 2030WP vols

2030 WITH PROJECT VOLUMES

2030 WITH PROJECT - AM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	542	2643	0	0	801	551	0	0	0	513	0	1590
2. Archibald Ave / SR-60 EB Ramps	0	1941	385	271	1042	0	1243	0	863	0	0	0
3. Archibald Ave / Schaefer Ave	113	1200	0	76	833	135	165	317	80	53	401	63
4. Archibald Ave / Park St	44	1010	106	140	805	45	76	11	76	103	11	190
5. Archibald Ave / Eucalyptus Ave	569	1169	113	54	702	164	101	164	235	88	518	131
6. A St / Edison Ave	76	9	90	67	8	5	17	1359	128	86	1716	31
7. Turner Ave / Edison Ave	109	20	111	26	17	161	201	1211	105	185	1563	31
8. Haven Ave / Schaefer Ave	257	555	0	0	329	244	196	0	185	0	0	0
9. Haven Ave / Park St	158	667	6	217	180	98	139	10	148	79	11	50
10. Haven Ave / Eucalyptus Ave	93	678	167	46	279	83	76	250	14	43	477	80
1. A St / Park St	0	0	0	62	0	42	96	197	0	0	167	48
2. Turner Ave / Park St	0	0	0	68	0	115	88	130	0	0	181	103
3. B St / Park St	0	0	0	161	0	115	106	128	0	0	135	138

2030 WITH PROJECT - PM PEAK HOUR VOLUMES

Intersection	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
1. Archibald Ave / SR-60 WB Ramps	860	1707	0	0	2377	1496	0	0	0	434	0	618
2. Archibald Ave / SR-60 EB Ramps	0	1792	661	1076	1735	0	774	0	1032	0	0	0
3. Archibald Ave / Schaefer Ave	78	1091	39	97	1350	166	166	555	119	3	443	117
4. Archibald Ave / Park St	99	1128	78	135	1246	100	82	16	83	53	11	84
5. Archibald Ave / Eucalyptus Ave	342	880	65	169	1267	168	220	558	590	70	364	105
6. A St / Edison Ave	35	4	44	51	6	29	5	1994	40	68	1696	79
7. Turner Ave / Edison Ave	59	9	62	86	13	207	216	1789	85	70	1580	28
8. Haven Ave / Schaefer Ave	305	436	0	0	558	273	354	0	344	0	0	0
9. Haven Ave / Park St	111	342	139	149	672	108	73	11	80	10	15	304
10. Haven Ave / Eucalyptus Ave	33	419	66	80	608	76	112	560	75	165	459	65
1. A St / Park St	0	0	0	21	0	56	39	120	0	0	101	24
2. Turner Ave / Park St	0	0	0	55	0	36	42	113	0	0	95	43
3. B St / Park St	0	0	0	80	0	50	63	86	0	0	118	111

For Ints #1, 2, 3, 5, and 8:
Model generated 2030 WP turning movement vols were used and the ProjOnly vols were subtracted from 2030WP to obtain 2030NP vols

For Ints #7 and 10:
Model generated 2030NP turning movement vols were used and the ProjOnly vols were added to 2030NP to obtain 2030WP vols (to avoid negative vols)

For Ints #4, 6, and 9: Calculated the 2030NP turning movements vols and added the ProjOnly vols to obtain 2030WP vols

APPENDIX C: LEVEL OF SERVICE CALCULATION WORKSHEETS

EXISTING CONDITIONS

AM PEAK HOUR

Grand Park Specific Plan TIA
Existing Conditions (2012)
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	C	25.2	0.757	C	25.2	0.757	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	C	23.7	0.689	C	23.7	0.689	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	D	30.9	0.000	D	30.9	0.000	+ 0.000 D/V
# 4 Archibald Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	19.6	0.000	C	19.6	0.000	+ 0.000 D/V
# 6 A St and Edison Ave		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 7 Turner Ave and Edison Ave		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 9 Haven Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 10 Haven Avenue and Merrill Avenu	A	9.5	0.000	A	9.5	0.000	+ 0.000 D/V
# 11 A St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 13 B St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
Existing Conditions (2012)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.2
Optimal Cycle:	50	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	508	875	0	0	303	180	0	0	0	283	4	394
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	875	0	0	303	180	0	0	0	283	4	394
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	508	875	0	0	303	180	0	0	0	283	4	394
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	569	980	0	0	339	202	0	0	0	317	4	441
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	569	980	0	0	339	202	0	0	0	317	4	441
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	569	980	0	0	339	202	0	0	0	317	4	441
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	1.00	0.95	0.94	1.00	0.95	0.94	0.94	0.95
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	0.99	0.01	1.00
Final Sat.:	1700	5400	0	0	5400	1705	0	0	0	1676	24	1705
Capacity Analysis Module:												
Vol/Sat:	0.33	0.18	0.00	0.00	0.06	0.12	0.00	0.00	0.00	0.19	0.19	0.26
Crit Moves:	****					****						****
Green Time:	44.2	59.8	0.0	0.0	15.6	15.6	0.0	0.0	0.0	34.2	34.2	34.2
Volume/Cap:	0.76	0.30	0.00	0.00	0.40	0.76	0.00	0.00	0.00	0.55	0.55	0.76
Delay/Veh:	27.8	9.9	0.0	0.0	38.2	45.0	0.0	0.0	0.0	27.9	27.9	34.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	9.9	0.0	0.0	38.2	45.0	0.0	0.0	0.0	27.9	27.9	34.9
LOS by Move:	C	A	A	A	D	D	A	A	A	C	C	C
HCM2kAvgQ:	17	5	0	0	3	8	0	0	0	9	9	14

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.7
Optimal Cycle:	41	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0 3	0	0	0 1 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1053	431		153 458	0		333	3	408	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1053	431		153 458	0		333	3	408	0	0	0
Added Vol:	0 0	0		0 0	0		0	0	0	0	0	0
PasserByVol:	0 0	0		0 0	0		0	0	0	0	0	0
Initial Fut:	0 1053	431		153 458	0		333	3	408	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.90 0.90	0.90		0.90 0.90	0.90		0.90 0.90	0.90		0.90 0.90	0.90	
PHF Volume:	0 1171	479		170 509	0		370	3	454	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1171	479		170 509	0		370	3	454	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1171	479		170 509	0		370	3	454	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	0.95		0.94 1.00	0.95		0.94 0.94	0.95		0.94 1.00	0.95	
Lanes:	0.00 3.00	1.00		1.00 3.00	0.00		0.99 0.01	1.00		0.00 0.00	0.00	
Final Sat.:	0 5400	1705		1700 5400	0		1685 15	1705		0 0	0	
Capacity Analysis Module:												
Vol/Sat:	0.00 0.22	0.28		0.10 0.09	0.00		0.22 0.22	0.27		0.00 0.00	0.00	
Crit Moves:		****		****				****				
Green Time:	0.0 40.8	40.8		14.5 55.4	0.0		38.6 38.6	38.6		0.0 0.0	0.0	
Volume/Cap:	0.00 0.53	0.69		0.69 0.17	0.00		0.57 0.57	0.69		0.00 0.00	0.00	
Delay/Veh:	0.0 22.5	25.2		48.5 11.0	0.0		25.3 25.3	28.7		0.0 0.0	0.0	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	0.0 22.5	25.2		48.5 11.0	0.0		25.3 25.3	28.7		0.0 0.0	0.0	
LOS by Move:	A	C	C	D	B	A	C	C	C	A	A	A
HCM2kAvgQ:	0	9	14	7	3	0	10	10	13	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[30.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	10	749	3	15	408	5	3	2	10	8	4	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	749	3	15	408	5	3	2	10	8	4	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	749	3	15	408	5	3	2	10	8	4	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	11	815	3	16	444	5	3	2	11	9	4	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	11	815	3	16	444	5	3	2	11	9	4	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	449	xxxx	xxxxx	818	xxxx	xxxxx	1322	1319	447	1324	1320	817
Potent Cap.:	1122	xxxx	xxxxx	819	xxxx	xxxxx	135	158	616	134	158	380
Move Cap.:	1122	xxxx	xxxxx	819	xxxx	xxxxx	128	154	616	128	154	380
Volume/Cap:	0.01	xxxx	xxxx	0.02	xxxx	xxxx	0.03	0.01	0.02	0.07	0.03	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.2	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	285	xxxxx	xxxx	155	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.4	xxxxx	xxxxx	30.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			18.4			30.9		
ApproachLOS:	*			*			C			D		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[19.6]

Street Name:	Archibald Avenue									Eucalyptus Avenue								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	866		5		14	426		0		0		0			5		0		71
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
Initial Bse:	0	866		5		14	426		0		0		0			5		0		71
Added Vol:	0	0		0		0	0		0		0		0			0		0		0
PasserByVol:	0	0		0		0	0		0		0		0			0		0		0
Initial Fut:	0	866		5		14	426		0		0		0			5		0		71
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Adj:	0.98	0.98		0.98		0.98	0.98		0.98		0.98		0.98			0.98		0.98		0.98
PHF Volume:	0	883		5		14	434		0		0		0			5		0		72
Reduct Vol:	0	0		0		0	0		0		0		0			0		0		0
FinalVolume:	0	883		5		14	434		0		0		0			5		0		72
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		7.1	6.5		6.2		6.4	6.5		6.2			
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0		3.3		3.5	4.0		3.3			
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx		888	xxxx	xxxxx		1384	1351		434		1348	1348		885			
Potent Cap.:	xxxx	xxxx	xxxxx		771	xxxx	xxxxx		122	152		626		168	152		347			
Move Cap.:	xxxx	xxxx	xxxxx		771	xxxx	xxxxx		95	149		626		166	149		347			
Volume/Cap:	xxxx	xxxx	xxxx		0.02	xxxx	xxxx		0.00	0.00		0.00		0.03	0.00		0.21			
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx		0.1	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Control Del:	xxxxx	xxxx	xxxxx		9.8	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*		A	*	*		*	*	*		*	*	*					
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx		0	xxxxx		xxxx	323		xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	0.9	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	19.6	xxxxx					
Shared LOS:	*	*	*		*	*	*		*	*	*		*	C	*					
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					19.6				
ApproachLOS:	*					*					*					C				

Note: Queue reported is the number of cars per lane.

EXISTING CONDITIONS

PM PEAK HOUR

Grand Park Specific Plan TIA
Existing Conditions (2012)
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	C	28.6	0.793	C	28.6	0.793	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	D	36.5	0.955	D	36.5	0.955	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	D	27.8	0.000	D	27.8	0.000	+ 0.000 D/V
# 4 Archibald Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	B	12.4	0.000	B	12.4	0.000	+ 0.000 D/V
# 6 A St and Edison Ave		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 7 Turner Ave and Edison Ave		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 9 Haven Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 D/V
# 10 Haven Avenue and Merrill Avenu	A	9.5	0.000	A	9.5	0.000	+ 0.000 D/V
# 11 A St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 13 B St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
Existing Conditions (2012)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	28.6
Optimal Cycle:	57	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	397	385	0	0	917	416	0	0	0	327	4	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	385	0	0	917	416	0	0	0	327	4	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	385	0	0	917	416	0	0	0	327	4	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	440	427	0	0	1017	461	0	0	0	363	4	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	427	0	0	1017	461	0	0	0	363	4	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	440	427	0	0	1017	461	0	0	0	363	4	122
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	1.00	0.95	0.94	1.00	0.95	0.94	0.94	0.95
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	0.99	0.01	1.00
Final Sat.:	1700	5400	0	0	5400	1705	0	0	0	1679	21	1705
Capacity Analysis Module:												
Vol/Sat:	0.26	0.08	0.00	0.00	0.19	0.27	0.00	0.00	0.00	0.22	0.22	0.07
Crit Moves:	****					****				****		
Green Time:	32.7	66.8	0.0	0.0	34.1	34.1	0.0	0.0	0.0	27.2	27.2	27.2
Volume/Cap:	0.79	0.12	0.00	0.00	0.55	0.79	0.00	0.00	0.00	0.79	0.79	0.26
Delay/Veh:	38.3	6.0	0.0	0.0	27.0	32.2	0.0	0.0	0.0	42.8	42.8	28.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	6.0	0.0	0.0	27.0	32.2	0.0	0.0	0.0	42.8	42.8	28.8
LOS by Move:	D	A	A	A	C	C	A	A	A	D	D	C
HCM2kAvgQ:	15	2	0	0	9	15	0	0	0	13	13	3

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	36.5
Optimal Cycle:	141	Level Of Service:	D

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0 3	0	0	0 1 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 705	508		334 862		0	118	1	642	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 705	508		334 862		0	118	1	642	0	0	0
Added Vol:	0 0	0		0 0		0	0	0	0	0	0	0
PasserByVol:	0 0	0		0 0		0	0	0	0	0	0	0
Initial Fut:	0 705	508		334 862		0	118	1	642	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97 0.97	0.97		0.97 0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0 727	524		344 889		0	122	1	662	0	0	0
Reduct Vol:	0 0	0		0 0		0	0	0	0	0	0	0
Reduced Vol:	0 727	524		344 889		0	122	1	662	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0 727	524		344 889		0	122	1	662	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800		1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94 1.00	0.95		0.94 1.00		0.95	0.94	0.94	0.95	0.94	1.00	0.95
Lanes:	0.00 3.00	1.00		1.00 3.00		0.00	0.99	0.01	1.00	0.00	0.00	0.00
Final Sat.:	0 5400	1705		1700 5400		0	1686	14	1705	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.13	0.31		0.20 0.16		0.00	0.07	0.07	0.39	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green Time:	0.0 32.2	32.2		21.2 53.4		0.0	40.6	40.6	40.6	0.0	0.0	0.0
Volume/Cap:	0.00 0.42	0.96		0.96 0.31		0.00	0.18	0.18	0.96	0.00	0.00	0.00
Delay/Veh:	0.0 26.7	48.6		74.6 13.1		0.0	19.1	19.1	52.4	0.0	0.0	0.0
User DelAdj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 26.7	48.6		74.6 13.1		0.0	19.1	19.1	52.4	0.0	0.0	0.0
LOS by Move:	A	C	D	E	B	A	B	B	D	A	A	A
HCM2kAvgQ:	0	6	22	16	5	0	3	3	26	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: D[27.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	1 0		1 0 0	1 0		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	0	572	11	4	766	0	4	0	4	6	0	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	572	11	4	766	0	4	0	4	6	0	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	572	11	4	766	0	4	0	4	6	0	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	614	12	4	822	0	4	0	4	6	0	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	614	12	4	822	0	4	0	4	6	0	9
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	626	xxxx	xxxxx	1454	1456	822	1452	1450	620
Potent Cap.:	xxxx	xxxx	xxxxx	966	xxxx	xxxxx	109	131	377	110	132	492
Move Cap.:	xxxx	xxxx	xxxxx	966	xxxx	xxxxx	107	130	377	108	132	492
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	0.04	0.00	0.01	0.06	0.00	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	167	xxxxx	xxxx	195	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	27.8	xxxxx	xxxxx	25.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			27.8			25.0		
ApproachLOS:	*			*			D			D		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Conditions (2012)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[12.4]

Street Name:	Archibald Avenue									Eucalyptus Avenue								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	560		2		83	930		0		0		0			0		0		22
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
Initial Bse:	0	560		2		83	930		0		0		0			0		0		22
Added Vol:	0	0		0		0	0		0		0		0			0		0		0
PasserByVol:	0	0		0		0	0		0		0		0			0		0		0
Initial Fut:	0	560		2		83	930		0		0		0			0		0		22
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00			1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95			0.95		0.95		0.95
PHF Volume:	0	588		2		87	976		0		0		0			0		0		23
Reduct Vol:	0	0		0		0	0		0		0		0			0		0		0
FinalVolume:	0	588		2		87	976		0		0		0			0		0		23
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		7.1		6.5			6.2	xxxxx	xxxx		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5		4.0			3.3	xxxxx	xxxx		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		590	xxxx		xxxxx		1750		1740			976	xxxx	xxxx		589
Potent Cap.:	xxxx	xxxx		xxxxx		996	xxxx		xxxxx		68		88			307	xxxx	xxxx		512
Move Cap.:	xxxx	xxxx		xxxxx		996	xxxx		xxxxx		60		80			307	xxxx	xxxx		512
Volume/Cap:	xxxx	xxxx		xxxx		0.09	xxxx		xxxx		0.00		0.00			0.00	xxxx	xxxx		0.05
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.3	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		0.1	
Control Del:	xxxxx	xxxx		xxxxx		9.0	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		12.4	
LOS by Move:	*	*		*		A	*		*		*	*		*		*	*		B	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx		0		xxxxx	xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*		*	
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					12.4				
ApproachLOS:	*					*					*					B				

Note: Queue reported is the number of cars per lane.

EXISTING PLUS PROJECT CONDITIONS

AM PEAK HOUR

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in	
# 1 Archibald Ave / SR-60 WB Ramps	C	26.1	0.795	C	26.1	0.795	+ 0.000	D/V
# 2 Archibald Ave / SR-60 EB Ramps	C	24.9	0.726	C	24.9	0.726	+ 0.000	D/V
# 3 Archibald Avenue and Schaefer	F	64.4	0.000	F	64.4	0.000	+ 0.000	D/V
# 4 Archibald Ave and Park St	C	23.1	0.338	C	23.1	0.338	+ 0.000	D/V
# 5 Archibald Ave and Eucalyptus A	F	116.1	0.000	F	116.1	0.000	+ 0.000	D/V
# 6 A St and Edison Ave	B	16.7	0.189	B	16.7	0.189	+ 0.000	D/V
# 7 Turner Ave and Edison Ave	B	16.0	0.282	B	16.0	0.282	+ 0.000	D/V
# 9 Haven Ave and Park St	B	16.2	0.295	B	16.2	0.295	+ 0.000	D/V
# 10 Haven Avenue and Merrill Avenu	B	13.4	0.000	B	13.4	0.000	+ 0.000	D/V
# 11 A St and Park St	A	6.7	0.000	A	6.7	0.000	+ 0.000	V/C
# 12 Turner Ave and Park St	A	7.0	0.000	A	7.0	0.000	+ 0.000	V/C
# 13 B St and Park St	A	7.8	0.000	A	7.8	0.000	+ 0.000	V/C

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.1
Optimal Cycle:	57	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	562	929	0	0	357	180	0	0	0	283	4	394
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	562	929	0	0	357	180	0	0	0	283	4	394
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	562	929	0	0	357	180	0	0	0	283	4	394
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	629	1040	0	0	400	202	0	0	0	317	4	441
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	629	1040	0	0	400	202	0	0	0	317	4	441
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	629	1040	0	0	400	202	0	0	0	317	4	441
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	1.00	0.95	0.94	1.00	0.95	0.94	0.94	0.95
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	0.99	0.01	1.00
Final Sat.:	1700	5400	0	0	5400	1705	0	0	0	1676	24	1705
Capacity Analysis Module:												
Vol/Sat:	0.37	0.19	0.00	0.00	0.07	0.12	0.00	0.00	0.00	0.19	0.19	0.26
Crit Moves:	****					****						****
Green Time:	46.6	61.4	0.0	0.0	14.9	14.9	0.0	0.0	0.0	32.6	32.6	32.6
Volume/Cap:	0.79	0.31	0.00	0.00	0.50	0.79	0.00	0.00	0.00	0.58	0.58	0.79
Delay/Veh:	28.2	9.3	0.0	0.0	39.5	46.9	0.0	0.0	0.0	29.6	29.6	38.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.2	9.3	0.0	0.0	39.5	46.9	0.0	0.0	0.0	29.6	29.6	38.5
LOS by Move:	C	A	A	A	D	D	A	A	A	C	C	D
HCM2kAvgQ:	19	5	0	0	4	8	0	0	0	9	9	15

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.9
Optimal Cycle:	45	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0 3	0	0	0 1 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1162	431		153 512	0		333	3	462	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1162	431		153 512	0		333	3	462	0	0	0
Added Vol:	0 0	0		0 0	0		0	0	0	0	0	0
PasserByVol:	0 0	0		0 0	0		0	0	0	0	0	0
Initial Fut:	0 1162	431		153 512	0		333	3	462	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.90 0.90	0.90		0.90 0.90	0.90		0.90 0.90	0.90		0.90 0.90	0.90	
PHF Volume:	0 1293	479		170 570	0		370	3	514	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1293	479		170 570	0		370	3	514	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1293	479		170 570	0		370	3	514	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800 1800	1800		1800 1800	1800		1800 1800	1800		1800 1800	1800	
Adjustment:	0.94 1.00	0.95		0.94 1.00	0.95		0.94 0.94	0.95		0.94 1.00	0.95	
Lanes:	0.00 3.00	1.00		1.00 3.00	0.00		0.99 0.01	1.00		0.00 0.00	0.00	
Final Sat.:	0 5400	1705		1700 5400	0		1685 15	1705		0 0	0	
Capacity Analysis Module:												
Vol/Sat:	0.00 0.24	0.28		0.10 0.11	0.00		0.22 0.22	0.30		0.00 0.00	0.00	
Crit Moves:		****		****				****				
Green Time:	0.0 38.7	38.7		13.8 52.5	0.0		41.5 41.5	41.5		0.0 0.0	0.0	
Volume/Cap:	0.00 0.62	0.73		0.73 0.20	0.00		0.53 0.53	0.73		0.00 0.00	0.00	
Delay/Veh:	0.0 25.1	27.2		52.1 12.6	0.0		22.7 22.7	28.3		0.0 0.0	0.0	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	0.0 25.1	27.2		52.1 12.6	0.0		22.7 22.7	28.3		0.0 0.0	0.0	
LOS by Move:	A	C	C	D	B	A	C	C	C	A	A	A
HCM2kAvgQ:	0	11	14	7	3	0	9	9	15	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: F[64.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	1 0		1 0 0	1 0		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	38	888	3	15	554	5	3	6	39	8	8	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	888	3	15	554	5	3	6	39	8	8	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	888	3	15	554	5	3	6	39	8	8	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	41	966	3	16	603	5	3	7	42	9	9	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	41	966	3	16	603	5	3	7	42	9	9	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	608	xxxx	xxxxx	970	xxxx	xxxxx	1695	1690	606	1713	1692	968
Potent Cap.:	980	xxxx	xxxxx	719	xxxx	xxxxx	74	94	501	72	94	311
Move Cap.:	980	xxxx	xxxxx	719	xxxx	xxxxx	65	88	501	59	88	311
Volume/Cap:	0.04	xxxx	xxxx	0.02	xxxx	xxxx	0.05	0.07	0.08	0.15	0.10	0.01
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	250	xxxxx	xxxx	81	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	0.9	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.2	xxxxx	xxxxx	64.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			23.2			64.4		
ApproachLOS:	*			*			C			F		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.338
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.1
Optimal Cycle:	21	Level Of Service:	C

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	3	95	142	8	0	0	0	0	95	0	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3	95	142	8	0	0	0	0	95	0	195
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3	95	142	8	0	0	0	0	95	0	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	3	100	149	8	0	0	0	0	100	0	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	100	149	8	0	0	0	0	100	0	205
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	3	100	149	8	0	0	0	0	100	0	205
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	0.95	0.95	0.94	1.00	0.95	0.94	1.00	0.95	1.00	1.00	1.00
Lanes:	0.00	0.03	0.97	1.00	1.00	0.00	0.00	0.00	0.00	0.33	0.00	0.67
Final Sat.:	0	52	1653	1700	1800	0	0	0	0	590	0	1210
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.09	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:		****		****						****		
Green Time:	0.0	17.9	17.9	26.0	43.9	0.0	0.0	0.0	0.0	50.1	0.0	50.1
Volume/Cap:	0.00	0.34	0.34	0.34	0.01	0.00	0.00	0.00	0.00	0.34	0.00	0.34
Delay/Veh:	0.0	36.6	36.6	30.5	15.8	0.0	0.0	0.0	0.0	15.2	0.0	15.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	36.6	36.6	30.5	15.8	0.0	0.0	0.0	0.0	15.2	0.0	15.2
LOS by Move:	A	D	D	C	B	A	A	A	A	B	A	B
HCM2kAvgQ:	0	3	3	4	0	0	0	0	0	2	0	4

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: F[116.1]

Street Name:	Archibald Avenue						Eucalyptus Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	1 0		1 0 0	1 0		0 1 0	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	0	924	12	23	483	38	38	5	0	13	6	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	924	12	23	483	38	38	5	0	13	6	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	924	12	23	483	38	38	5	0	13	6	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	0	942	12	23	492	39	39	5	0	13	6	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	942	12	23	492	39	39	5	0	13	6	74
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	xxxxx	7.1	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	954	xxxx	xxxxx	1547	1513	xxxxx	1509	1526	948
Potent Cap.:	xxxx	xxxx	xxxxx	729	xxxx	xxxxx	94	121	xxxxx	100	119	319
Move Cap.:	xxxx	xxxx	xxxxx	729	xxxx	xxxxx	68	117	xxxxx	94	115	319
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxx	0.57	0.04	xxxx	0.14	0.05	0.23
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	B	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	71	xxxx	xxxxx	xxxx	220	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.7	xxxx	xxxxx	xxxxx	2.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	116.1	xxxx	xxxxx	xxxxx	33.1	xxxxx
Shared LOS:	*	*	*	*	*	*	F	*	*	*	D	*
ApproachDel:	xxxxxx			xxxxxx			116.1			33.1		
ApproachLOS:	*			*			F			D		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.189
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.7
Optimal Cycle:	14	Level Of Service:	B

Street Name:	A Street						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module:												
Base Vol:	79	0	98	0	0	0	0	133	133	94	134	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	79	0	98	0	0	0	0	133	133	94	134	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	0	98	0	0	0	0	133	133	94	134	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	83	0	103	0	0	0	0	140	140	99	141	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	0	103	0	0	0	0	140	140	99	141	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	83	0	103	0	0	0	0	140	140	99	141	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	1.00	0.94	1.00	0.95	0.94	1.00	0.95	0.94	1.00	0.95
Lanes:	0.45	0.00	0.55	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	803	0	997	0	0	0	0	1800	1705	1700	3600	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.08	0.08	0.06	0.04	0.00
Crit Moves:	****							****				
Green Time:	54.8	0.0	54.8	0.0	0.0	0.0	0.0	41.2	41.2	41.2	41.2	0.0
Volume/Cap:	0.19	0.00	0.19	0.00	0.00	0.00	0.00	0.19	0.20	0.14	0.10	0.00
Delay/Veh:	11.5	0.0	11.5	0.0	0.0	0.0	0.0	18.8	18.9	18.5	18.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	0.0	11.5	0.0	0.0	0.0	0.0	18.8	18.9	18.5	18.0	0.0
LOS by Move:	B	A	B	A	A	A	A	B	B	B	B	A
HCM2kAvgQ:	1	0	2	0	0	0	0	3	3	2	1	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.282
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.0
Optimal Cycle:	16	Level Of Service:	B

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	111	20	120	1	17	0	0	124	106	200	116	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	20	120	1	17	0	0	124	106	200	116	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	20	120	1	17	0	0	124	106	200	116	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	117	21	126	1	18	0	0	131	112	211	122	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	21	126	1	18	0	0	131	112	211	122	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	21	126	1	18	0	0	131	112	211	122	2
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	1.00	0.94	0.94	0.95	0.94	1.00	0.95	0.94	0.97	0.95
Lanes:	0.44	0.08	0.48	0.06	0.94	0.00	1.00	1.05	0.95	1.00	1.97	0.03
Final Sat.:	796	143	861	94	1606	0	1700	1889	1614	1700	3446	59
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.01	0.01	0.00	0.00	0.07	0.07	0.12	0.04	0.04
Crit Moves:	****									****		
Green Time:	52.1	52.1	52.1	52.1	52.1	0.0	0.0	43.9	43.9	43.9	43.9	43.9
Volume/Cap:	0.28	0.28	0.28	0.02	0.02	0.00	0.00	0.16	0.16	0.28	0.08	0.08
Delay/Veh:	13.6	13.6	13.6	11.6	11.6	0.0	0.0	16.9	16.9	18.1	16.3	16.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	13.6	13.6	11.6	11.6	0.0	0.0	16.9	16.9	18.1	16.3	16.3
LOS by Move:	B	B	B	B	B	A	A	B	B	B	B	B
HCM2kAvgQ:	5	5	5	0	0	0	0	2	2	4	1	1

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.295
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.2
Optimal Cycle:	16	Level Of Service:	B

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	168	4	0	0	13	105	151	0	156	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	4	0	0	13	105	151	0	156	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	4	0	0	13	105	151	0	156	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	177	4	0	0	14	111	159	0	164	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	4	0	0	14	111	159	0	164	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	4	0	0	14	111	159	0	164	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	0.95	0.95	1.00	1.00	1.00	0.94	1.00	0.95
Lanes:	1.00	1.00	0.00	0.00	0.11	0.89	0.49	0.00	0.51	0.00	0.00	0.00
Final Sat.:	1700	1800	0	0	188	1517	885	0	915	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.00	0.00	0.07	0.07	0.18	0.00	0.18	0.00	0.00	0.00
Crit Moves:	****						****					
Green Time:	35.2	35.2	0.0	0.0	35.2	35.2	60.8	0.0	60.8	0.0	0.0	0.0
Volume/Cap:	0.30	0.01	0.00	0.00	0.21	0.21	0.30	0.00	0.30	0.00	0.00	0.00
Delay/Veh:	23.7	21.0	0.0	0.0	22.8	22.8	9.5	0.0	9.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	21.0	0.0	0.0	22.8	22.8	9.5	0.0	9.5	0.0	0.0	0.0
LOS by Move:	C	C	A	A	C	C	A	A	A	A	A	A
HCM2kAvgQ:	4	0	0	0	3	3	3	0	3	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Haven Avenue and Merrill Avenue

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: B[13.4]

Street Name:	Haven Avenue									Merrill Avenue								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	65	128		0		31	123		14		12		2		20	0		0		32
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	65	128		0		31	123		14		12		2		20	0		0		32
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	65	128		0		31	123		14		12		2		20	0		0		32
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.64	0.64		0.64		0.64	0.64		0.64		0.64		0.64		0.64	0.64		0.64		0.64
PHF Volume:	102	200		0		49	192		22		19		3		31	0		0		50
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	102	200		0		49	192		22		19		3		31	0		0		50
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx				7.1		6.5		6.2	xxxxx	xxxx		6.2	
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx		3.3	
Capacity Module:																				
Cnflict Vol:	214	xxxx	xxxxx		200	xxxx	xxxxx				729		704		203	xxxx	xxxx		200	
Potent Cap.:	1368	xxxx	xxxxx		1384	xxxx	xxxxx				341		364		842	xxxx	xxxx		846	
Move Cap.:	1368	xxxx	xxxxx		1384	xxxx	xxxxx				294		325		842	xxxx	xxxx		846	
Volume/Cap:	0.07	xxxx	xxxx		0.04	xxxx	xxxx				0.06		0.01		0.04	xxxx	xxxx		0.06	
Level Of Service Module:																				
2Way95thQ:	0.2	xxxx	xxxxx		0.1	xxxx	xxxxx				xxxx		xxxx		xxxxx	xxxx	xxxx		0.2	
Control Del:	7.8	xxxx	xxxxx		7.7	xxxx	xxxxx				xxxxx		xxxx		xxxxx	xxxxx	xxxx		9.5	
LOS by Move:	A	*		*	A	*		*			*		*		*	*		*		A
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx				xxxx		481		xxxxx	xxxx	xxxx		xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx				xxxxx		0.4		xxxxx	xxxxx	xxxx		xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx				xxxxx		13.4		xxxxx	xxxxx	xxxx		xxxxx	
Shared LOS:	*	*		*	*	*		*			*		B		*	*		*		*
ApproachDel:	xxxxxx				xxxxxx						13.4					9.5				
ApproachLOS:	*				*						B					A				

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #11 A St and Park St

****

Average Delay (sec/veh): 6.7 Level Of Service: A

****

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	58	0	37	90	184	0	0	158	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	58	0	37	90	184	0	0	158	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	58	0	37	90	184	0	0	158	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	61	0	39	95	194	0	0	166	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	61	0	39	95	194	0	0	166	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	61	0	39	95	194	0	0	166	44
PCE Module:												
AutoPCE:	0	0	0	61	0	39	95	194	0	0	166	44
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	111	0	89	145	244	0	0	216	94
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	499			216			111			145		
MaxVolume:	xxxxxx			1083			1140			1122		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			812			885			861		
ApproachVol:	xxxxxx			200			388			311		
ApproachDel:	xxxxxx			5.9			7.2			6.5		
Queue:	xxxx			1.0			2.3			1.7		

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #12 Turner Ave and Park St

****

Average Delay (sec/veh): 7.0 Level Of Service: A

****

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	64	0	119	87	123	0	0	172	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	119	87	123	0	0	172	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	64	0	119	87	123	0	0	172	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	67	0	125	92	129	0	0	181	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	67	0	125	92	129	0	0	181	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	67	0	125	92	129	0	0	181	106
PCE Module:												
AutoPCE:	0	0	0	67	0	125	92	129	0	0	181	106
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	117	0	175	142	179	0	0	231	156
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	438			231			117			142		
MaxVolume:	xxxxxx			1075			1137			1124		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			803			881			864		
ApproachVol:	xxxxxx			293			321			387		
ApproachDel:	xxxxxx			7.0			6.4			7.5		
Queue:	xxxx			1.7			1.7			2.3		

Grand Park Specific Plan TIA
Existing Plus Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #13 B St and Park St

Average Delay (sec/veh): 7.8 Level Of Service: A

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	169	0	103	97	129	0	0	136	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	169	0	103	97	129	0	0	136	143
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	169	0	103	97	129	0	0	136	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	178	0	108	102	136	0	0	143	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	178	0	108	102	136	0	0	143	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	178	0	108	102	136	0	0	143	151
PCE Module:												
AutoPCE:	0	0	0	178	0	108	102	136	0	0	143	151
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	228	0	158	152	186	0	0	193	201
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	566			193			228			152		
MaxVolume:	xxxxxx			1096			1077			1118		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			828			805			856		
ApproachVol:	xxxxxx			386			338			394		
ApproachDel:	xxxxxx			8.1			7.7			7.7		
Queue:	xxxx			2.5			2.1			2.4		

EXISTING PLUS PROJECT CONDITIONS

PM PEAK HOUR

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	C	29.3	0.812	C	29.3	0.812	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	D	39.4	0.981	D	39.4	0.981	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	E	39.9	0.000	E	39.9	0.000	+ 0.000 D/V
# 4 Archibald Ave and Park St	C	24.7	0.250	C	24.7	0.250	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	F	222.9	0.000	F	222.9	0.000	+ 0.000 D/V
# 6 A St and Edison Ave	B	14.6	0.102	B	14.6	0.102	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	B	16.7	0.141	B	16.7	0.141	+ 0.000 D/V
# 9 Haven Ave and Park St	B	15.4	0.176	B	15.4	0.176	+ 0.000 D/V
# 10 Haven Avenue and Merrill Avenu	A	9.4	0.000	A	9.4	0.000	+ 0.000 D/V
# 11 A St and Park St	A	5.4	0.000	A	5.4	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St	A	5.5	0.000	A	5.5	0.000	+ 0.000 V/C
# 13 B St and Park St	A	6.1	0.000	A	6.1	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.3
Optimal Cycle:	61	Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	425	413	0	0	958	416	0	0	0	327	4	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	425	413	0	0	958	416	0	0	0	327	4	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	425	413	0	0	958	416	0	0	0	327	4	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	471	458	0	0	1062	461	0	0	0	363	4	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	471	458	0	0	1062	461	0	0	0	363	4	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	471	458	0	0	1062	461	0	0	0	363	4	122
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	1.00	0.95	0.94	1.00	0.95	0.94	0.94	0.95
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	0.99	0.01	1.00
Final Sat.:	1700	5400	0	0	5400	1705	0	0	0	1679	21	1705
Capacity Analysis Module:												
Vol/Sat:	0.28	0.08	0.00	0.00	0.20	0.27	0.00	0.00	0.00	0.22	0.22	0.07
Crit Moves:	****					****				****		
Green Time:	34.1	67.4	0.0	0.0	33.3	33.3	0.0	0.0	0.0	26.6	26.6	26.6
Volume/Cap:	0.81	0.13	0.00	0.00	0.59	0.81	0.00	0.00	0.00	0.81	0.81	0.27
Delay/Veh:	38.5	5.8	0.0	0.0	28.1	33.3	0.0	0.0	0.0	45.1	45.1	29.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.5	5.8	0.0	0.0	28.1	33.3	0.0	0.0	0.0	45.1	45.1	29.4
LOS by Move:	D	A	A	A	C	C	A	A	A	D	D	C
HCM2kAvgQ:	16	2	0	0	10	16	0	0	0	13	13	3

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.981
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	39.4
Optimal Cycle:	180	Level Of Service:	D

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0	3	0 0	0 1	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	762	508	334	903	0	118	1	683	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	762	508	334	903	0	118	1	683	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	762	508	334	903	0	118	1	683	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	786	524	344	931	0	122	1	704	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	786	524	344	931	0	122	1	704	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	786	524	344	931	0	122	1	704	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	1.00	0.95	0.94	0.94	0.95	0.94	1.00	0.95
Lanes:	0.00	3.00	1.00	1.00	3.00	0.00	0.99	0.01	1.00	0.00	0.00	0.00
Final Sat.:	0	5400	1705	1700	5400	0	1686	14	1705	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.31	0.20	0.17	0.00	0.07	0.07	0.41	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:	0.0	31.3	31.3	20.6	51.9	0.0	42.1	42.1	42.1	0.0	0.0	0.0
Volume/Cap:	0.00	0.46	0.98	0.98	0.33	0.00	0.17	0.17	0.98	0.00	0.00	0.00
Delay/Veh:	0.0	27.7	54.3	82.4	14.0	0.0	18.2	18.2	57.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.7	54.3	82.4	14.0	0.0	18.2	18.2	57.5	0.0	0.0	0.0
LOS by Move:	A	C	D	F	B	A	B	B	E	A	A	A
HCM2kAvgQ:	0	7	23	16	6	0	2	2	29	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: E[39.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	1 0		1 0 0	1 0		0 0 1!	0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	15	649	11	4	876	0	4	3	26	6	2	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	649	11	4	876	0	4	3	26	6	2	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	649	11	4	876	0	4	3	26	6	2	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	16	696	12	4	940	0	4	3	28	6	2	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	16	696	12	4	940	0	4	3	28	6	2	9
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	940	xxxx	xxxxx	708	xxxx	xxxxx	1688	1689	940	1698	1683	702
Potent Cap.:	737	xxxx	xxxxx	900	xxxx	xxxxx	75	95	322	74	95	441
Move Cap.:	737	xxxx	xxxxx	900	xxxx	xxxxx	71	92	322	64	93	441
Volume/Cap:	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.06	0.03	0.09	0.10	0.02	0.02
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	194	xxxxx	xxxx	120	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	27.6	xxxxx	xxxxx	39.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	E	*
ApproachDel:	xxxxxx			xxxxxx			27.6			39.9		
ApproachLOS:	*			*			D			E		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.250
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.7
Optimal Cycle:	19	Level Of Service:	C

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	11	78	152	6	0	0	0	0	53	0	94
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	11	78	152	6	0	0	0	0	53	0	94
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	11	78	152	6	0	0	0	0	53	0	94
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	12	82	160	6	0	0	0	0	56	0	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	12	82	160	6	0	0	0	0	56	0	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	12	82	160	6	0	0	0	0	56	0	99
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	0.95	0.95	0.94	1.00	0.95	0.94	1.00	0.95	1.00	1.00	1.00
Lanes:	0.00	0.12	0.88	1.00	1.00	0.00	0.00	0.00	0.00	0.36	0.00	0.64
Final Sat.:	0	211	1494	1700	1800	0	0	0	0	649	0	1151
Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.05	0.09	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Crit Moves:		****		****						****		
Green Time:	0.0	22.0	22.0	37.6	59.6	0.0	0.0	0.0	0.0	34.4	0.0	34.4
Volume/Cap:	0.00	0.25	0.25	0.25	0.01	0.00	0.00	0.00	0.00	0.25	0.00	0.25
Delay/Veh:	0.0	32.6	32.6	21.7	8.2	0.0	0.0	0.0	0.0	23.8	0.0	23.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	32.6	32.6	21.7	8.2	0.0	0.0	0.0	0.0	23.8	0.0	23.8
LOS by Move:	A	C	C	C	A	A	A	A	A	C	A	C
HCM2kAvgQ:	0	3	3	4	0	0	0	0	0	1	0	2

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Average Delay (sec/veh): 6.2 Worst Case Level Of Service: F[222.9]

Street Name:	Archibald Avenue									Eucalyptus Avenue								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	0	604		7		88	960		25		36		5		0	4		3		31
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	604		7		88	960		25		36		5		0	4		3		31
Added Vol:	0	0		0		0	0		0		0		0		0	0		0		0
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	604		7		88	960		25		36		5		0	4		3		31
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	0	634		7		92	1007		26		38		5		0	4		3		33
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	0	634		7		92	1007		26		38		5		0	4		3		33
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		4.1	xxxx		xxxxx		7.1		6.5		xxxxx	7.1		6.5		6.2
FollowUpTim:	xxxxx	xxxx		xxxxx		2.2	xxxx		xxxxx		3.5		4.0		xxxxx	3.5		4.0		3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		641	xxxx		xxxxx		1860		1846		xxxxx	1845		1856		637
Potent Cap.:	xxxx	xxxx		xxxxx		953	xxxx		xxxxx		57		76		xxxxx	58		75		481
Move Cap.:	xxxx	xxxx		xxxxx		953	xxxx		xxxxx		47		68		xxxxx	51		67		481
Volume/Cap:	xxxx	xxxx		xxxx		0.10	xxxx		xxxx		0.80		0.08		xxxx	0.08		0.05		0.07
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx		xxxxx		0.3	xxxx		xxxxx		xxxx		xxxx		xxxxx	xxxx		xxxx		xxxxx
Control Del:	xxxxx	xxxx		xxxxx		9.2	xxxx		xxxxx		xxxxx		xxxx		xxxxx	xxxxx		xxxx		xxxxx
LOS by Move:	*	*		*		A	*		*		*		*		*	*		*		*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		49		xxxx		xxxxx	xxxx		202		xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		3.7		xxxx		xxxxx	xxxxx		0.7		xxxxx
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		222.9		xxxx		xxxxx	xxxxx		27.1		xxxxx
Shared LOS:	*	*		*		*	*		*		F		*		*	*		D		*
ApproachDel:	xxxxxx					xxxxxx					222.9					27.1				
ApproachLOS:	*					*					F					D				

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.102
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.6
Optimal Cycle:	13	Level Of Service:	B

Street Name:	A Street						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module:												
Base Vol:	38	0	48	0	0	0	0	116	43	74	91	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	0	48	0	0	0	0	116	43	74	91	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	0	48	0	0	0	0	116	43	74	91	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	40	0	51	0	0	0	0	122	45	78	96	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	51	0	0	0	0	122	45	78	96	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	51	0	0	0	0	122	45	78	96	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	1.00	0.94	1.00	0.95	0.94	0.98	0.95	0.94	1.00	0.95
Lanes:	0.44	0.00	0.56	0.00	0.00	0.00	0.00	1.44	0.56	1.00	2.00	0.00
Final Sat.:	795	0	1005	0	0	0	0	2557	948	1700	3600	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.03	0.00
Crit Moves:	****							****				
Green Time:	49.2	0.0	49.2	0.0	0.0	0.0	0.0	46.8	46.8	46.8	46.8	0.0
Volume/Cap:	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.10	0.10	0.10	0.06	0.00
Delay/Veh:	13.6	0.0	13.6	0.0	0.0	0.0	0.0	14.9	14.9	14.9	14.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	0.0	13.6	0.0	0.0	0.0	0.0	14.9	14.9	14.9	14.6	0.0
LOS by Move:	B	A	B	A	A	A	A	B	B	B	B	A
HCM2kAvgQ:	1	0	1	0	0	0	0	1	1	1	1	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.141
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.7
Optimal Cycle:	13	Level Of Service:	B

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0	1 0	0 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	61	10	67	2	14	0	0	76	88	76	104	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	10	67	2	14	0	0	76	88	76	104	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	10	67	2	14	0	0	76	88	76	104	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	64	11	71	2	15	0	0	80	93	80	109	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	11	71	2	15	0	0	80	93	80	109	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	11	71	2	15	0	0	80	93	80	109	1
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	1.00	1.00	1.00	0.94	0.94	0.95	0.94	1.00	0.95	0.94	0.97	0.95
Lanes:	0.44	0.07	0.49	0.12	0.88	0.00	1.00	1.00	1.00	1.00	1.98	0.02
Final Sat.:	796	130	874	212	1487	0	1700	1800	1705	1700	3472	33
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.01	0.01	0.00	0.00	0.04	0.05	0.05	0.03	0.03
Crit Moves:		****							****			
Green Time:	57.4	57.4	57.4	57.4	57.4	0.0	0.0	38.6	38.6	38.6	38.6	38.6
Volume/Cap:	0.14	0.14	0.14	0.02	0.02	0.00	0.00	0.12	0.14	0.12	0.08	0.08
Delay/Veh:	9.9	9.9	9.9	9.2	9.2	0.0	0.0	19.7	20.0	19.9	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.9	9.9	9.9	9.2	9.2	0.0	0.0	19.7	20.0	19.9	19.5	19.5
LOS by Move:	A	A	A	A	A	A	A	B	B	B	B	B
HCM2kAvgQ:	2	2	2	0	0	0	0	2	2	2	1	1

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.176
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	15.4
Optimal Cycle:	14	Level Of Service:	B

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	110	14	0	0	8	117	77	0	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	14	0	0	8	117	77	0	80	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	14	0	0	8	117	77	0	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	116	15	0	0	8	123	81	0	84	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	15	0	0	8	123	81	0	84	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	116	15	0	0	8	123	81	0	84	0	0	0
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	0.95	0.94	0.95	0.95	1.00	1.00	1.00	0.94	1.00	0.95
Lanes:	1.00	1.00	0.00	0.00	0.06	0.94	0.49	0.00	0.51	0.00	0.00	0.00
Final Sat.:	1700	1800	0	0	109	1596	883	0	917	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.00	0.00	0.08	0.08	0.09	0.00	0.09	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	43.8	43.8	0.0	0.0	43.8	43.8	52.2	0.0	52.2	0.0	0.0	0.0
Volume/Cap:	0.16	0.02	0.00	0.00	0.18	0.18	0.18	0.00	0.18	0.00	0.00	0.00
Delay/Veh:	17.0	15.9	0.0	0.0	17.2	17.2	12.7	0.0	12.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	15.9	0.0	0.0	17.2	17.2	12.7	0.0	12.7	0.0	0.0	0.0
LOS by Move:	B	B	A	A	B	B	B	A	B	A	A	A
HCM2kAvgQ:	2	0	0	0	3	3	1	0	1	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Haven Avenue and Merrill Avenue

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: A[9.4]

Street Name:	Haven Avenue									Merrill Avenue								
Approach:	North Bound				South Bound					East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	29	91		0		16	64		7		10		1	85		0		2		23
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
Initial Bse:	29	91		0		16	64		7		10		1	85		0		2		23
Added Vol:	0	0		0		0	0		0		0		0	0		0		0		0
PasserByVol:	0	0		0		0	0		0		0		0	0		0		0		0
Initial Fut:	29	91		0		16	64		7		10		1	85		0		2		23
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00		1.00		1.00
PHF Adj:	0.88	0.88		0.88		0.88	0.88		0.88		0.88		0.88	0.88		0.88		0.88		0.88
PHF Volume:	33	103		0		18	72		8		11		1	96		0		2		26
Reduct Vol:	0	0		0		0	0		0		0		0	0		0		0		0
FinalVolume:	33	103		0		18	72		8		11		1	96		0		2		26
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx		4.1	xxxx	xxxxx				7.1	6.5		6.2	xxxxx	6.5		6.2		
FollowUpTim:	2.2	xxxx	xxxxx		2.2	xxxx	xxxxx				3.5	4.0		3.3	xxxxx	4.0		3.3		
Capacity Module:																				
Cnflict Vol:	80	xxxx	xxxxx		103	xxxx	xxxxx				295	281		76	xxxx	285		103		
Potent Cap.:	1530	xxxx	xxxxx		1502	xxxx	xxxxx				661	631		990	xxxx	628		957		
Move Cap.:	1530	xxxx	xxxxx		1502	xxxx	xxxxx				625	610		990	xxxx	607		957		
Volume/Cap:	0.02	xxxx	xxxx		0.01	xxxx	xxxx				0.02	0.00		0.10	xxxx	0.00		0.03		
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx		0.0	xxxx	xxxxx				xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx		
Control Del:	7.4	xxxx	xxxxx		7.4	xxxx	xxxxx				xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx		
LOS by Move:	A	*	*		A	*	*				*	*		*	*	*		*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx				xxxx	928		xxxxx	xxxx	xxxx		915		
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx				xxxxx	0.4		xxxxx	xxxxx	xxxx		0.1		
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx				xxxxx	9.4		xxxxx	xxxxx	xxxx		9.1		
Shared LOS:	*	*	*		*	*	*				*	A		*	*	*		A		
ApproachDel:	xxxxxx				xxxxxx						9.4				9.1					
ApproachLOS:	*				*						A				A					

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #11 A St and Park St

****

Average Delay (sec/veh): 5.4 Level Of Service: A

****

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	16	0	56	37	118	0	0	97	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	16	0	56	37	118	0	0	97	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	16	0	56	37	118	0	0	97	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	17	0	59	39	124	0	0	102	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	17	0	59	39	124	0	0	102	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	17	0	59	39	124	0	0	102	21
PCE Module:												
AutoPCE:	0	0	0	17	0	59	39	124	0	0	102	21
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	67	0	109	89	174	0	0	152	71
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	330			152			67			89		
MaxVolume:	xxxxxx			1118			1164			1152		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			856			917			901		
ApproachVol:	xxxxxx			176			263			223		
ApproachDel:	xxxxxx			5.3			5.5			5.3		
Queue:	xxxx			0.8			1.2			1.0		

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #12 Turner Ave and Park St

****

Average Delay (sec/veh): 5.5 Level Of Service: A

****

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	52	0	36	42	107	0	0	87	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	52	0	36	42	107	0	0	87	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	52	0	36	42	107	0	0	87	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	55	0	38	44	113	0	0	92	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	55	0	38	44	113	0	0	92	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	55	0	38	44	113	0	0	92	40
PCE Module:												
AutoPCE:	0	0	0	55	0	38	44	113	0	0	92	40
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	105	0	88	94	163	0	0	142	90
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	362			142			105			94		
MaxVolume:	xxxxxx			1124			1143			1149		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			864			890			897		
ApproachVol:	xxxxxx			193			257			232		
ApproachDel:	xxxxxx			5.4			5.7			5.4		
Queue:	xxxx			0.9			1.2			1.0		

Grand Park Specific Plan TIA
Existing Plus Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #13 B St and Park St

****

Average Delay (sec/veh): 6.1 Level Of Service: A

****

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	81	0	46	60	78	0	0	108	112
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	81	0	46	60	78	0	0	108	112
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	81	0	46	60	78	0	0	108	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	85	0	48	63	82	0	0	114	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	85	0	48	63	82	0	0	114	118
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	85	0	48	63	82	0	0	114	118
PCE Module:												
AutoPCE:	0	0	0	85	0	48	63	82	0	0	114	118
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	135	0	98	113	132	0	0	164	168
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	381			164			135			113		
MaxVolume:	xxxxxx			1112			1127			1139		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			848			868			884		
ApproachVol:	xxxxxx			234			245			332		
ApproachDel:	xxxxxx			5.9			5.8			6.5		
Queue:	xxxx			1.1			1.2			1.8		

HORIZON YEAR (2030) NO PROJECT CONDITIONS

AM PEAK HOUR

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	F	185.4	1.556	F	185.4	1.556	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	F	116.7	1.261	F	116.7	1.261	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	18.8	0.394	B	18.8	0.394	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	11.2	0.289	B	11.2	0.289	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	24.4	0.582	C	24.4	0.582	+ 0.000 D/V
# 6 A St and Edison Ave	A	3.9	0.294	A	3.9	0.294	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	B	14.5	0.463	B	14.5	0.463	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	B	17.6	0.389	B	17.6	0.389	+ 0.000 D/V
# 9 Haven Ave and Park St	A	7.7	0.273	A	7.7	0.273	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.2	0.366	B	14.2	0.366	+ 0.000 D/V
# 11 A St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 13 B St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.556
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	185.4
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	488	2589	0	0	747	551	0	0	0	513	0	1590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	488	2589	0	0	747	551	0	0	0	513	0	1590
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	488	2589	0	0	747	551	0	0	0	513	0	1590
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	514	2725	0	0	786	580	0	0	0	540	0	1674
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	514	2725	0	0	786	580	0	0	0	540	0	1674
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	514	2725	0	0	786	580	0	0	0	540	0	1674
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1800	5700	0	0	5700	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.29	0.48	0.00	0.00	0.14	0.31	0.00	0.00	0.00	0.30	0.00	0.88
Crit Moves:	****					****						****
Green Time:	20.2	41.7	0.0	0.0	21.6	21.6	0.0	0.0	0.0	62.3	0.0	62.3
Volume/Cap:	1.56	1.26	0.00	0.00	0.70	1.56	0.00	0.00	0.00	0.53	0.00	1.56
Delay/Veh:	309.7	155	0.0	0.0	42.4	300.2	0.0	0.0	0.0	15.3	0.0	278.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	309.7	155	0.0	0.0	42.4	300.2	0.0	0.0	0.0	15.3	0.0	278.9
LOS by Move:	F	F	A	A	D	F	A	A	A	B	A	F
HCM2kAvgQ:	43	55	0	0	10	46	0	0	0	12	0	129

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.261
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	116.7
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0	3	0 0	0 1	0	0 1	0 0	0	0 0 0
Volume Module:												
Base Vol:	0 1832	385		271 988		0	1243	0		809	0	0 0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00	1.00		1.00	1.00	1.00 1.00
Initial Bse:	0 1832	385		271 988		0	1243	0		809	0	0 0
Added Vol:	0 0	0		0 0		0	0 0	0		0	0	0 0
PasserByVol:	0 0	0		0 0		0	0 0	0		0	0	0 0
Initial Fut:	0 1832	385		271 988		0	1243	0		809	0	0 0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00	1.00		1.00	1.00	1.00 1.00
PHF Adj:	0.95 0.95	0.95		0.95 0.95		0.95	0.95 0.95	0.95		0.95	0.95	0.95 0.95
PHF Volume:	0 1928	405		285 1040		0	1308	0		852	0	0 0
Reduct Vol:	0 0	0		0 0		0	0 0	0		0	0	0 0
Reduced Vol:	0 1928	405		285 1040		0	1308	0		852	0	0 0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00	1.00		1.00	1.00	1.00 1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00	1.00		1.00	1.00	1.00 1.00
FinalVolume:	0 1928	405		285 1040		0	1308	0		852	0	0 0
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900		1900	1900 1900	1900		1900	1900	1900 1900
Adjustment:	0.95 1.00	1.00		0.95 1.00		1.00	0.95 0.95	1.00		0.95	1.00	1.00 1.00
Lanes:	0.00 3.31	0.69		1.00 3.00		0.00	1.00 0.00	1.00		0.00	0.00	0.00 0.00
Final Sat.:	0 6280	1320		1800 5700		0	1800	0		1900	0	0 0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.31	0.31		0.16 0.18		0.00	0.73 0.00	0.45		0.00	0.00	0.00 0.00
Crit Moves:	****			****			****					
Green Time:	0.0 26.8	26.8		13.8 40.6		0.0	63.4 0.0	63.4		0.0	0.0	0.0 0.0
Volume/Cap:	0.00 1.26	1.26		1.26 0.49		0.00	1.26 0.00	0.78		0.00	0.00	0.00 0.00
Delay/Veh:	0.0 164	163.7		196.2 27.0		0.0	148.7 0.0	21.5		0.0	0.0	0.0 0.0
User DelAdj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00	1.00		1.00	1.00	1.00 1.00
AdjDel/Veh:	0.0 164	163.7		196.2 27.0		0.0	148.7 0.0	21.5		0.0	0.0	0.0 0.0
LOS by Move:	A F	F		F C		A	F A	C		A	A	A A
HCM2kAvgQ:	0 37	37		20 9		0	82 0	23		0	0	0 0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.394
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.8
Optimal Cycle:	23	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	86	1062	0	76	687	135	165	313	52	53	395	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	1062	0	76	687	135	165	313	52	53	395	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	1062	0	76	687	135	165	313	52	53	395	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	91	1118	0	80	723	142	174	329	55	56	416	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	1118	0	80	723	142	174	329	55	56	416	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	91	1118	0	80	723	142	174	329	55	56	416	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.51	0.49	1.00	1.72	0.28	1.00	1.72	0.28
Final Sat.:	1800	5700	0	1800	4764	936	1800	3259	541	1800	3277	523
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.00	0.04	0.15	0.15	0.10	0.10	0.10	0.03	0.13	0.13
Crit Moves:		****		****							****	
Green Time:	13.7	44.8	0.0	10.2	41.3	41.3	29.0	29.0	29.0	29.0	29.0	29.0
Volume/Cap:	0.33	0.39	0.00	0.39	0.33	0.33	0.30	0.31	0.31	0.10	0.39	0.39
Delay/Veh:	34.8	14.2	0.0	38.3	15.6	15.6	23.2	23.1	23.1	21.4	23.9	23.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.8	14.2	0.0	38.3	15.6	15.6	23.2	23.1	23.1	21.4	23.9	23.9
LOS by Move:	C	B	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	6	0	3	5	5	4	4	4	1	5	5

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.289
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.2
Optimal Cycle:	20	Level Of Service:	B

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	44	1007	0	0	797	45	76	0	76	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	1007	0	0	797	45	76	0	76	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1007	0	0	797	45	76	0	76	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	46	1060	0	0	839	47	80	0	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	1060	0	0	839	47	80	0	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	1060	0	0	839	47	80	0	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.84	0.16	0.50	0.00	0.50	0.00	0.00	0.00
Final Sat.:	1800	5700	0	0	5395	305	900	0	900	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.00	0.00	0.16	0.16	0.09	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	8.0	56.4	0.0	0.0	48.4	48.4	27.6	0.0	27.6	0.0	0.0	0.0
Volume/Cap:	0.29	0.30	0.00	0.00	0.29	0.29	0.29	0.00	0.29	0.00	0.00	0.00
Delay/Veh:	39.3	7.8	0.0	0.0	11.5	11.5	24.0	0.0	24.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.3	7.8	0.0	0.0	11.5	11.5	24.0	0.0	24.0	0.0	0.0	0.0
LOS by Move:	D	A	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	2	4	0	0	4	4	4	0	4	0	0	0

Note: Queue reported is the number of cars per lane.

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2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.582
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.4
Optimal Cycle:	37	Level Of Service:	C

Street Name:	Archibald Avenue						Eucalyptus Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 2	1	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	569 1111	106		37 645	126		63 159	235		80 512	119	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	569 1111	106		37 645	126		63 159	235		80 512	119	
Added Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	
Initial Fut:	569 1111	106		37 645	126		63 159	235		80 512	119	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	599 1169	112		39 679	133		66 167	247		84 539	125	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	599 1169	112		39 679	133		66 167	247		84 539	125	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	599 1169	112		39 679	133		66 167	247		84 539	125	
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.89 1.00	1.00		0.89 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00	
Lanes:	2.00 2.74	0.26		2.00 2.51	0.49		1.00 1.00	1.00		1.00 1.62	0.38	
Final Sat.:	3400 5204	496		3400 4768	932		1800 1900	1900		1800 3083	717	
Capacity Analysis Module:												
Vol/Sat:	0.18 0.22	0.22		0.01 0.14	0.14		0.04 0.09	0.13		0.05 0.17	0.17	
Crit Moves:	****			****			****			****		
Green Time:	27.2 46.9	46.9		2.4 22.0	22.0		5.7 24.1	24.1		8.7 27.0	27.0	
Volume/Cap:	0.58 0.43	0.43		0.43 0.58	0.58		0.58 0.33	0.49		0.49 0.58	0.58	
Delay/Veh:	27.4 13.4	13.4		46.4 30.6	30.6		48.4 26.6	28.2		40.7 27.5	27.5	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	27.4 13.4	13.4		46.4 30.6	30.6		48.4 26.6	28.2		40.7 27.5	27.5	
LOS by Move:	C	B		D	C		D	C		D	C	
HCM2kAvgQ:	8	7		1	7		3	4		3	8	

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.294
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	3.9
Optimal Cycle:	20	Level Of Service:	A

Street Name:	A Street								Edison Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	0	0	0	0	0	1!	0	0	1	0	4	0	0	0	0	3	1	0
Volume Module:																				
Base Vol:	0	0	0			64	0	5			17	1232	0			0	1589	29		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	0			64	0	5			17	1232	0			0	1589	29		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	0	0	0			64	0	5			17	1232	0			0	1589	29		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	0	0	0			67	0	5			18	1297	0			0	1673	31		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	0	0	0			67	0	5			18	1297	0			0	1673	31		
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
FinalVolume:	0	0	0			67	0	5			18	1297	0			0	1673	31		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	1.00	1.00			0.95	0.95	0.95			0.95	1.00	1.00			0.95	1.00	1.00		
Lanes:	0.00	0.00	0.00			0.93	0.00	0.07			1.00	4.00	0.00			0.00	3.93	0.07		
Final Sat.:	0	0	0			1670	0	130			1800	7600	0			0	7464	136		
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00			0.04	0.00	0.04			0.01	0.17	0.00			0.00	0.22	0.22		
Crit Moves:						****					****						****			
Green Time:	0.0	0.0	0.0			12.4	0.0	12.4			3.0	71.6	0.0			0.0	68.6	68.6		
Volume/Cap:	0.00	0.00	0.00			0.29	0.00	0.29			0.29	0.21	0.00			0.00	0.29	0.29		
Delay/Veh:	0.0	0.0	0.0			35.6	0.0	35.6			45.1	2.3	0.0			0.0	3.3	3.3		
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
AdjDel/Veh:	0.0	0.0	0.0			35.6	0.0	35.6			45.1	2.3	0.0			0.0	3.3	3.3		
LOS by Move:	A	A	A			D	A	D			D	A	A			A	A	A		
HCM2kAvgQ:	0	0	0			2	0	0			1	2	0			0	4	4		

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.463
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.5
Optimal Cycle:	25	Level Of Service:	B

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3 1	0	1 0	3 1	0
Volume Module:												
Base Vol:	0	0	0	25	0	161	201	1097	0	0	1457	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	25	0	161	201	1097	0	0	1457	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	25	0	161	201	1097	0	0	1457	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	26	0	169	212	1155	0	0	1534	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	26	0	169	212	1155	0	0	1534	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	26	0	169	212	1155	0	0	1534	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.00	1.00	0.00	0.13	0.00	0.87	1.00	4.00	0.00	1.00	3.92	0.08
Final Sat.:	0	1800	0	242	0	1558	1800	7600	0	1800	7452	148
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.12	0.15	0.00	0.00	0.21	0.21
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	21.1	0.0	21.1	22.8	62.9	0.0	0.0	40.0	40.0
Volume/Cap:	0.00	0.00	0.00	0.46	0.00	0.46	0.46	0.22	0.00	0.00	0.46	0.46
Delay/Veh:	0.0	0.0	0.0	30.4	0.0	30.4	29.1	4.8	0.0	0.0	17.6	17.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	30.4	0.0	30.4	29.1	4.8	0.0	0.0	17.6	17.6
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	1	0	4	6	3	0	0	8	8

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Haven Ave and Schaefer Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.389
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	17.6
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Schaefer Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	255	440	0	0	219	244	196	0	184	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	255	440	0	0	219	244	196	0	184	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	255	440	0	0	219	244	196	0	184	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	268	463	0	0	231	257	206	0	194	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	268	463	0	0	231	257	206	0	194	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	268	463	0	0	231	257	206	0	194	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.00	1.00	0.52	0.00	0.48	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	1900	1900	928	0	872	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.12	0.00	0.00	0.12	0.14	0.22	0.00	0.22	0.00	0.00	0.00
Crit Moves:	****						****					
Green Time:	34.5	34.5	0.0	0.0	34.5	34.5	51.5	0.0	51.5	0.0	0.0	0.0
Volume/Cap:	0.39	0.32	0.00	0.00	0.32	0.35	0.39	0.00	0.39	0.00	0.00	0.00
Delay/Veh:	20.4	19.6	0.0	0.0	19.6	19.9	10.9	0.0	10.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	19.6	0.0	0.0	19.6	19.9	10.9	0.0	10.9	0.0	0.0	0.0
LOS by Move:	C	B	A	A	B	B	B	A	B	A	A	A
HCM2kAvgQ:	6	5	0	0	5	5	6	0	6	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.273
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	7.7
Optimal Cycle:	16	Level Of Service:	A

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1	1 0		1 0 2	0 0		0 0 0	0 0 0		0 0 1!	0 0	
Volume Module:												
Base Vol:	0	663	6	216	167	0	0	0	0	79	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	663	6	216	167	0	0	0	0	79	0	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	663	6	216	167	0	0	0	0	79	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	698	6	227	176	0	0	0	0	83	0	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	698	6	227	176	0	0	0	0	83	0	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	698	6	227	176	0	0	0	0	83	0	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95
Lanes:	0.00	1.98	0.02	1.00	2.00	0.00	0.00	0.00	0.00	0.61	0.00	0.39
Final Sat.:	0	3766	34	1800	3800	0	0	0	0	1102	0	698
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.13	0.05	0.00	0.00	0.00	0.00	0.08	0.00	0.08
Crit Moves:		****								****		
Green Time:	0.0	61.1	61.1	61.1	61.1	0.0	0.0	0.0	0.0	24.9	0.0	24.9
Volume/Cap:	0.00	0.27	0.27	0.19	0.07	0.00	0.00	0.00	0.00	0.27	0.00	0.27
Delay/Veh:	0.0	5.7	5.7	5.4	4.9	0.0	0.0	0.0	0.0	25.8	0.0	25.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	5.7	5.7	5.4	4.9	0.0	0.0	0.0	0.0	25.8	0.0	25.8
LOS by Move:	A	A	A	A	A	A	A	A	A	C	A	C
HCM2kAvgQ:	0	4	4	2	1	0	0	0	0	3	0	3

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Haven Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.366
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Eucalyptusl Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	92	561	167	25	166	56	53	249	8	43	477	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	561	167	25	166	56	53	249	8	43	477	59
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	561	167	25	166	56	53	249	8	43	477	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	97	591	176	26	175	59	56	262	8	45	502	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	591	176	26	175	59	56	262	8	45	502	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	97	591	176	26	175	59	56	262	8	45	502	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.54	0.46	1.00	1.50	0.50	1.00	1.94	0.06	1.00	1.78	0.22
Final Sat.:	1800	2928	872	1800	2841	959	1800	3682	118	1800	3382	418
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.01	0.06	0.06	0.03	0.07	0.07	0.03	0.15	0.15
Crit Moves:		****									****	
Green Time:	49.5	49.5	49.5	49.5	49.5	49.5	36.5	36.5	36.5	36.5	36.5	36.5
Volume/Cap:	0.10	0.37	0.37	0.03	0.11	0.11	0.08	0.18	0.18	0.06	0.37	0.37
Delay/Veh:	9.7	11.5	11.5	9.2	9.7	9.7	16.5	17.2	17.2	16.4	18.8	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.7	11.5	11.5	9.2	9.7	9.7	16.5	17.2	17.2	16.4	18.8	18.8
LOS by Move:	A	B	B	A	A	A	B	B	B	B	B	B
HCM2kAvgQ:	1	6	6	0	2	2	1	2	2	1	5	5

Note: Queue reported is the number of cars per lane.

HORIZON YEAR (2030) NO PROJECT CONDITIONS

PM PEAK HOUR

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	F	173.7	1.753	F	173.7	1.753	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	F	214.7	1.634	F	214.7	1.634	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	19.3	0.518	B	19.3	0.518	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	10.6	0.431	B	10.6	0.431	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	30.1	0.798	C	30.1	0.798	+ 0.000 D/V
# 6 A St and Edison Ave	A	3.4	0.329	A	3.4	0.329	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	B	16.6	0.542	B	16.6	0.542	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	C	21.2	0.644	C	21.2	0.644	+ 0.000 D/V
# 9 Haven Ave and Park St	B	14.7	0.384	B	14.7	0.384	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.4	0.360	B	14.4	0.360	+ 0.000 D/V
# 11 A St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C
# 13 B St and Park St		0.0	0.000		0.0	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.753
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	173.7
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	832	1679	0	0	2336	1496	0	0	0	434	0	618
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	832	1679	0	0	2336	1496	0	0	0	434	0	618
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	832	1679	0	0	2336	1496	0	0	0	434	0	618
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	876	1767	0	0	2459	1575	0	0	0	457	0	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	876	1767	0	0	2459	1575	0	0	0	457	0	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	876	1767	0	0	2459	1575	0	0	0	457	0	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1800	5700	0	0	5700	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.49	0.31	0.00	0.00	0.43	0.83	0.00	0.00	0.00	0.25	0.00	0.34
Crit Moves:	****					****						****
Green Time:	30.5	82.5	0.0	0.0	52.0	52.0	0.0	0.0	0.0	21.5	0.0	21.5
Volume/Cap:	1.75	0.41	0.00	0.00	0.91	1.75	0.00	0.00	0.00	1.30	0.00	1.75
Delay/Veh:	386.9	5.0	0.0	0.0	30.3	369.8	0.0	0.0	0.0	198.6	0.0	394.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	386.9	5.0	0.0	0.0	30.3	369.8	0.0	0.0	0.0	198.6	0.0	394.2
LOS by Move:	F	A	A	A	C	F	A	A	A	F	A	F
HCM2kAvgQ:	80	7	0	0	30	135	0	0	0	32	0	57

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.634
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	214.7
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0	3	0 0	0 1	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0 1735	661		1076 1694		0	774		0 991	0		0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 1735	661		1076 1694		0	774		0 991	0		0
Added Vol:	0 0	0		0 0		0	0		0 0	0		0
PasserByVol:	0 0	0		0 0		0	0		0 0	0		0
Initial Fut:	0 1735	661		1076 1694		0	774		0 991	0		0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95 0.95	0.95		0.95 0.95		0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0 1826	696		1133 1783		0	815		0 1043	0		0
Reduct Vol:	0 0	0		0 0		0	0		0 0	0		0
Reduced Vol:	0 1826	696		1133 1783		0	815		0 1043	0		0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0 1826	696		1133 1783		0	815		0 1043	0		0
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900		1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95 1.00	1.00		0.95 1.00		1.00	0.95	0.95	1.00	0.95	1.00	1.00
Lanes:	0.00 3.00	1.00		1.00 3.00		0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0 5700	1900		1800 5700		0	1800		0 1900	0		0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.32	0.37		0.63 0.31		0.00	0.45	0.00	0.55	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green Time:	0.0 24.7	24.7		42.4 67.0		0.0	37.0	0.0	37.0	0.0	0.0	0.0
Volume/Cap:	0.00 1.43	1.63		1.63 0.51		0.00	1.35	0.00	1.63	0.00	0.00	0.00
Delay/Veh:	0.0 239	330.8		325.5 12.3		0.0	203.4	0.0	328.7	0.0	0.0	0.0
User DelAdj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 239	330.8		325.5 12.3		0.0	203.4	0.0	328.7	0.0	0.0	0.0
LOS by Move:	A F	F		F B		A	F	A	F	A	A	A
HCM2kAvgQ:	0 44	57		97 11		0	57		0 85	0		0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.518
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	28	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	69 1019	39		97 1248	166		166 552	106		3 441	117	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	69 1019	39		97 1248	166		166 552	106		3 441	117	
Added Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	
Initial Fut:	69 1019	39		97 1248	166		166 552	106		3 441	117	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	73 1073	41		102 1314	175		175 581	112		3 464	123	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	73 1073	41		102 1314	175		175 581	112		3 464	123	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	73 1073	41		102 1314	175		175 581	112		3 464	123	
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00	
Lanes:	1.00 2.89	0.11		1.00 2.65	0.35		1.00 1.68	0.32		1.00 1.58	0.42	
Final Sat.:	1800 5490	210		1800 5031	669		1800 3188	612		1800 3003	797	
Capacity Analysis Module:												
Vol/Sat:	0.04 0.20	0.20		0.06 0.26	0.26		0.10 0.18	0.18		0.00 0.15	0.15	
Crit Moves:	****			****			****					
Green Time:	7.0 40.6	40.6		11.8 45.3	45.3		31.7 31.7	31.7		31.7 31.7	31.7	
Volume/Cap:	0.52 0.43	0.43		0.43 0.52	0.52		0.28 0.52	0.52		0.00 0.44	0.44	
Delay/Veh:	43.3 17.0	17.0		37.3 15.2	15.2		21.2 23.5	23.5		19.0 22.6	22.6	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	43.3 17.0	17.0		37.3 15.2	15.2		21.2 23.5	23.5		19.0 22.6	22.6	
LOS by Move:	D	B	B	D	B	B	C	C	C	B	C	C
HCM2kAvgQ:	3	7	7	3	9	9	4	8	8	0	6	6

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.431
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.6
Optimal Cycle:	24	Level Of Service:	B

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	2 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	99	1118	0	0	1240	100	82	0	83	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	1118	0	0	1240	100	82	0	83	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	1118	0	0	1240	100	82	0	83	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	104	1177	0	0	1305	105	86	0	87	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	1177	0	0	1305	105	86	0	87	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	1177	0	0	1305	105	86	0	87	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.78	0.22	0.50	0.00	0.50	0.00	0.00	0.00
Final Sat.:	1800	5700	0	0	5275	425	895	0	905	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.21	0.00	0.00	0.25	0.25	0.10	0.00	0.10	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green Time:	12.1	63.8	0.0	0.0	51.7	51.7	20.2	0.0	20.2	0.0	0.0	0.0
Volume/Cap:	0.43	0.29	0.00	0.00	0.43	0.43	0.43	0.00	0.43	0.00	0.00	0.00
Delay/Veh:	37.0	4.8	0.0	0.0	10.9	10.9	30.7	0.0	30.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.0	4.8	0.0	0.0	10.9	10.9	30.7	0.0	30.7	0.0	0.0	0.0
LOS by Move:	D	A	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	3	4	0	0	7	7	5	0	5	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.798
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.1
Optimal Cycle:	63	Level Of Service:	C

Street Name:	Archibald Avenue						Eucalyptus Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 2	1	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	342	836	60	160	1237	148	191	554	590	66	361	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	342	836	60	160	1237	148	191	554	590	66	361	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	342	836	60	160	1237	148	191	554	590	66	361	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	360	880	63	168	1302	156	201	583	621	69	380	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	880	63	168	1302	156	201	583	621	69	380	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	360	880	63	168	1302	156	201	583	621	69	380	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	1.00	0.89	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	2.00	2.80	0.20	2.00	2.68	0.32	1.00	1.00	1.00	1.00	1.60	0.40
Final Sat.:	3400	5318	382	3400	5091	609	1800	1900	1900	1800	3042	758
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.17	0.05	0.26	0.26	0.11	0.31	0.33	0.04	0.12	0.12
Crit Moves:	****				****				****	****		
Green Time:	11.9	31.4	31.4	9.4	28.8	28.8	19.5	36.9	36.9	4.4	21.8	21.8
Volume/Cap:	0.80	0.47	0.47	0.47	0.80	0.80	0.52	0.75	0.80	0.80	0.52	0.52
Delay/Veh:	47.5	23.0	23.0	39.0	30.5	30.5	32.3	24.6	26.4	81.2	30.1	30.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	23.0	23.0	39.0	30.5	30.5	32.3	24.6	26.4	81.2	30.1	30.1
LOS by Move:	D	C	C	D	C	C	C	C	C	F	C	C
HCM2kAvgQ:	8	7	7	3	14	14	6	15	17	4	6	6

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.329
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	3.4
Optimal Cycle:	21	Level Of Service:	A

Street Name:	A Street						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	0 0	1! 0	0	1 0	4 0	0	0 0	3 1	0
Volume Module:												
Base Vol:	0	0	0	49	0	29	5	1886	0	0	1611	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	49	0	29	5	1886	0	0	1611	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	49	0	29	5	1886	0	0	1611	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	52	0	31	5	1985	0	0	1696	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	52	0	31	5	1985	0	0	1696	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	52	0	31	5	1985	0	0	1696	82
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.00	0.00	0.00	0.63	0.00	0.37	1.00	4.00	0.00	0.00	3.82	0.18
Final Sat.:	0	0	0	1131	0	669	1800	7600	0	0	7249	351
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.26	0.00	0.00	0.23	0.23
Crit Moves:				****				****		****		
Green Time:	0.0	0.0	0.0	12.5	0.0	12.5	0.9	71.5	0.0	0.0	70.6	70.6
Volume/Cap:	0.00	0.00	0.00	0.33	0.00	0.33	0.30	0.33	0.00	0.00	0.30	0.30
Delay/Veh:	0.0	0.0	0.0	35.7	0.0	35.7	53.5	2.6	0.0	0.0	2.7	2.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	35.7	0.0	35.7	53.5	2.6	0.0	0.0	2.7	2.7
LOS by Move:	A	A	A	D	A	D	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	1	0	4	0	0	4	4

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.542
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.6
Optimal Cycle:	29	Level Of Service:	B

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3 1	0	1 0	3 1	0
Volume Module:												
Base Vol:	0	0	0	84	0	207	216	1720	0	0	1484	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	84	0	207	216	1720	0	0	1484	27
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	84	0	207	216	1720	0	0	1484	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	88	0	218	227	1811	0	0	1562	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	88	0	218	227	1811	0	0	1562	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	88	0	218	227	1811	0	0	1562	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.00	1.00	0.00	0.29	0.00	0.71	1.00	4.00	0.00	1.00	3.93	0.07
Final Sat.:	0	1800	0	520	0	1280	1800	7600	0	1800	7464	136
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.17	0.13	0.24	0.00	0.00	0.21	0.21
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	28.3	0.0	28.3	21.0	55.7	0.0	0.0	34.8	34.8
Volume/Cap:	0.00	0.00	0.00	0.54	0.00	0.54	0.54	0.38	0.00	0.00	0.54	0.54
Delay/Veh:	0.0	0.0	0.0	26.6	0.0	26.6	31.7	8.6	0.0	0.0	21.6	21.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	26.6	0.0	26.6	31.7	8.6	0.0	0.0	21.6	21.6
LOS by Move:	A	A	A	C	A	C	C	A	A	A	C	C
HCM2kAvgQ:	0	0	0	3	0	6	6	6	0	0	9	9

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Haven Ave and Schaefer Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.644
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	21.2
Optimal Cycle:	30	Level Of Service:	C

Street Name:	Haven Avenue						Schaefer Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	304	381	0	0	477	273	354	0	343	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	304	381	0	0	477	273	354	0	343	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	304	381	0	0	477	273	354	0	343	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	320	401	0	0	502	287	373	0	361	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	401	0	0	502	287	373	0	361	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	320	401	0	0	502	287	373	0	361	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.27	0.73	0.51	0.00	0.49	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	2417	1383	914	0	886	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.18	0.11	0.00	0.00	0.21	0.21	0.41	0.00	0.41	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	29.0	29.0	0.0	0.0	29.0	29.0	57.0	0.0	57.0	0.0	0.0	0.0
Volume/Cap:	0.55	0.33	0.00	0.00	0.64	0.64	0.64	0.00	0.64	0.00	0.00	0.00
Delay/Veh:	26.3	23.2	0.0	0.0	27.3	27.3	11.5	0.0	11.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.3	23.2	0.0	0.0	27.3	27.3	11.5	0.0	11.5	0.0	0.0	0.0
LOS by Move:	C	C	A	A	C	C	B	A	B	A	A	A
HCM2kAvgQ:	8	4	0	0	10	10	14	0	14	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.7
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 1	0	1 0	2 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	328	139	148	664	0	0	0	0	10	0	303
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	328	139	148	664	0	0	0	0	10	0	303
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	328	139	148	664	0	0	0	0	10	0	303
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	345	146	156	699	0	0	0	0	11	0	319
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	345	146	156	699	0	0	0	0	11	0	319
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	345	146	156	699	0	0	0	0	11	0	319
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95
Lanes:	0.00	1.40	0.60	1.00	2.00	0.00	0.00	0.00	0.00	0.03	0.00	0.97
Final Sat.:	0	2669	1131	1800	3800	0	0	0	0	58	0	1742
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.09	0.18	0.00	0.00	0.00	0.00	0.18	0.00	0.18
Crit Moves:					****					****		
Green Time:	0.0	43.1	43.1	43.1	43.1	0.0	0.0	0.0	0.0	42.9	0.0	42.9
Volume/Cap:	0.00	0.27	0.27	0.18	0.38	0.00	0.00	0.00	0.00	0.38	0.00	0.38
Delay/Veh:	0.0	14.1	14.1	13.5	15.1	0.0	0.0	0.0	0.0	15.4	0.0	15.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.1	14.1	13.5	15.1	0.0	0.0	0.0	0.0	15.4	0.0	15.4
LOS by Move:	A	B	B	B	B	A	A	A	A	B	A	B
HCM2kAvgQ:	0	4	4	3	6	0	0	0	0	6	0	6

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 No Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Haven Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.360
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.4
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Eucalyptusl Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	27	335	66	64	549	63	93	559	72	165	457	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	335	66	64	549	63	93	559	72	165	457	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	335	66	64	549	63	93	559	72	165	457	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	28	353	69	67	578	66	98	588	76	174	481	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	353	69	67	578	66	98	588	76	174	481	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	353	69	67	578	66	98	588	76	174	481	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.67	0.33	1.00	1.79	0.21	1.00	1.77	0.23	1.00	1.83	0.17
Final Sat.:	1800	3175	625	1800	3409	391	1800	3366	434	1800	3480	320
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.11	0.04	0.17	0.17	0.05	0.17	0.17	0.10	0.14	0.14
Crit Moves:					****			****				
Green Time:	42.3	42.3	42.3	42.3	42.3	42.3	43.7	43.7	43.7	43.7	43.7	43.7
Volume/Cap:	0.03	0.24	0.24	0.08	0.36	0.36	0.11	0.36	0.36	0.20	0.28	0.28
Delay/Veh:	12.8	14.3	14.3	13.1	15.3	15.3	12.7	14.6	14.6	13.3	13.9	13.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.8	14.3	14.3	13.1	15.3	15.3	12.7	14.6	14.6	13.3	13.9	13.9
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	3	3	1	6	6	2	6	6	3	4	4

Note: Queue reported is the number of cars per lane.

HORIZON YEAR (2030) WITH PROJECT CONDITIONS

AM PEAK HOUR

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	F	188.7	1.590	F	188.7	1.590	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	F	120.9	1.277	F	120.9	1.277	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	18.9	0.423	B	18.9	0.423	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	19.4	0.499	B	19.4	0.499	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	25.8	0.631	C	25.8	0.631	+ 0.000 D/V
# 6 A St and Edison Ave	B	11.8	0.384	B	11.8	0.384	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	C	26.7	0.641	C	26.7	0.641	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	B	17.8	0.399	B	17.8	0.399	+ 0.000 D/V
# 9 Haven Ave and Park St	B	14.0	0.377	B	14.0	0.377	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.0	0.406	B	14.0	0.406	+ 0.000 D/V
# 11 A St and Park St	A	6.9	0.000	A	6.9	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St	A	7.2	0.000	A	7.2	0.000	+ 0.000 V/C
# 13 B St and Park St	A	7.9	0.000	A	7.9	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.590
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	188.7
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	542	2643	0	0	801	551	0	0	0	513	0	1590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	542	2643	0	0	801	551	0	0	0	513	0	1590
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	542	2643	0	0	801	551	0	0	0	513	0	1590
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	571	2782	0	0	843	580	0	0	0	540	0	1674
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	571	2782	0	0	843	580	0	0	0	540	0	1674
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	571	2782	0	0	843	580	0	0	0	540	0	1674
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1800	5700	0	0	5700	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.32	0.49	0.00	0.00	0.15	0.31	0.00	0.00	0.00	0.30	0.00	0.88
Crit Moves:	****					****						****
Green Time:	21.9	43.1	0.0	0.0	21.1	21.1	0.0	0.0	0.0	60.9	0.0	60.9
Volume/Cap:	1.59	1.25	0.00	0.00	0.77	1.59	0.00	0.00	0.00	0.54	0.00	1.59
Delay/Veh:	322.4	149	0.0	0.0	44.2	315.2	0.0	0.0	0.0	16.2	0.0	294.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	322.4	149	0.0	0.0	44.2	315.2	0.0	0.0	0.0	16.2	0.0	294.5
LOS by Move:	F	F	A	A	D	F	A	A	A	B	A	F
HCM2kAvgQ:	49	56	0	0	11	47	0	0	0	12	0	131

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.277
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	120.9
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0	3	0 0	0 1	0	0 1	0 0	0	0 0 0
Volume Module:												
Base Vol:	0 1941	385		271 1042		0	1243	0	863	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 1941	385		271 1042		0	1243	0	863	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0 1941	385		271 1042		0	1243	0	863	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	0.95 0.95	0.95		0.95 0.95		0.95	0.95 0.95		0.95	0.95 0.95		0.95
PHF Volume:	0 2043	405		285 1097		0	1308	0	908	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0 2043	405		285 1097		0	1308	0	908	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	0 2043	405		285 1097		0	1308	0	908	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900		1900	1900 1900		1900	1900 1900		1900
Adjustment:	0.95 1.00	1.00		0.95 1.00		1.00	0.95 0.95		1.00	0.95 1.00		1.00
Lanes:	0.00 3.34	0.66		1.00 3.00		0.00	1.00 0.00		1.00	0.00 0.00		0.00
Final Sat.:	0 6342	1258		1800 5700		0	1800	0	1900	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.32	0.32		0.16 0.19		0.00	0.73 0.00		0.48	0.00 0.00		0.00
Crit Moves:	****			****			****					
Green Time:	0.0 27.7	27.7		13.6 41.4		0.0	62.6	0.0	62.6	0.0	0.0	0.0
Volume/Cap:	0.00 1.28	1.28		1.28 0.51		0.00	1.28 0.00		0.84	0.00 0.00		0.00
Delay/Veh:	0.0 170	170.1		202.9 26.7		0.0	156.1	0.0	25.6	0.0	0.0	0.0
User DelAdj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
AdjDel/Veh:	0.0 170	170.1		202.9 26.7		0.0	156.1	0.0	25.6	0.0	0.0	0.0
LOS by Move:	A	F	F	F	C	A	F	A	C	A	A	A
HCM2kAvgQ:	0	39	39	21	10	0	84	0	27	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.423
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.9
Optimal Cycle:	24	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	113	1200	0	76	833	135	165	317	80	53	401	63
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	1200	0	76	833	135	165	317	80	53	401	63
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	1200	0	76	833	135	165	317	80	53	401	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	119	1263	0	80	877	142	174	334	84	56	422	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	1263	0	80	877	142	174	334	84	56	422	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	119	1263	0	80	877	142	174	334	84	56	422	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.58	0.42	1.00	1.60	0.40	1.00	1.73	0.27
Final Sat.:	1800	5700	0	1800	4905	795	1800	3034	766	1800	3284	516
Capacity Analysis Module:												
Vol/Sat:	0.07	0.22	0.00	0.04	0.18	0.18	0.10	0.11	0.11	0.03	0.13	0.13
Crit Moves:		****		****							****	
Green Time:	15.3	47.2	0.0	9.5	41.4	41.4	27.4	27.4	27.4	27.4	27.4	27.4
Volume/Cap:	0.39	0.42	0.00	0.42	0.39	0.39	0.32	0.36	0.36	0.10	0.42	0.42
Delay/Veh:	34.0	13.2	0.0	39.2	16.1	16.1	24.5	24.7	24.7	22.6	25.3	25.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	13.2	0.0	39.2	16.1	16.1	24.5	24.7	24.7	22.6	25.3	25.3
LOS by Move:	C	B	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	7	0	3	6	6	4	5	5	1	6	6

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.499
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.4
Optimal Cycle:	27	Level Of Service:	B

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	44	1010	106	140	805	45	76	11	76	103	11	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	1010	106	140	805	45	76	11	76	103	11	190
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	1010	106	140	805	45	76	11	76	103	11	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	46	1063	112	147	847	47	80	12	80	108	12	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	1063	112	147	847	47	80	12	80	108	12	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	1063	112	147	847	47	80	12	80	108	12	200
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	2.72	0.28	1.00	2.84	0.16	0.46	0.07	0.47	0.34	0.04	0.62
Final Sat.:	1800	5159	541	1800	5398	302	839	121	839	610	65	1125
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.21	0.08	0.16	0.16	0.10	0.10	0.10	0.18	0.18	0.18
Crit Moves:		****		****							****	
Green Time:	7.3	37.2	37.2	14.8	44.6	44.6	32.1	32.1	32.1	32.1	32.1	32.1
Volume/Cap:	0.32	0.50	0.50	0.50	0.32	0.32	0.27	0.27	0.27	0.50	0.50	0.50
Delay/Veh:	40.2	19.7	19.7	35.6	13.6	13.6	20.8	20.8	20.8	23.3	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.2	19.7	19.7	35.6	13.6	13.6	20.8	20.8	20.8	23.3	23.3	23.3
LOS by Move:	D	B	B	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	8	8	4	5	5	4	4	4	8	8	8

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.631
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.8
Optimal Cycle:	40	Level Of Service:	C

Street Name:	Archibald Avenue						Eucalyptus Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 2	1	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	569 1169	113		54 702	164		101 164	235		88 518	131	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	569 1169	113		54 702	164		101 164	235		88 518	131	
Added Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
PasserByVol:	0 0	0		0 0	0		0 0	0		0 0	0	
Initial Fut:	569 1169	113		54 702	164		101 164	235		88 518	131	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95		0.95 0.95	0.95	
PHF Volume:	599 1231	119		57 739	173		106 173	247		93 545	138	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	599 1231	119		57 739	173		106 173	247		93 545	138	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	599 1231	119		57 739	173		106 173	247		93 545	138	
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900	1900		1900 1900	1900		1900 1900	1900	
Adjustment:	0.89 1.00	1.00		0.89 1.00	1.00		0.95 1.00	1.00		0.95 1.00	1.00	
Lanes:	2.00 2.74	0.26		2.00 2.43	0.57		1.00 1.00	1.00		1.00 1.60	0.40	
Final Sat.:	3400 5198	502		3400 4621	1079		1800 1900	1900		1800 3033	767	
Capacity Analysis Module:												
Vol/Sat:	0.18 0.24	0.24		0.02 0.16	0.16		0.06 0.09	0.13		0.05 0.18	0.18	
Crit Moves:	****			****			****			****		
Green Time:	25.1 44.8	44.8		3.2 22.8	22.8		8.4 24.4	24.4		9.7 25.6	25.6	
Volume/Cap:	0.63 0.48	0.48		0.48 0.63	0.63		0.63 0.33	0.48		0.48 0.63	0.63	
Delay/Veh:	29.8 15.0	15.0		45.6 30.8	30.8		46.8 26.4	27.9		39.7 29.3	29.3	
User DelAdj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
AdjDel/Veh:	29.8 15.0	15.0		45.6 30.8	30.8		46.8 26.4	27.9		39.7 29.3	29.3	
LOS by Move:	C	B		D	C		D	C		D	C	
HCM2kAvgQ:	9	8		2	8		4	4		3	9	

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.8
Optimal Cycle:	22	Level Of Service:	B

Street Name:	A Street						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3	1 0	1 0	3	1 0
Volume Module:												
Base Vol:	76	9	90	67	8	5	17	1359	128	86	1716	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	76	9	90	67	8	5	17	1359	128	86	1716	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	9	90	67	8	5	17	1359	128	86	1716	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	80	9	95	71	8	5	18	1431	135	91	1806	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	9	95	71	8	5	18	1431	135	91	1806	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	9	95	71	8	5	18	1431	135	91	1806	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.43	0.05	0.52	0.84	0.10	0.06	1.00	3.66	0.34	1.00	3.93	0.07
Final Sat.:	782	93	926	1507	180	112	1800	6946	654	1800	7465	135
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.05	0.05	0.05	0.01	0.21	0.21	0.05	0.24	0.24
Crit Moves:		****						****		****		
Green Time:	24.0	24.0	24.0	24.0	24.0	24.0	2.4	48.2	48.2	11.8	57.7	57.7
Volume/Cap:	0.38	0.38	0.38	0.18	0.18	0.18	0.38	0.38	0.38	0.38	0.38	0.38
Delay/Veh:	27.5	27.5	27.5	25.6	25.6	25.6	48.1	12.3	12.3	36.8	7.7	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	27.5	27.5	25.6	25.6	25.6	48.1	12.3	12.3	36.8	7.7	7.7
LOS by Move:	C	C	C	C	C	C	D	B	B	D	A	A
HCM2kAvgQ:	5	5	5	2	2	2	1	6	6	3	6	6

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	26.7
Optimal Cycle:	36	Level Of Service:	C

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3 1	0	1 0	3 1	0
Volume Module:												
Base Vol:	109	20	111	26	17	161	201	1211	105	185	1563	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	20	111	26	17	161	201	1211	105	185	1563	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	20	111	26	17	161	201	1211	105	185	1563	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	115	21	117	27	18	169	212	1275	111	195	1645	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	21	117	27	18	169	212	1275	111	195	1645	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	115	21	117	27	18	169	212	1275	111	195	1645	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.45	0.08	0.47	0.13	0.08	0.79	1.00	3.68	0.32	1.00	3.92	0.08
Final Sat.:	817	150	832	229	150	1421	1800	6994	606	1800	7452	148
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.12	0.12	0.12	0.12	0.18	0.18	0.11	0.22	0.22
Crit Moves:		****			****			****			****	
Green Time:	19.7	19.7	19.7	16.8	36.5	36.5	16.5	29.8	29.8	17.7	31.0	31.0
Volume/Cap:	0.64	0.64	0.64	0.64	0.29	0.29	0.64	0.55	0.55	0.55	0.64	0.64
Delay/Veh:	35.5	35.5	35.5	38.0	18.3	18.3	38.2	24.9	24.9	34.4	25.4	25.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	35.5	35.5	38.0	18.3	18.3	38.2	24.9	24.9	34.4	25.4	25.4
LOS by Move:	D	D	D	D	B	B	D	C	C	C	C	C
HCM2kAvgQ:	8	8	8	2	1	3	7	8	8	6	11	11

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Haven Ave and Schaefer Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.399
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	17.8
Optimal Cycle:	19	Level Of Service:	B

Street Name:	Haven Avenue						Schaefer Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	0	0 0	1 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	257	555	0	0	329	244	196	0	185	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	257	555	0	0	329	244	196	0	185	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	257	555	0	0	329	244	196	0	185	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	271	584	0	0	346	257	206	0	195	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	271	584	0	0	346	257	206	0	195	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	271	584	0	0	346	257	206	0	195	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.15	0.85	0.51	0.00	0.49	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	2182	1618	926	0	874	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.00	0.00	0.16	0.16	0.22	0.00	0.22	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	35.8	35.8	0.0	0.0	35.8	35.8	50.2	0.0	50.2	0.0	0.0	0.0
Volume/Cap:	0.38	0.39	0.00	0.00	0.40	0.40	0.40	0.00	0.40	0.00	0.00	0.00
Delay/Veh:	19.6	19.5	0.0	0.0	19.6	19.6	11.6	0.0	11.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.6	19.5	0.0	0.0	19.6	19.6	11.6	0.0	11.6	0.0	0.0	0.0
LOS by Move:	B	B	A	A	B	B	B	A	B	A	A	A
HCM2kAvgQ:	6	6	0	0	6	6	7	0	7	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.377
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.0
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	158	667	6	217	180	98	139	10	148	79	11	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	667	6	217	180	98	139	10	148	79	11	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	158	667	6	217	180	98	139	10	148	79	11	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	166	702	6	228	189	103	146	11	156	83	12	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	702	6	228	189	103	146	11	156	83	12	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	702	6	228	189	103	146	11	156	83	12	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	1.98	0.02	1.00	1.29	0.71	0.47	0.03	0.50	0.56	0.08	0.36
Final Sat.:	1800	3766	34	1800	2460	1340	842	61	897	1016	141	643
Capacity Analysis Module:												
Vol/Sat:	0.09	0.19	0.19	0.13	0.08	0.08	0.17	0.17	0.17	0.08	0.08	0.08
Crit Moves:		****						****				
Green Time:	44.5	44.5	44.5	44.5	44.5	44.5	41.5	41.5	41.5	41.5	41.5	41.5
Volume/Cap:	0.19	0.38	0.38	0.26	0.16	0.16	0.38	0.38	0.38	0.18	0.18	0.18
Delay/Veh:	12.8	14.3	14.3	13.3	12.5	12.5	16.1	16.1	16.1	14.3	14.3	14.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.8	14.3	14.3	13.3	12.5	12.5	16.1	16.1	16.1	14.3	14.3	14.3
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	3	6	6	4	2	2	6	6	6	2	2	2

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Haven Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.406
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.0
Optimal Cycle:	19	Level Of Service:	B

Street Name:	Haven Avenue						Eucalyptusl Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	93	678	167	46	279	83	76	250	14	43	477	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	678	167	46	279	83	76	250	14	43	477	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	678	167	46	279	83	76	250	14	43	477	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	98	714	176	48	294	87	80	263	15	45	502	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	714	176	48	294	87	80	263	15	45	502	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	98	714	176	48	294	87	80	263	15	45	502	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.54	0.46	1.00	1.89	0.11	1.00	1.71	0.29
Final Sat.:	1800	3049	751	1800	2929	871	1800	3598	202	1800	3254	546
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.03	0.10	0.10	0.04	0.07	0.07	0.03	0.15	0.15
Crit Moves:		****									****	
Green Time:	51.8	51.8	51.8	51.8	51.8	51.8	34.2	34.2	34.2	34.2	34.2	34.2
Volume/Cap:	0.09	0.41	0.41	0.05	0.17	0.17	0.12	0.19	0.19	0.07	0.41	0.41
Delay/Veh:	8.6	10.7	10.7	8.3	9.0	9.0	18.2	18.8	18.8	17.8	20.7	20.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	10.7	10.7	8.3	9.0	9.0	18.2	18.8	18.8	17.8	20.7	20.7
LOS by Move:	A	B	B	A	A	A	B	B	B	B	C	C
HCM2kAvgQ:	1	7	7	1	2	2	2	3	3	1	6	6

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #11 A St and Park St

****

Average Delay (sec/veh): 6.9 Level Of Service: A

****

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	62	0	42	96	197	0	0	167	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	62	0	42	96	197	0	0	167	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	62	0	42	96	197	0	0	167	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	65	0	44	101	207	0	0	176	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	65	0	44	101	207	0	0	176	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	65	0	44	101	207	0	0	176	51
PCE Module:												
AutoPCE:	0	0	0	65	0	44	101	207	0	0	176	51
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	115	0	94	151	257	0	0	226	101

Delay Module: >> Time Period: 0.25 hours <<				
CircVolume:	524	226	115	151
MaxVolume:	xxxxxx	1078	1138	1118
PedVolume:	0	838	838	838
AdjMaxVol:	xxxxxx	806	882	857
ApproachVol:	xxxxxx	209	408	326
ApproachDel:	xxxxxx	6.0	7.6	6.8
Queue:	xxxx	1.0	2.5	1.8

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #12 Turner Ave and Park St

****

Average Delay (sec/veh): 7.2 Level Of Service: A

****

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	68	0	115	88	130	0	0	181	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	68	0	115	88	130	0	0	181	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	68	0	115	88	130	0	0	181	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	72	0	121	93	137	0	0	191	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	72	0	121	93	137	0	0	191	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	72	0	121	93	137	0	0	191	108
PCE Module:												
AutoPCE:	0	0	0	72	0	121	93	137	0	0	191	108
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	122	0	171	143	187	0	0	241	158
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	451			241			122			143		
MaxVolume:	xxxxxx			1070			1134			1123		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			796			878			863		
ApproachVol:	xxxxxx			293			329			399		
ApproachDel:	xxxxxx			7.1			6.5			7.7		
Queue:	xxxx			1.7			1.8			2.5		

Grand Park Specific Plan TIA
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #13 B St and Park St

****

Average Delay (sec/veh): 7.9 Level Of Service: A

****

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	161	0	115	106	128	0	0	135	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	161	0	115	106	128	0	0	135	138
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	161	0	115	106	128	0	0	135	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	169	0	121	112	135	0	0	142	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	169	0	121	112	135	0	0	142	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	169	0	121	112	135	0	0	142	145
PCE Module:												
AutoPCE:	0	0	0	169	0	121	112	135	0	0	142	145
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	219	0	171	162	185	0	0	192	195
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	566			192			219			162		
MaxVolume:	xxxxxx			1096			1081			1113		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			829			810			850		
ApproachVol:	xxxxxx			391			346			387		
ApproachDel:	xxxxxx			8.2			7.7			7.7		
Queue:	xxxx			2.6			2.2			2.4		

HORIZON YEAR (2030) WITH PROJECT CONDITIONS

PM PEAK HOUR

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	F	177.1	1.771	F	177.1	1.771	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	F	224.8	1.658	F	224.8	1.658	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	19.4	0.549	B	19.4	0.549	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	16.1	0.442	B	16.1	0.442	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	30.7	0.811	C	30.7	0.811	+ 0.000 D/V
# 6 A St and Edison Ave	A	6.1	0.398	A	6.1	0.398	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	C	23.4	0.647	C	23.4	0.647	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	C	21.2	0.668	C	21.2	0.668	+ 0.000 D/V
# 9 Haven Ave and Park St	B	14.1	0.427	B	14.1	0.427	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.7	0.382	B	14.7	0.382	+ 0.000 D/V
# 11 A St and Park St	A	5.4	0.000	A	5.4	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St	A	5.6	0.000	A	5.6	0.000	+ 0.000 V/C
# 13 B St and Park St	A	6.2	0.000	A	6.2	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.771
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	177.1
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	3 0	0	0 0	3 1	0	0 0	0 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	860	1707	0	0	2377	1496	0	0	0	434	0	618
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	860	1707	0	0	2377	1496	0	0	0	434	0	618
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	860	1707	0	0	2377	1496	0	0	0	434	0	618
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	905	1797	0	0	2502	1575	0	0	0	457	0	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	905	1797	0	0	2502	1575	0	0	0	457	0	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	905	1797	0	0	2502	1575	0	0	0	457	0	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1800	5700	0	0	5700	1900	0	0	0	1800	0	1900
Capacity Analysis Module:												
Vol/Sat:	0.50	0.32	0.00	0.00	0.44	0.83	0.00	0.00	0.00	0.25	0.00	0.34
Crit Moves:	****					****						****
Green Time:	31.2	82.7	0.0	0.0	51.5	51.5	0.0	0.0	0.0	21.3	0.0	21.3
Volume/Cap:	1.77	0.42	0.00	0.00	0.94	1.77	0.00	0.00	0.00	1.31	0.00	1.77
Delay/Veh:	394.1	5.0	0.0	0.0	32.5	377.9	0.0	0.0	0.0	204.1	0.0	402.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	394.1	5.0	0.0	0.0	32.5	377.9	0.0	0.0	0.0	204.1	0.0	402.1
LOS by Move:	F	A	A	A	C	F	A	A	A	F	A	F
HCM2kAvgQ:	83	7	0	0	31	136	0	0	0	32	0	57

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	110	Critical Vol./Cap.(X):	1.658
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	224.8
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3	1	0	1 0	3	0 0	0 1	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0 1792	661		1076 1735		0	774		0 1032	0		0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 1792	661		1076 1735		0	774		0 1032	0		0
Added Vol:	0 0	0		0 0		0	0		0 0	0		0
PasserByVol:	0 0	0		0 0		0	0		0 0	0		0
Initial Fut:	0 1792	661		1076 1735		0	774		0 1032	0		0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95 0.95	0.95		0.95 0.95		0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0 1886	696		1133 1826		0	815		0 1086	0		0
Reduct Vol:	0 0	0		0 0		0	0		0 0	0		0
Reduced Vol:	0 1886	696		1133 1826		0	815		0 1086	0		0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0 1886	696		1133 1826		0	815		0 1086	0		0
Saturation Flow Module:												
Sat/Lane:	1900 1900	1900		1900 1900		1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95 1.00	1.00		0.95 1.00		1.00	0.95	0.95	1.00	0.95	1.00	1.00
Lanes:	0.00 3.00	1.00		1.00 3.00		0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0 5700	1900		1800 5700		0	1800		0 1900	0		0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.33	0.37		0.63 0.32		0.00	0.45	0.00	0.57	0.00	0.00	0.00
Crit Moves:		****		****					****			
Green Time:	0.0 24.3	24.3		41.8 66.1		0.0	37.9	0.0	37.9	0.0	0.0	0.0
Volume/Cap:	0.00 1.50	1.66		1.66 0.53		0.00	1.31	0.00	1.66	0.00	0.00	0.00
Delay/Veh:	0.0 270	341.7		336.5 13.1		0.0	187.8	0.0	338.7	0.0	0.0	0.0
User DelAdj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 270	341.7		336.5 13.1		0.0	187.8	0.0	338.7	0.0	0.0	0.0
LOS by Move:	A F	F		F B		A	F	A	F	A	A	A
HCM2kAvgQ:	0 48	58		98 12		0	56	0	89	0	0	0

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Archibald Avenue and Schaefer Avenue

Cycle (sec):	90	Critical Vol./Cap.(X):	0.549
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	19.4
Optimal Cycle:	30	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	78	1091	39	97	1350	166	166	555	119	3	443	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	1091	39	97	1350	166	166	555	119	3	443	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	1091	39	97	1350	166	166	555	119	3	443	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	82	1148	41	102	1421	175	175	584	125	3	466	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	1148	41	102	1421	175	175	584	125	3	466	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	1148	41	102	1421	175	175	584	125	3	466	123
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.90	0.10	1.00	2.67	0.33	1.00	1.65	0.35	1.00	1.58	0.42
Final Sat.:	1800	5503	197	1800	5076	624	1800	3129	671	1800	3006	794
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.06	0.28	0.28	0.10	0.19	0.19	0.00	0.16	0.16
Crit Moves:	****				****			****				
Green Time:	7.5	42.0	42.0	11.4	45.9	45.9	30.6	30.6	30.6	30.6	30.6	30.6
Volume/Cap:	0.55	0.45	0.45	0.45	0.55	0.55	0.29	0.55	0.55	0.01	0.46	0.46
Delay/Veh:	43.9	16.3	16.3	37.8	15.2	15.2	22.0	24.6	24.6	19.6	23.4	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.9	16.3	16.3	37.8	15.2	15.2	22.0	24.6	24.6	19.6	23.4	23.4
LOS by Move:	D	B	B	D	B	B	C	C	C	B	C	C
HCM2kAvgQ:	3	7	7	3	10	10	4	8	8	0	7	7

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Archibald Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.442
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	16.1
Optimal Cycle:	25	Level Of Service:	B

Street Name:	Archibald Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	1 0	1 0	2	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	99	1128	78	135	1246	100	82	16	83	53	11	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	1128	78	135	1246	100	82	16	83	53	11	84
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	1128	78	135	1246	100	82	16	83	53	11	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	104	1187	82	142	1312	105	86	17	87	56	12	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	1187	82	142	1312	105	86	17	87	56	12	88
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	1187	82	142	1312	105	86	17	87	56	12	88
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	2.81	0.19	1.00	2.78	0.22	0.45	0.09	0.46	0.36	0.07	0.57
Final Sat.:	1800	5331	369	1800	5277	423	815	159	825	645	134	1022
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.08	0.25	0.25	0.11	0.11	0.11	0.09	0.09	0.09
Crit Moves:	****				****			****				
Green Time:	11.8	46.1	46.1	16.3	50.6	50.6	21.6	21.6	21.6	21.6	21.6	21.6
Volume/Cap:	0.44	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.36	0.36	0.36
Delay/Veh:	37.4	13.9	13.9	33.7	11.6	11.6	29.8	29.8	29.8	29.0	29.0	29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.4	13.9	13.9	33.7	11.6	11.6	29.8	29.8	29.8	29.0	29.0	29.0
LOS by Move:	D	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	7	7	4	8	8	5	5	5	4	4	4

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Archibald Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.811
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	30.7
Optimal Cycle:	66	Level Of Service:	C

Street Name:	Archibald Avenue						Eucalyptus Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 2	1	0	2 0 2	1	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	342	880	65	169	1267	168	220	558	590	70	364	105
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	342	880	65	169	1267	168	220	558	590	70	364	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	342	880	65	169	1267	168	220	558	590	70	364	105
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	360	926	68	178	1334	177	232	587	621	74	383	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	926	68	178	1334	177	232	587	621	74	383	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	360	926	68	178	1334	177	232	587	621	74	383	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	1.00	0.89	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	2.00	2.79	0.21	2.00	2.65	0.35	1.00	1.00	1.00	1.00	1.55	0.45
Final Sat.:	3400	5308	392	3400	5033	667	1800	1900	1900	1800	2949	851
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.17	0.05	0.27	0.27	0.13	0.31	0.33	0.04	0.13	0.13
Crit Moves:	****				****				****	****		
Green Time:	11.8	31.7	31.7	9.5	29.4	29.4	20.3	36.3	36.3	4.5	20.5	20.5
Volume/Cap:	0.81	0.50	0.50	0.50	0.81	0.81	0.57	0.77	0.81	0.81	0.57	0.57
Delay/Veh:	48.8	23.1	23.1	39.1	30.5	30.5	32.9	25.5	27.3	82.5	31.7	31.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.8	23.1	23.1	39.1	30.5	30.5	32.9	25.5	27.3	82.5	31.7	31.7
LOS by Move:	D	C	C	D	C	C	C	C	C	F	C	C
HCM2kAvgQ:	8	7	7	3	15	15	7	16	17	4	7	7

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 A St and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.398
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	6.1
Optimal Cycle:	23	Level Of Service:	A

Street Name:	A Street							Edison Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted					Permitted					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	3	1	0	1	0	3	1	0
Volume Module:																				
Base Vol:	35	4	44			51	6	29			5	1994			40	68	1696			79
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
Initial Bse:	35	4	44			51	6	29			5	1994			40	68	1696			79
Added Vol:	0	0	0			0	0	0			0	0			0	0	0			0
PasserByVol:	0	0	0			0	0	0			0	0			0	0	0			0
Initial Fut:	35	4	44			51	6	29			5	1994			40	68	1696			79
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95			0.95	0.95	0.95			0.95
PHF Volume:	37	4	46			54	6	31			5	2099			42	72	1785			83
Reduct Vol:	0	0	0			0	0	0			0	0			0	0	0			0
Reduced Vol:	37	4	46			54	6	31			5	2099			42	72	1785			83
PCE Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
FinalVolume:	37	4	46			54	6	31			5	2099			42	72	1785			83
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900			1900	1900	1900			1900
Adjustment:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	1.00			1.00	0.95	1.00			1.00
Lanes:	0.42	0.05	0.53			0.59	0.07	0.34			1.00	3.92			0.08	1.00	3.82			0.18
Final Sat.:	759	87	954			1067	126	607			1800	7451			149	1800	7262			338
Capacity Analysis Module:																				
Vol/Sat:	0.05	0.05	0.05			0.05	0.05	0.05			0.00	0.28			0.28	0.04	0.25			0.25
Crit Moves:							****					****				****				
Green Time:	11.4	11.4	11.4			11.4	11.4	11.4			0.9	63.7			63.7	9.0	71.8			71.8
Volume/Cap:	0.38	0.38	0.38			0.40	0.40	0.40			0.31	0.40			0.40	0.40	0.31			0.31
Delay/Veh:	37.2	37.2	37.2			37.3	37.3	37.3			54.3	5.4			5.4	39.4	2.5			2.5
User DelAdj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00			1.00
AdjDel/Veh:	37.2	37.2	37.2			37.3	37.3	37.3			54.3	5.4			5.4	39.4	2.5			2.5
LOS by Move:	D	D	D			D	D	D			D	A			A	D	A			A
HCM2kAvgQ:	3	3	3			3	3	3			0	6			6	2	4			4

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Turner Ave and Edison Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.647
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	23.4
Optimal Cycle:	36	Level Of Service:	C

Street Name:	Turner Avenue						Edison Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	3 1	0	1 0	3 1	0
Volume Module:												
Base Vol:	59	9	62	86	13	207	216	1789	85	70	1580	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	9	62	86	13	207	216	1789	85	70	1580	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	9	62	86	13	207	216	1789	85	70	1580	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	62	9	65	91	14	218	227	1883	89	74	1663	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	9	65	91	14	218	227	1883	89	74	1663	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	62	9	65	91	14	218	227	1883	89	74	1663	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	0.45	0.07	0.48	0.28	0.04	0.68	1.00	3.82	0.18	1.00	3.93	0.07
Final Sat.:	817	125	858	506	76	1218	1800	7255	345	1800	7468	132
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.18	0.18	0.18	0.13	0.26	0.26	0.04	0.22	0.22
Crit Moves:		****			****			****			****	
Green Time:	10.6	10.6	10.6	24.9	35.5	35.5	17.6	41.9	41.9	6.6	31.0	31.0
Volume/Cap:	0.65	0.65	0.65	0.65	0.45	0.45	0.65	0.56	0.56	0.56	0.65	0.65
Delay/Veh:	44.7	44.7	44.7	31.7	20.6	20.6	37.5	17.5	17.5	45.5	25.5	25.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.7	44.7	44.7	31.7	20.6	20.6	37.5	17.5	17.5	45.5	25.5	25.5
LOS by Move:	D	D	D	C	C	C	D	B	B	D	C	C
HCM2kAvgQ:	5	5	5	3	1	5	7	10	10	3	11	11

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Haven Ave and Schaefer Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	21.2
Optimal Cycle:	32	Level Of Service:	C

Street Name:	Haven Avenue								Schaefer Avenue							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Permitted				Permitted				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	305	436	0		0	558	273		354	0	344		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	305	436	0		0	558	273		354	0	344		0	0	0	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	305	436	0		0	558	273		354	0	344		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	321	459	0		0	587	287		373	0	362		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	321	459	0		0	587	287		373	0	362		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	321	459	0		0	587	287		373	0	362		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		0.95	1.00	1.00		0.95	0.95	0.95		0.95	1.00	1.00	
Lanes:	1.00	2.00	0.00		0.00	1.34	0.66		0.51	0.00	0.49		0.00	0.00	0.00	
Final Sat.:	1800	3800	0		0	2552	1248		913	0	887		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.18	0.12	0.00		0.00	0.23	0.23		0.41	0.00	0.41		0.00	0.00	0.00	
Crit Moves:						****			****							
Green Time:	31.0	31.0	0.0		0.0	31.0	31.0		55.0	0.0	55.0		0.0	0.0	0.0	
Volume/Cap:	0.52	0.35	0.00		0.00	0.67	0.67		0.67	0.00	0.67		0.00	0.00	0.00	
Delay/Veh:	24.3	22.2	0.0		0.0	26.5	26.5		13.1	0.0	13.1		0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	24.3	22.2	0.0		0.0	26.5	26.5		13.1	0.0	13.1		0.0	0.0	0.0	
LOS by Move:	C	C	A		A	C	C		B	A	B		A	A	A	
HCM2kAvgQ:	8	5	0		0	11	11		15	0	15		0	0	0	

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Haven Ave and Park St

Cycle (sec):	90	Critical Vol./Cap.(X):	0.427
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.1
Optimal Cycle:	20	Level Of Service:	B

Street Name:	Haven Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	111	342	139	149	672	108	73	11	80	10	15	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	111	342	139	149	672	108	73	11	80	10	15	304
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	342	139	149	672	108	73	11	80	10	15	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	117	360	146	157	707	114	77	12	84	11	16	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	360	146	157	707	114	77	12	84	11	16	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	117	360	146	157	707	114	77	12	84	11	16	320
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	1.42	0.58	1.00	1.72	0.28	0.44	0.07	0.49	0.03	0.05	0.92
Final Sat.:	1800	2702	1098	1800	3274	526	801	121	878	55	82	1663
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.13	0.09	0.22	0.22	0.10	0.10	0.10	0.19	0.19	0.19
Crit Moves:					****						****	
Green Time:	45.5	45.5	45.5	45.5	45.5	45.5	40.5	40.5	40.5	40.5	40.5	40.5
Volume/Cap:	0.13	0.26	0.26	0.17	0.43	0.43	0.21	0.21	0.21	0.43	0.43	0.43
Delay/Veh:	11.8	12.8	12.8	12.1	14.2	14.2	15.2	15.2	15.2	17.2	17.2	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.8	12.8	12.8	12.1	14.2	14.2	15.2	15.2	15.2	17.2	17.2	17.2
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	2	4	4	2	7	7	3	3	3	7	7	7

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
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PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Haven Ave and Eucalyptus Ave

Cycle (sec):	90	Critical Vol./Cap.(X):	0.382
Loss Time (sec):	4 (Y+R=4.0 sec)	Average Delay (sec/veh):	14.7
Optimal Cycle:	18	Level Of Service:	B

Street Name:	Haven Avenue						Eucalyptusl Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	33	419	66	80	608	76	112	560	75	165	459	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	33	419	66	80	608	76	112	560	75	165	459	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	419	66	80	608	76	112	560	75	165	459	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	35	441	69	84	640	80	118	589	79	174	483	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	441	69	84	640	80	118	589	79	174	483	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	441	69	84	640	80	118	589	79	174	483	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.78	0.22	1.00	1.76	0.24	1.00	1.75	0.25
Final Sat.:	1800	3283	517	1800	3378	422	1800	3351	449	1800	3329	471
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.13	0.05	0.19	0.19	0.07	0.18	0.18	0.10	0.15	0.15
Crit Moves:					****			****				
Green Time:	44.6	44.6	44.6	44.6	44.6	44.6	41.4	41.4	41.4	41.4	41.4	41.4
Volume/Cap:	0.04	0.27	0.27	0.09	0.38	0.38	0.14	0.38	0.38	0.21	0.32	0.32
Delay/Veh:	11.7	13.3	13.3	12.1	14.3	14.3	14.1	16.1	16.1	14.6	15.5	15.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	13.3	13.3	12.1	14.3	14.3	14.1	16.1	16.1	14.6	15.5	15.5
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	1	4	4	1	6	6	2	6	6	3	5	5

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #11 A St and Park St

****

Average Delay (sec/veh): 5.4 Level Of Service: A

****

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	21	0	56	39	120	0	0	101	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	56	39	120	0	0	101	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	21	0	56	39	120	0	0	101	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	22	0	59	41	126	0	0	106	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	22	0	59	41	126	0	0	106	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	22	0	59	41	126	0	0	106	25
PCE Module:												
AutoPCE:	0	0	0	22	0	59	41	126	0	0	106	25
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	72	0	109	91	176	0	0	156	75
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	339			156			72			91		
MaxVolume:	xxxxxx			1116			1161			1151		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			853			913			899		
ApproachVol:	xxxxxx			181			267			232		
ApproachDel:	xxxxxx			5.4			5.6			5.4		
Queue:	xxxx			0.8			1.2			1.0		

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

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Intersection #12 Turner Ave and Park St

****

Average Delay (sec/veh): 5.6 Level Of Service: A

****

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	55	0	36	42	113	0	0	95	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	55	0	36	42	113	0	0	95	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	55	0	36	42	113	0	0	95	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	58	0	38	44	119	0	0	100	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	58	0	38	44	119	0	0	100	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	58	0	38	44	119	0	0	100	45
PCE Module:												
AutoPCE:	0	0	0	58	0	38	44	119	0	0	100	45
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	108	0	88	94	169	0	0	150	95
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	371			150			108			94		
MaxVolume:	xxxxxx			1119			1142			1149		
PedVolume:	0			838			838			838		
AdjMaxVol:	xxxxxx			858			887			897		
ApproachVol:	xxxxxx			196			263			245		
ApproachDel:	xxxxxx			5.4			5.8			5.5		
Queue:	xxxx			0.9			1.2			1.1		

Grand Park Specific Plan TIA
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

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Intersection #13 B St and Park St

****

Average Delay (sec/veh): 6.2 Level Of Service: A

****

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	80	0	50	63	86	0	0	118	111
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	80	0	50	63	86	0	0	118	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	80	0	50	63	86	0	0	118	111
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	84	0	53	66	91	0	0	124	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	84	0	53	66	91	0	0	124	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	84	0	53	66	91	0	0	124	117
PCE Module:												
AutoPCE:	0	0	0	84	0	53	66	91	0	0	124	117
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	134	0	103	116	141	0	0	174	167

Delay Module: >> Time Period: 0.25 hours <<				
CircVolume:	391	174	134	116
MaxVolume:	xxxxxx	1106	1128	1137
PedVolume:	0	838	838	838
AdjMaxVol:	xxxxxx	841	869	881
ApproachVol:	xxxxxx	237	257	341
ApproachDel:	xxxxxx	6.0	5.9	6.6
Queue:	xxxx	1.2	1.2	1.8

HORIZON YEAR (2030) WITH PROJECT CONDITIONS

WITH RECOMMENDED MITIGATION MEASURES

AM PEAK HOUR

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	D	50.6	1.064	D	50.6	1.064	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	C	29.0	0.960	C	29.0	0.960	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	18.9	0.423	B	18.9	0.423	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	19.4	0.499	B	19.4	0.499	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	25.8	0.631	C	25.8	0.631	+ 0.000 D/V
# 6 A St and Edison Ave	B	11.8	0.384	B	11.8	0.384	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	C	26.7	0.641	C	26.7	0.641	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	B	17.8	0.399	B	17.8	0.399	+ 0.000 D/V
# 9 Haven Ave and Park St	B	14.0	0.377	B	14.0	0.377	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.0	0.406	B	14.0	0.406	+ 0.000 D/V
# 11 A St and Park St	A	6.9	0.000	A	6.9	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St	A	7.2	0.000	A	7.2	0.000	+ 0.000 V/C
# 13 B St and Park St	A	7.9	0.000	A	7.9	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	1.064
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	50.6
Optimal Cycle:	180	Level Of Service:	D

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	0	0 0	3 0	2	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	542	2643	0	0	801	551	0	0	0	513	0	1590
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	542	2643	0	0	801	551	0	0	0	513	0	1590
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	542	2643	0	0	801	551	0	0	0	513	0	1590
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	571	2782	0	0	843	580	0	0	0	540	0	1674
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	571	2782	0	0	843	580	0	0	0	540	0	1674
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	571	2782	0	0	843	580	0	0	0	540	0	1674
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	1.25	0.00	1.75
Final Sat.:	3400	5700	0	0	5700	3600	0	0	0	2257	0	3317
Capacity Analysis Module:												
Vol/Sat:	0.17	0.49	0.00	0.00	0.15	0.16	0.00	0.00	0.00	0.24	0.00	0.50
Crit Moves:		****		****								****
Green Time:	21.1	41.3	0.0	0.0	20.2	20.2	0.0	0.0	0.0	42.7	0.0	42.7
Volume/Cap:	0.72	1.06	0.00	0.00	0.66	0.72	0.00	0.00	0.00	0.50	0.00	1.06
Delay/Veh:	34.9	61.7	0.0	0.0	33.0	35.3	0.0	0.0	0.0	16.4	0.0	62.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.9	61.7	0.0	0.0	33.0	35.3	0.0	0.0	0.0	16.4	0.0	62.8
LOS by Move:	C	E	A	A	C	D	A	A	A	B	A	E
HCM2kAvgQ:	10	38	0	0	8	9	0	0	0	9	0	39

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.960
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3 0	1	2 0	3 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1941	385	271	1042	0	1243	0	863	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1941	385	271	1042	0	1243	0	863	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1941	385	271	1042	0	1243	0	863	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	2043	405	285	1097	0	1308	0	908	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2043	405	285	1097	0	1308	0	908	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	2043	405	285	1097	0	1308	0	908	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.89	1.00	1.00	0.95	1.00	0.99	0.95	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	1.60	0.00	1.40	0.00	0.00	0.00
Final Sat.:	0	5700	1900	3400	5700	0	2882	0	2632	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.21	0.08	0.19	0.00	0.45	0.00	0.35	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green Time:	0.0	33.6	33.6	7.9	41.5	0.0	42.5	0.0	85.1	0.0	0.0	0.0
Volume/Cap:	0.00	0.96	0.57	0.96	0.42	0.00	0.96	0.00	0.36	0.00	0.00	0.00
Delay/Veh:	0.0	39.2	23.6	82.3	16.3	0.0	33.9	0.0	0.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	39.2	23.6	82.3	16.3	0.0	33.9	0.0	0.2	0.0	0.0	0.0
LOS by Move:	A	D	C	F	B	A	C	A	A	A	A	A
HCM2kAvgQ:	0	24	9	8	7	0	29	0	2	0	0	0

Note: Queue reported is the number of cars per lane.

HORIZON YEAR (2030) WITH PROJECT CONDITIONS

WITH RECOMMENDED MITIGATION MEASURES

PM PEAK HOUR

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Archibald Ave / SR-60 WB Ramps	D	37.4	0.993	D	37.4	0.993	+ 0.000 D/V
# 2 Archibald Ave / SR-60 EB Ramps	D	52.3	1.150	D	52.3	1.150	+ 0.000 D/V
# 3 Archibald Avenue and Schaefer	B	19.4	0.549	B	19.4	0.549	+ 0.000 D/V
# 4 Archibald Ave and Park St	B	16.1	0.442	B	16.1	0.442	+ 0.000 D/V
# 5 Archibald Ave and Eucalyptus A	C	30.7	0.811	C	30.7	0.811	+ 0.000 D/V
# 6 A St and Edison Ave	A	6.1	0.398	A	6.1	0.398	+ 0.000 D/V
# 7 Turner Ave and Edison Ave	C	23.4	0.647	C	23.4	0.647	+ 0.000 D/V
# 8 Haven Ave and Schaefer Ave	C	21.2	0.668	C	21.2	0.668	+ 0.000 D/V
# 9 Haven Ave and Park St	B	14.1	0.427	B	14.1	0.427	+ 0.000 D/V
# 10 Haven Ave and Eucalyptus Ave	B	14.7	0.382	B	14.7	0.382	+ 0.000 D/V
# 11 A St and Park St	A	5.4	0.000	A	5.4	0.000	+ 0.000 V/C
# 12 Turner Ave and Park St	A	5.6	0.000	A	5.6	0.000	+ 0.000 V/C
# 13 B St and Park St	A	6.2	0.000	A	6.2	0.000	+ 0.000 V/C

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Archibald Ave / SR-60 WB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	0.993
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	37.4
Optimal Cycle:	180	Level Of Service:	D

Street Name:	Archibald Avenue						SR-60 WB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	3 0	0	0 0	3 0	2	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	860	1707	0	0	2377	1496	0	0	0	434	0	618
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	860	1707	0	0	2377	1496	0	0	0	434	0	618
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	860	1707	0	0	2377	1496	0	0	0	434	0	618
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	905	1797	0	0	2502	1575	0	0	0	457	0	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	905	1797	0	0	2502	1575	0	0	0	457	0	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	905	1797	0	0	2502	1575	0	0	0	457	0	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	0.95	1.00	0.98
Lanes:	2.00	3.00	0.00	0.00	3.00	2.00	0.00	0.00	0.00	1.42	0.00	1.58
Final Sat.:	3400	5700	0	0	5700	3600	0	0	0	2556	0	2933
Capacity Analysis Module:												
Vol/Sat:	0.27	0.32	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.18	0.00	0.22
Crit Moves:	****				****							****
Green Time:	24.1	63.9	0.0	0.0	39.8	39.8	0.0	0.0	0.0	20.1	0.0	20.1
Volume/Cap:	0.99	0.44	0.00	0.00	0.99	0.99	0.00	0.00	0.00	0.80	0.00	0.99
Delay/Veh:	60.9	5.6	0.0	0.0	41.3	45.0	0.0	0.0	0.0	36.5	0.0	60.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.9	5.6	0.0	0.0	41.3	45.0	0.0	0.0	0.0	36.5	0.0	60.1
LOS by Move:	E	A	A	A	D	D	A	A	A	D	A	E
HCM2kAvgQ:	20	7	0	0	31	30	0	0	0	11	0	18

Note: Queue reported is the number of cars per lane.

Grand Park Specific Plan TIA
2030 With Project Conditions-With Mitigations
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Archibald Ave / SR-60 EB Ramps

Cycle (sec):	90	Critical Vol./Cap.(X):	1.150
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	52.3
Optimal Cycle: OPTIMIZED		Level Of Service:	D

Street Name:	Archibald Avenue						SR-60 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3 0	1	2 0	3 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1792	661	1076	1735	0	774	0	1032	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1792	661	1076	1735	0	774	0	1032	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1792	661	1076	1735	0	774	0	1032	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	1886	696	1133	1826	0	815	0	1086	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1886	696	1133	1826	0	815	0	1086	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1886	696	1133	1826	0	815	0	1086	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	0.89	1.00	1.00	0.95	1.00	0.98	0.95	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	1.44	0.00	1.56	0.00	0.00	0.00
Final Sat.:	0	5700	1900	3400	5700	0	2586	0	2906	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.37	0.33	0.32	0.00	0.32	0.00	0.37	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:	0.0	28.7	28.7	26.1	54.7	0.0	29.3	0.0	58.5	0.0	0.0	0.0
Volume/Cap:	0.00	1.04	1.15	1.15	0.53	0.00	0.97	0.00	0.57	0.00	0.00	0.00
Delay/Veh:	0.0	62.7	116.1	111.3	10.3	0.0	43.7	0.0	9.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	62.7	116.1	111.3	10.3	0.0	43.7	0.0	9.0	0.0	0.0	0.0
LOS by Move:	A	E	F	F	B	A	D	A	A	A	A	A
HCM2kAvgQ:	0	26	34	31	10	0	22	0	11	0	0	0

Note: Queue reported is the number of cars per lane.

ROUNDABOUT ANALYSIS

WORST CASE SCENARIO

AM PEAK HOUR

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #11 A St and Park St

Average Delay (sec/veh): 15.0 Level Of Service: B

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	62	0	42	96	197	0	0	167	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	62	0	42	96	197	0	0	167	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	62	0	42	96	197	0	0	167	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	65	0	44	101	207	0	0	176	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	65	0	44	101	207	0	0	176	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	65	0	44	101	207	0	0	176	51
PCE Module:												
AutoPCE:	0	0	0	65	0	44	101	207	0	0	176	51
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	115	0	94	151	257	0	0	226	101
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	524			226			115			151		
ExitVolume:	xxxxxx			1078			1138			1118		
PedVolume:	0			3350			3350			3350		
AdjMaxVol:	xxxxxx			398			662			574		
ApproachVol:	xxxxxx			209			408			326		
ApproachDel:	xxxxxx			18.6			13.8			14.2		
Queue:	xxxx			3.0			4.3			3.5		

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #12 Turner Ave and Park St

Average Delay (sec/veh): 21.8 Level Of Service: C

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	68	0	115	88	130	0	0	181	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	68	0	115	88	130	0	0	181	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	68	0	115	88	130	0	0	181	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	72	0	121	93	137	0	0	191	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	72	0	121	93	137	0	0	191	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	72	0	121	93	137	0	0	191	108
PCE Module:												
AutoPCE:	0	0	0	72	0	121	93	137	0	0	191	108
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	122	0	171	143	187	0	0	241	158

Delay Module: >> Time Period: 0.25 hours <<				
CircVolume:	451	241	122	143
NbrVolume:	xxxxxx	1070	1134	1123
PedVolume:	0	3350	3350	3350
AdjMaxVol:	xxxxxx	365	647	595
ApproachVol:	xxxxxx	293	329	399
ApproachDel:	xxxxxx	39.6	11.2	17.5
Queue:	xxxx	6.9	2.9	5.1

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
AM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #13 B St and Park St

Average Delay (sec/veh): 30.9 Level Of Service: D

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	160	0	115	106	128	0	0	135	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	160	0	115	106	128	0	0	135	136
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	160	0	115	106	128	0	0	135	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	168	0	121	112	135	0	0	142	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	168	0	121	112	135	0	0	142	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	168	0	121	112	135	0	0	142	143
PCE Module:												
AutoPCE:	0	0	0	168	0	121	112	135	0	0	142	143
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	218	0	171	162	185	0	0	192	193
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	565			192			218			162		
MyVolume:	xxxxxx			1096			1082			1113		
PedVolume:	0			3350			3350			3350		
AdjMaxVol:	xxxxxx			476			415			549		
ApproachVol:	xxxxxx			389			346			385		
ApproachDel:	xxxxxx			33.4			39.5			20.6		
Queue:	xxxx			7.8			7.9			5.6		

ROUNDABOUT ANALYSIS

WORST CASE SCENARIO

PM PEAK HOUR

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #11 A St and Park St

Average Delay (sec/veh): 7.8 Level Of Service: A

Street Name:	A Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	21	0	56	39	120	0	0	101	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	56	39	120	0	0	101	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	21	0	56	39	120	0	0	101	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	22	0	59	41	126	0	0	106	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	22	0	59	41	126	0	0	106	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	22	0	59	41	126	0	0	106	25
PCE Module:												
AutoPCE:	0	0	0	22	0	59	41	126	0	0	106	25
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	72	0	109	91	176	0	0	156	75
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	339			156			72			91		
ExitVolume:	xxxxxx			1116			1161			1151		
PedVolume:	0			3350			3350			3350		
AdjMaxVol:	xxxxxx			561			773			724		
ApproachVol:	xxxxxx			181			267			232		
ApproachDel:	xxxxxx			9.4			7.1			7.3		
Queue:	xxxx			1.4			1.5			1.4		

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #12 Turner Ave and Park St

****

Average Delay (sec/veh): 8.5 Level Of Service: A

****

Street Name:	Turner Avenue						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	55	0	36	42	113	0	0	95	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	55	0	36	42	113	0	0	95	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	55	0	36	42	113	0	0	95	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	58	0	38	44	119	0	0	100	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	58	0	38	44	119	0	0	100	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	58	0	38	44	119	0	0	100	45
PCE Module:												
AutoPCE:	0	0	0	58	0	38	44	119	0	0	100	45
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	108	0	88	94	169	0	0	150	95
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	371			150			108			94		
NcVolume:	xxxxxx			1119			1142			1149		
PedVolume:	0			3350			3350			3350		
AdjMaxVol:	xxxxxx			577			681			716		
ApproachVol:	xxxxxx			196			263			245		
ApproachDel:	xxxxxx			9.4			8.6			7.6		
Queue:	xxxx			1.5			1.8			1.5		

Grand Park Specific Plan TIA
2030 WP - Roundabout Test Analysis
PM Peak Hour

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

Intersection #13 B St and Park St

Average Delay (sec/veh): 11.2 Level Of Service: B

Street Name:	B Street						Park Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	0			1			1			1		
Volume Module:												
Base Vol:	0	0	0	79	0	50	63	86	0	0	118	109
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	79	0	50	63	86	0	0	118	109
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	79	0	50	63	86	0	0	118	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	83	0	53	66	91	0	0	124	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	83	0	53	66	91	0	0	124	115
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	83	0	53	66	91	0	0	124	115
PCE Module:												
AutoPCE:	0	0	0	83	0	53	66	91	0	0	124	115
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	50	0	50	50	50	0	0	50	50
AdjVolume:	0	0	0	133	0	103	116	141	0	0	174	165
Delay Module: >> Time Period: 0.25 hours <<												
CircVolume:	390			174			133			116		
ExitVolume:	xxxxxx			1106			1128			1137		
PedVolume:	0			3350			3350			3350		
AdjMaxVol:	xxxxxx			518			618			660		
ApproachVol:	xxxxxx			236			257			339		
ApproachDel:	xxxxxx			12.6			9.9			11.1		
Queue:	xxxx			2.3			2.0			3.0		