Appendix E
Traffic Impact Study

URBAN CROSSROADS
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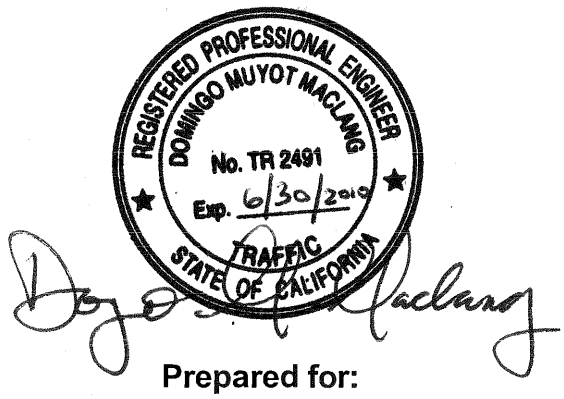

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THE AVENUE SPECIFIC PLAN AMENDMENT
TRAFFIC IMPACT STUDY (REVISED)
CITY OF ONTARIO, CALIFORNIA

December 10, 2008 (Revised)
August 27, 2008

JN:05279-06
CW:DM:lr

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CITY OF ONTARIO, CALIFORNIA

1.0 INTRODUCTION

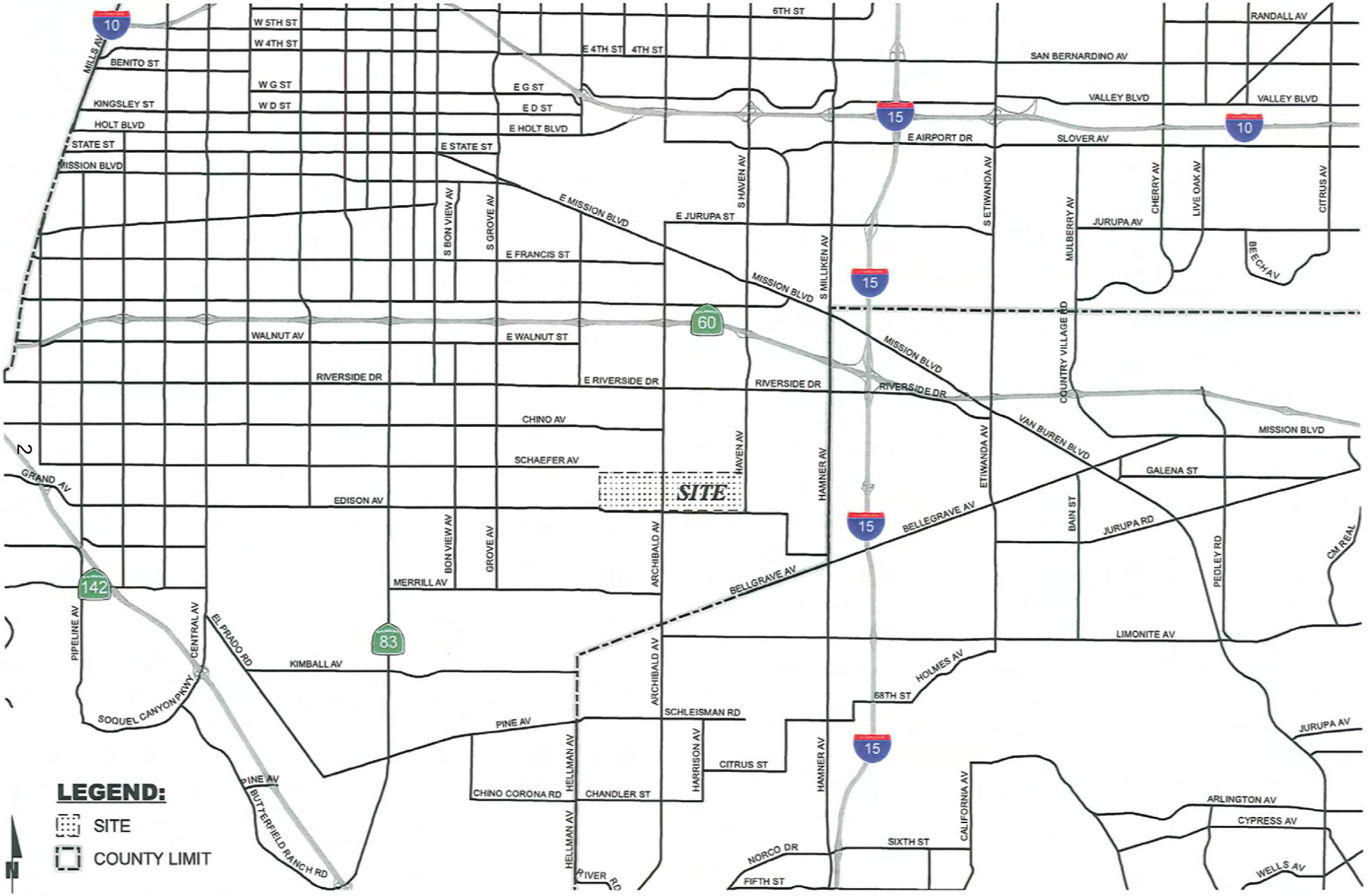
This report summarizes the traffic impact analysis conducted to assess the potential impacts of the proposed The Avenue Specific Plan Amendment on the roadway system in the study area. Urban Crossroads, Inc. previously prepared a traffic study for The Avenue Specific Plan (SPA) in September 2006. Due to the changes in the project's description (increase of intensity) and relocation of land uses, this new traffic study has been prepared. This new traffic study will specifically address potential impacts related to the increase in project intensity/trip generation and relocation of the commercial and residential in the easterly portions of the project. The Avenue SPA also includes the proposed realignment of Schaefer Avenue on the easterly side of the project. The increase in land use includes 286 dwelling units and 76,000 square feet of commercial use. The Avenue encompasses approximately 569 acres, comprised of the entire original New Model Colony Subarea 18 delineation (approximately 315 gross acres) and including areas formerly a part of Subarea 12 (approximately 59 acres), Subarea 17 (approximately 134 acres) and Subarea 23 (approximately 47 acres). The Avenue Specific Plan Amendment will update the regulations and guidelines, which will govern the development of the overall community. The westerly boundary of the Specific Plan is Carpenter Avenue, and the easterly boundary is Haven Avenue. The northerly and southerly boundaries are Schaefer Avenue and Edison Avenue, respectively. The general location of the project site is presented on Exhibit 1-A.

Previous traffic impact studies for the overall New Model Colony, including The Avenue Specific Plan has been prepared in conformance with the requirements of the San Bernardino County Congestion Management Program (CMP) and the California Environmental Quality Act (CEQA). The City of Ontario fee program conforms to the requirements of the San Bernardino CMP Nexus Study, eliminating the need for CMP related traffic analysis. This focused study evaluates traffic conditions for Existing conditions and Interim Year (2015) and Long Range (2030) Conditions, in accordance with CEQA Section 15152.

The introduction to this report presents an overview of the project and provides a brief description of the study area. The analysis methodologies used to evaluate the impacts of the project are described and

EXHIBIT 1-A

PROJECT LOCATION MAP



The Avenue Specific Plan Amendment
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URBAN CROSSROADS

the definitions of roadway system deficiencies and significant project impacts are presented in the context of the CMP and CEQA requirements.

Subsequent sections of the report will describe the project in detail and provide a complete description of existing and projected traffic conditions within the study area.

1.1 Project Overview

The Avenue Specific Plan development is located east of Carpenter Avenue, west of Haven Avenue, south of Schaefer Avenue and north of Edison Avenue in the City of Ontario. The Avenue Specific Plan is illustrated in Exhibit 1-B, per the proposed amendment. As shown on Exhibit 1-B, The Avenue Specific Plan has been divided into 11 planning areas and includes a mix of residential, commercial, school and park uses. A more detailed site plan emphasizing the road and driveway configurations are illustrated on Exhibit 1-C.

Additional detailed discussion of the roadway network features of the project, traffic generation characteristics, and detailed trip distributions will be provided in subsequent sections of this report.

1.2 Study Area

The overall study area evaluated in this traffic study was developed through discussions with City of Ontario staff. The sixteen (16) study area intersections analyzed in this study are listed below and shown on Exhibit 1-D:

Hellman Avenue (NS) at:

1. The Avenue (EW) – future intersection

Archibald Avenue (NS) at:

2. Chino Avenue (EW) – existing intersection
3. Schaefer Avenue (EW) – currently exists with Schaefer Avenue as a private road. Public access to this road is currently restricted.
4. The Avenue (EW) – future intersection
5. Edison Avenue (EW) – existing intersection

"A" Street (NS) at:

EXHIBIT 1-B

THE AVENUE SPECIFIC PLAN AMENDMENT PLANNING AREAS

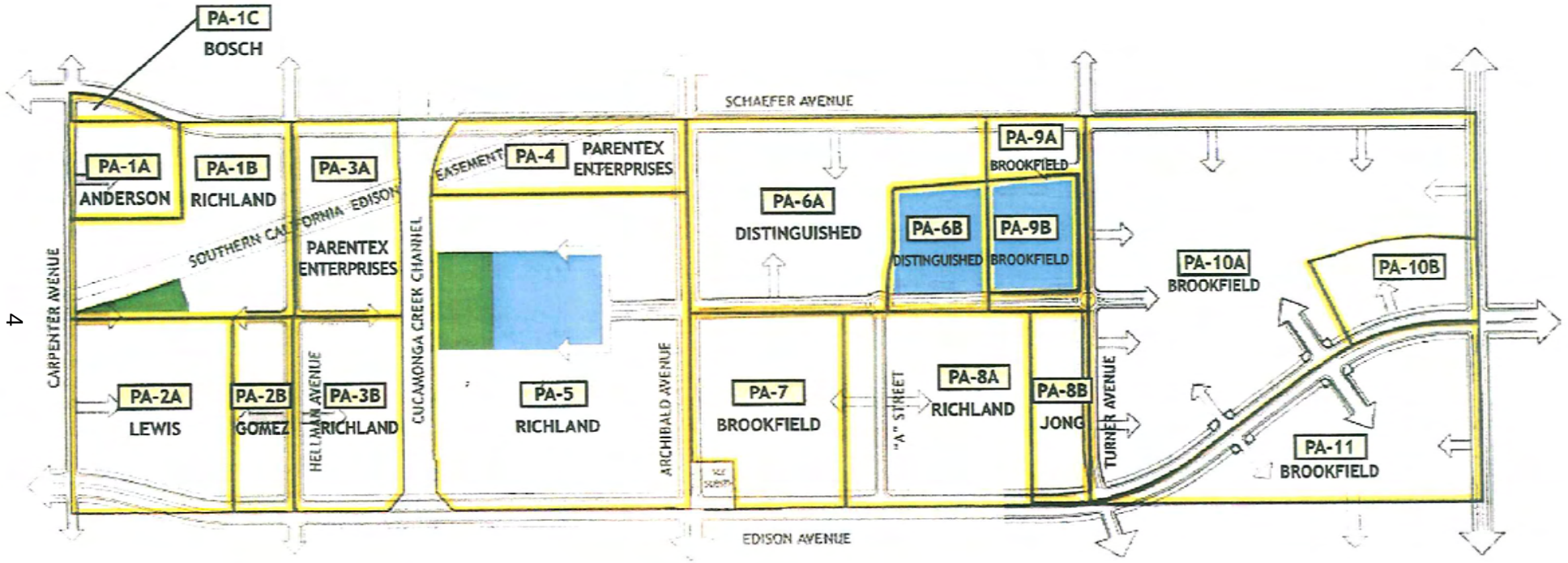

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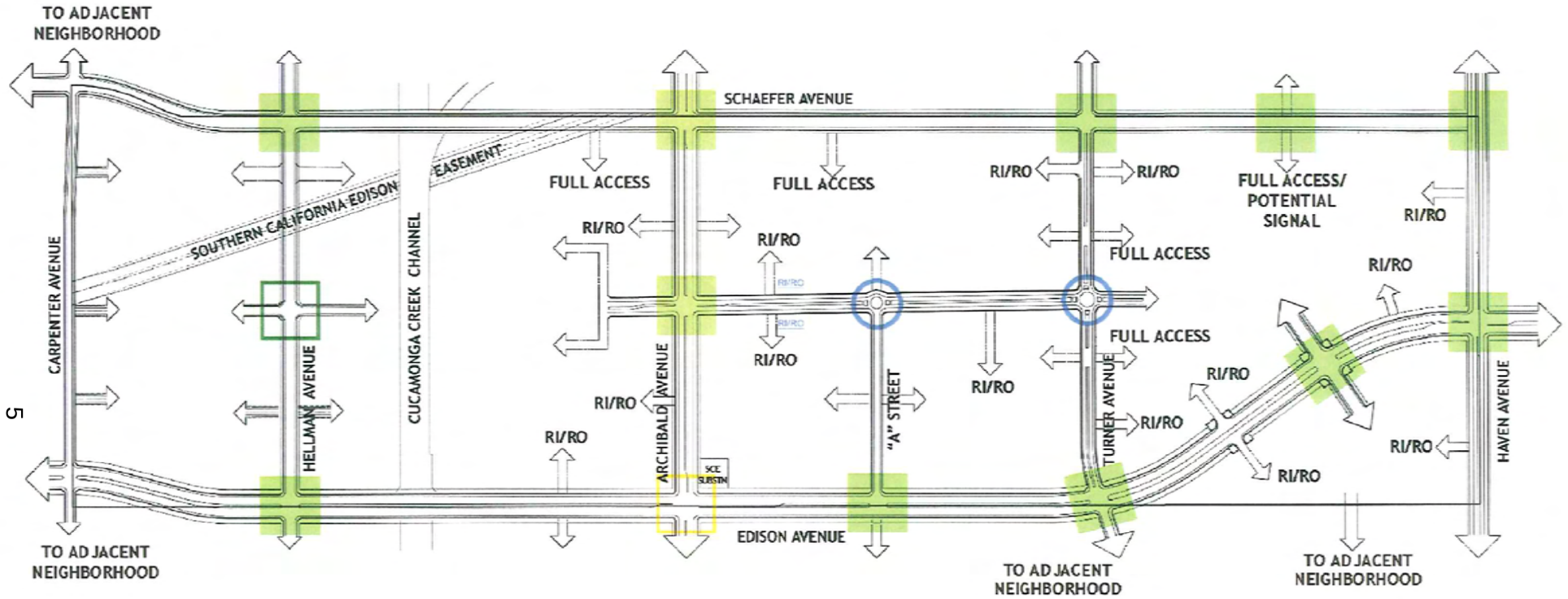
EXHIBIT 1-C

THE AVENUE SPECIFIC PLAN AMENDMENT
PROPOSED PROJECT ENTRIES AND TRAFFIC CONTROLS



LEGEND

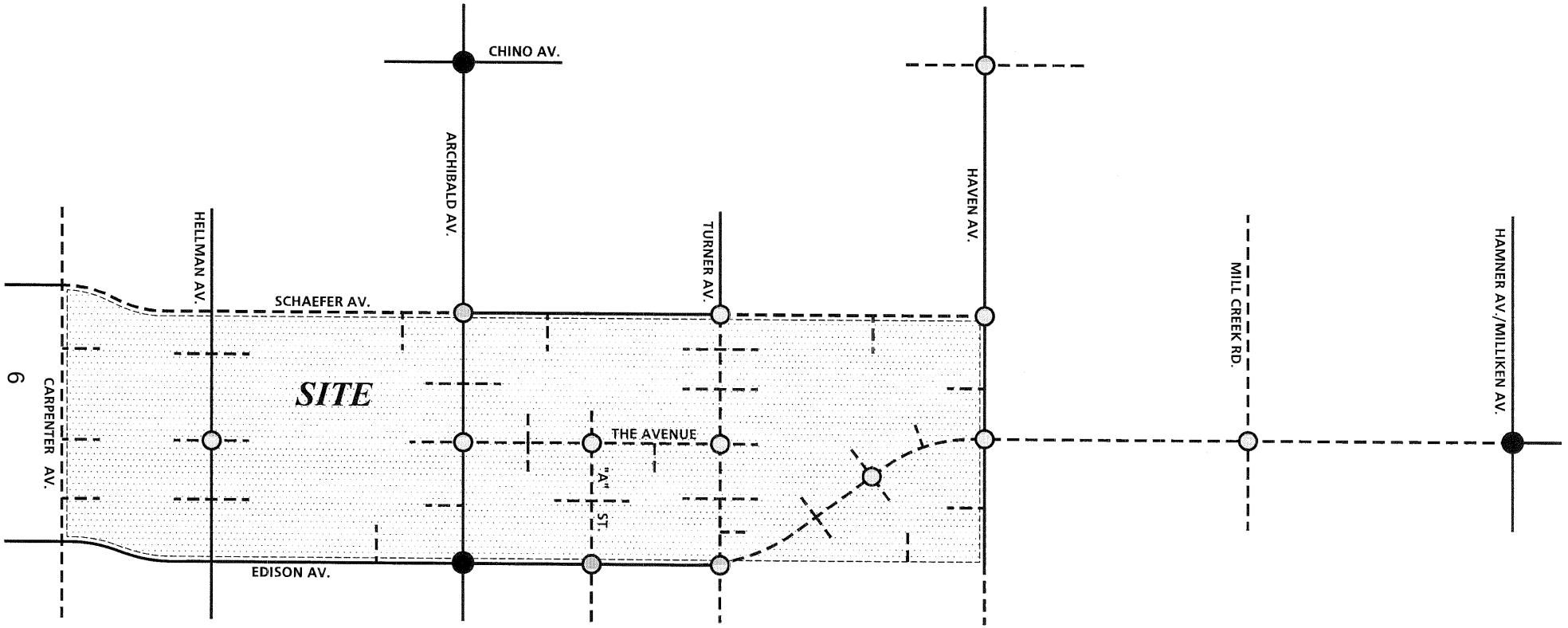
- ROUNDABOUT
- NEW SIGNALIZED INTERSECTION
- EXISTING SIGNALIZED INTERSECTION (TO BE MODIFIED)
- SIGNAL MAY BE WARRANTED

N

NOTE: The locations of entry points is conceptual. Precise locations will be determined as part of the tract map process.

EXHIBIT 1-D

STUDY AREA INTERSECTIONS



LEGEND:

● = EXISTING INTERSECTION ANALYSIS LOCATION

○ = FUTURE INTERSECTION ANALYSIS LOCATION

N

NOTE: EAST LEG OF ARCHIBALD AVENUE AT SCHAEFER AVENUE IS A PRIVATE ROAD (ie - PUBLIC ACCESS IS RESTRICTED)

6. The Avenue (EW) – future intersection
7. Edison Avenue (EW) – future intersection

Turner Avenue (NS) at:

8. Schaefer Avenue (EW) – future intersection
9. The Avenue (EW) – future intersection
10. Edison Avenue (EW) – future intersection

Planning Area (PA) 10 and 11 Driveway (NS) at:

11. Edison Avenue (EW) – future intersection

Haven Avenue (NS) at:

12. Chino Avenue (EW) – future intersection
13. Schaefer Avenue (EW) – future intersection
14. Edison Avenue (EW) – future intersection

Mill Creek Avenue (NS) at:

15. Edison Avenue (EW) – future intersection

Hamner (Milliken) Avenue (NS) at:

16. Edison Avenue (EW) – existing intersection

Three (3) of the above intersections are existing intersections and thirteen (13) of them are future intersections. Although the intersection of Archibald Avenue at Schaefer Avenue currently exists, posted signs observed during field inventory indicate Schaefer Avenue is a private road restricting public access.

1.3 Analysis Methodologies

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. This focused traffic analysis has been prepared to support the environmental process required to develop The Avenue Specific Plan Amendment as an element or specific component of the overall New Model Colony. The detailed methodologies described in the remainder of this section are generally consistent with the San Bernardino County Congestion Management Program traffic study guidelines. The following analysis years are considered in this report:

- Existing Conditions
- Interim Year (2015) Conditions Without and With Project
- Long Range (2030) Conditions Without and With Project

For analysis purposes, it has been assumed that The Avenue Specific Plan Amendment will be fully developed by 2015, consistent with the Avenue Specific Plan. The overall methodologies used to develop future traffic volume forecasts, and the explicit traffic operations analysis methodologies are summarized herein. The primary section of interest to the non-technically oriented reviewer is Section 1.4.2 (Definition of Significant Impact).

1.3.1 Overall Analysis Methodology

As described previously, traffic conditions are evaluated in this report for existing conditions and two (2) future years (2015 and 2030). All traffic counts have been obtained in late 2007. The traffic counts have been adjusted to reflect passenger car equivalences (PCEs). The PCE factors utilized are as follows:

- Passenger cars – 1.0
- Buses/Recreational vehicles – 1.5
- 3 axle units – 2.0
- 4 axle or more units – 3.0

The Interim Year (2015) and Long Range (2030) with project traffic volumes have been obtained from the traffic model maintained by Iteris, Inc. in consultation and coordination with City of Ontario staff. The Ontario New Model Colony travel demand model is currently being used for planning for the City of Ontario. Flow conservation checks and forecast adjustments were performed as necessary to ensure the future traffic volume forecasts are reasonable. These two sets of model volumes represent Interim Year (2015) With Project and Long Range (2030) With Project conditions.

Project traffic volumes for The Avenue Specific Plan Amendment were estimated using the manual approach described in the CMP guidelines. The trip generation calculation is based on the most recent Institute of Transportation Engineers Trip Generation Rates, 7th Edition. The Avenue Specific Plan trip distributions used in this traffic study are

based on the project trip distribution patterns utilized in the previously published in The Avenue Specific Plan traffic study (dated September 2006). The project only traffic forecasts have been generated by applying the trip generation, distribution and traffic assignment calculations.

The Avenue Specific Plan Amendment project only traffic volumes were then subtracted from the Interim Year (2015) With Project volumes to represent the Interim Year (2015) Without Project conditions. Similarly, the Avenue Specific Plan Amendment project only traffic volumes were subtracted from the Long Range (2030) With Project volumes to represent the Long Range (2030) Without Project conditions. These calculations are further discussed and presented in Appendix "G".

1.3.2 Traffic Operations Analysis

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM) (Transportation Research Board Special Report 209). The HCM defines level of service as a qualitative measure which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS (Level of Service) conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted.

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

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.

- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

Uninterrupted flow is generally found only on limited access (freeway) facilities in urban areas.

The definitions of level of service for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control.

The level of service is typically dependent on the quality of traffic flow at the intersections along a roadway. The HCM methodology expresses the level of service at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control. The levels of service determined in this study are calculated using the HCM methodology (via Traffix software).

For signalized intersections, average total delay per vehicle for the overall intersection is used to determine level of service. Levels of service at signalized study intersections have been evaluated using an HCM intersection analysis program (Traffix).

The study area intersections which are stop sign controlled with stop-control on the minor street only have been analyzed using the two-way stop-controlled unsignalized intersection analysis methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at these locations to calculate average intersection delay; the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on total delay per vehicle for the worst minor street movement(s).

The levels of service are defined in terms of average delay for the intersection analysis methodology as follows:

LEVEL OF SERVICE	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)	
	SIGNALIZED	UNSIGNALIZED
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up

Per CMP guidelines, signalized intersections are considered deficient (LOS "F") if the overall intersection critical volume to capacity (V/C) ratio equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined LOS standard. The V/C ratio is defined as the critical volumes divided by the intersection capacity. A V/C ratio greater than 1.0 implies an infinite queue.

The software used to analyze the design parameters of the roundabout was a fully interactive program for aiding roundabout design. RODEL is an engineering tool that uses empirical equations to determine the LOS, delay and design parameters essential

uses empirical equations to determine the LOS, delay and design parameters essential for an efficient roundabout. RODEL has been thoroughly validated through extensive fieldwork. The roundabout design parameters and traffic volumes are the variables used to evaluate the efficiency and operations of the roundabout.

The LOS analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase in accordance with San Bernardino CMP recommended default values. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings have also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all HCM runs:

[(Curb to Curb distance) / (4 feet/second)] +5 seconds

For Existing and Interim Year (2015) analyses, saturation flow rates of 1,800 vehicles per hour of green (vphg) for through and right turn lanes and 1,700 vehicles for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for all capacity analysis. These are the default values recommended by the CMP guidelines for Interim Year (2015) analysis.

For Long Range (2030) analyses, saturation flow rates of 1,900 vehicles per hour of green (vphg) for through and right turn lanes and 1,800 vehicles for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,600 vehicles per lane for triple left turn lanes have been assumed for all capacity analysis. These are the default values recommended by the CMP guidelines for Long Range (2030) analysis.

As required by the San Bernardino CMP traffic study guidelines, the peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios analyzed. In accordance with City of Ontario and the San Bernardino CMP traffic study guidelines, the peak hour factor from the field counts were utilized in the Existing and Interim Year analysis. A peak hour factor of 0.75 has been used where the field counts indicate a peak hour factor less than 0.75. A peak hour factor of 0.95 was utilized in the 2030 analysis, consistent with the San Bernardino County CMP traffic study guidelines.

1.4 Definition of Deficiency and Significant Impact

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of Ontario requirements.

1.4.1 Definition of Deficiency

The definition of an intersection deficiency has been obtained from the City of Ontario Staff. Discussion with City staff indicates that the established City Wide target peak hour intersection operations of LOS "D" or better are considered acceptable. Therefore, any City of Ontario intersection operating at LOS "E" or worse will be considered deficient.

The identification of a CMP deficiency requires further analysis in satisfaction of CEQA requirements, including:

- Evaluation of the mitigation measures required to restore traffic operations to an acceptable level of service with respect to regional and local jurisdiction LOS standards.

- Calculation of the project share of new traffic on the impacted facility during peak hours of traffic, or identifying the appropriate fee to be paid by the project that will construct the necessary improvement(s).

- Estimation of the cost required to implement the improvements required to restore traffic operations to an acceptable level of service as described above, or identifying the appropriate fee to be paid by the project that will construct the necessary improvement(s).

This study incorporates each of these aspects for all locations where a deficiency is identified.

1.4.2 Definition of Significant Impact

The identification of significant impacts is a requirement of CEQA. The City of Ontario General Plan and Circulation Element (including the New Model Colony) have been

adopted in accordance with CEQA requirements, and any roadway improvements within the City of Ontario, which are consistent with these documents are not considered a significant impact, so long as the project contributes its "fair share" funding for improvements.

A traffic impact is considered significant and unmitigable if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the level of service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the City of Ontario General Plan cannot be constructed.

2.0 PROJECT DESCRIPTION AND CMP TRAFFIC CONTRIBUTION TEST

This section describes the project land uses and traffic characteristics for the future horizon year analyzed. The analysis location intersections were determined based on direction from City of Ontario staff.

2.1 Project Description

The Avenue Specific Plan proposed development is located east of Carpenter Avenue, west of Haven Avenue, south of Schaefer Avenue and north of Edison Avenue in the City of Ontario. Exhibit 1-B (presented previously) illustrates the different planning areas that comprise The Avenue Specific Plan per the proposed amendment. The Avenue Specific Plan includes a mix of residential, commercial retail, and school uses. The Avenue Specific Plan Amendment proposes an increase of 76,000 square feet of commercial space and 286 dwelling units in addition to the previous plan of 174,000 square feet of commercial space and 2,320 dwelling units.

Additional detailed discussion of the roadway network features of the project and its traffic generation characteristics (The Avenue Specific Plan compared to The Avenue Specific Plan Amendment) will be provided in subsequent sections of this report.

2.2 Project Traffic

The traffic related to the project has been calculated in accordance with the following accepted procedural steps:

- Trip Generation
- Trip Distribution
- Traffic Assignment

These steps are described in detail below.

2.2.1 Project Trip Generation

The Avenue Specific Plan Amendment proposes an increase of 76,000 square feet of commercial space and 286 dwelling units in addition to the previous plan of 174,000 square feet of commercial space and 2,320 dwelling units. This report is an amendment to the

previous The Avenue Specific Plan traffic impact study and is evaluating the "project" as only the net change in trip generation (discussed below).

The trip generation calculation is based on the most recent Institute of Transportation Engineers Trip Generation Rates, 7th Edition. The Avenue Specific Plan Amendment divides the development into eleven planning areas.

Not all of the vehicle trips expected to be generated by the retail component of the proposed project will be new trips on the roadway network. A significant portion of these trips will consist of pass-by trips or vehicles already traveling along roadways adjacent to the project site for other purposes that will patronize the proposed development in conjunction with their trip and then continue on to their original destination. These trips are not new trips on the roadway network as a result of the retail component of the planned project. Statistics published by the Institute of Transportation Engineers (ITE) indicate that, on average, up to 34 percent of the trips generated by shopping centers consist of pass-by trips. However, in order to provide a conservative (high) assessment of project-related impacts on the transportation infrastructure, a 25 percent pass-by trip rate was applied to the trip generation for the retail component of the project. A discussion of "pass-by" trips is contained in Appendix "A".

Given the mix of uses proposed as part of the planned development, it is expected that a portion of the trips generated by the proposed project will consist of dual-purpose or internally captured trips. By way of example, a resident may also patronize the retail uses within the development. Similarly, a retail employee within the development may live in the residences within the site. This characteristic of mixed-use developments is not accounted for when the trip generation calculations are performed on an individual land use basis. Studies documented by ITE for mixed-use developments have shown internal capture rates ranging as high as 55 percent during the peak commuter periods. However, in order to provide a conservative (high) analysis scenario, a more conservative assessment of the mixed use capture has been completed. The rate was applied to the traffic volumes associated with the proposed development. Based on the ITE Multi-Use development trip generation and internal capture summary sheet, the internal capture during the PM peak hours is approximately 8%, with 8% daily internal capture. Appendix "B" contained the Multi-Use Development Trip Generation and internal capture summary worksheets.

Table 2-1 summarizes the trip rates utilized to calculate the trip generation for The Avenue Specific Plan Amendment. As shown on Table 2-1, the trip generation calculations include of ITE land use codes "210" (Single Family Detached Housing), "230" (Condos), "520" (Elementary School), "522" (Middle School) and "820" (Shopping Center). Table 2-2 presents the overall trip generation calculated for The Avenue Specific Plan. The land use intensities identified on Table 2-2 reflect The Avenue Specific Plan Amendment which consists of a more intense retail component and additional dwelling units in comparison to the original The Avenue Specific Plan. As shown on Table 2-2, the entire The Avenue Specific Plan (with the proposed amendment) generates 35,147 daily vehicles with 2,730 vehicles and 3, 462 vehicles in the AM and PM peak hour, respectively.

The trip generation previously evaluated in The Avenue Specific Plan Traffic Impact Study prepared by Urban Crossroads, Inc. (dated September 22, 2006) is shown on Table 2-3. As shown on Table 2-3, the previously evaluated Specific Plan generates 31,876 daily vehicles with 2,619 vehicles and 3, 186 vehicles in the AM and PM peak hour, respectively.

Table 2-4 presents the trip generation comparison between the Avenue Specific Plan Amendment and the Avenue Specific Plan. As shown on Table 2-4, the majority of land use and intensity changes occur towards the easterly portion of the site where Planning Areas 10 and 11 are located. As previously discussed, the net change between the Specific Plan Amendment and the Specific Plan is identified as the "project" in this report. Based on this information, the "project" generates +3,272 daily vehicles with +113 vehicles and +279 vehicles in the AM and PM peak hour, respectively.

2.2.2 Project Trip Distribution and Assignment

The project trip distribution and assignment process represents the directional orientation of traffic to and from the project site. The trip distributions utilized in this traffic study have been based on the trip distributions presented in the previous The Avenue Specific Plan traffic study (dated September 22, 2006). These trip distributions have also been adjusted to reflect the relocation of the land uses (commercial and residential) along the easterly portions of the project and the realignment of Schaefer Avenue as indicated in the current Specific Plan Amendment. Appendix "C" includes trip distributions

Table 2-1

Trip Generation Rates[1]

Land Use	ITE Code	Units[2]	Peak Hour						Daily
			AM			PM			
			In	Out	Total	In	Out	Total	
Project Trip Rates:									
Single-Family Detached Housing	210	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Shopping Center - 87 TSF	820	TSF	1.01	0.65	1.66	3.15	3.41	6.56	71.3
Shopping Center - 163 TSF	820	TSF	0.79	0.5	1.29	2.55	2.76	5.31	57.24
Condominiums	230	DU	0.07	0.37	0.44	0.35	0.17	0.52	5.86
Elementary School[3]	520	STD	0.23	0.19	0.42	NOM[4]	NOM	NOM	1.29
Middle School[3]	522	STD	0.29	0.24	0.53	0.08	0.07	0.15	1.62

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation (7th Edition, 2003), Land Use Code 210

[2] DU = Dwelling Units, KSF=Thousand Square Feet, STD=Students

[3] Number of Students were provided by City of Ontario Staff; this quantity has not changed from the previously published Specific Plan.

[4] NOM = Nominal

Table 2-2 (1 of 2)

The Avenue Specific Plan Amendment
Full Trip Generation by Planning Area

Land Use Planning Area	ITE Code	Quantity	Units[1]	Peak Hour AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily
Planning Area 1:										
Residential 1A	210	51	DU	10	29	38	33	19	52	488
Internal Capture (8%)				1	2	3	3	2	4	39
Total Net Residential Area 1A				9	27	35	30	17	48	449
Residential 1B	210	127	DU	24	71	95	81	47	128	1,215
Internal Capture (8%)				2	6	8	7	4	10	97
Total Net Residential Area 1B				22	65	87	74	43	118	1,118
Residential 1C	210	5	DU	1	3	4	3	2	5	48
Internal Capture (8%)				0	0	0	0	0	0	4
Total Net Residential Area 1C				1	3	4	3	2	5	44
Total Net Trips Area 1				**32**	**94**	**126**	**107**	**62**	**171**	**1,611**
Planning Area 2:										
Residential 2A	210	147	DU	28	82	110	94	54	148	1,407
Internal Capture (8%)				2	7	9	8	4	12	113
Total Net trips Area 2A				26	75	101	86	50	136	1,294
Residential 2B	210	58	DU	11	32	44	37	21	59	555
Internal Capture (8%)				1	3	3	3	2	5	44
Total Net Residential Area 2B				10	29	41	34	19	54	511
Total Net Trips Area 2				**36**	**105**	**142**	**120**	**70**	**190**	**1,805**
Planning Area 3:										
Residential 3A	210	86	DU	16	48	65	55	32	87	823
Internal Capture (8%)				1	4	5	4	3	7	66
Total Net Residential Area 3A				15	44	60	51	29	80	757
Residential 3B	210	97	DU	18	54	73	62	36	98	928
Internal Capture (8%)				1	4	6	5	3	8	74
Total Net Residential Area 3B				17	50	67	57	33	90	854
Total Net Trips Area 3				**33**	**94**	**126**	**108**	**62**	**170**	**1,611**
Planning Area 4:										
Commercial	820	87	KSF	88	57	144	274	297	571	6,203
Pass-By (25%)				22	14	36	69	74	143	1,551
Total Net Trips Area 4				**66**	**42**	**108**	**206**	**223**	**428**	**4,652**
Planning Area 5:										
Residential Area 5	210	334	DU	63	187	251	214	124	337	3,196
Internal Capture (8%)				5	15	20	17	10	27	256
Total Net Residential Area 5				58	172	230	197	114	310	2,941
Elementary school[2] or 92 Dus	520	850	STD	196	162	357	59	34	93	1,097
Total Net Trips Area 5				**254**	**334**	**587**	**256**	**148**	**403**	**4,037**
Planning Area 6:										
Middle school 6B	522	450	STD	131	108	239	36	32	68	729
Residential Area 6A	210	230	DU	44	129	173	147	85	232	2,201
Internal Capture (8%)				3	10	14	12	7	19	176
Total Net Residential Area 6A				41	119	159	135	78	213	2,025
Total Net Trips Area 6				**171**	**227**	**397**	**171**	**110**	**281**	**2,754**
Planning Area 7:										

Table 2-2 (2 of 2)

The Avenue Specific Plan Amendment
Full Trip Generation by Planning Area

Land Use Planning Area	ITE Code	Quantity	Units[1]	Peak Hour AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily
Residential Area 7	210	175	DU	33	98	131	112	65	177	1,675
Internal Capture (8%)				3	8	11	9	5	14	134
Total Net Trips Area 7				**30**	**90**	**120**	**103**	**60**	**163**	**1,541**
Planning Area 8:										
Residential 8A	210	180	DU	34	101	135	115	67	182	1,723
Internal Capture (8%)				3	8	11	9	5	15	138
Total Net Residential Area 8A				31	93	124	106	62	167	1,585
Residential 8B	210	44	DU	8	25	33	28	16	44	421
Internal Capture (8%)				1	2	3	2	1	4	34
Total Net Residential Area 8B				7	23	30	26	15	40	387
Total Net Trips Area 8				**39**	**115**	**154**	**132**	**77**	**207**	**1,972**
Planning Area 9:										
Residential 9A	210	48	DU	9	27	36	31	18	48	459
Internal Capture (8%)				1	2	3	2	1	4	37
Total Net Residential Area 9A				8	25	33	29	17	44	422
Middle school Area 9B	522	450	STD	131	108	239	36	32	68	729
Total Net Trips Area 9				**139**	**133**	**272**	**65**	**49**	**112**	**1,151**
Planning Area 10:										
Commercial 10B	820	163	KSF	129	82	210	416	450	866	9,330
Pass-By (25%)				32	20	53	104	112	216	2,333
Net Commercial Trips				97	61	158	312	337	649	6,998
Residential 10A (SF)	210	305	DU	58	171	229	195	113	308	2,919
Internal Capture (8%)				5	14	18	16	9	25	234
Total Net Residential Area 10A (SF)				53	157	211	179	104	283	2,685
Residential 10A (MF)	230	412	DU	29	152	181	144	70	214	2,414
Internal Capture (8%)				2	12	15	12	6	17	193
Total Net Residential Area 10A (MF)				27	140	166	132	64	197	2,221
Total Net Trips Area 10				**176**	**358**	**535**	**623**	**505**	**1,129**	**11,904**
Planning Area 11:										
Residential 11 (SF)	210	133	DU	25	74	100	85	49	134	1,273
Internal Capture (8%)				2	6	8	7	4	11	102
Total Net Trips Area 11 (SF)				23	68	92	78	45	123	1,171
Residential 11 (MF)	230	174	DU	12	64	77	61	30	90	1,020
Internal Capture (8%)				1	5	6	5	2	7	82
Total Net Residential Area 11 (MF)				11	59	71	56	28	83	938
Overall Net Trips Area 11				**34**	**128**	**162**	**134**	**73**	**207**	**2,108**
Total Net Project Traffic		**2,606**	**DU**	**1,010**	**1,721**	**2,730**	**2,025**	**1,437**	**3,462**	**35,147**

[1] DU = Dwelling Units, KSF=Thousand Square Feet, STD=Students

Table 2-3 (1 of 2)

The Avenue Specific Plan Trip Generation by Planning Area

Land Use Planning Area	ITE Code	Quantity	Units[2]	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Planning Area 1:										
Residential 1A	210	51	DU	10	29	38	33	19	52	488
Internal Capture (8%)				1	2	3	3	2	4	39
Total Net Residential Area 1A				9	27	35	30	17	48	449
Residential 1B	210	127	DU	24	71	95	81	47	128	1,215
Internal Capture (8%)				2	6	8	7	4	10	97
Total Net Residential Area 1B				22	65	87	74	43	118	1,118
Total Residential Area 1				34	100	134	114	66	180	1,703
Total Residential Internal Capture				3	8	11	10	6	14	136
Total Net Trips Area 1				31	92	123	104	60	166	1,567
Planning Area 2:										
Residential 2A	210	147	DU	28	82	110	94	54	148	1,407
Internal Capture (8%)				2	7	9	8	4	12	113
Total Net trips Area 2A				26	75	101	86	50	136	1,294
Residential 2B	210	58	DU	11	32	44	37	21	59	555
Internal Capture (8%)				1	3	3	3	2	5	44
Total Net Residential Area 2B				10	29	41	34	19	54	511
Total Residential Area 2				39	115	154	131	76	207	1,962
Total Residential Internal Capture				3	10	12	11	6	17	157
Total Net Trips Area 2A				36	105	142	120	70	190	1,805
Planning Area 3:										
Residential 3A	210	86	DU	16	48	65	55	32	87	823
Internal Capture (8%)				1	4	5	4	3	7	66
Total Net Residential Area 3A				15	44	60	51	29	80	757
Residential 3B	210	97	DU	18	54	73	62	36	98	928
Internal Capture (8%)				1	4	6	5	3	8	74
Total Net Residential Area 3B				17	50	67	57	33	90	854
Total Residential Area 3				35	102	137	117	68	185	1,751
Total Residential Internal Capture				2	8	11	9	6	15	140
Total Net Trips Area 3				33	94	126	108	62	170	1,611
Planning Area 4:										
Commercial	820	87	KSF	88	57	144	274	297	571	6,203
Pass-By (25%)				22	14	36	69	74	143	1,551
Total Area 4				66	42	108	206	223	428	4,652
Planning Area 5:										
Residential Area 5	210	334	DU	63	187	251	214	124	337	3,196
Internal Capture (8%)				5	15	20	17	10	27	256
Total Net Residential Area 5				58	172	230	197	114	310	2,941
Elementary school[2] or 92 Dus	520	850	STD	196	162	357	59	34	93	1,097
Total Area 5				254	334	587	256	148	403	4,037
Planning Area 6:										
Middle school 6B	522	450	STD	131	108	239	36	32	68	729
Residential Area 6A	210	230	DU	44	129	173	147	85	232	2,201
Internal Capture (8%)				3	10	14	12	7	19	176
Total Net Residential Area 6A				41	119	159	135	78	213	2,025
Total Net Area 6				171	227	397	171	110	281	2,754
Planning Area 7:										
Residential	210	171	DU	32	96	128	109	63	173	1,636
Internal Capture (8%)				3	8	10	9	5	14	131
Total Net trips Area 7				29	88	118	100	58	159	1,505

Table 2-3 (2 of 2)

The Avenue Specific Plan Trip Generation by Planning Area

Land Use Planning Area	ITE Code	Quantity	Units[2]	Peak Hour						Daily
				AM			PM			
				In	Out	Total	In	Out	Total	
Planning Area 8:										
Residential 8A	210	135	DU	26	76	101	86	50	136	1,292
Internal Capture (8%)				2	6	8	7	4	11	103
Total Net Residential Area 8A				24	70	93	79	46	125	1,189
Residential 8B	210	43	DU	8	24	32	28	16	43	412
Internal Capture (8%)				1	2	3	2	1	3	33
Total Net Residential Area 8B				7	22	29	26	15	40	379
Total Residential Area 8				34	100	134	114	66	180	1,703
Total Residential Internal Capture				3	8	11	9	5	14	136
Total Net Trips Area 8				31	92	123	105	61	166	1,567
Planning Area 9:										
Residential 9A	210	35	DU	7	20	26	22	13	35	335
Internal Capture (8%)				1	2	2	2	1	3	27
Total Net Residential Area 9A				6	18	24	20	12	32	308
Residential 9C	210	251	DU	48	141	188	161	93	254	2,402
Internal Capture (8%)				4	11	15	13	7	20	192
Total Net Residential Area 9C				44	130	173	148	86	234	2,210
Residential 9D	210	89	DU	17	50	67	57	33	90	852
Internal Capture (8%)				1	4	5	5	3	7	68
Total Net Residential Area 9D				16	46	62	52	30	83	784
Residential 9 (transfer)	210	41	DU	8	23	31	26	15	41	392
Internal Capture (8%)				1	2	2	2	1	3	31
Total Net Residential Area 9 (transfer)				7	21	29	24	14	38	361
Total Residential Area 9				79	233	312	266	154	420	3,981
Total Residential Internal Capture				7	19	24	22	12	33	318
Total Net Residential Trips Area 9				72	214	288	244	142	387	3,663
Middle school Area 9B	522	450	STD	131	108	239	36	32	68	729
Total Net Trips Area 9				203	322	527	280	173	455	4,392
Planning Area 10:										
Commercial 10A	820	87	KSF	88	57	144	274	297	571	6,203
Pass-By (25%)				22	14	36	69	74	143	1,551
Total Commercial Net trips				66	42	108	206	223	428	4,652
Residential 10A	210	100	DU	19	56	75	64	37	101	957
Internal Capture (8%)				2	4	6	5	3	8	77
Total Net Residential Area 10A				17	52	69	59	34	93	880
Residential 10A	230	120	DU	8	44	53	42	20	62	703
Internal Capture (8%)				1	4	4	3	2	5	56
Total Net Residential Area 10B				7	40	49	39	18	57	647
Residential 10B	210	23	DU	4	13	17	15	9	23	220
Internal Capture (8%)				0	1	1	1	1	2	18
Total Net Residential Area 10B				4	12	16	14	8	21	202
Total Net Trips Area 10				95	147	242	317	282	600	6,382
Planning Area 11:										
Residential 11	210	182	DU	35	102	137	116	67	184	1,742
Internal Capture (8%)				3	8	11	9	5	15	139
Total Net Trips Area 11				32	94	126	107	62	169	1,603
Total Net Project Traffic		2,320		980	1,636	2,619	1,875	1,309	3,186	31,876

[1] DU = Dwelling Units, KSF=Thousand Square Feet, STD=Students

[2] The PM peak hour was based on the possible replacement of the school with 92 SFDU.

Table 2-4 (1 of 1)

The Avenue Specific Plan Amendment and Specific Plan Comparison (IE - Project)
Trip Generation by Planning Area

Land Use Planning Area	ITE Code	Quantity	Units[1]	Peak Hour AM In	AM Out	AM Total	PM In	PM Out	PM Total	Daily
New Net Total PA1 Trips				32	95	126	108	62	171	1,611
Old Net Total PA1 Trips				31	92	122	105	60	166	1,567
Difference in PA1 Trips (New-Old)	210	5	DU	**1**	**3**	**4**	**3**	**2**	**5**	**44**
New Net Total PA2 Trips				36	105	142	120	70	190	1,805
Old Net Total PA2 Trips				36	105	142	120	70	190	1,805
Difference in PA 2 Trips (New-Old)				**0**	**0**	**0**	**0**	**0**	**0**	**0**
New Net Total PA3 Trips				33	94	126	108	62	170	1,611
Old Net Total PA3 Trips				33	94	126	108	62	170	1,611
Difference in PA 3 Trips (New-Old)				**0**	**0**	**0**	**0**	**0**	**0**	**0**
New Net Total PA4 Trips				66	42	108	206	223	428	4,652
Old Net Total PA4 Trips				66	42	108	206	223	428	4,652
Difference in PA 4 Trips (New-Old)				**0**	**0**	**0**	**0**	**0**	**0**	**0**
New Net Total PA5 Trips				254	334	587	256	148	403	4,037
Old Net Total PA5 Trips				254	334	587	256	148	403	4,037
Difference in PA5 Trips (New-Old)				**0**	**0**	**0**	**0**	**0**	**0**	**0**
New Net Total PA6 Trips				171	227	397	171	110	281	2,754
Old Net Total PA6 Trips				171	227	397	171	110	281	2,754
Difference in PA6 Trips (New-Old)				**0**	**0**	**0**	**0**	**0**	**0**	**0**
New Net Total PA7 Trips				30	90	121	103	60	163	1,541
Old Net Total PA7 Trips				29	88	118	100	58	159	1,505
Difference in PA7 Trips (New-Old)	**210**	**4**	**DU**	**1**	**2**	**3**	**3**	**2**	**4**	**36**
New Net Total PA8 Trips				38	116	154	132	77	207	1,972
Old Net Total PA8 Trips				31	92	122	105	61	165	1,568
Difference in PA8 Trips (New-Old)	**210**	**46**	**DU**	**7**	**24**	**32**	**27**	**16**	**42**	**404**
New Net Total PA 9A Trips				8	25	33	29	17	44	422
Old Net Total PA 9A Trips				6	18	24	20	12	32	308
Difference in PA 9A Trips	**210**	**7**	**DU**	**2**	**7**	**9**	**9**	**5**	**12**	**114**
New Net Total PA 9B Trips				131	108	239	36	32	68	729
Old Net Total PA 9B Trips				131	108	239	36	32	68	729
Difference in PA 9A Trips	**522**	**0**	**STU**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TAZ 781										
New PA 10A Total Net Trips				97	62	158	312	338	650	6,998
New PA 10B Total Net Trips				80	297	378	311	168	480	4,906
New PA 10A and 10B Total Net Trips				177	359	536	623	506	1,130	11,904
Old PA 9C Total Net Trips				44	130	173	148	86	234	2,210
Old PA 9D Total Net Trips (with transfer)				23	67	91	76	44	121	1,145
Old PA 10B Total Net Trips				4	12	16	14	8	21	202
Old PA 11 Total Net Trips				32	94	126	107	62	169	1,603
Old PA 9C, 9D, 10B, 11 Total Net Trips				103	303	406	345	200	545	5,160
New TAZ 781 TOTAL				**74**	**56**	**130**	**278**	**306**	**585**	**6,744**
TAZ 791										
New PA 11 Total Net Trips				34	127	163	134	73	206	2,109
Old PA 10A Total Net Trips				90	135	226	304	275	578	6,179
New PA 11 - Old PA 10A Total Net Trips				**-56**	**-8**	**-63**	**-170**	**-202**	**-372**	**-4,070**
Total Net Project Traffic				**1,009**	**1,722**	**2,731**	**2,026**	**1,438**	**3,464**	**35,148**
Previous Traffic Study Total Net Traffic				**981**	**1,638**	**2,618**	**1,875**	**1,310**	**3,185**	**31,876**
Net Project (Difference)				**28**	**84**	**113**	**151**	**128**	**279**	**3,272**

[1] DU = Dwelling Units, KSF=Thousand Square Feet, STD=Students

[2] Totals may be differ by 1 due to rounding

excerpts from the previous traffic study. Urban Crossroads, Inc. has also reviewed the select zone data/plots for the subject project from the latest model runs (July 2008). Based on our evaluation of this information, the trip distributions utilized in this SPA traffic study are generally a consistent representative of those presented in the previously published traffic study (dated September 2006).

The project traffic detailed trip distributions for each of the different planning areas within The Avenue Specific Plan Amendment are shown on Exhibits 2-A through 2-R.

2.2.3 Project Only Traffic Volume Forecasts

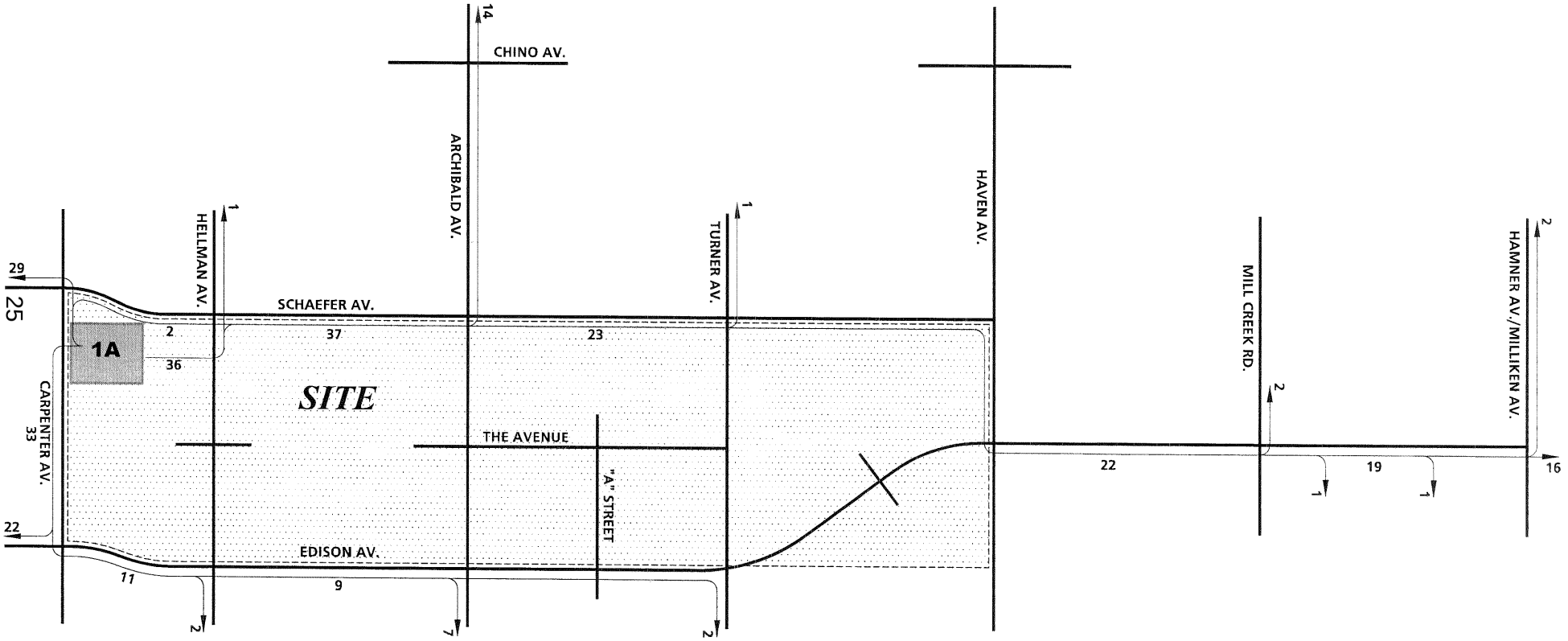
The project AM, PM and daily volume traffic forecasts have been generated by applying the trip generation, distribution and traffic assignment calculations. The internal capture has been applied to the residential trip generation, but was assigned credit to the roadway system in conjunction with the school and retail trip generation to avoid "double counting".

The ADT volumes attributable to the project only are presented on Exhibit 2-S. As shown on Exhibit 2-S, the highest project daily traffic volumes occur on Schaefer Avenue between Turner Avenue and Haven Avenue, where a project only volume of 2,900 VPD is projected. The AM and PM peak hour project only traffic forecasts are depicted on Exhibit 2-T and Exhibit 2-U. As shown on these exhibits, the project only PM peak hour volumes are higher than the project only AM peak hour volumes. The project only traffic volume trends correspond closely to the trends described previously for daily traffic conditions. The highest peak hour project contribution occurs at the intersection of Haven Avenue (NS) at Schaefer Avenue (EW).

Additionally, some study area intersections are assigned negative project only volumes. This is due to the relocation of land uses (commercial and residential) towards the easterly portion of the site and the realignment of Schaefer Avenue. With the relocation of the commercial area, formerly on the south side of Edison Avenue, commercial project only trips (located in Planning Area 10) are anticipated to utilize internal roadways (such as The Avenue) to access adjacent roadways (such as Schaefer Avenue) rather than travel along Haven Avenue and Turner Avenue.

EXHIBIT 2-A

PLANNING AREA 1A TRIP DISTRIBUTION



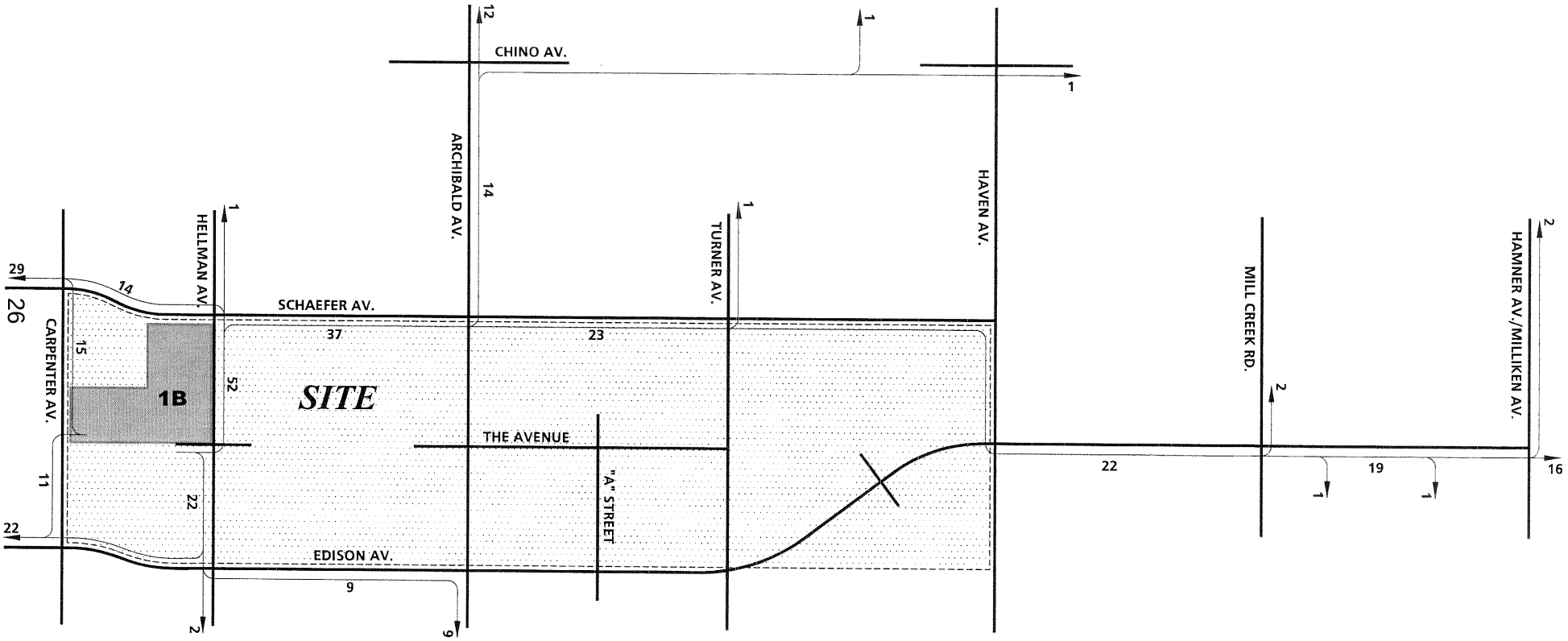
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-B

PLANNING AREA 1B TRIP DISTRIBUTION



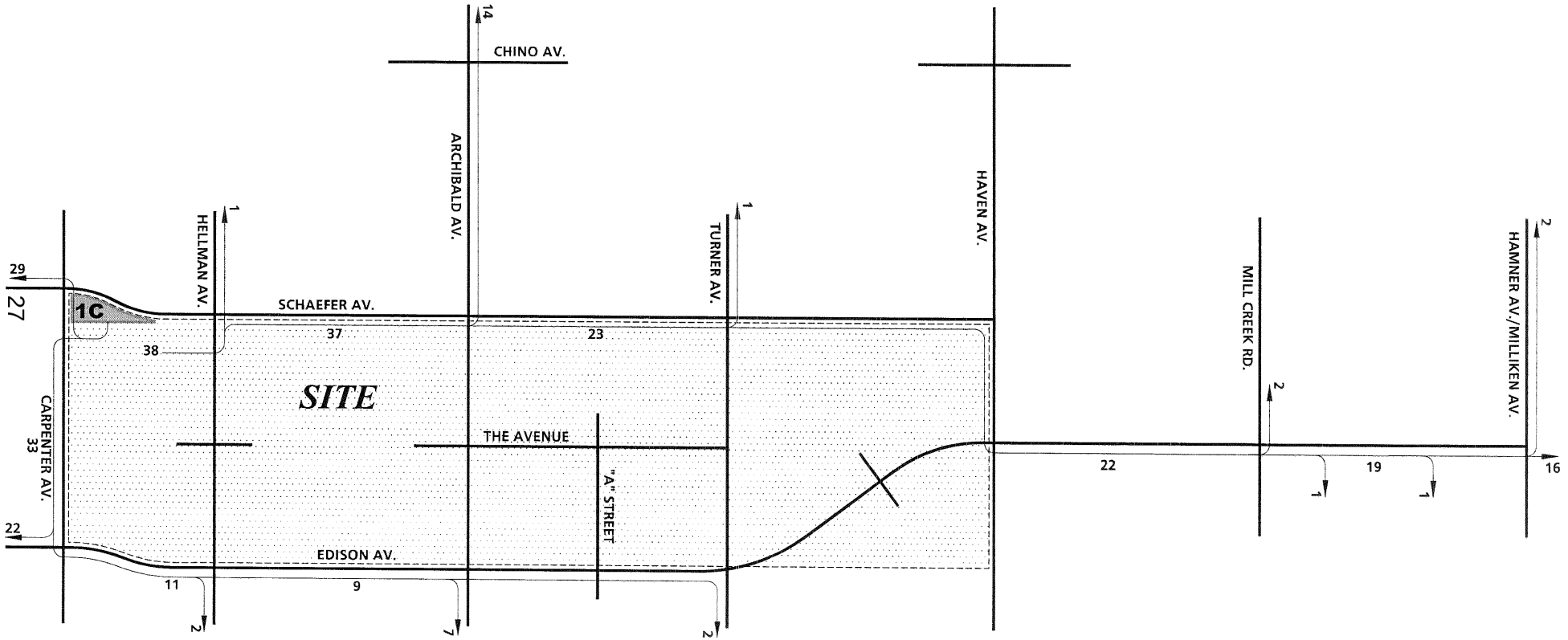
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-C

PLANNING AREA 1C TRIP DISTRIBUTION



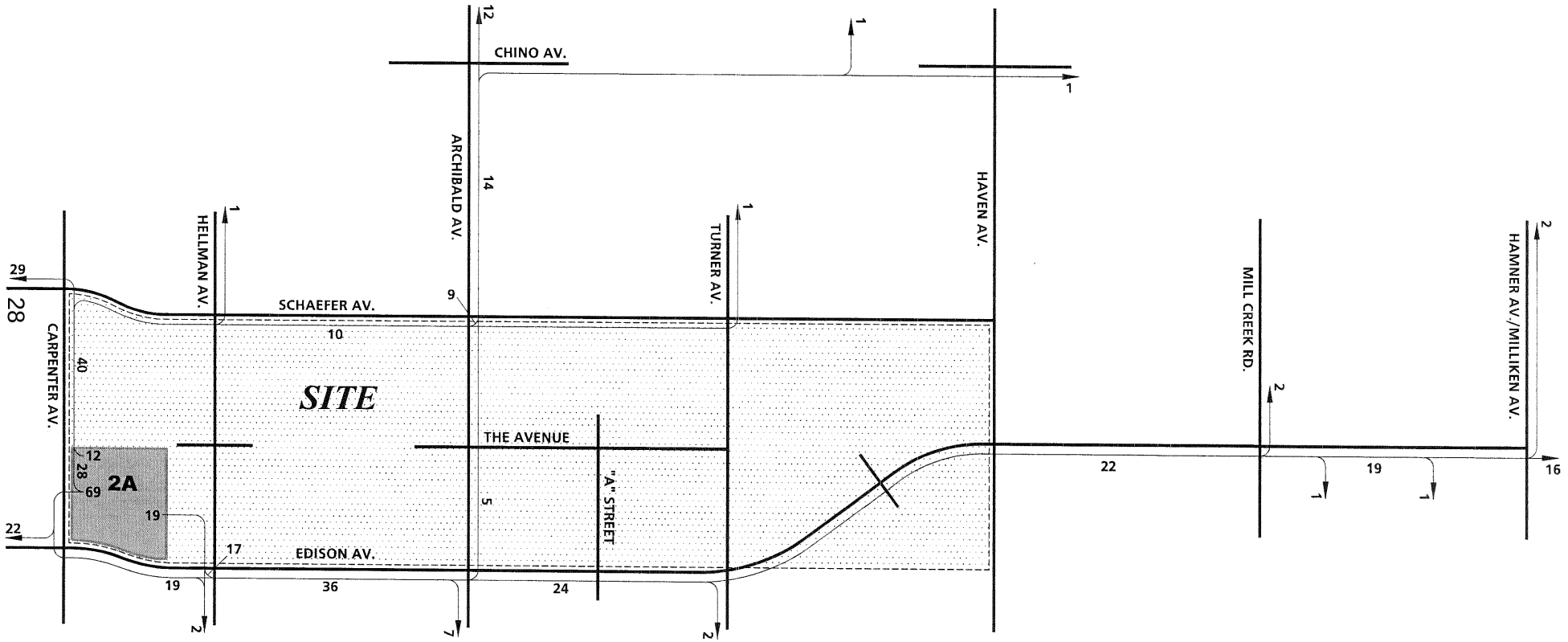
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-D

PLANNING AREA 2A TRIP DISTRIBUTION



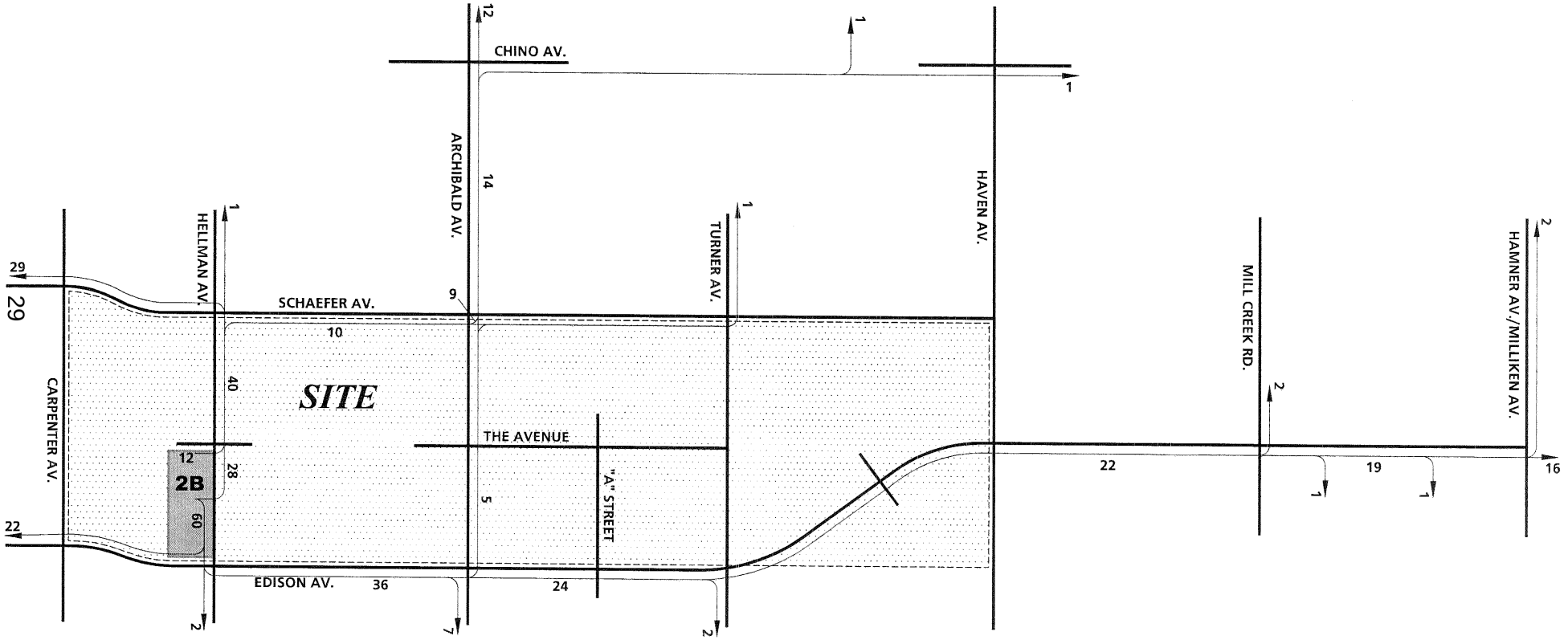
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-E

PLANNING AREA 2B TRIP DISTRIBUTION



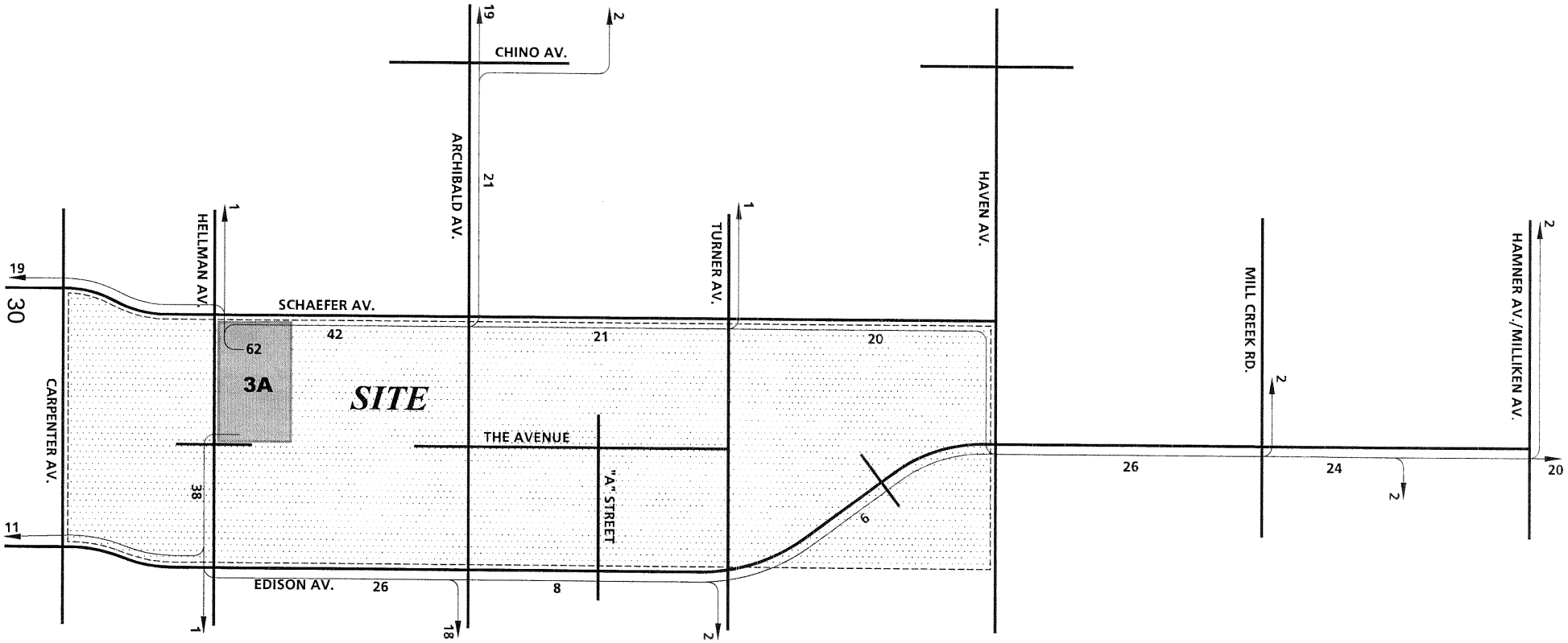
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-F

PLANNING AREA 3A TRIP DISTRIBUTION



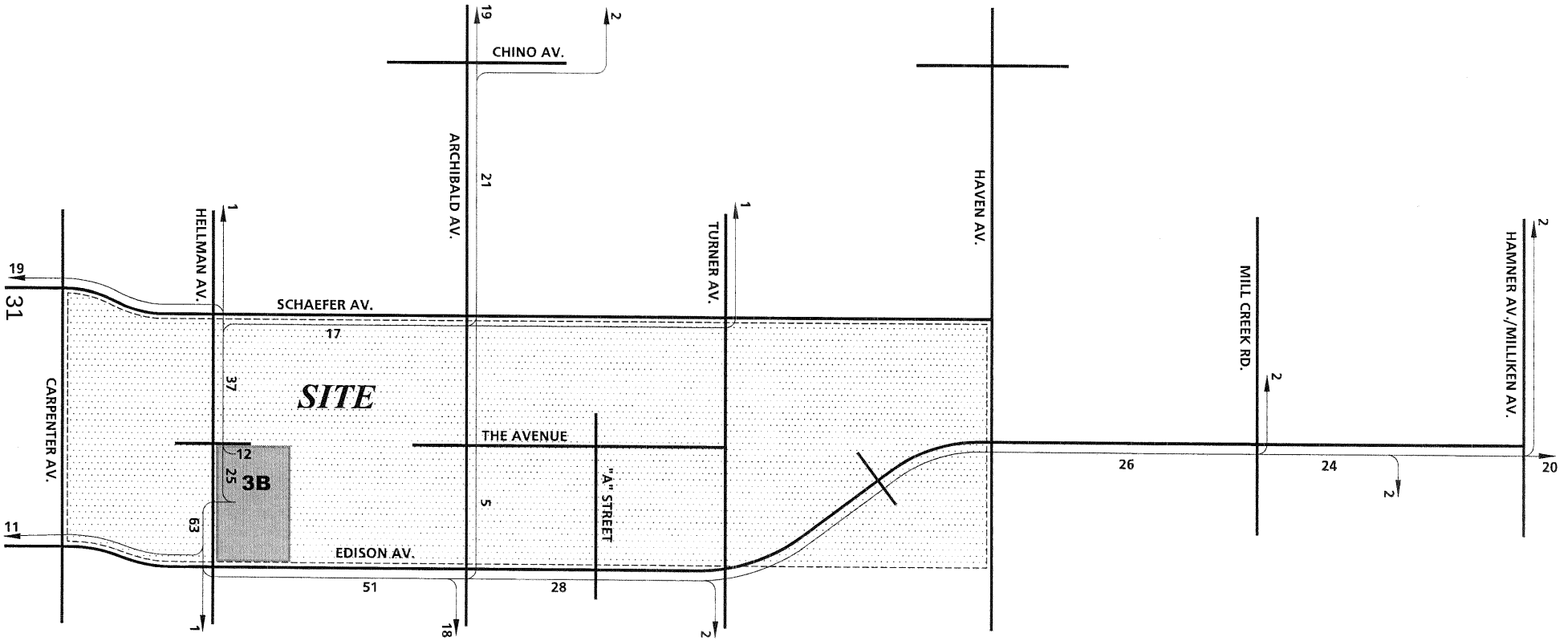
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-G

PLANNING AREA 3B TRIP DISTRIBUTION



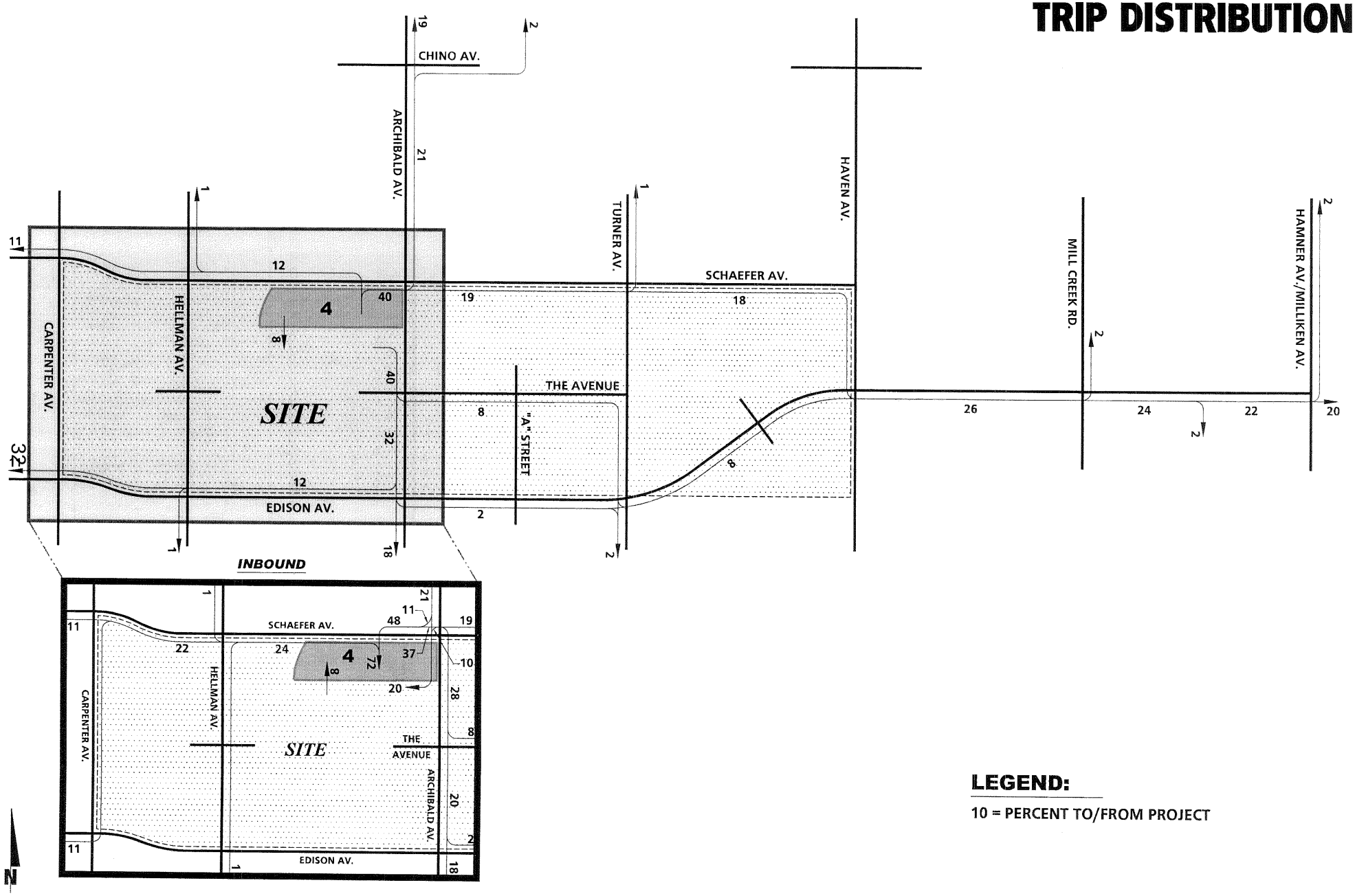
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-H

PLANNING AREA 4 TRIP DISTRIBUTION

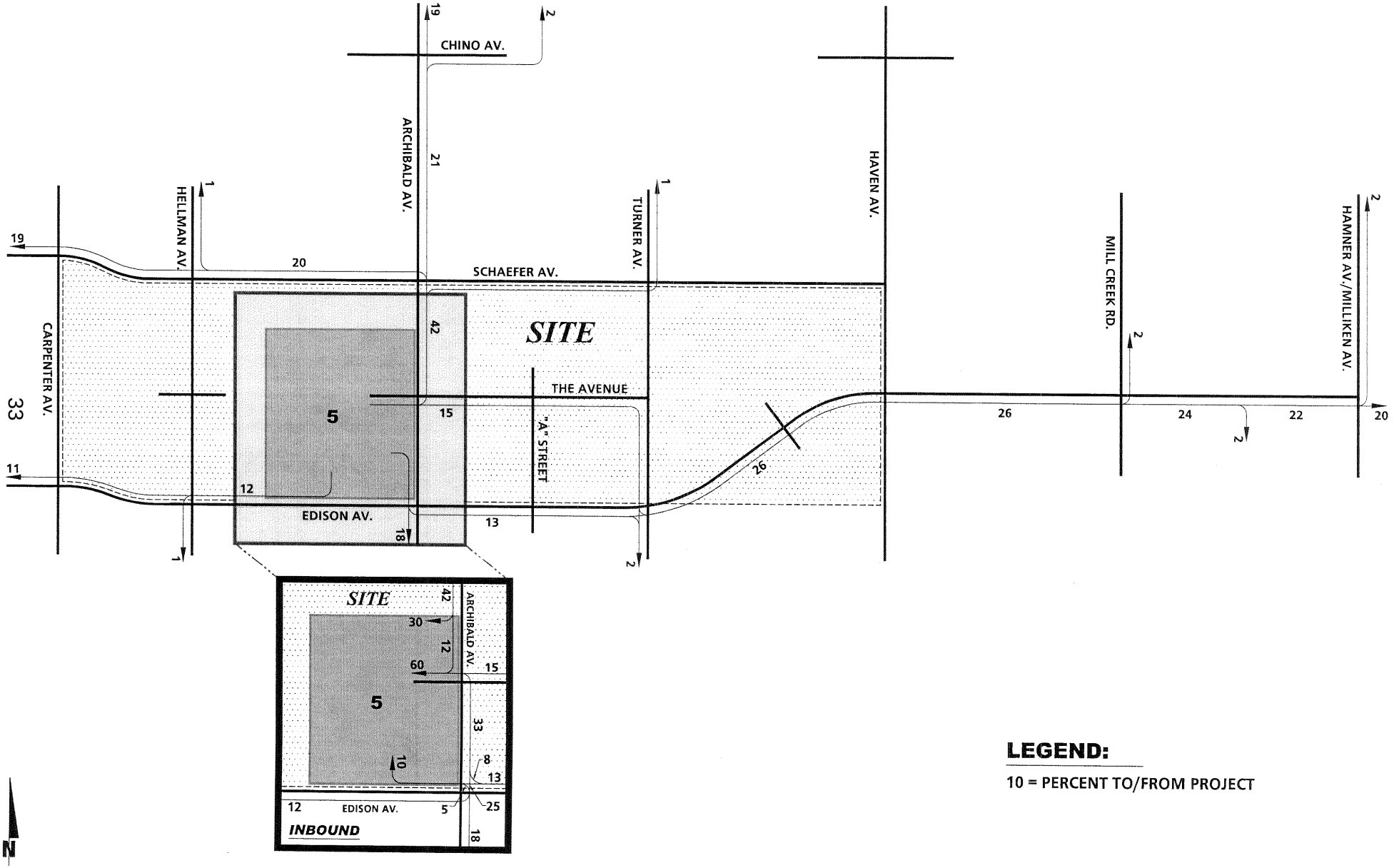


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-I

PLANNING AREA 5 (RESIDENTIAL) TRIP DISTRIBUTION

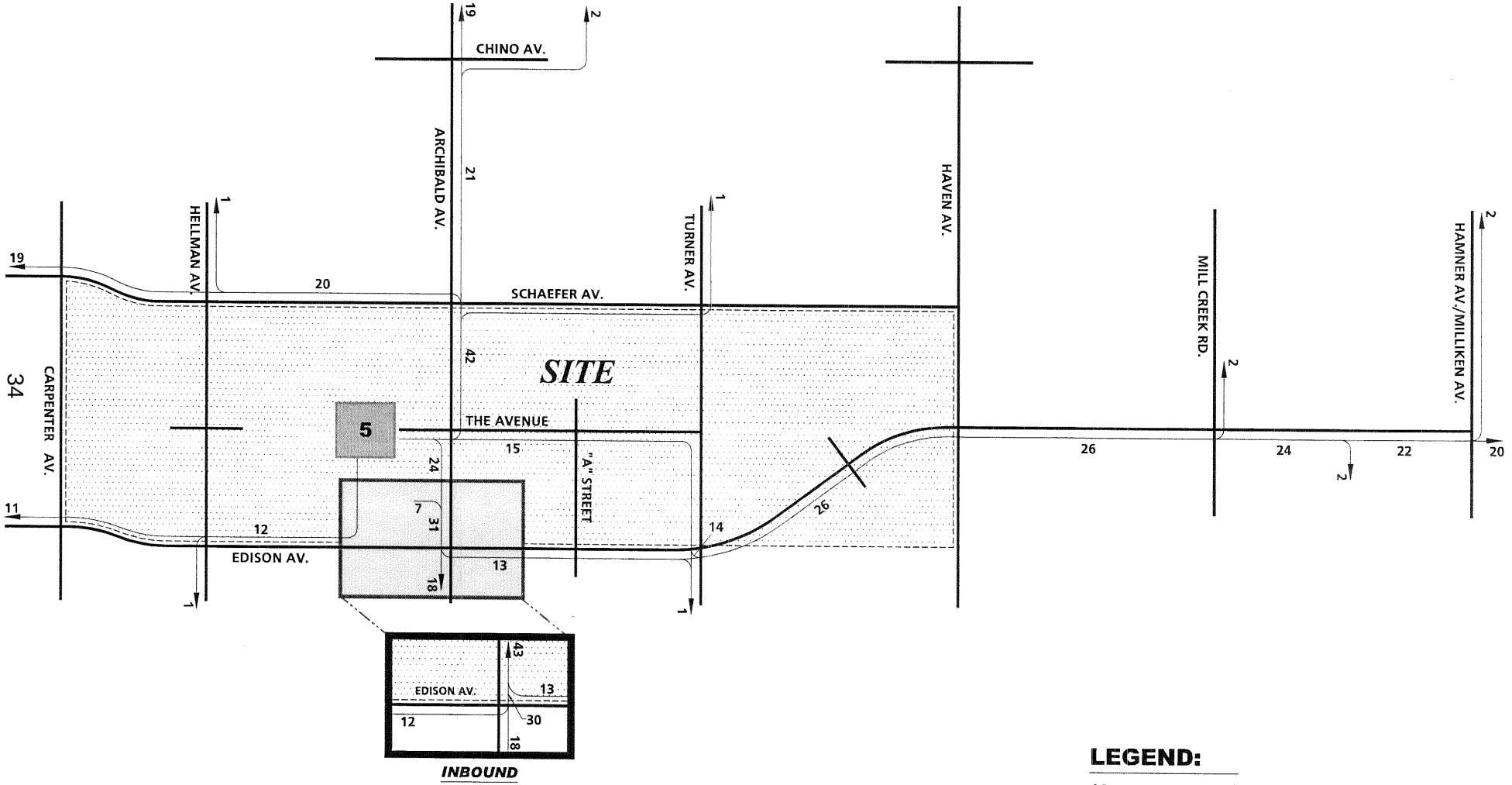


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-J

PLANNING AREA 5 (ELEMENTARY SCHOOL) TRIP DISTRIBUTION

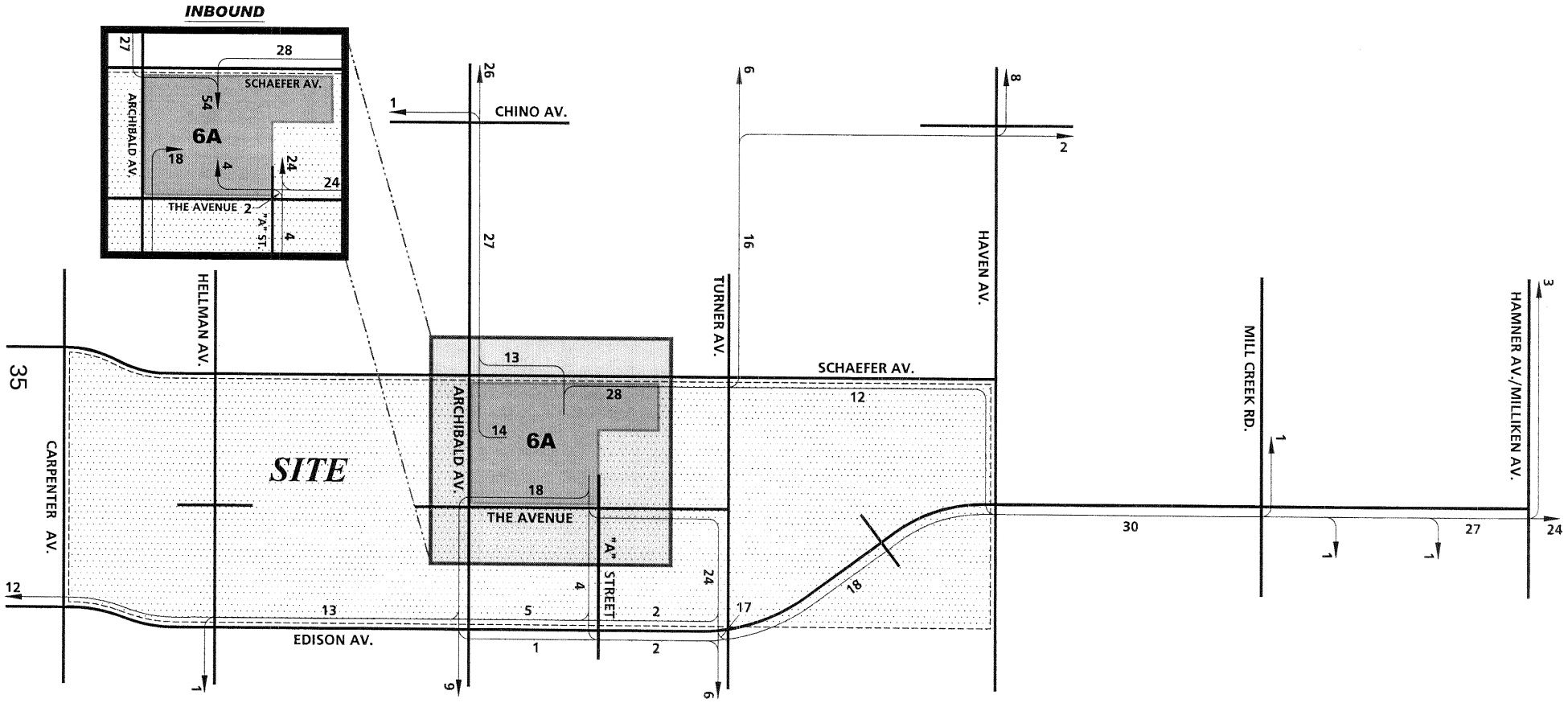


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-K

PLANNING AREA 6A TRIP DISTRIBUTION

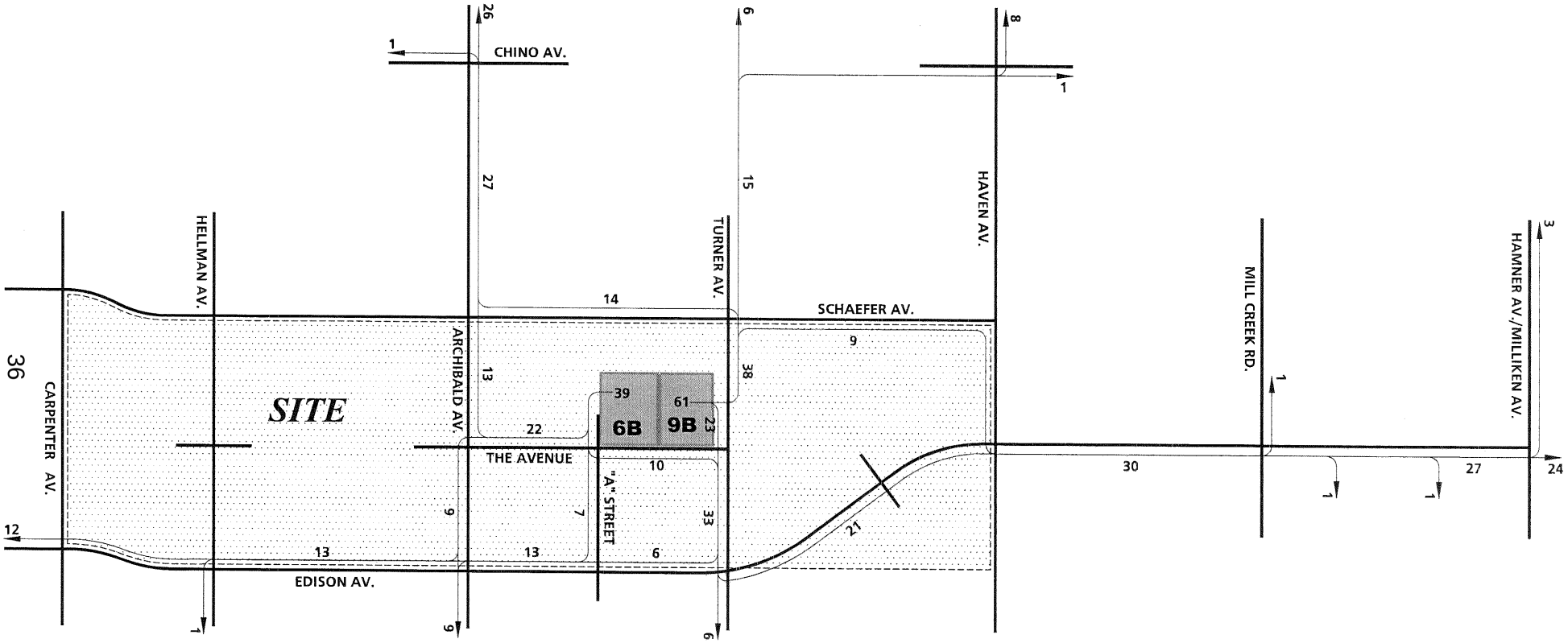


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-L

PLANNING AREA 6B AND 9B (MIDDLE SCHOOL) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

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EXHIBIT 2-M

PLANNING AREA 7 TRIP DISTRIBUTION

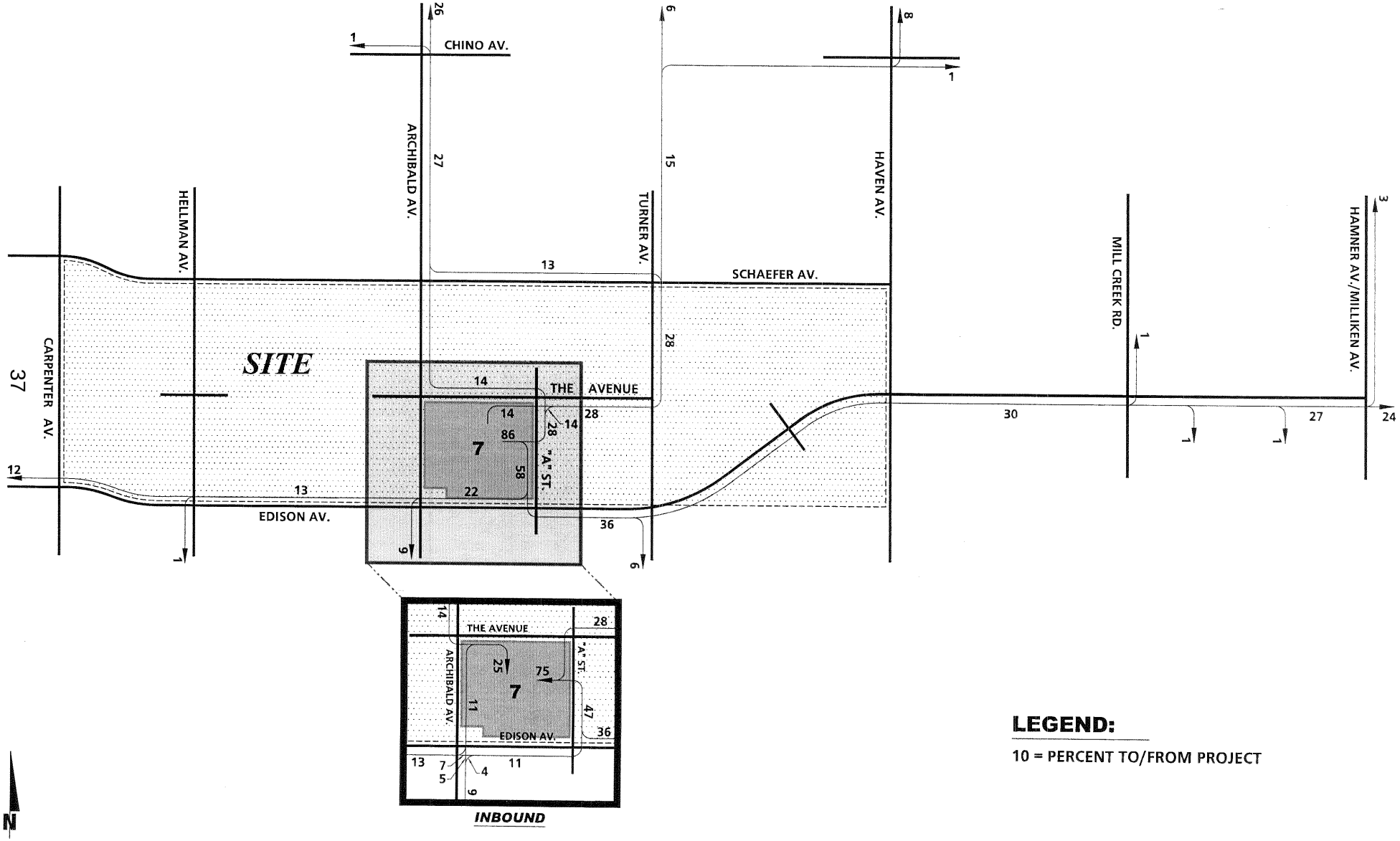
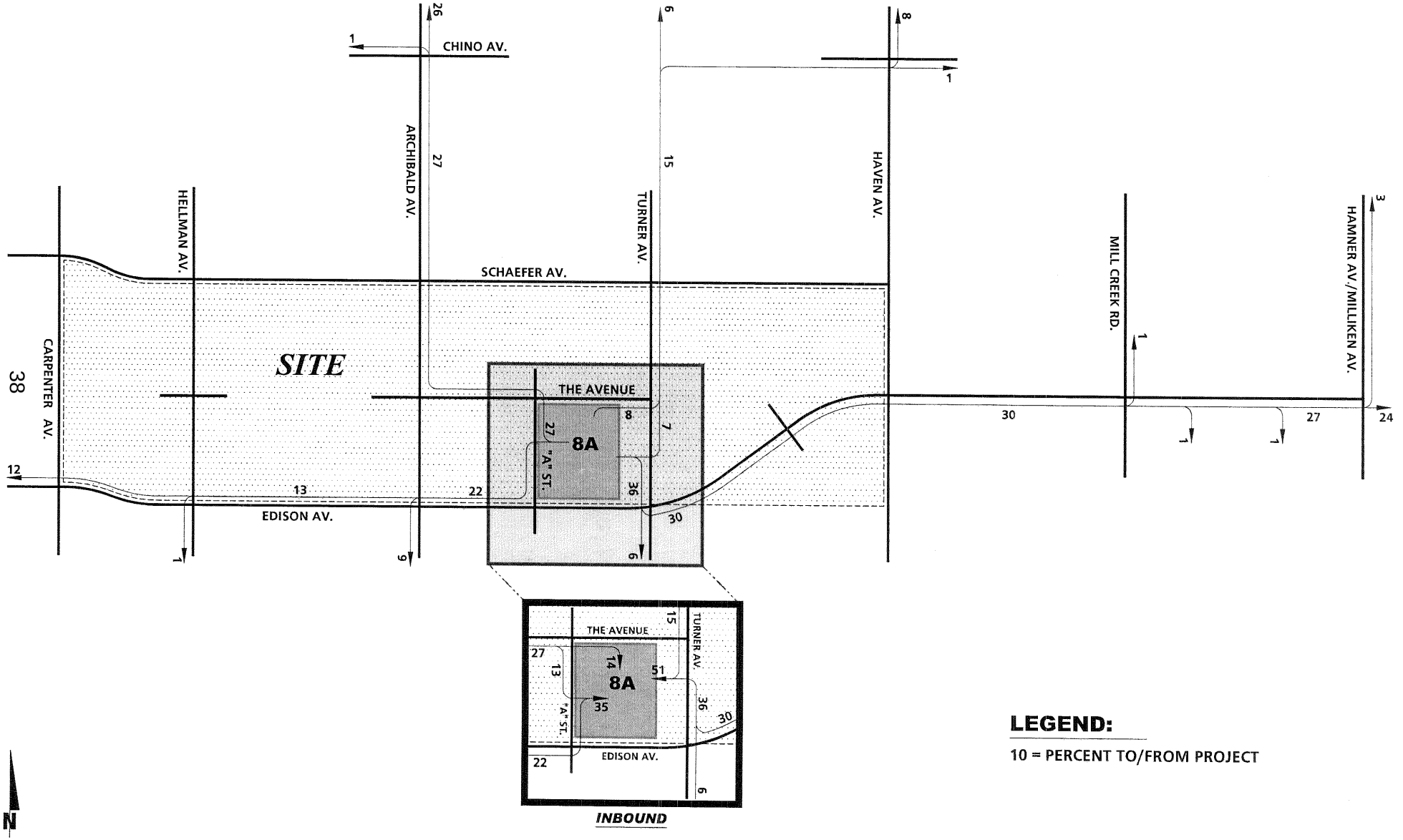


EXHIBIT 2-N

PLANNING AREA 8A TRIP DISTRIBUTION

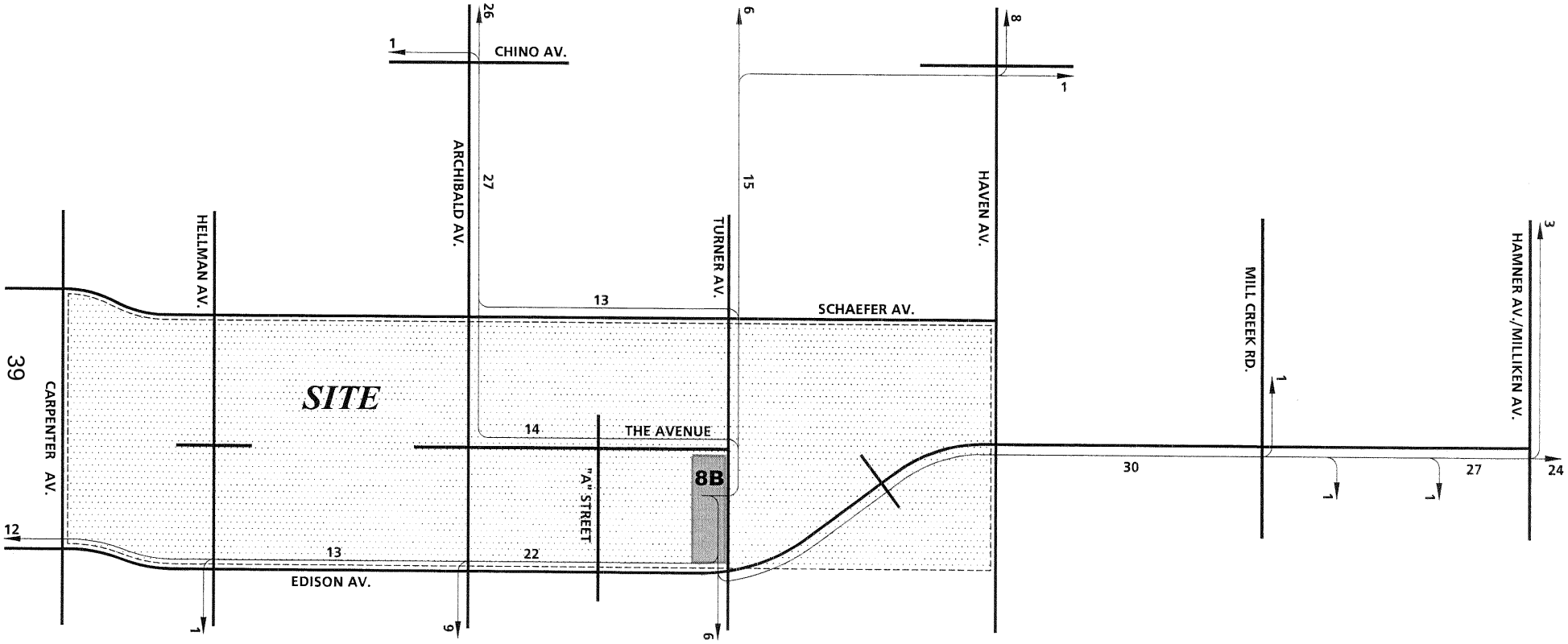


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-O

PLANNING AREA 8B TRIP DISTRIBUTION



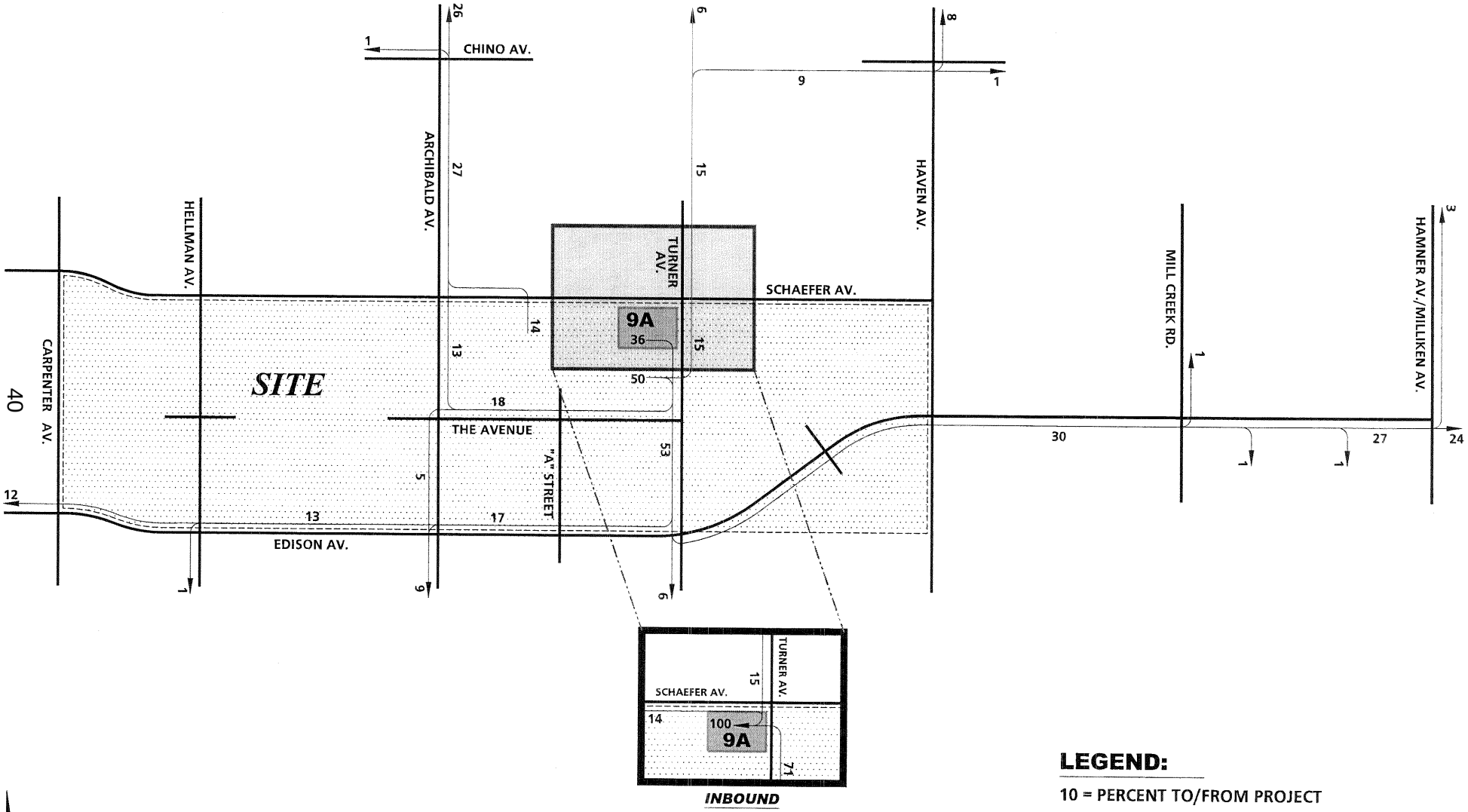
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-P

PLANNING AREA 9A TRIP DISTRIBUTION



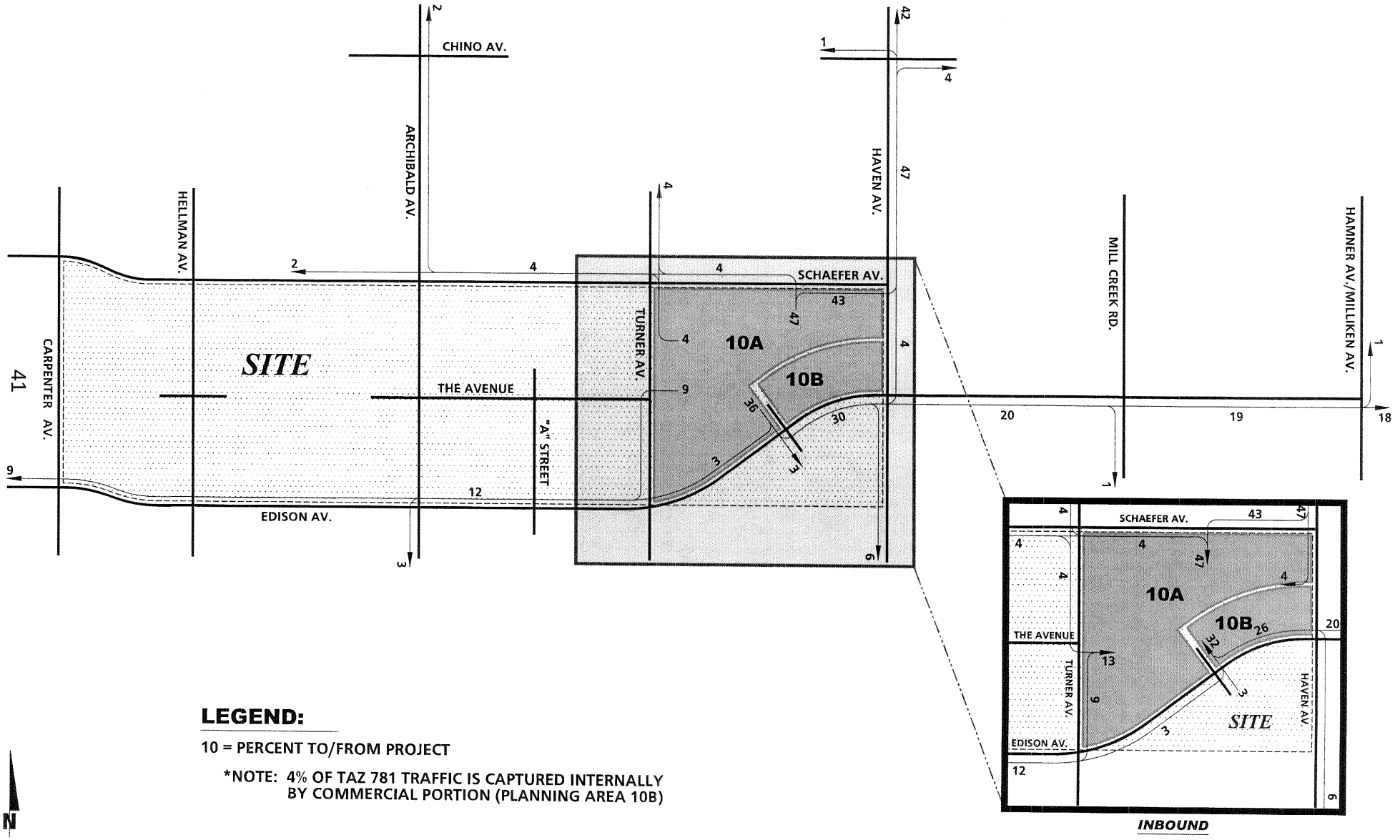
LEGEND:

10 = PERCENT TO/FROM PROJECT

N

EXHIBIT 2-Q

PLANNING AREA 10A & 10B (TAZ 781) TRIP DISTRIBUTION



LEGEND:

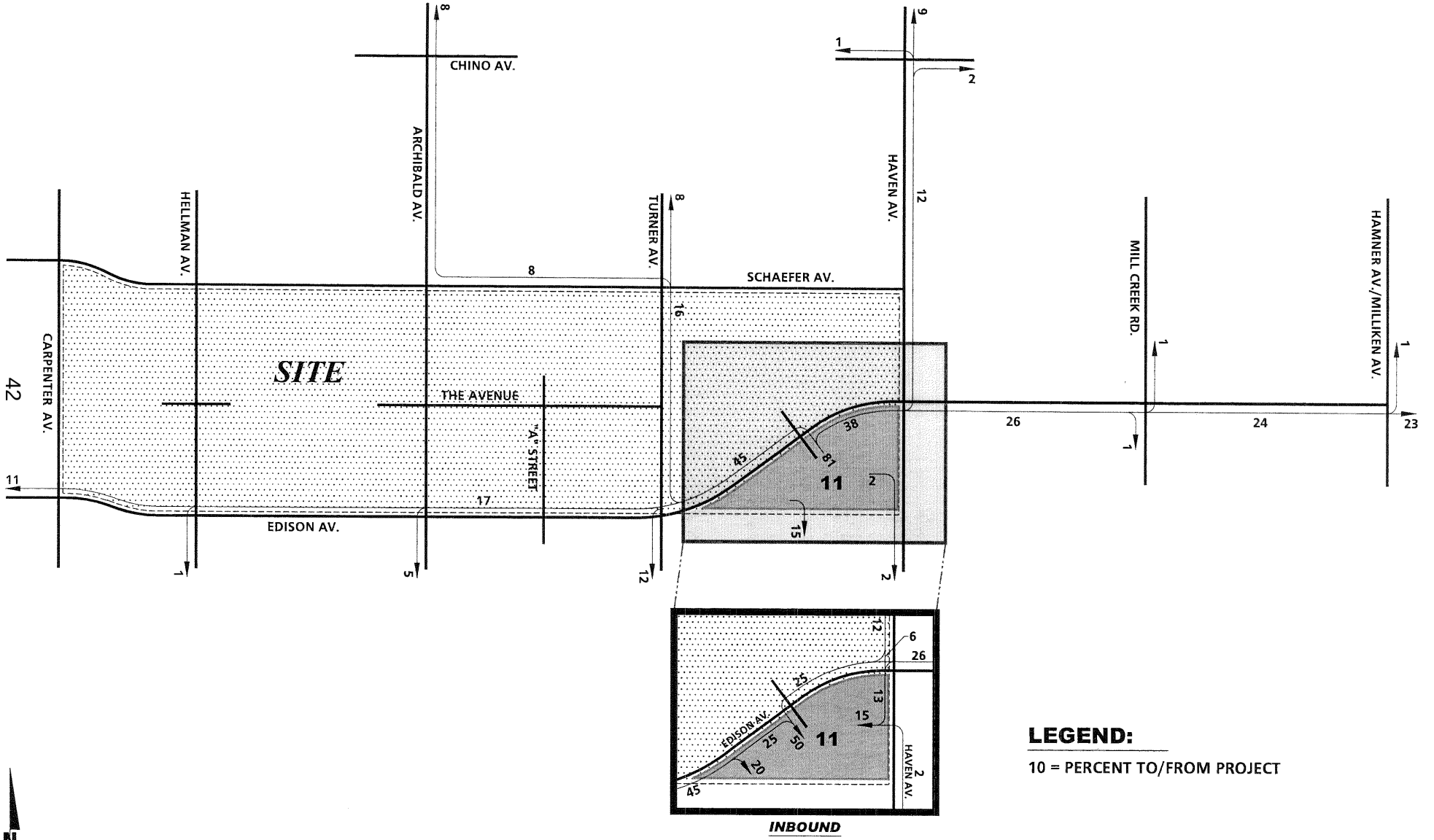
10 = PERCENT TO/FROM PROJECT

*NOTE: 4% OF TAZ 781 TRAFFIC IS CAPTURED INTERNALLY BY COMMERCIAL PORTION (PLANNING AREA 10B)

N

EXHIBIT 2-R

PLANNING AREA 11 (TAZ 791) TRIP DISTRIBUTION

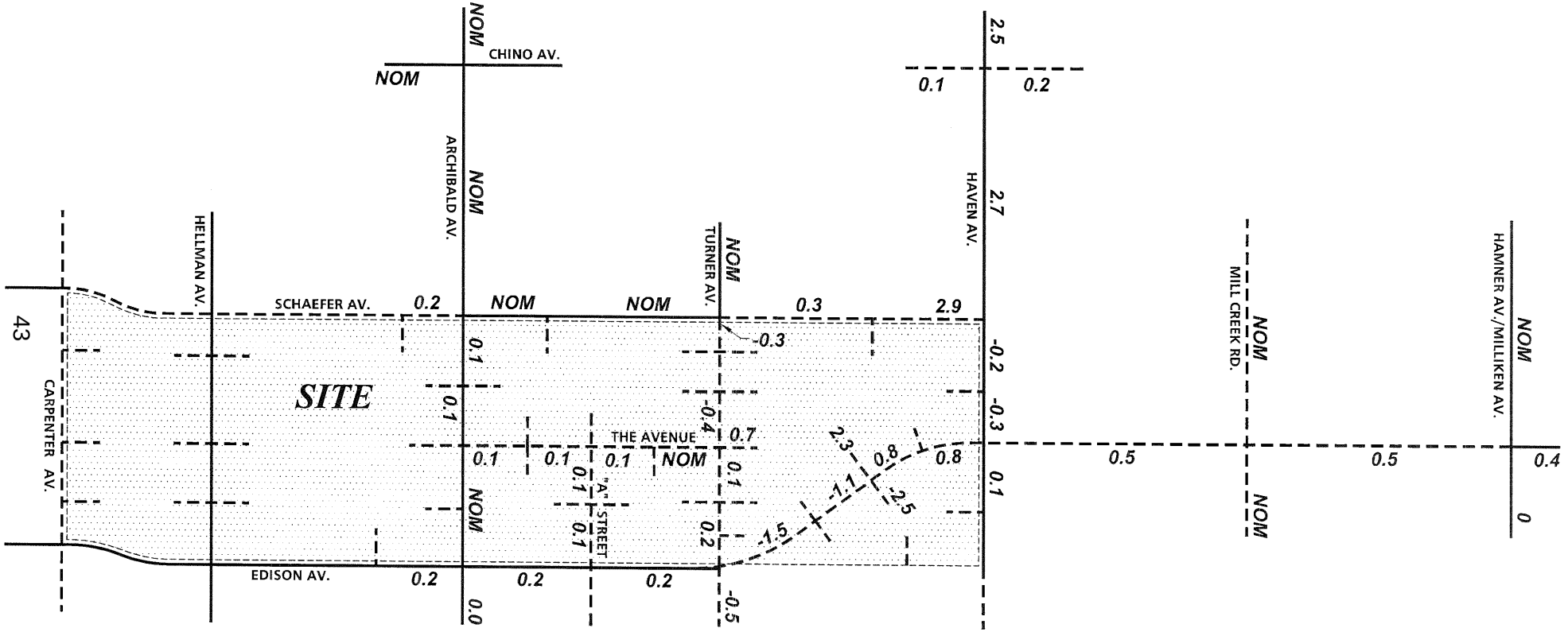


LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 2-S

PROJECT ONLY AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

EXHIBIT 2-T

PROJECT ONLY
AM PEAK HOUR INTERSECTION VOLUMES

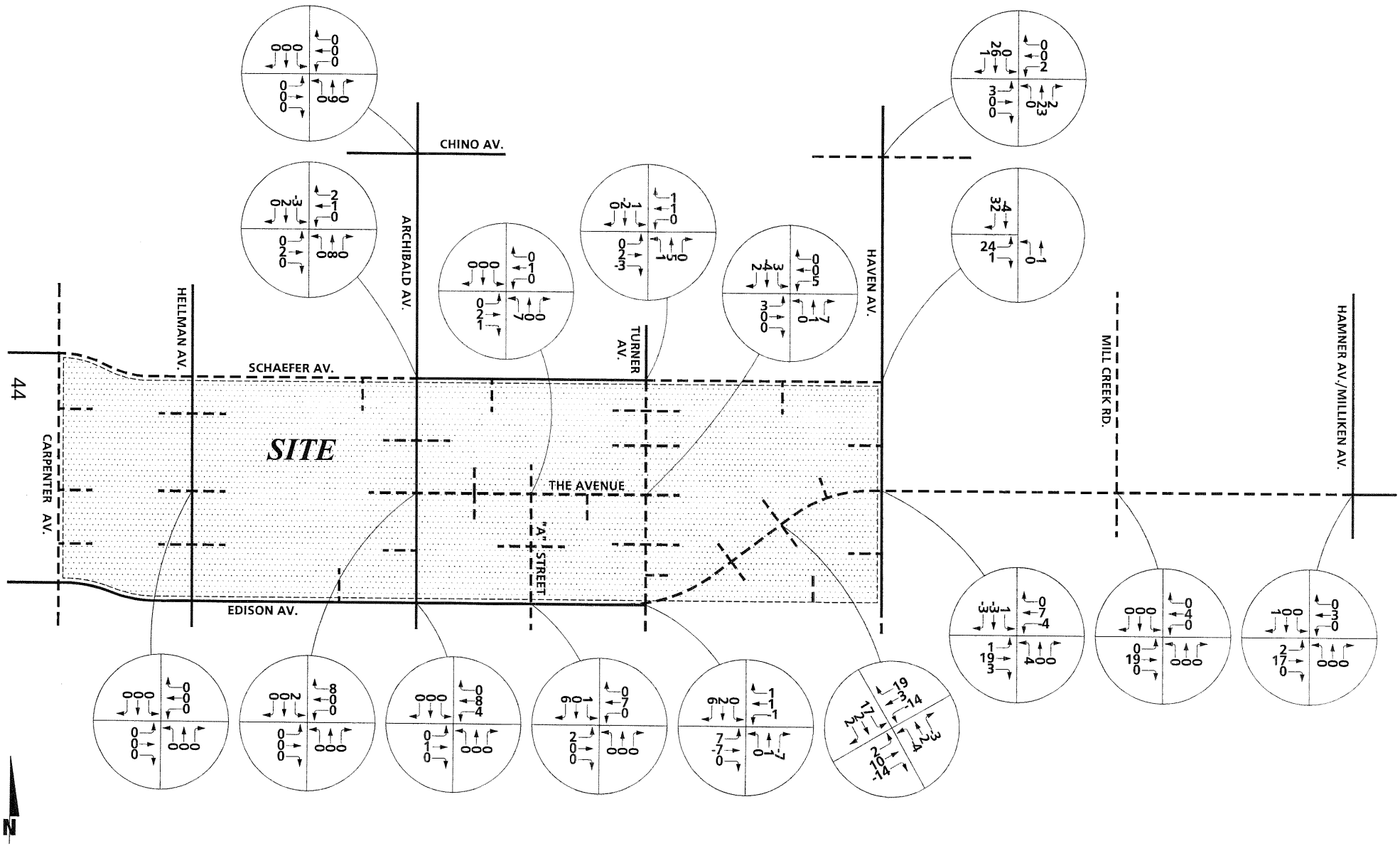
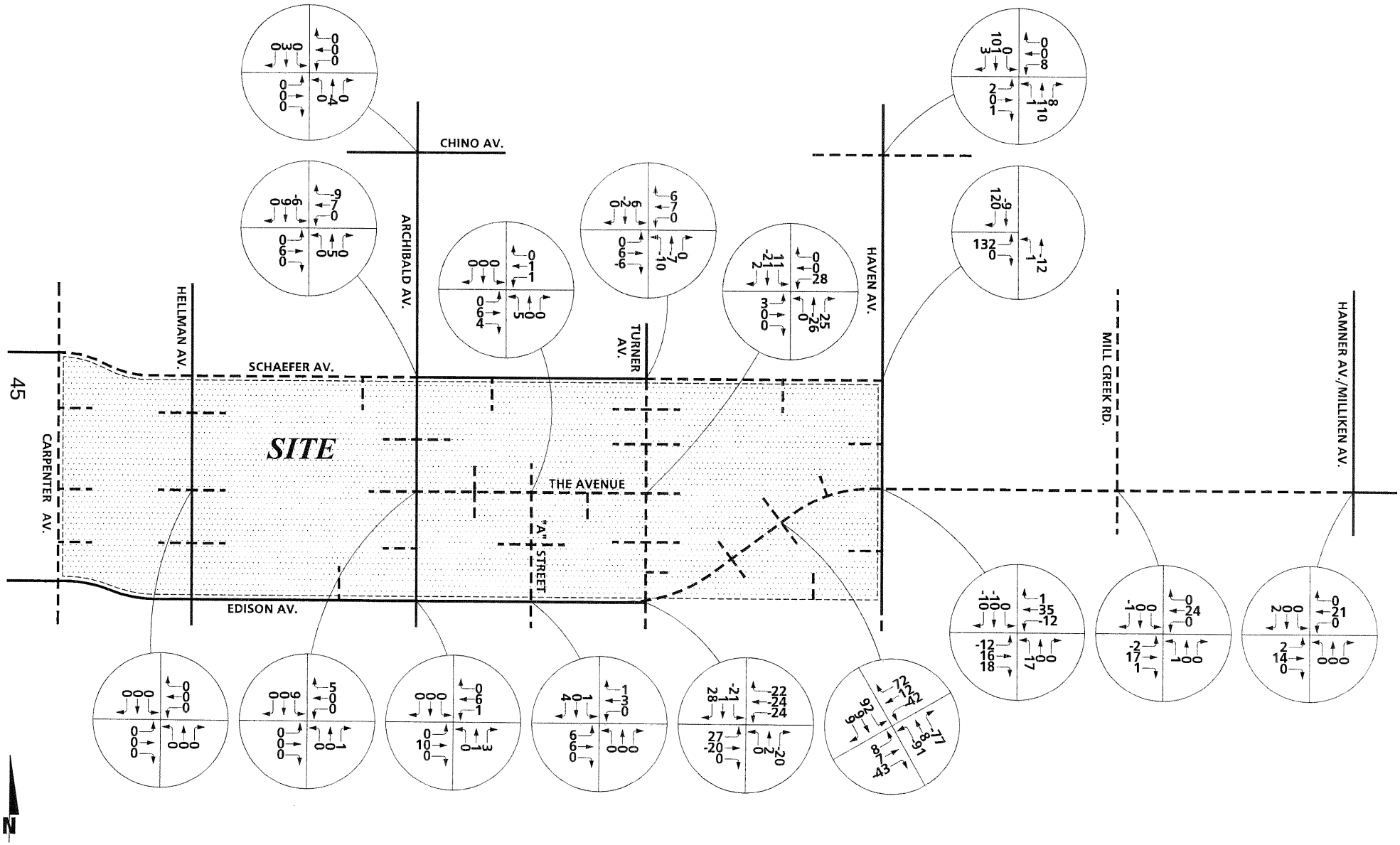


EXHIBIT 2-U

PROJECT ONLY
PM PEAK HOUR INTERSECTION VOLUMES



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3.0 EXISTING ROADWAY SYSTEM

This section of the report summarizes existing roadway and traffic conditions in the study area. All study area intersections, which exist today have been analyzed. The number of through travel lanes for existing roadways and intersection controls are presented, along with existing traffic count data collected for this study. This data was used to analyze existing traffic operations in the study area. Existing plans for roadway improvements are also described in this section.

3.1 Existing Transportation System and Daily Traffic Volumes

The existing number of through travel lanes, intersection control and geometry within the study area are presented on Exhibit 3-A. Most of the roadways in the immediate vicinity of the proposed project are two lane undivided facilities, consistent with the ongoing agricultural characteristics of the area. The following discussion summarizes the existing number of through lanes within the study area:

- Hellman Avenue within the project site currently does not exist. However, Hellman Avenue exists as a 2 lane undivided roadway immediately north of Schaefer Avenue.

- Archibald Avenue is a 5 lane divided roadway (with 3 northbound lanes) north of Chino Avenue. Between Chino Avenue and Schaefer Avenue, Archibald Avenue is a 4 lane divided facility with 3 northbound lanes. South of Schaefer Avenue, Archibald Avenue is a 2 lane undivided roadway.

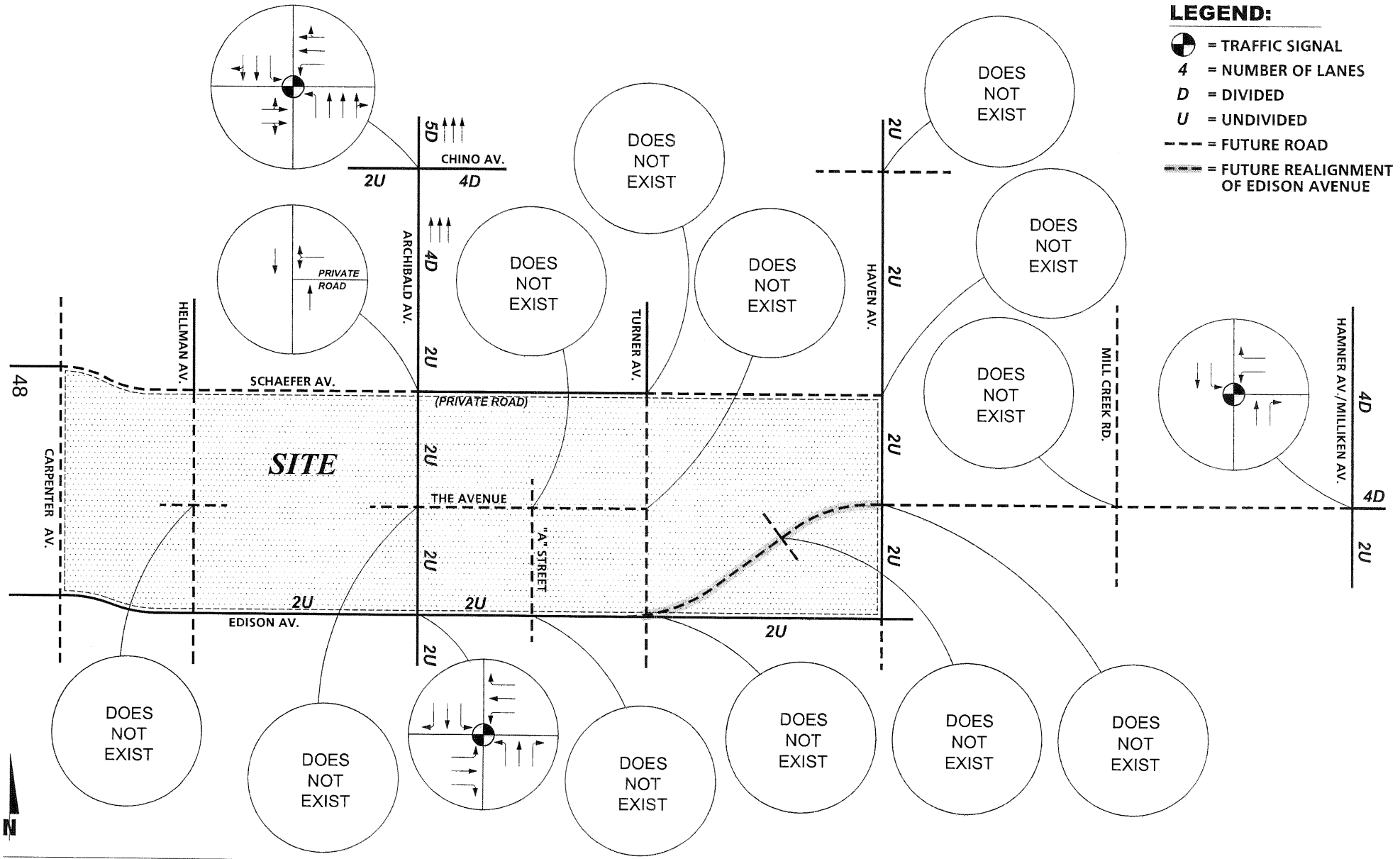
- Turner Avenue within the project site currently does not exist. However, Turner Avenue exists as a 2 lane undivided roadway immediately north of Schaefer Avenue.

- Haven Avenue currently exists as a 2 lane undivided roadway from north of Chino Avenue to north of Edison Avenue. Haven Avenue does not exist south of Edison Avenue.

- Mill Creek Road currently does not exist in the study area.

EXHIBIT 3-A

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



- Hamner (Milliken) Avenue currently exists as 4 lane divided roadway immediately north of Edison Avenue and a 2 lane undivided facility immediately south of Edison Avenue.

- Chino Avenue exists as a 2 lane divided road immediately west of Archibald Avenue and a 4 lane divided facility immediately east of Archibald Avenue.

- Schaefer Avenue, within the study area, currently exists as a private road (with signage) west of Archibald Avenue.

- Edison Avenue currently exists as a 2 lane undivided road west of Haven Avenue in the study area. In the future, Edison Avenue is proposed to be realigned with Cantu Galleano Ranch Road. Cantu Galleano Ranch Road currently exists as a 4 lane divided facility immediately east of Hamner Avenue.

Exhibit 3-B depicts the existing average daily traffic (ADT) volumes in the study area. Existing ADT volumes are estimated based on daily traffic volumes and peak hour data compiled from the latest traffic data collected by Urban Crossroads, Inc. in late 2007 (see Appendix "D"). The estimated ADT volumes have been calculated by Urban Crossroads, Inc. using the following formula for each intersection leg:

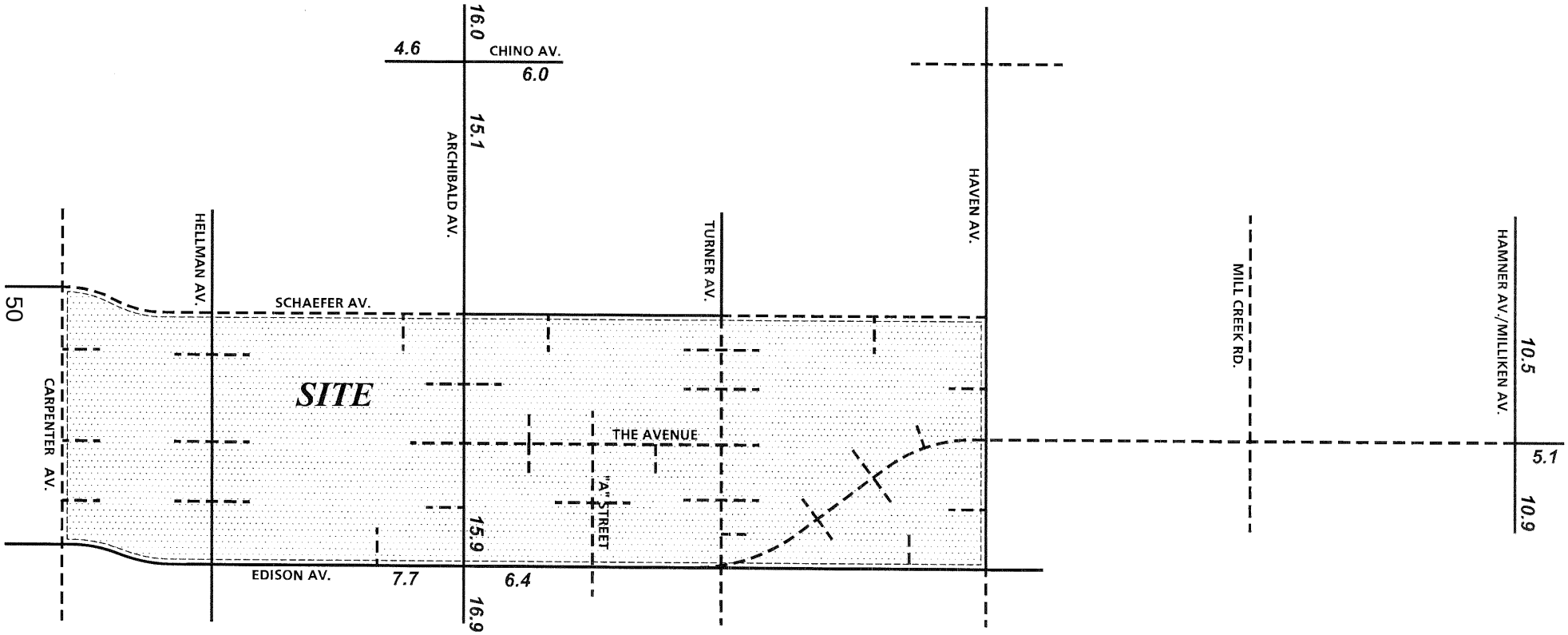
(AM Peak Hour (Approach + Exit Volume) +PM Peak Hour (Approach + Exit Volume)) /
(9% + 9%) = Daily Leg Volume.

In the above formula, the constants of 9% and 9% are calculated AM and PM Peak Hour to ADT ratios, respectively, based on the actual count data collected and included in Appendix "D". The resulting factor is 5.49. Please note the previously published traffic study for The Avenue Specific Plan identified a resulting peak hour to daily factor of 5.26. The nominal difference between the two (2) factors indicates a similar peak to daily relationship between the two sets of existing data.

Archibald Avenue is the busiest roadway in the study area, carrying approximately 16,900 vehicles per day (VPD), south of Edison Avenue. The other notable roadway in the study area that carries approximately 10,900 VPD is Hamner (Milliken) Avenue, south of Edison Avenue (Cantu Galleano Ranch Road).

EXHIBIT 3-B

EXISTING AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

3.2 Existing Peak Hour Traffic Volumes

Existing AM and PM traffic volumes are shown on Exhibit 3-C and Exhibit 3-D, respectively. Peak period traffic count worksheets are included in Appendix "D". The AM peak hour traffic volumes were determined by counting the two-hour period between 7 - 9 AM in the morning. Similarly, the PM peak hour traffic volumes were identified by counting the two-hour period from 4 - 6 PM in the evening.

The highest existing peak hour traffic volumes occur along Archibald Avenue, south of Chino Avenue in the PM peak hour (1,519 vehicles). Edison Avenue in the vicinity of the project site carries relatively small amount of traffic with generally about 1/3 of the daily vehicles identified along Archibald Avenue.

3.3 Transit Services

Transit service in the study area are provided by Omnitrans bus services. The current Omnitrans routes are shown on Exhibit 3-E. The nearest transit route is Route 70. Route 70 provides service along Riverside Drive (north of the study area).

These bus routes provide transit services within the City of Ontario and from adjacent cities to the City of Ontario. These routes serve primarily the residential neighborhoods in the western part of the City. As the City of Ontario continues to develop the New Model Colony, transit services should be modified to provide services for future residents and work force around the New Model Colony. The City should work with Omnitrans to develop additional routes and services for local and regional services.

3.4 Planned Transportation Improvements and Relationships to General Plan

The long range transportation system within the study area is expected to undergo significant improvement as a result of work to be performed by Caltrans, and the City of Ontario. The New Model Colony General Plan Circulation Transportation Master Plan is shown on Exhibit 3-F. The New Model Colony roadway cross-sections are depicted on Exhibit 3-G. Edison Avenue adjacent to the project site is planned as an 8 lane Divided Arterial. Archibald Avenue is planned as a 6 lane Divided Arterial roadway from Edison Avenue north to Riverside Drive.

EXHIBIT 3-C

EXISTING AM PEAK HOUR INTERSECTION VOLUMES

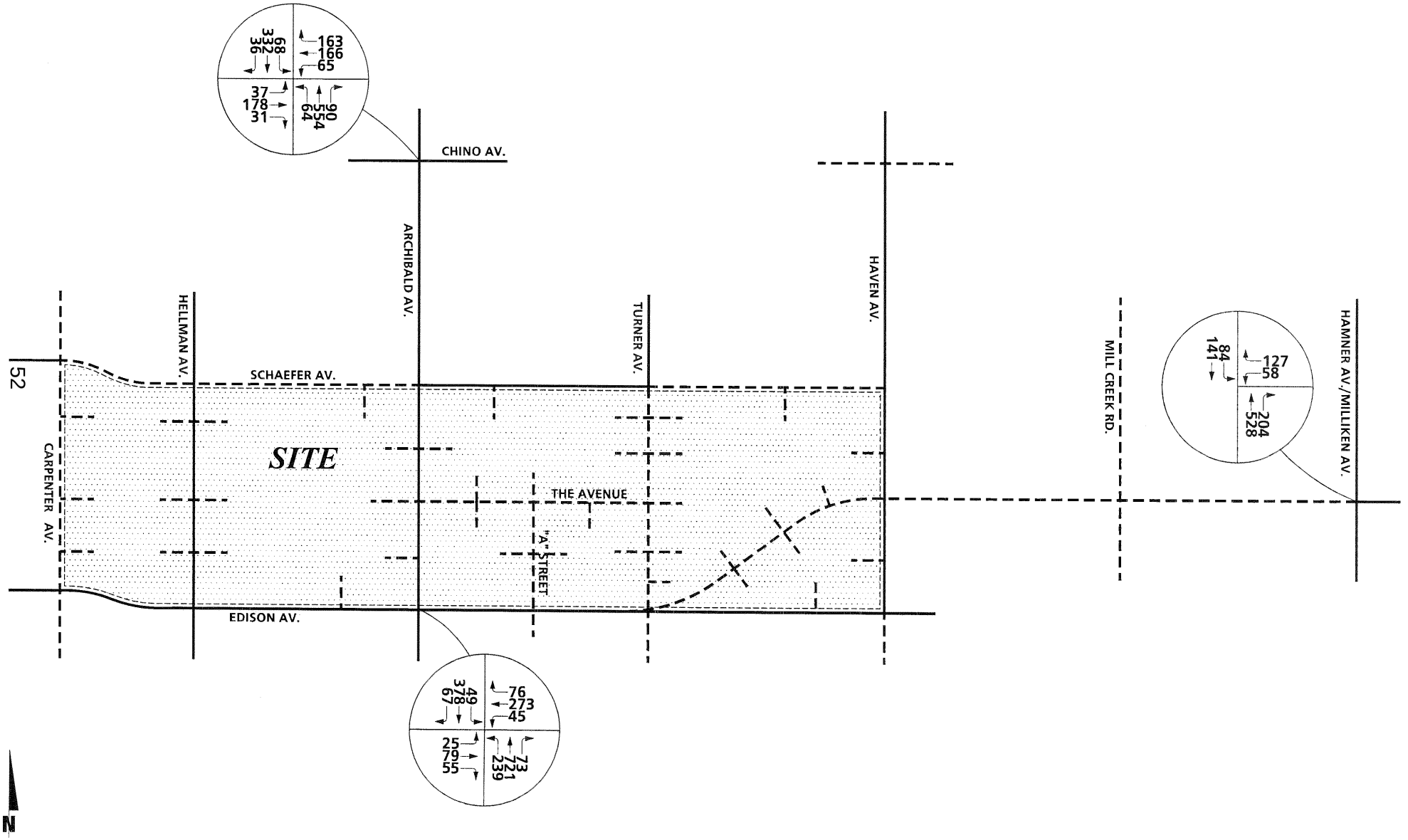


EXHIBIT 3-D

EXISTING PM PEAK HOUR INTERSECTION VOLUMES

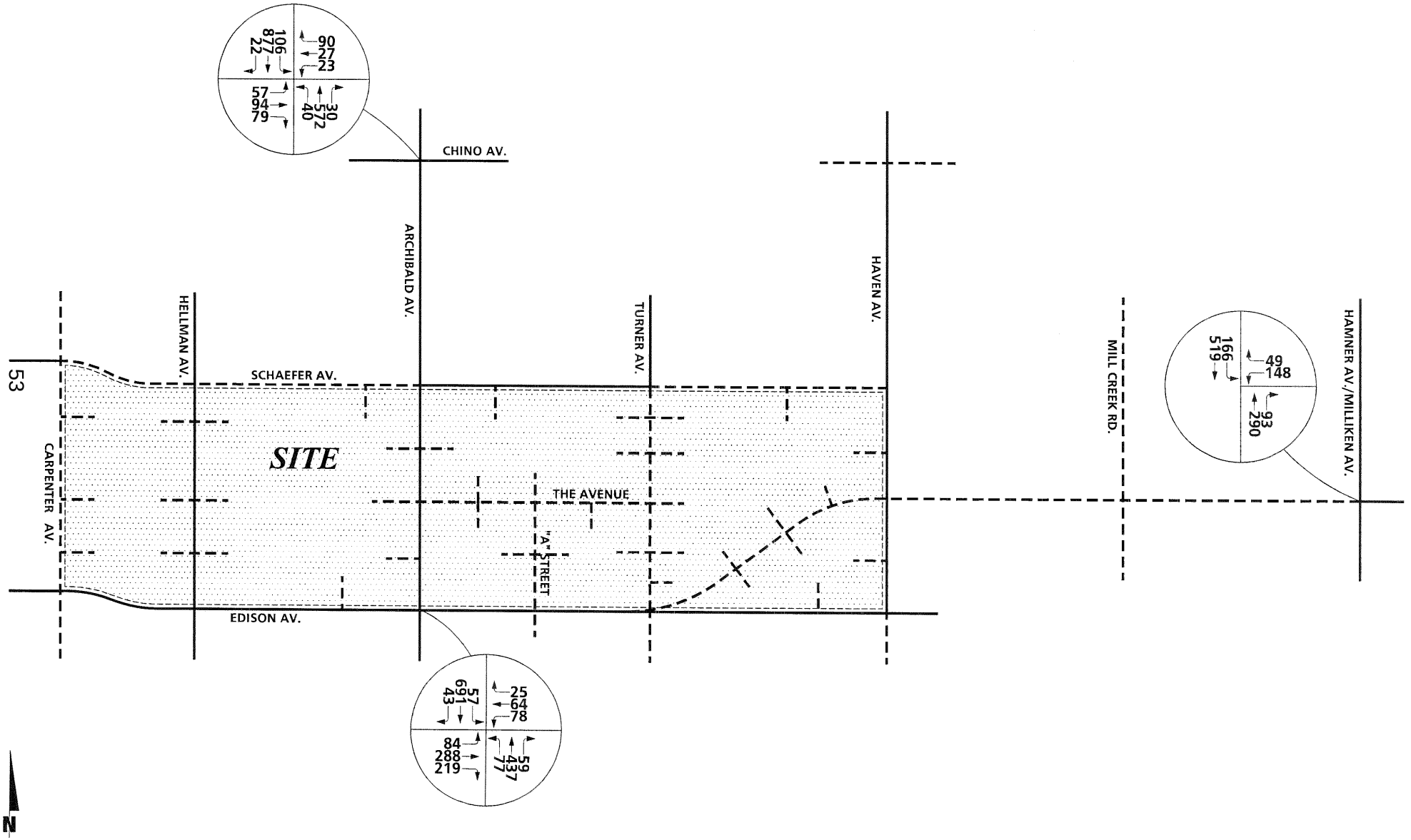
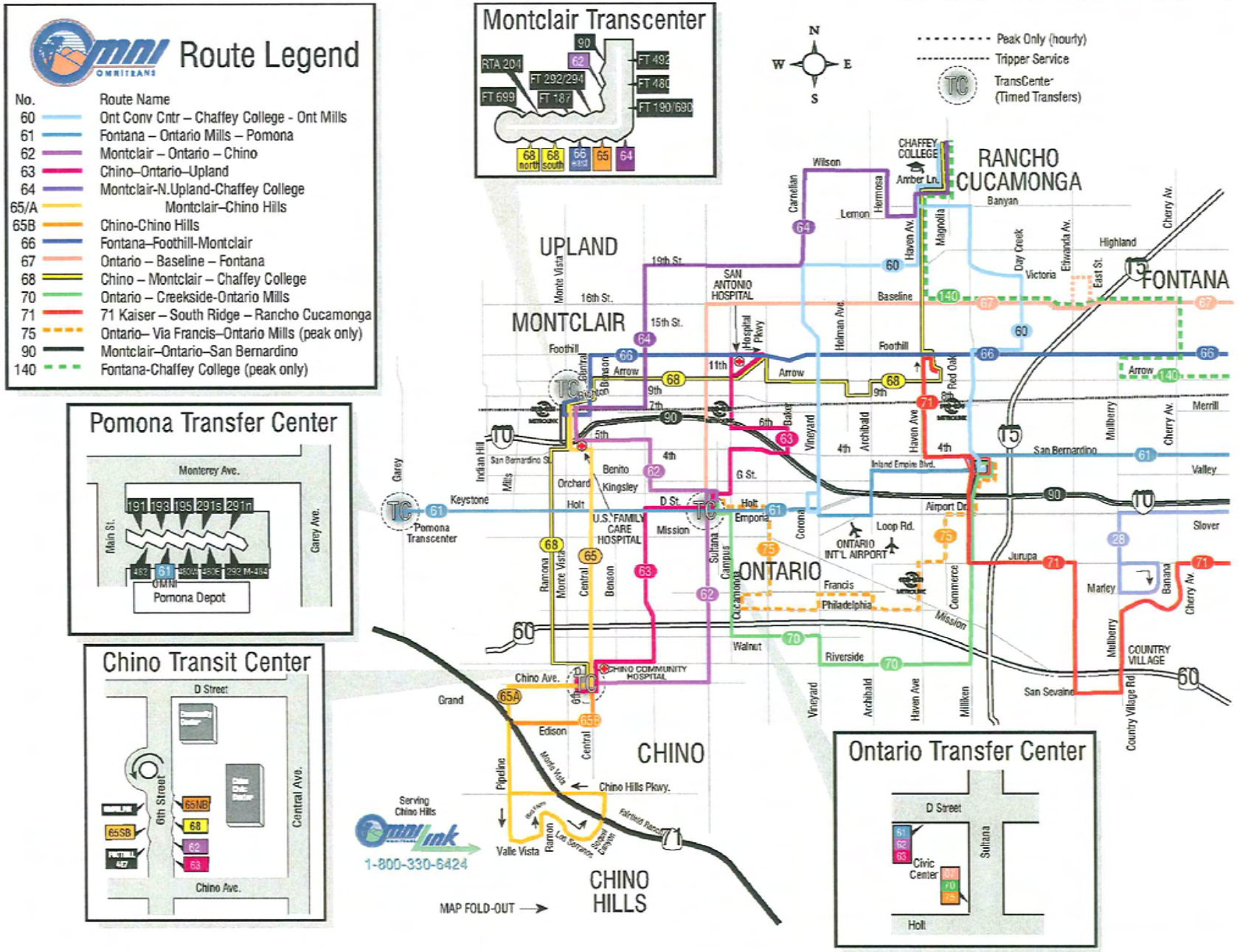


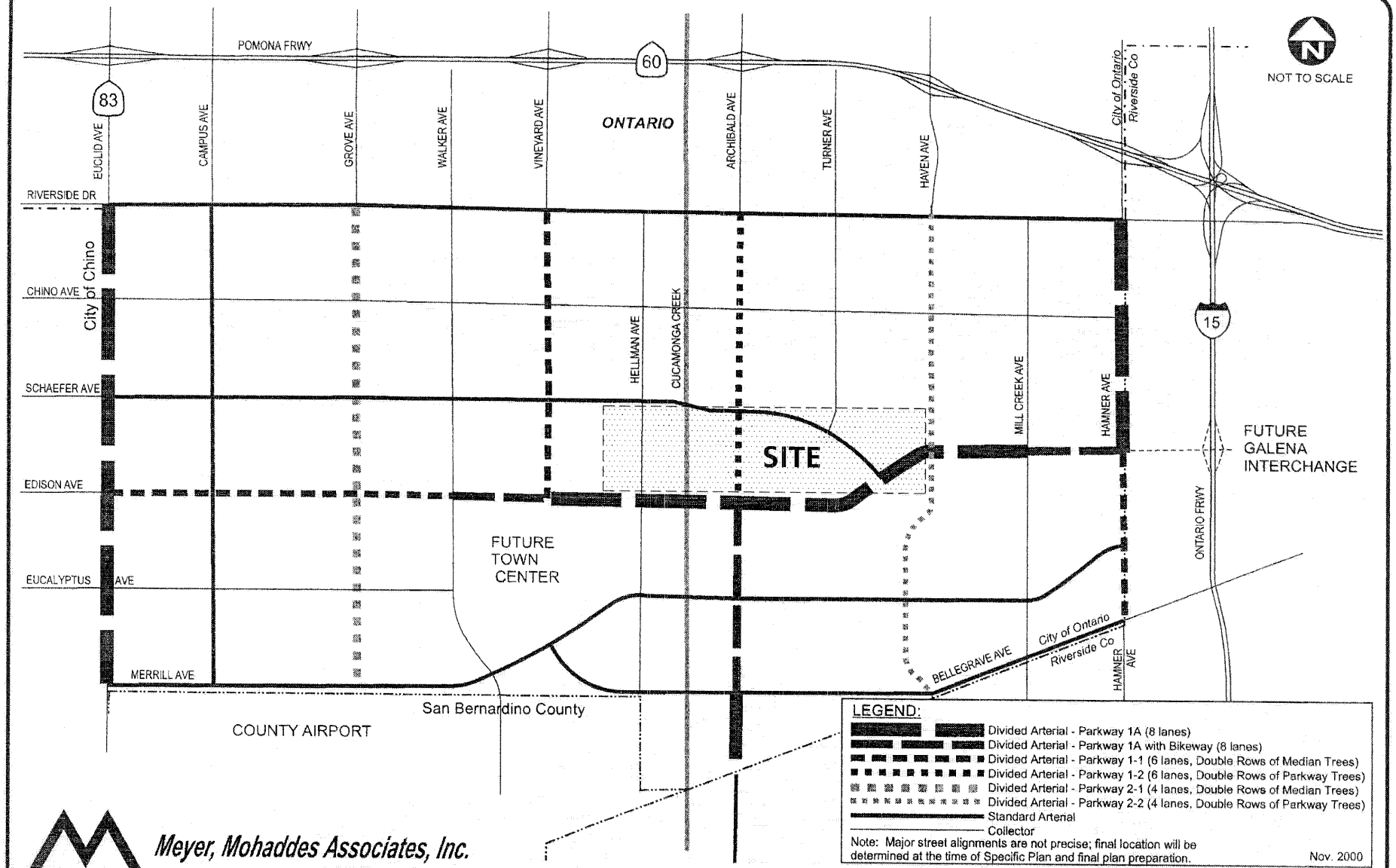
EXHIBIT 3-E

OMNITRANS BUS ROUTES



URBAN CROSSROADS

NEW MODEL COLONY TRANSPORTATION MASTER PLANS



Meyer, Mohaddes Associates, Inc.

An Iteris Company

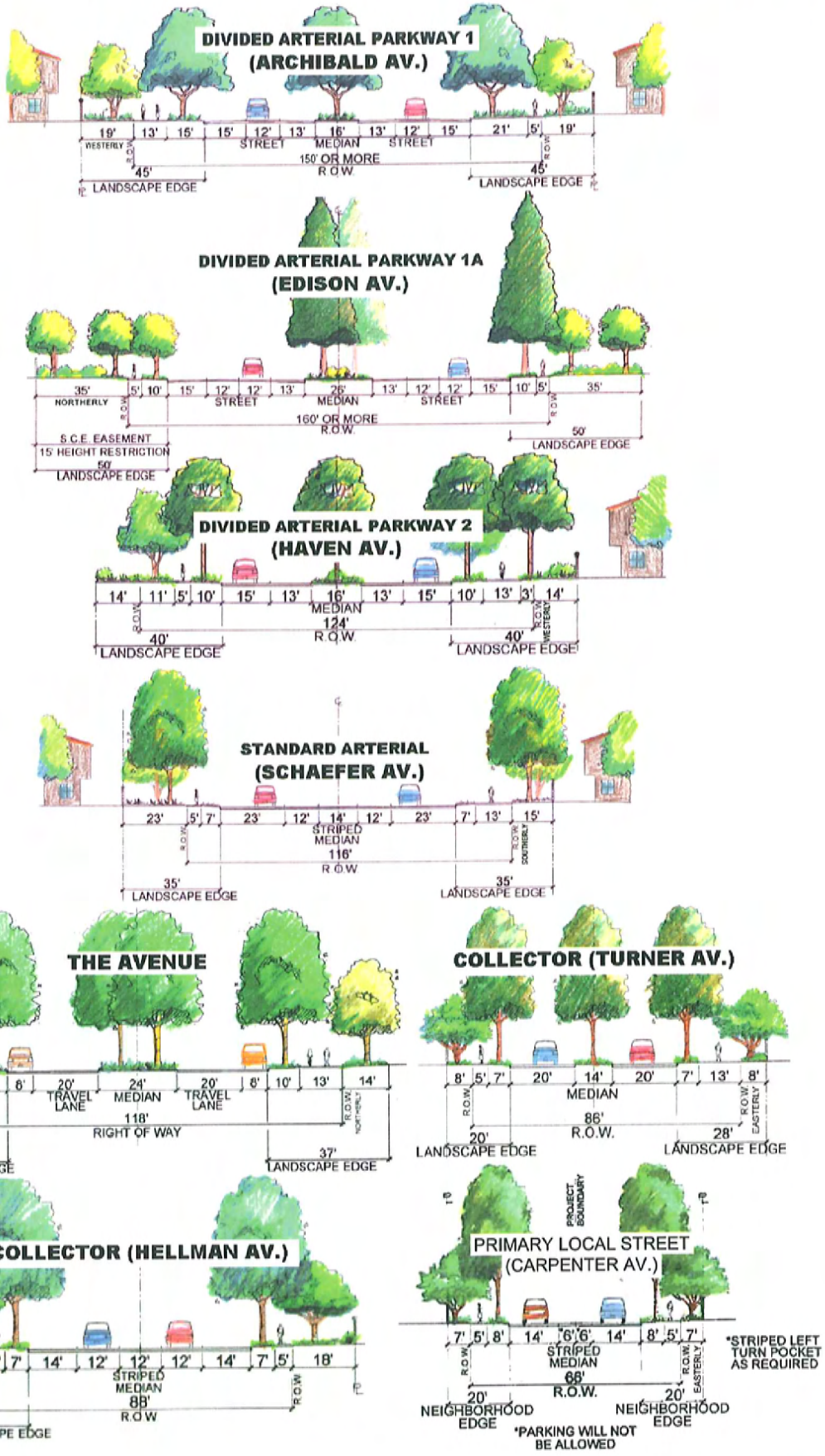
ONTARIO NEW MODEL COLONY TRANSPORTATION IMPLEMENTATION PLAN

FIGURE 2
Roadway Classifications

N

EXHIBIT 3-G

NEW MODEL COLONY ROADWAY CROSS-SECTIONS



Archibald Avenue south of Edison Avenue transitions to an 8 lane Divided Arterial. Haven Avenue is designated as a 4 lane Divided Arterial throughout the New Model Colony (Bellgrave Avenue to Riverside Drive). Schaefer Avenue is designated as a Standard Arterial (4 lane divided facility with a painted center median area) through the New Model Colony (NMC). Hellman Avenue and Turner Avenue within the project site (and throughout the NMC) are designated as 2 lane Collector roadways (with either a painted or a raised median, respectively).

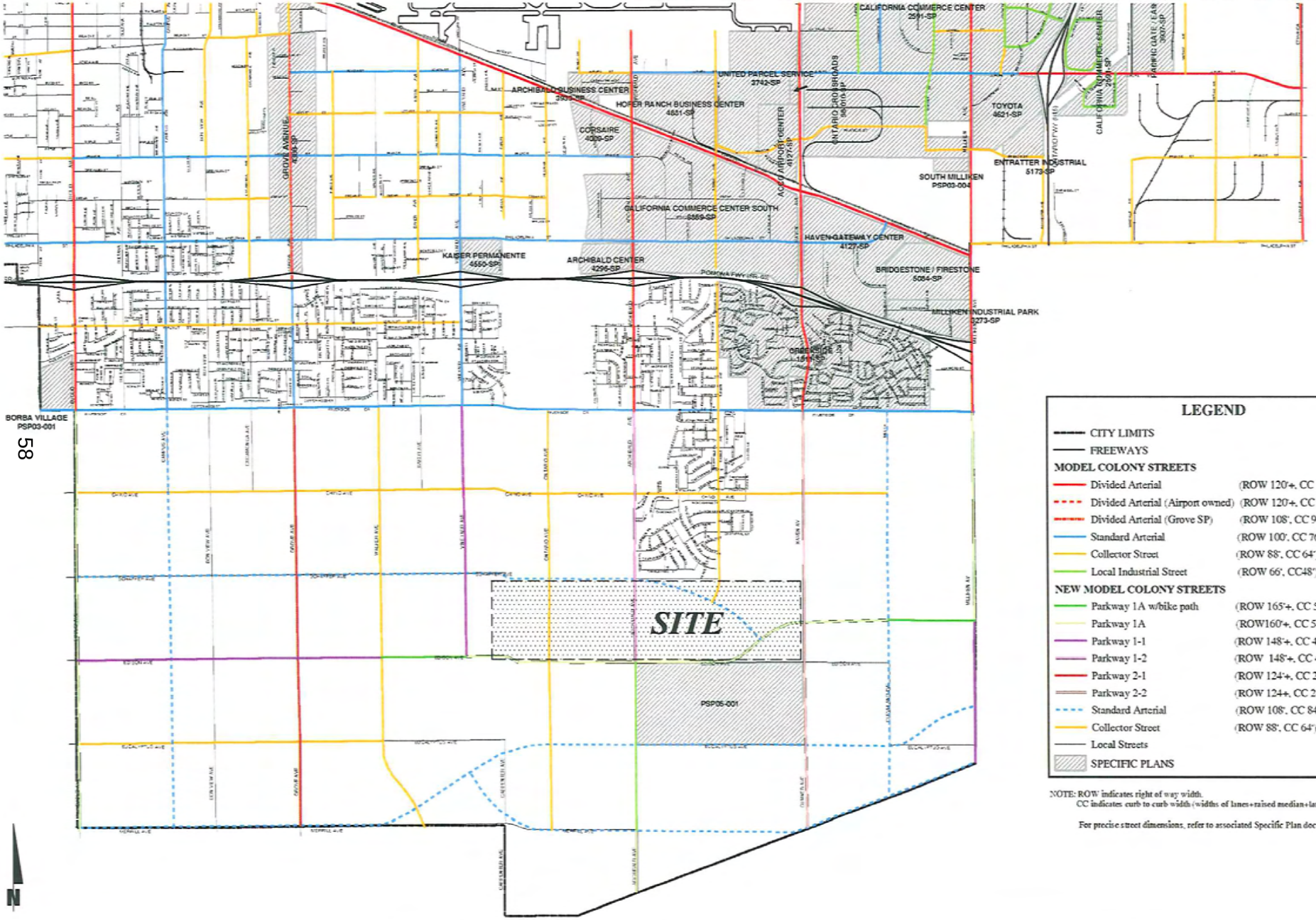
The City of Ontario General Plan Circulation Element is shown on Exhibit 3-H, while the cross-sections are depicted on Exhibit 3-I. Archibald Avenue and Haven Avenue north of Riverside Drive are designated as 6 lane Divided Arterial roadways. Table 3-1 summarizes the roadway classification designations for the roadway within the study area based on all the previously described general plan circulation elements.

3.5 City of Ontario Fee Program

The City of Ontario Development Impact Fee program has established separate funding mechanisms for the Old Model Colony (OMC) and the New Model Colony (NMC) areas. Ontario's City Council approved the New Model Colony Master Plan in September of 2002 which identified needed infrastructure improvements throughout the NMC area. A Master Facilities Plan and Development Impact Fee (DIF) Report were prepared by the City incorporating the infrastructure improvements identified in the New Model Colony Master Plan. The Master Facilities Plan and the DIF Report identified total costs for all needed infrastructure improvements and the "per unit" cost required to install the identified improvements. The City's DIF is calculated on a "per dwelling unit" basis for residential development and on a "per square foot" basis for non-residential projects. The NMC DIF was last updated on April 15, 2007.

EXHIBIT 3-H

CITY OF ONTARIO MASTER PLAN OF STREETS



58

LEGEND

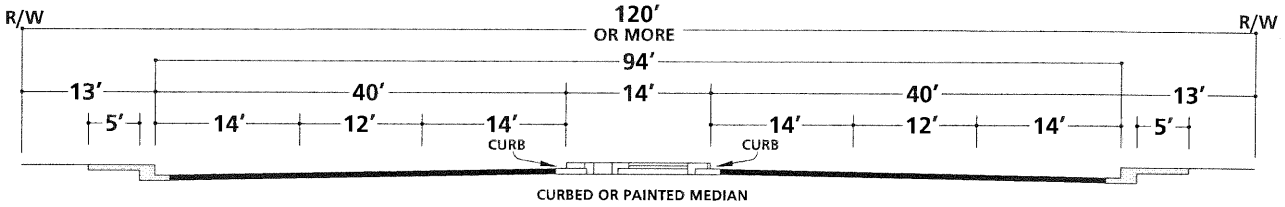
CITY LIMITS	
FREEWAYS	
MODEL COLONY STREETS	
Divided Arterial	(ROW 120'+, CC 40'+14'+40')
Divided Arterial (Airport owned)	(ROW 120'+, CC 40'+14'+40')
Divided Arterial (Grove SP)	(ROW 108', CC 94')
Standard Arterial	(ROW 100', CC 76')
Collector Street	(ROW 88', CC 64')
Local Industrial Street	(ROW 66', CC48')
NEW MODEL COLONY STREETS	
Parkway 1A w/bike path	(ROW 165'+, CC 52'+26'+52')
Parkway 1A	(ROW160'+, CC 52'+26'+52')
Parkway 1-1	(ROW 148'+, CC 40'+28'+40')
Parkway 1-2	(ROW 148'+, CC 40'+16'+40')
Parkway 2-1	(ROW 124'+, CC 28'+28'+28')
Parkway 2-2	(ROW 124+, CC 28'+16'+28')
Standard Arterial	(ROW 108', CC 84')
Collector Street	(ROW 88', CC 64')
Local Streets	
SPECIFIC PLANS	

NOTE: ROW indicates right of way width.
CC indicates curb to curb width (widths of lanes+raised median+lanes).

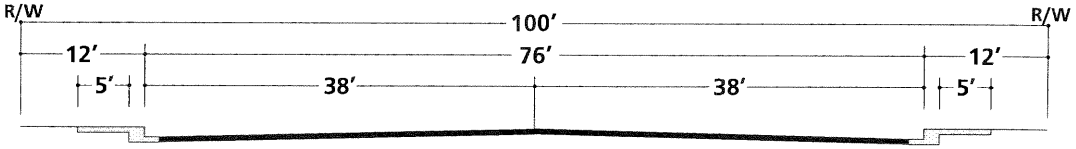
For precise street dimensions, refer to associated Specific Plan documents.

EXHIBIT 3-I

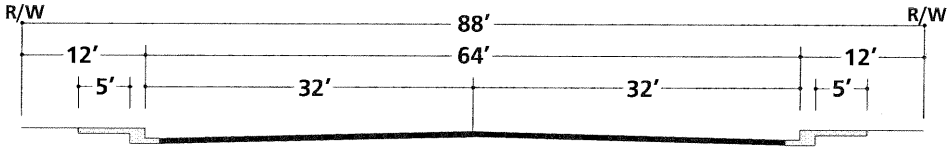
CITY OF ONTARIO
GENERAL PLAN ROADWAY CROSS-SECTIONS



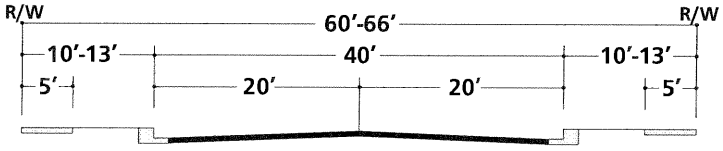
DIVIDED ARTERIAL



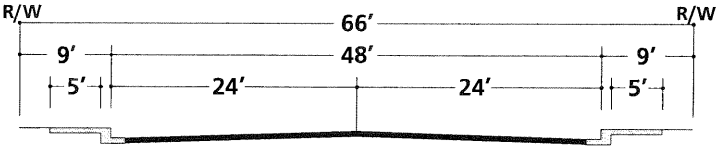
STANDARD ARTERIAL



COLLECTOR STREET



LOCAL STREET



LOCAL INDUSTRIAL STREET

SOURCE: CITY OF ONTARIO

Table 3-1

Study Area Roadway Classifications

Roadway	Segment	Classification	Number of Through Lanes
Chino Avenue	Entire Length	Collector	Two/Four
Schaefer Avenue	Entire Length	Standard Arterial	Four
Edison Avenue	West of Hellman Avenue to Mill Creek Avenue	Divided Arterial Parkway 1A	Eight
Edison Avenue	Mill Creek - Hamner	Divided Arterial Parkway 1A w/ Bikeway	Eight
Galena Street (Edison Extension)	Hamner - I-15 Freeway	Urban Arterial	Six
Hellman Avenue	Entire Length	Collector	Four
Archibald Avenue	North of Chino Avenue to Edison Avenue	Divided Arterial Parkway 1-2	Six
Archibald Avenue	South of Edison	Divided Arterial Parkway 1A w/ Bikeway	Eight
Turner Avenue	Entire Length	Collector	Two/Four
Haven Avenue	Entire Length	Divided Arterial Parkway 2-2	Four
Mill Creek Avenue	Entire Length	Collector	Two/Four
Hamner Avenue	North of Edison Avenue	Divided Arterial Parkway 1A	Eight
Hamner Avenue	South of Edison Avenue	Divided Arterial Parkway 1-1	Six

4.0 FUTURE TRAFFIC VOLUMES FORECASTS

This chapter of the report describes the development of the future traffic volumes and presents the resulting traffic volumes which will be used for traffic operations analysis. Future 2015 traffic volumes are presented first, followed by 2030 traffic volumes.

4.1 New Model Colony (NMC) Model Background Information

The land use data documented in the General Plan Amendment/EIR for the Ontario Sphere of Influence (now NMC) was thoroughly reviewed and found to be the same as the land use data in the original Buildout Ontario NMC Traffic Model. Iteris, Inc. and the City staff cooperatively developed "Year 2015 Land Use Data" for the New Model Colony, based on the project description for each of the currently proposed New Model Colony specific plan developments (Edenglen, Countryside, West Haven, Parkside, Rich-Haven, Armstrong Ranch, Great Park and other local projects). This scaled back version of the "Buildout Land Use Data" is representative of estimated most reasonable Year 2015 conditions. The west half of the New Model Colony is expected to be less developed than the east half, where specific plan preparations are already in progress.

The city's traffic model has been customized to provide updated Year 2015 Forecasts for the Ontario New Model Colony. The land use data, traffic analysis zone structure, and highway network has been customized to reflect all planned and programmed development in the eastside of the New Model Colony including the Armstrong Ranch, Countryside, West Haven, Edenglen, Parkside, Rich-Haven, Esperanza, Sub Area 29, The Avenue, The Lakes and Great Park Specific Plans. The Updated Year 2015 Ontario NMC Traffic Model (January 2008) will be used for all specific plan analyses in the area.

The future traffic volume forecasts included in this report are based on the most current knowledge regarding study area conditions. The input data related to the anticipated roadway system and expected levels of development have been refined and differ from the input data that was used to prepare the original traffic study report for The Avenue Specific Plan. As a result, the traffic volume forecasts in this report differ from the forecasts that were included in the original Specific Plan traffic study, as well as other reports that have been prepared related to The Avenue Specific Plan.

4.2 Future 2015 Traffic Volume Forecasts

As described within Section 1.3.1, the Interim Year (2015) With Project traffic volumes have been obtained from the traffic model developed in consultation and coordination with City of Ontario staff. The Ontario New Model Colony (NMC) travel demand model is currently being used for mid-range planning for the City of Ontario.

The backbone intersection volumes have been developed based on the 2015 NMC model run which includes The Avenue Specific Plan Amendment project. Appendix "G" illustrates the 2015 future forecast volumes developed specifically for The Avenue Specific Plan Amendment project. Appendix "G" also includes step by step calculations/discussion to generate the final 2015 With Project and 2015 Without Project traffic volumes.

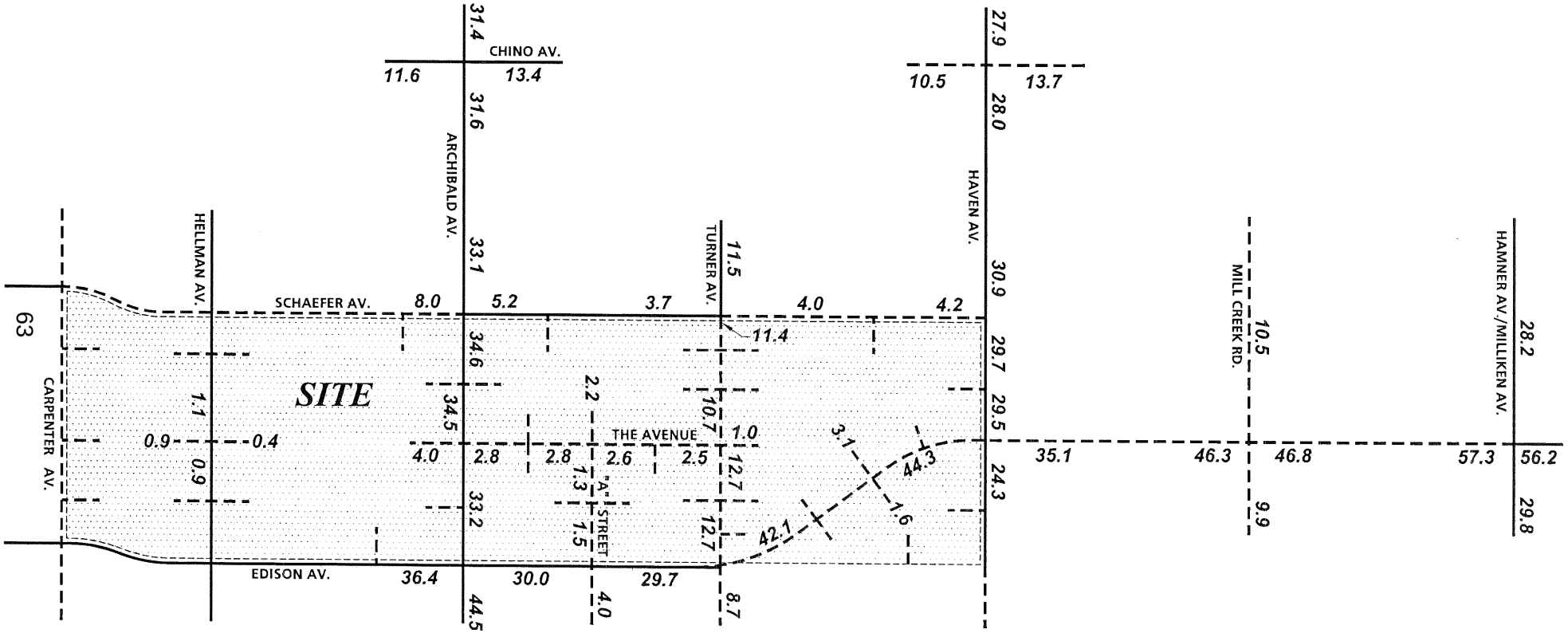
ADT volumes for 2015 traffic conditions have been determined using the methodology described previously (see Chapter 3) for estimating daily traffic volumes from peak hour data using the peak hour (AM and PM combined) to ADT factor is 5.49.

2015 With Project ADT volumes are shown on Exhibit 4-A, while 2015 With Project AM and PM peak hour traffic volumes are illustrated on Exhibit 4-B and Exhibit 4-C, respectively. As shown on these exhibits, Edison Avenue is the roadway anticipated to carry the most vehicles per day (VPD) in the study area with approximately 57,300 VPD using Edison Avenue (Cantu Galleano Ranch Road) west of Milliken Avenue. Other notable volumes in the study area include 44,300 VPD on Edison Avenue west of Haven Avenue and 46,800 VPD on Edison Avenue west of Mill Creek Road.

2015 Without Project ADT volumes are shown on Exhibit 4-D, while 2015 Without Project AM and PM peak hour traffic volumes are illustrated on Exhibit 4-E and Exhibit 4-F, respectively. As shown on these exhibits, Edison Avenue continues to be the roadway anticipated to carry the most vehicles per day (VPD) in the study area with approximately 56,800 VPD west of Milliken Avenue. Other notable volumes in the study area include the 43,500 VPD along Edison Avenue west of Haven Avenue and the 46,300 VPD along Edison Avenue west of Mill Creek Road.

EXHIBIT 4-A

2015 WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

EXHIBIT 4-B

2015 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

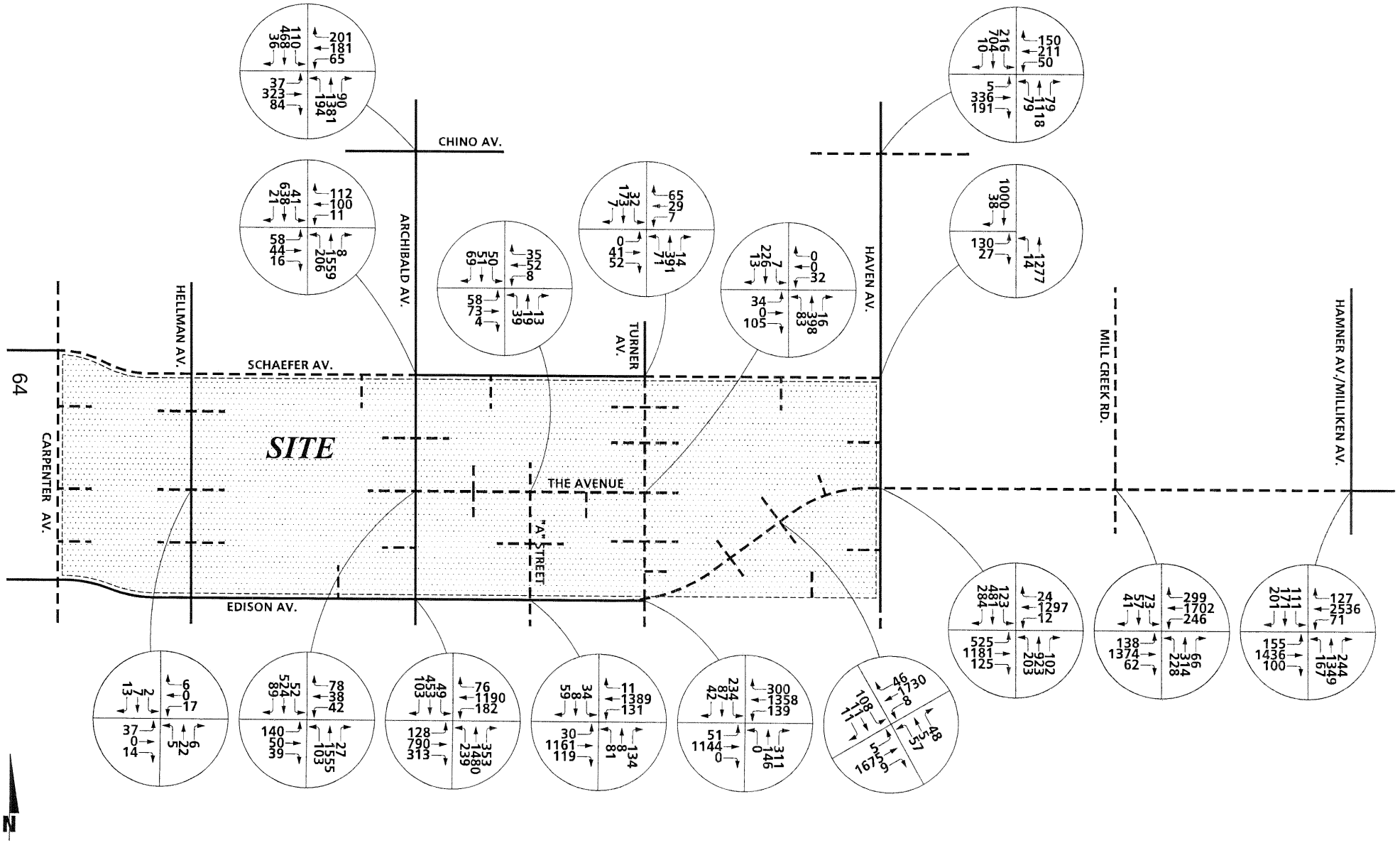


EXHIBIT 4-C

2015 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES

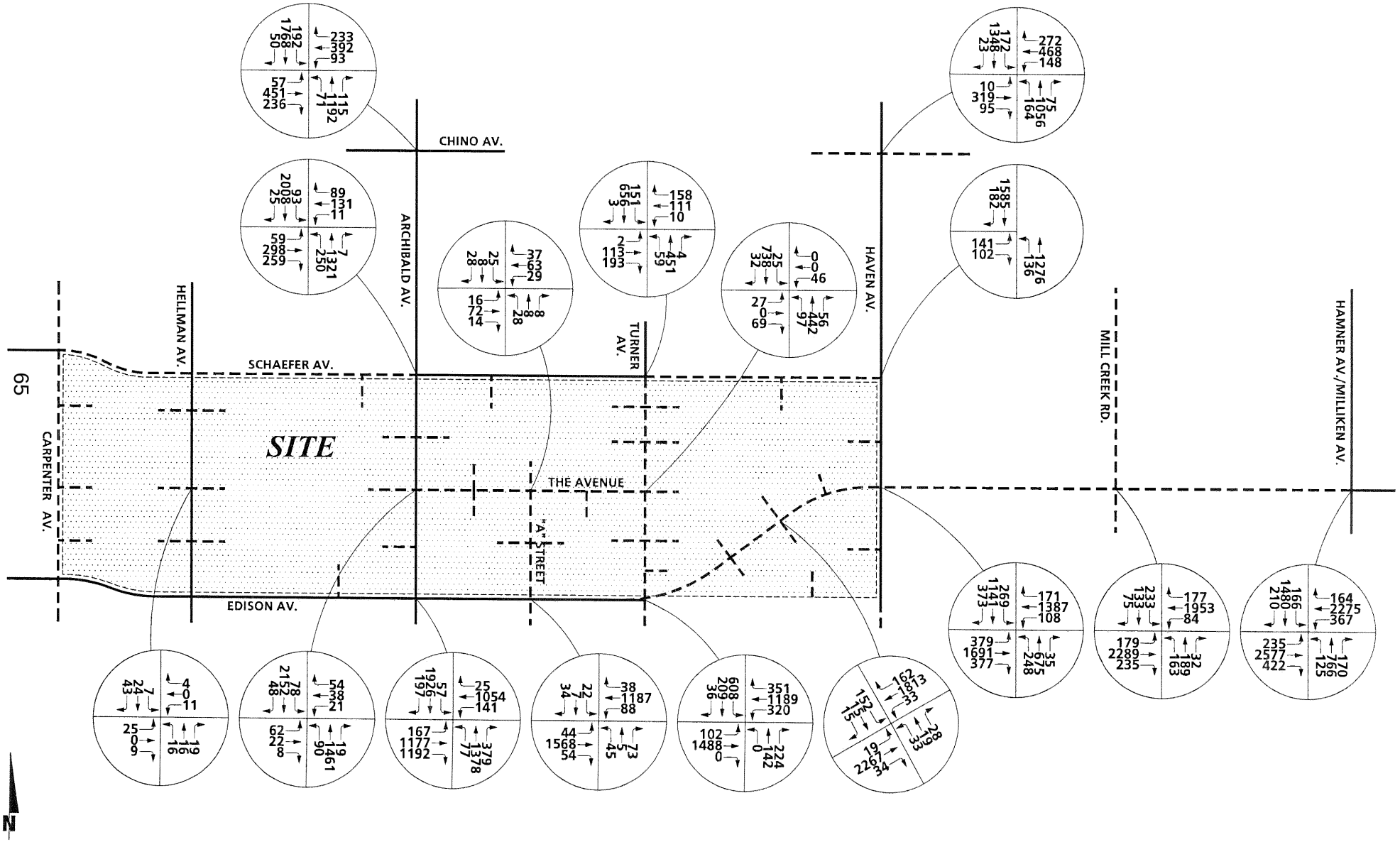
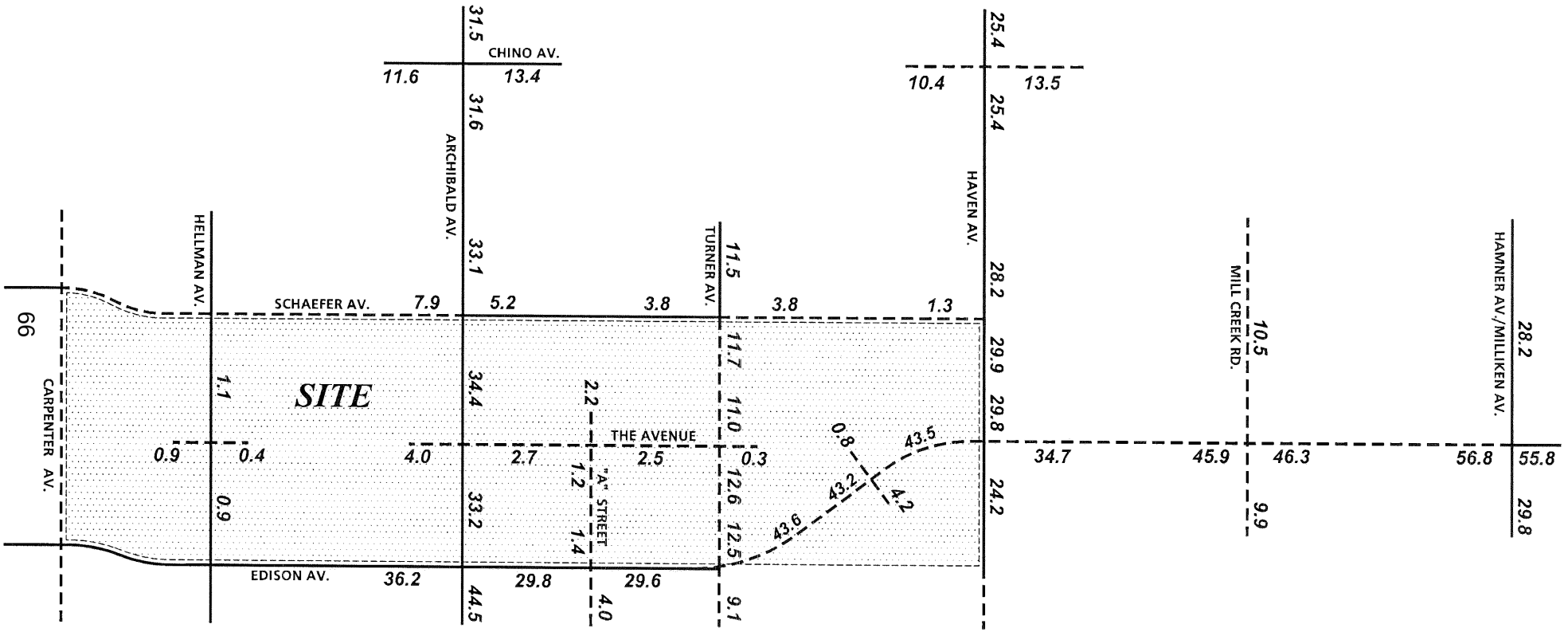


EXHIBIT 4-D

2015 WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

EXHIBIT 4-E

2015 WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

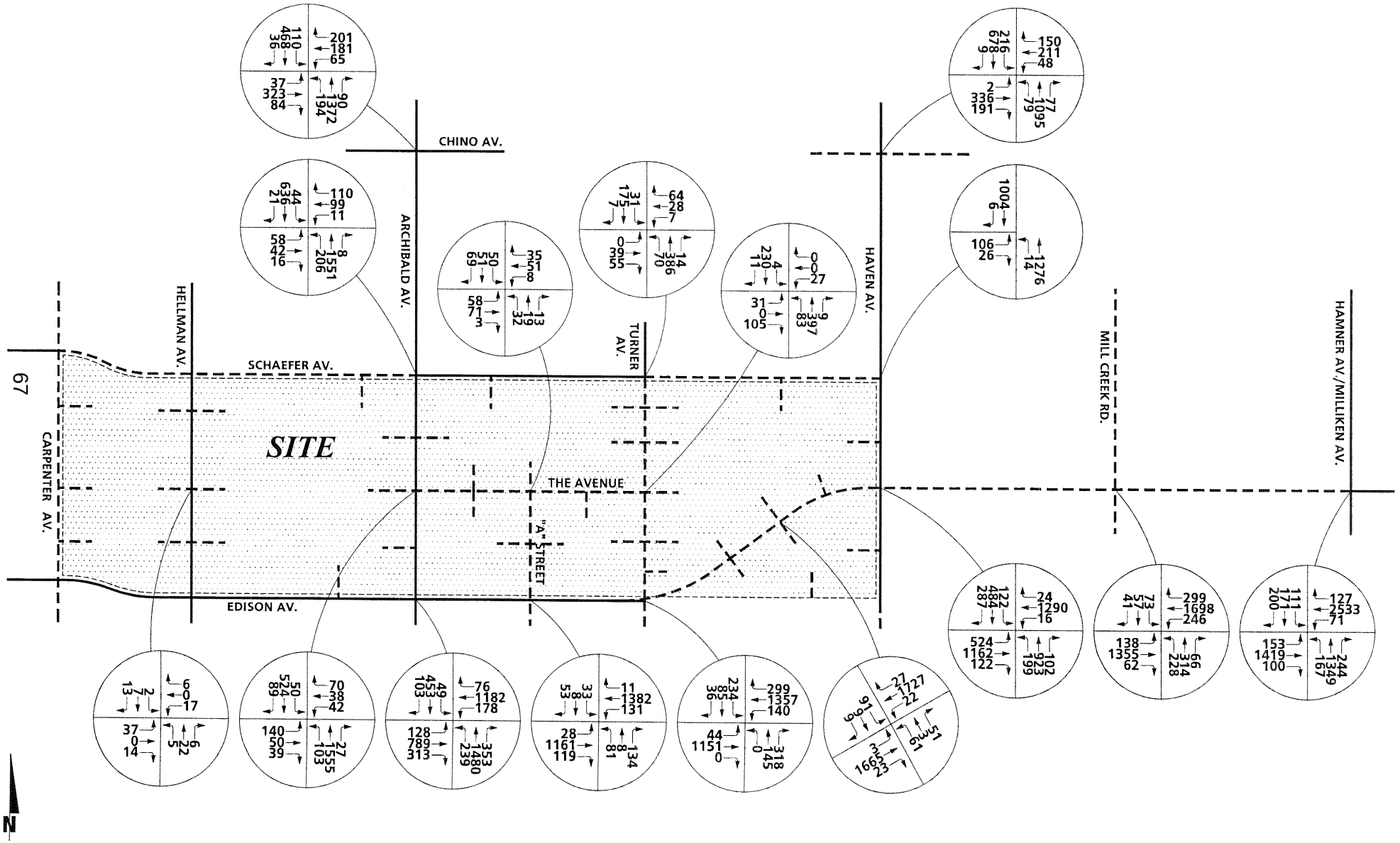
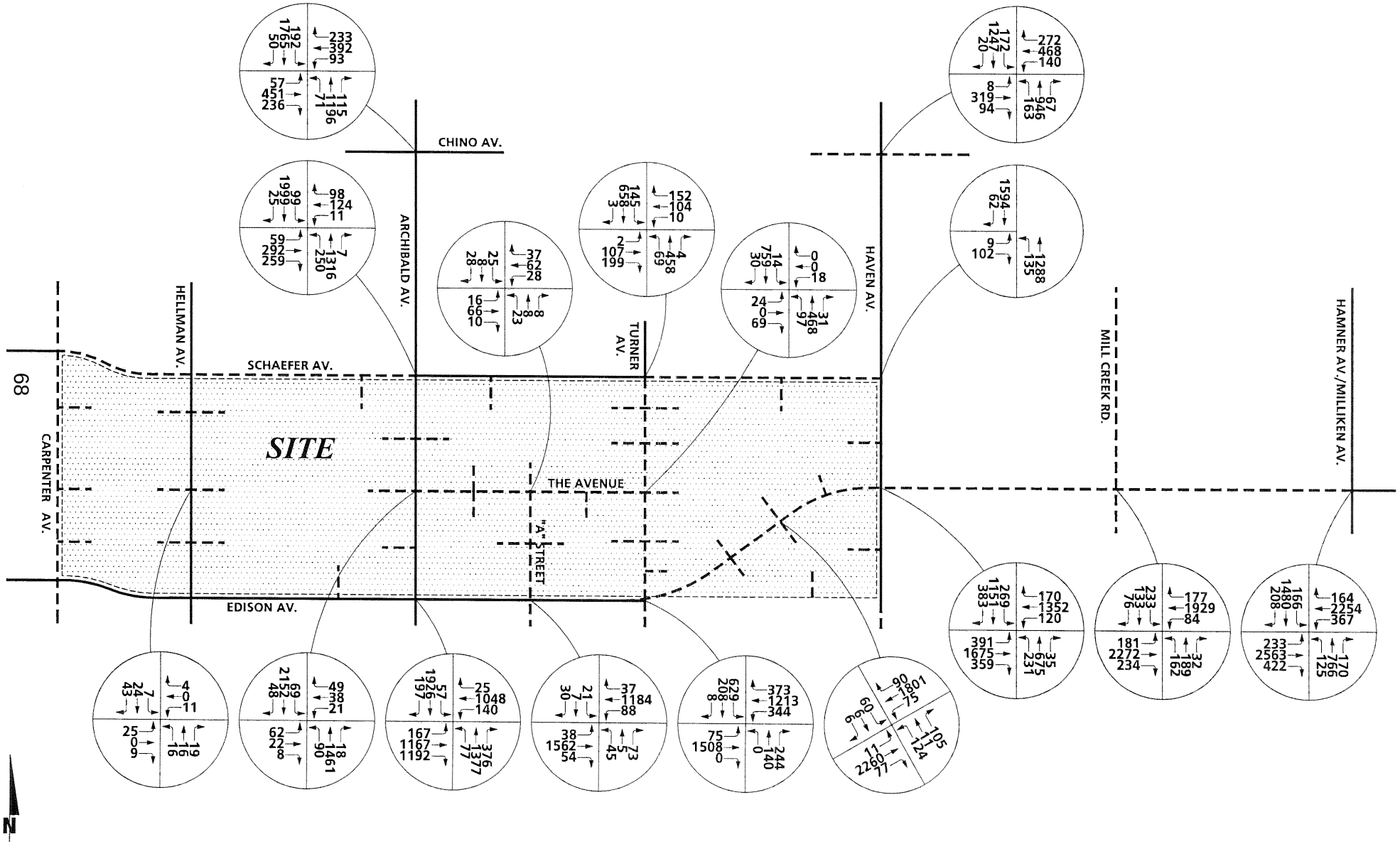


EXHIBIT 4-F

2015 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



4.3 Future 2030 Traffic Volume Forecasts

Similar to the Interim Year (2015) With Project volume forecasting methodology, the 2030 With Project traffic volumes have been obtained from the NMC traffic model developed by in consultation and coordination with City of Ontario staff.

The backbone intersection volumes have been developed based on the 2030 NMC model run which includes The Avenue Specific Plan Amendment project. Appendix "G" illustrates the 2030 future forecast volumes conducted specifically for The Avenue Specific Plan Amendment project. Appendix "G" also includes step by step calculations/discussion to generate the final 2030 With Project and 2030 Without Project traffic volumes.

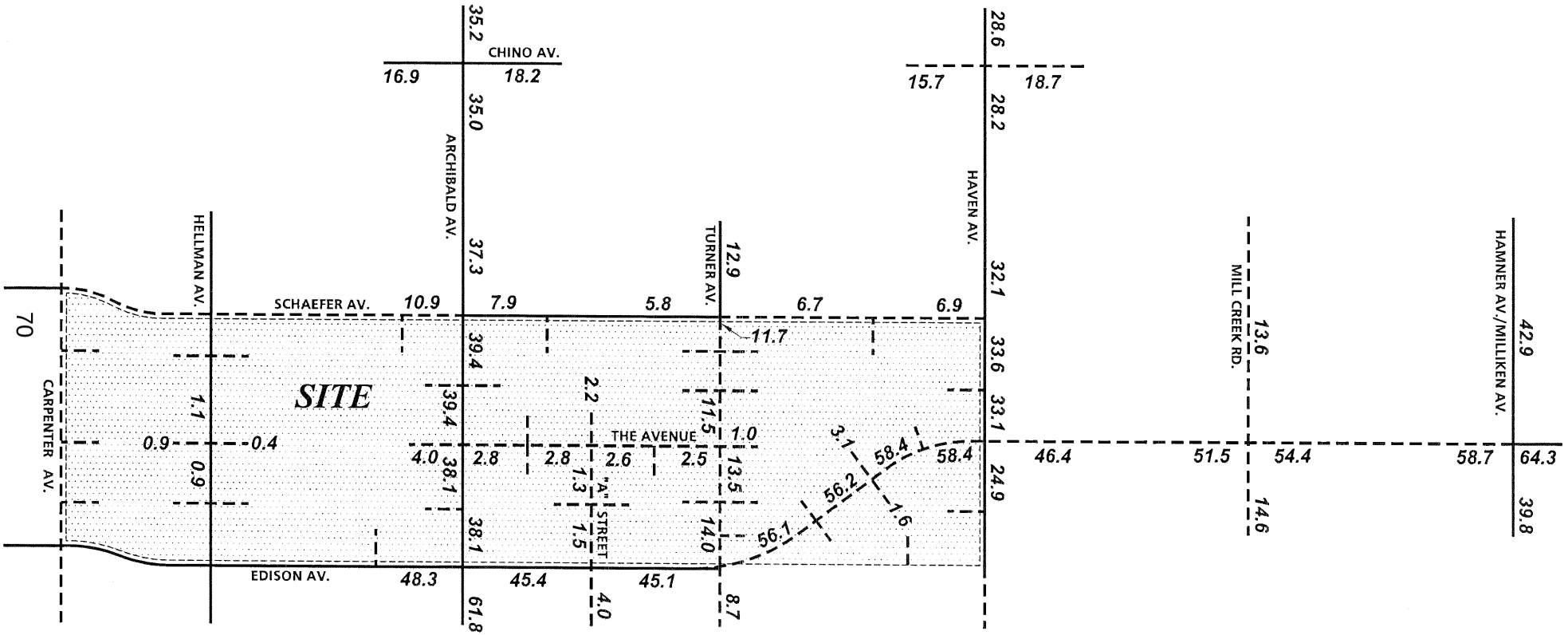
ADT volumes for 2030 traffic conditions have been determined using the methodology described previously (see Chapter 3) for estimating daily traffic volumes from peak hour data by assuming the peak hour to ADT factor is 5.49.

2030 With Project ADT volumes are shown on Exhibit 4-G, while 2030 With Project AM and PM peak hour traffic volumes are illustrated on Exhibit 4-H and Exhibit 4-I, respectively. As shown on these exhibits, Edison Avenue is the roadway anticipated to carry the most vehicles per day (VPD) in the study area with approximately 64,300 VPD west of Milliken Avenue. Other notable volumes in the study area include the 58,400 VPD along Edison Avenue west of Haven Avenue and the 61,800 VPD along Archibald Avenue, south of Edison Avenue.

2030 Without Project ADT volumes are shown on Exhibit 4-J, while 2030 Without Project AM and PM peak hour traffic volumes are illustrated on Exhibit 4-K and Exhibit 4-L respectively. As shown on these exhibits, Edison Avenue continues to be the roadway anticipated to carry the most vehicles per day (VPD) in the study area with approximately 63,900 VPD west of Milliken Avenue. Other notable volumes in the study area include the 57,600 VPD along Edison Avenue west of Haven Avenue and the 61,700 VPD along Archibald Avenue, south of Edison Avenue.

EXHIBIT 4-G

2030 WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

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EXHIBIT 4-H

2030 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

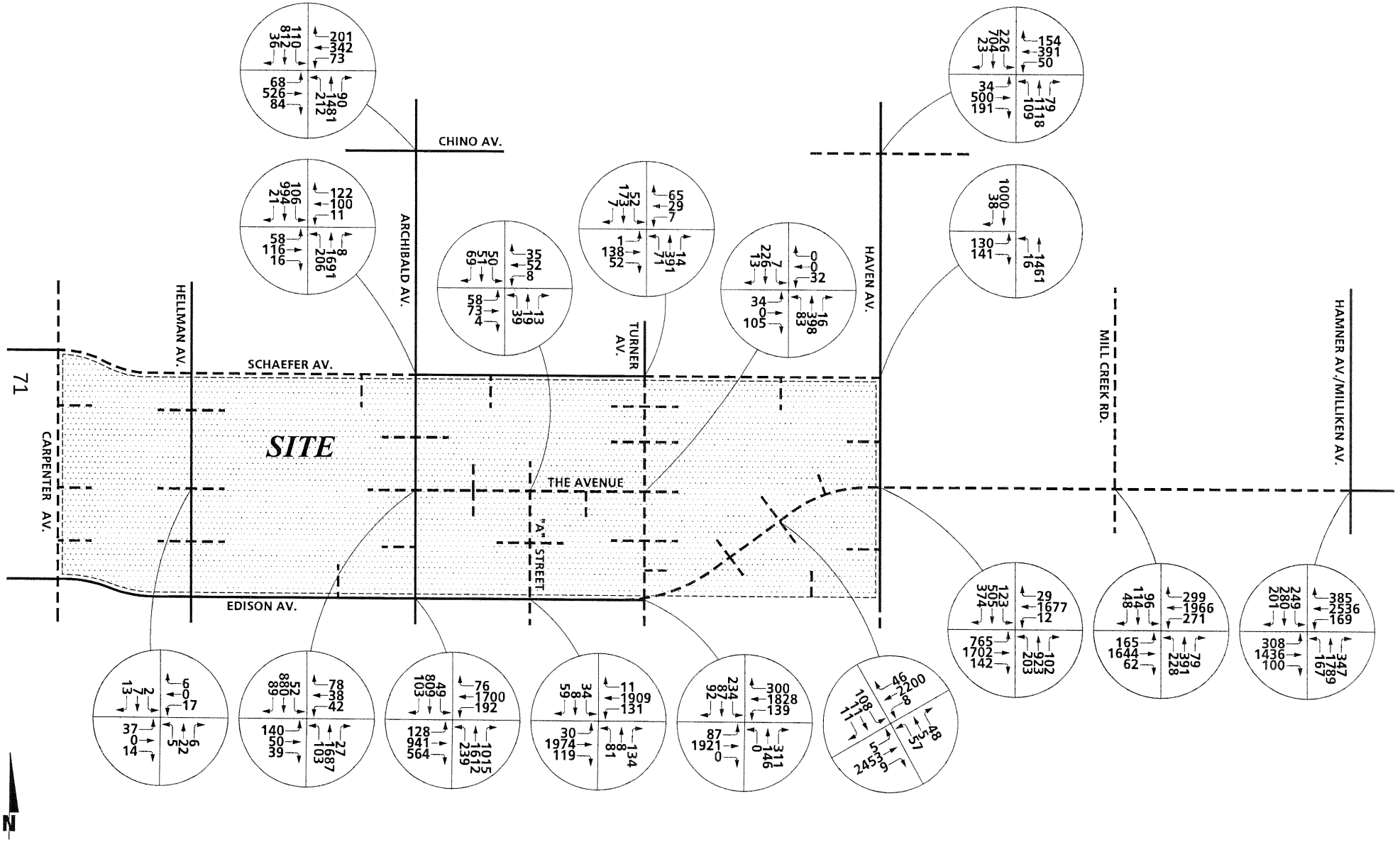


EXHIBIT 4-I

2030 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES

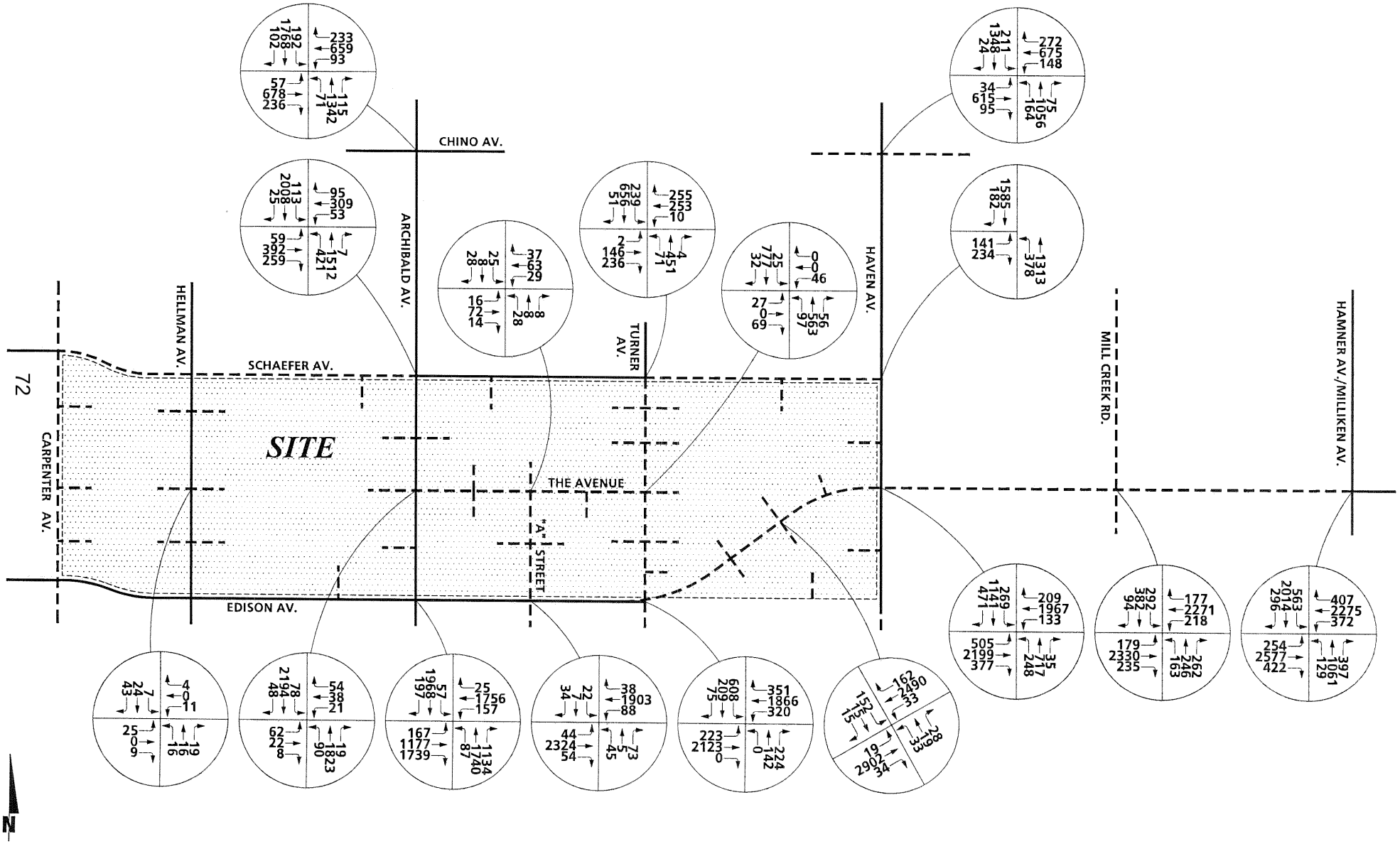
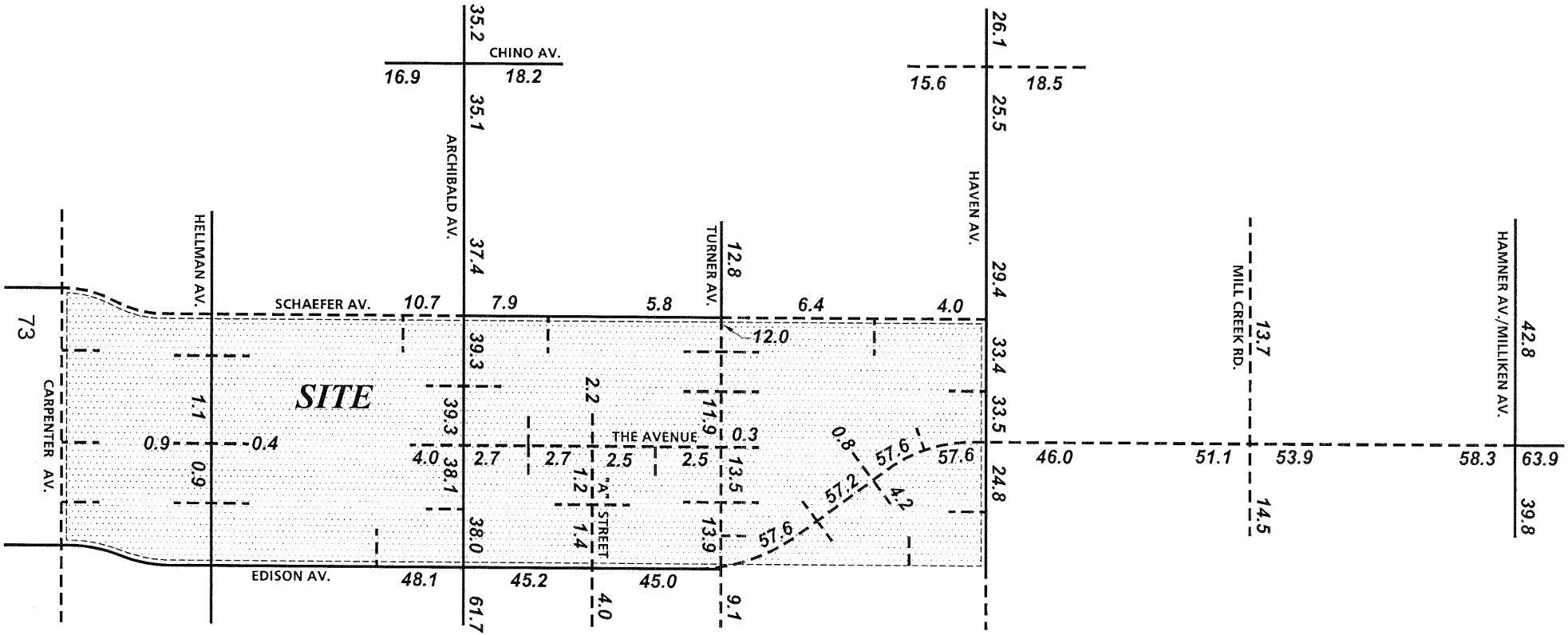


EXHIBIT 4-J

2030 WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

N

EXHIBIT 4-K

2030 WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

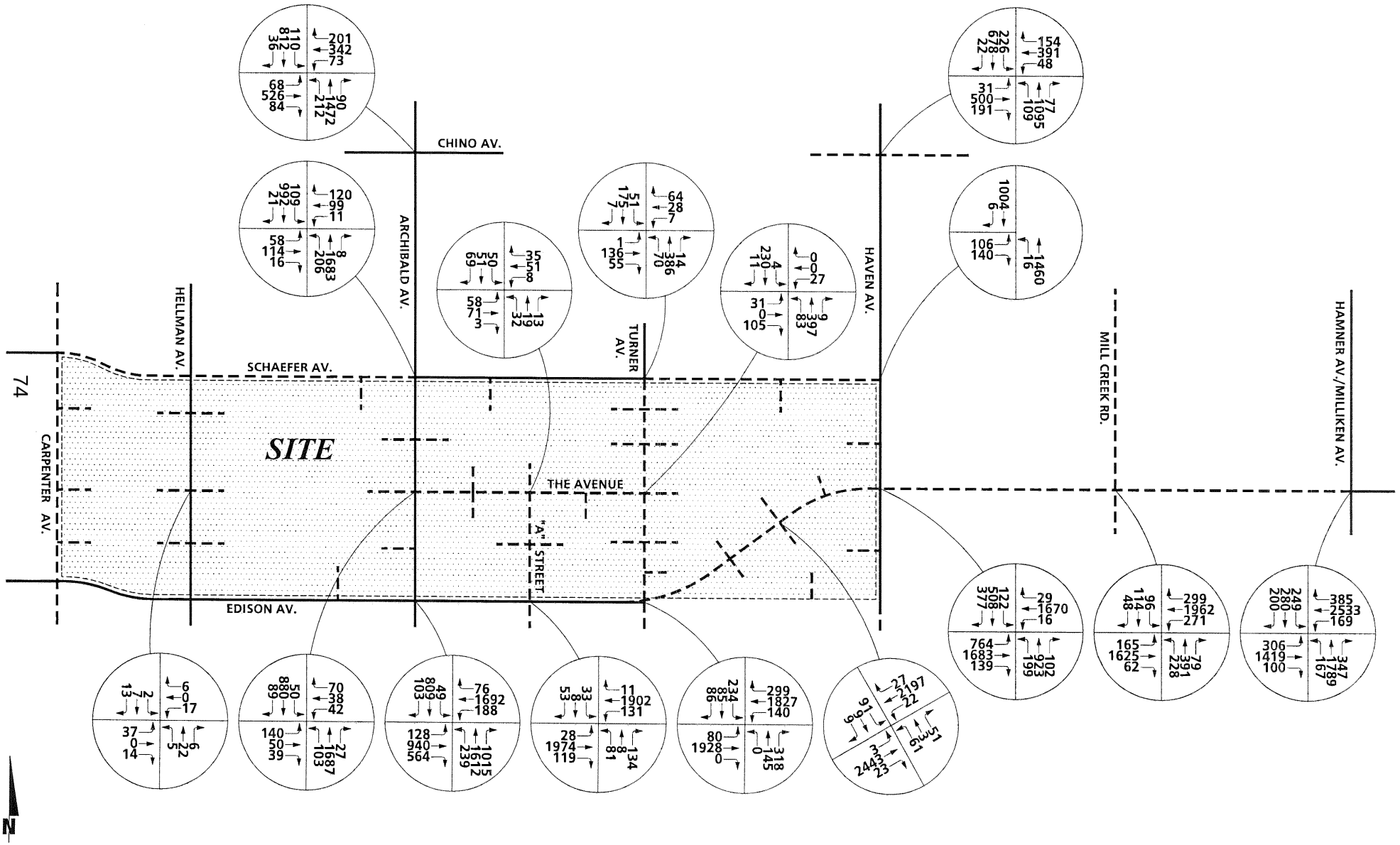
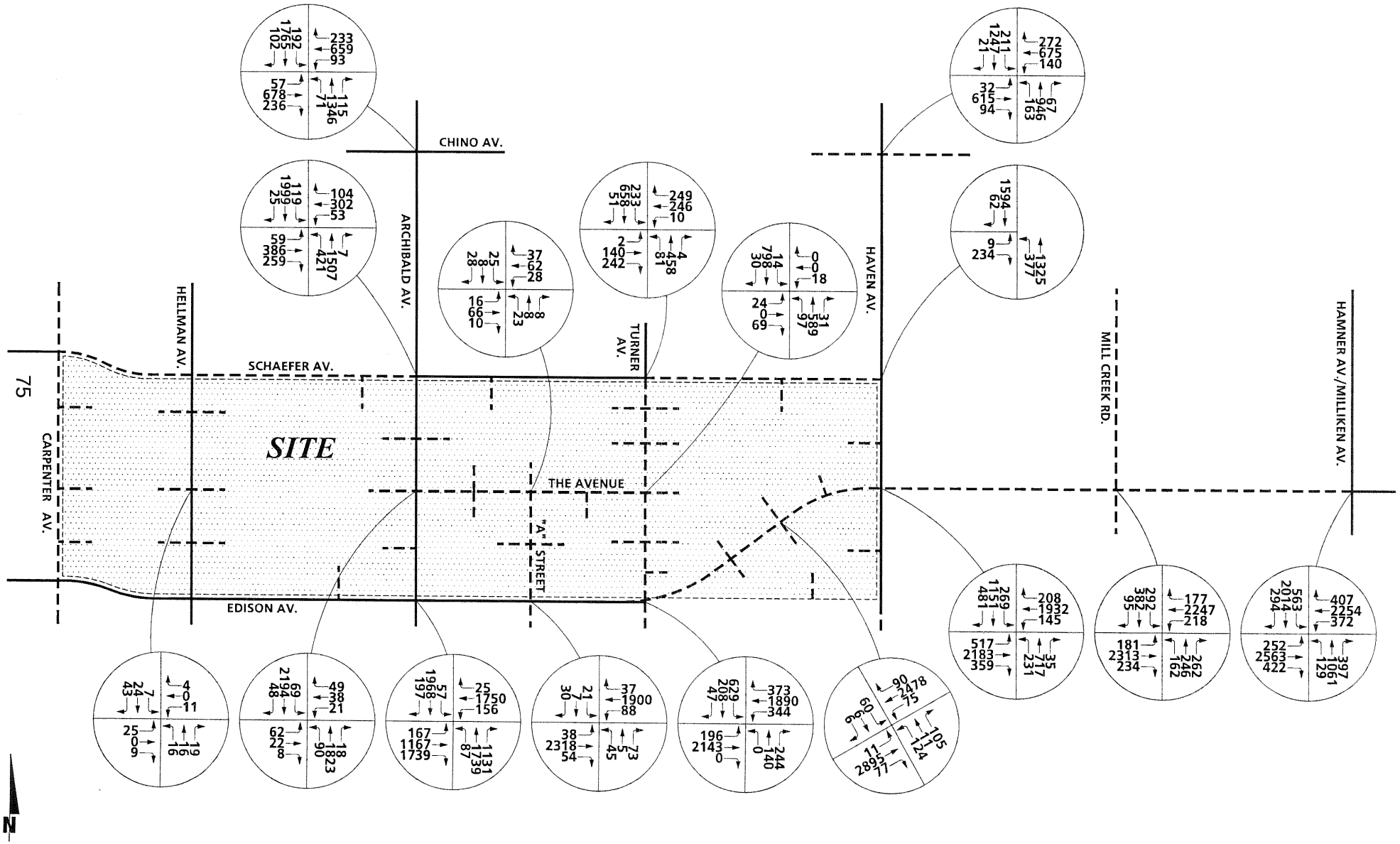


EXHIBIT 4-L

2030 WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



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5.0 TRAFFIC OPERATIONS ANALYSIS

This section of the report presents the operations analysis for the following five scenarios. As described in Chapter 1.3, the analysis procedures conform to the requirements of the County of San Bernardino CMP. The operations analysis for each analysis year is presented in a separate subsection.

- Existing Condition Traffic Operations
- Future Interim Year (2015) Without Project Operations
- Future Interim Year (2015) With Project Operations
- Future Horizon Year (2030) Without Project Operations
- Future Horizon Year (2030) With Project Operations

5.1 Existing Condition Traffic Operations

Existing peak hour traffic operations have been evaluated for both AM and PM peak hours of traffic throughout the study area. The operations analysis results are presented in Table 5-1. The operations analysis worksheets for existing conditions are included in Appendix "E".

As indicated on Table 5-1, all of the existing study intersections currently operate at acceptable levels of service during AM or PM peak hours for Existing conditions. Note the east leg of Archibald Avenue at Schaefer Avenue is currently paved, but is restricted from public access and therefore does not exist as a public road.

5.2 2015 Without Project Traffic Operations

The intersection operations analysis for 2015 Without Project traffic conditions under existing geometry conditions are summarized in Table 5-2. As shown in Table 5-2, all of the existing study area intersections will operate at unacceptable levels of service without improvements during peak hours per the City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

Table 5-1

Intersection Analysis for Existing Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] Secs.)		Level of Service	
		North-Bound			South-Bound			East-Bound			West-Bound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hellman Avenue (NS) at:																	
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
Archibald Avenue (NS) at:																	
• Chino Avenue (EW)	TS	1	3	0	1	2	0	0.5	1.5	0	1	2	0	15.3	17.1	B	B
• Schaefer Ave. (EW)	--	PRIVATE ROAD [4]												--	--	--	--
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• Edison Ave. (EW)	TS	1	1	1	1	1	1	1	1	1	1	1	1	34.7	34.4	C	C
"A" Street. (NS) at:																	
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
Turner Ave. (NS) at:																	
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• The "Avenue" (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
PA 10 and 11 Driveway (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
Haven Ave. (NS) at:																	
• Chino Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
• Edison Ave. (EW) (Realigned)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
Mill Creek Ave. (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
Milliken Ave./ Hamner Ave.																	
• Edison Ave. (EW)	TS	0	1	1	1	1	0	0	0	0	1	0	1	15.4	13.9	B	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right;

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R3 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal.

[4] East leg exists at this location as a private road, but is restricted from public access.

Table 5-2

Intersection Analysis for 2015 Without Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs.)		Level of Service	
		North-Bound			South-Bound			East-Bound			West-Bound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hellman Avenue (NS) at:																	
• The Avenue (EW)	CSS	1	1	0	1	1	0	1	1	0	1	1	0	9.0	9.4	A	A
Archibald Avenue (NS) at:																	
• Chino Avenue (EW)	TS	1	3	0	1	2	0	0.5	1.5	0	1	2	0	20.9	37.3	C	D
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	3	0	1	3	0	1	1	1	1	1	0	24.5	36.0	C	D
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	1	1	0	1	1	0	29.5	23.1	C	C
• Edison Ave. (EW)	TS	1	1	1	1	1	1	1	1	1	1	1	1	--[4]	--[4]	F	F
-With Improvements	TS	1	3	1	1	4	0	1	2	1>>	1	3	0	38.7	46.5	D	D
"A" Street. (NS) at:																	
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	2.9	2.8	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	2	0	1	2	0	23.8	23.8	C	C
Turner Ave. (NS) at:																	
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0	19.1	32.8	B	C
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	3.6	5.6	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	2	1	0	1	3	0	2	3	0	33.0	51.7	C	D
PA 10 and 11 Driveway (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	3	0	1	3	0	23.5	30.0	C	C
Haven Ave. (NS) at:																	
• Chino Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	2	0	1	1	0	1	2	0	48.0	39.4	D	D
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	0	2	0	1	0	1	0	0	0	8.4	13.7	A	B
• Edison Ave. (EW) (Realigned)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	2	3	1	1	3	1	43.4	53.7	D	D
Mill Creek Ave. (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	3	1	1	3	1	38.3	46.5	D	D
Milliken Ave./ Hamner Ave.																	
• Edison Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	0	--[4]	--[4]	F	F
-With Improvements	TS	1	3	0	1	4	0	2	4	1	2	4	1	45.2	50.7	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; >> = Free Right Turn Lane; 1 = improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R3 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop; RND = Roundabout

[4] -- = Delay High or V/C Ratio exceeding 1.0, Intersection Unstable, Level of Service "F".

For 2015 Without Project traffic conditions, the following study area intersections are projected to warrant a traffic signal (all signal warrant analysis worksheets are included in Appendix "F"):

Archibald Avenue (NS) at:

- Schaefer Avenue (EW) (new intersection)
- The Avenue (EW) (new intersection)

"A" Street (NS) at:

- The Avenue (EW) (new intersection)
- Edison Avenue (EW) (new intersection)

Turner Avenue (NS) at:

- Schaefer Avenue (EW) (new intersection)
- The Avenue (EW) (new intersection) – although this intersection currently warrants a traffic signal, a signal is not required to achieve acceptable LOS (see Table 5-2).
- Edison Avenue (EW) (new intersection)

PA 10 and 11 Driveway (NS) at:

- Edison Avenue (EW) (new intersection)

Haven Avenue (NS) at:

- Chino Avenue (EW) (new intersection)
- Schaefer Avenue (EW) (new intersection)
- Edison Avenue (EW) (new intersection)

Mill Creek Avenue (NS) at:

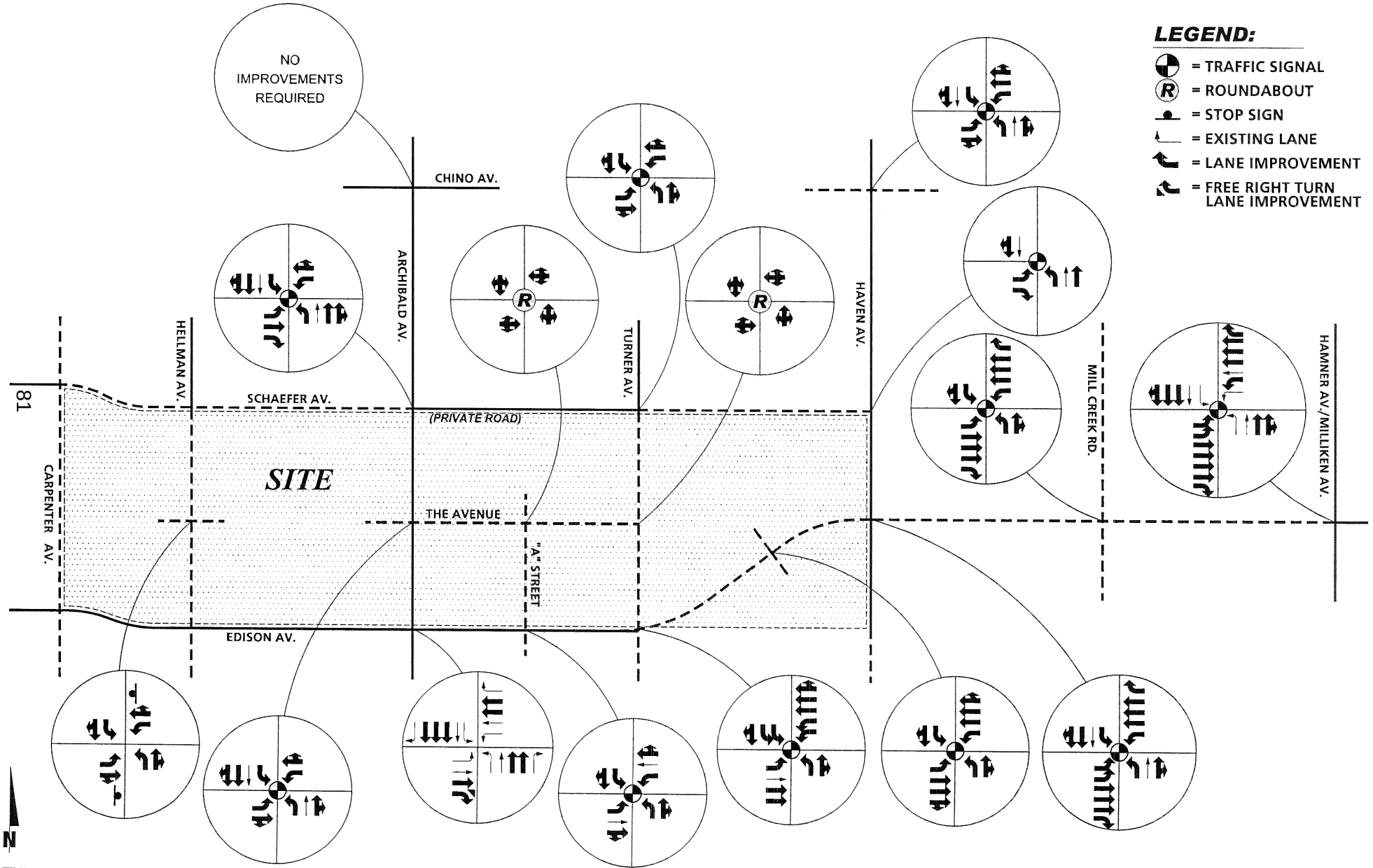
- Edison Avenue (EW) (new intersection)

As shown above, all of the intersections warranting a traffic signal are new intersections.

Table 5-2 also includes the minimum improvements, for the study area intersections for 2015 Without Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-2) for 2015 Without Project conditions are graphically

EXHIBIT 5-A

RECOMMENDED INTERSECTION IMPROVEMENTS FOR 2015 WITHOUT PROJECT CONDITIONS



illustrated on Exhibit 5-A. As shown on Exhibit 5-A, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

The proposed diameters for both roundabouts are 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A". The improvement analysis worksheets for all of the intersections are also included in Appendix "H".

5.3 2015 With Project Traffic Operations

The intersection operations analysis for 2015 With Project traffic conditions under existing geometry conditions are summarized in Table 5-3. As shown in Table 5-3, all of the existing study area intersections will operate at unacceptable levels of service without improvements during peak hours per the City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2015 With Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic under 2015 Without Project conditions.

Table 5-3 also includes the needed improvements for the study area intersections for 2015 With Project conditions. The intersection geometry improvements for 2015 With Project conditions are illustrated on Exhibit 5-B. As shown on Exhibit 5-B and 5-A (previously presented), the improvements required to achieve acceptable LOS for With and Without Project conditions are identical. Additionally, similar to 2015 Without Project conditions, single lane roundabouts are proposed to be installed at the following project intersections:

Table 5-3

Intersection Analysis for 2015 With Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs.)		Level of Service	
		North-Bound			South-Bound			East-Bound			West-Bound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hellman Avenue (NS) at:																	
• The Avenue (EW)	CSS	1	1	0	1	1	0	1	1	0	1	1	0	8.9	9.4	A	A
Archibald Avenue (NS) at:																	
• Chino Avenue (EW)	TS	1	3	0	1	2	0	0.5	1.5	0	1	2	0	20.9	37.4	C	C
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	3	0	1	3	0	1	1	1	1	1	0	24.5	36.3	C	D
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	1	1	0	1	1	0	29.6	23.2	C	C
• Edison Ave. (EW)	TS	1	1	1	1	1	1	1	1	1	1	1	1	34.6	43.7	C	D
-With Improvements	TS	1	3	1	1	4	0	1	2	1>>	1	3	0	39.0	47.2	D	D
"A" Street. (NS) at:																	
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	2.9	2.8	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	2	0	1	2	0	23.9	23.9	C	C
Turner Ave. (NS) at:																	
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0	19.2	33.3	B	C
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	3.6	5.6	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	2	1	0	1	3	0	2	3	0	32.8	48.2	C	D
PA 10 and 11 Driveway (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	3	0	1	3	0	24.6	32.2	C	C
Haven Ave. (NS) at:																	
• Chino Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	2	0	1	1	0	1	2	0	49.0	43.4	D	D
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	0	2	0	1	0	1	0	0	0	9.0	15.9	A	B
• Edison Ave. (EW) (Realigned)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	2	3	1	1	3	1	42.0	54.6	D	D
Mill Creek Ave. (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	3	1	1	3	1	38.5	47.2	D	D
Milliken Ave./ Hamner Ave.																	
• Edison Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	0	38.7	47.9	D	D
-With Improvements	TS	1	3	0	1	4	0	2	4	1	2	4	1	45.3	51.3	D	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; >> = Free Right Turn Lane; 1 = improvement

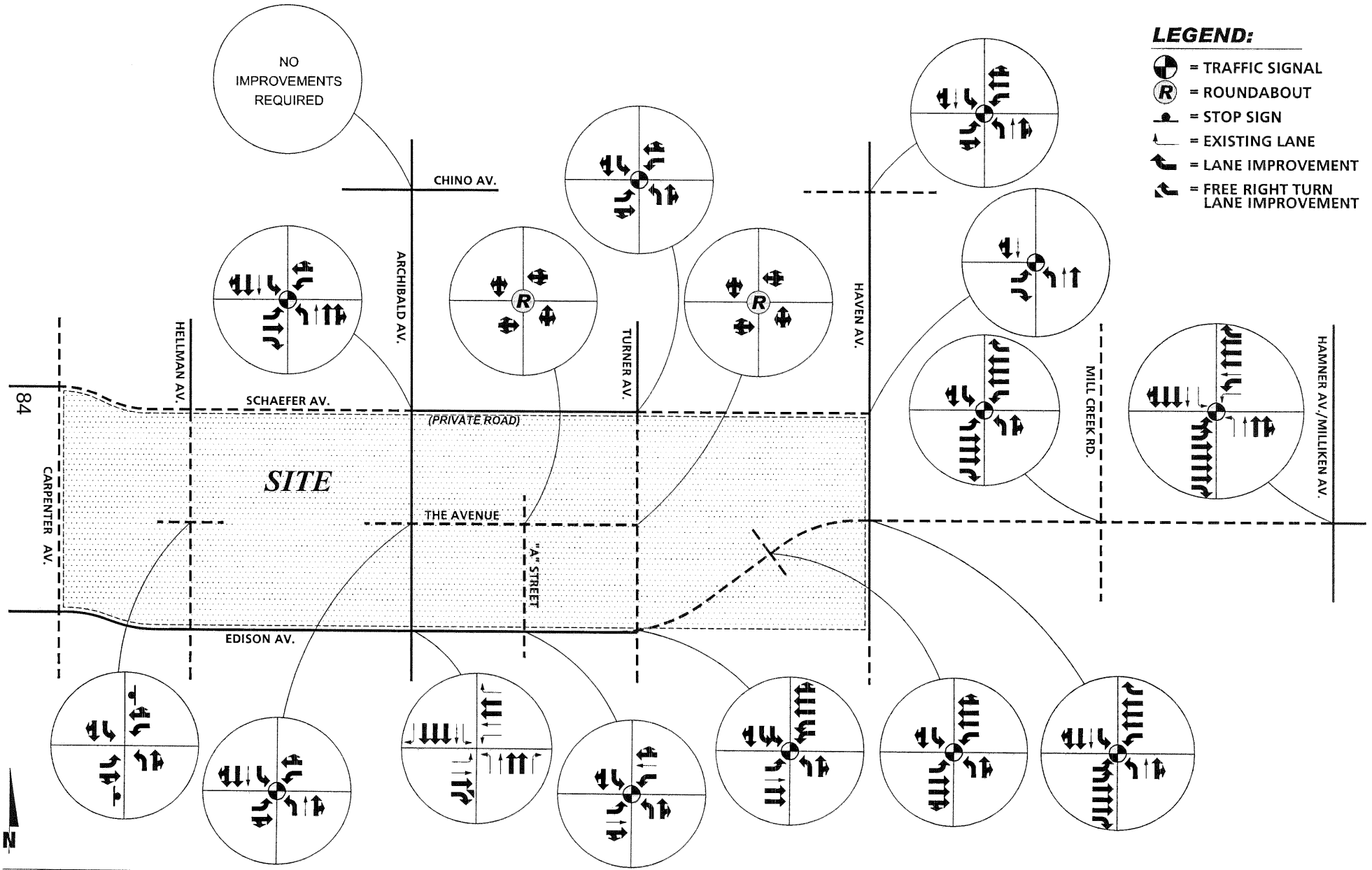
[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R3 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop; RND = Roundabout

[4] -- = Delay High or V/C Ratio exceeding 1.0, Intersection Unstable, Level of Service "F".

EXHIBIT 5-B

RECOMMENDED INTERSECTION IMPROVEMENTS FOR 2015 WITH PROJECT CONDITIONS



"A" Street at:

- The Avenue

Turner Avenue at:

- The Avenue

The proposed diameters for both roundabouts are 130 feet. Again, both roundabouts will operate at LOS "A". The improvement analysis worksheets for all of the intersections are also included in Appendix "I".

5.4 2030 Without Project Traffic Operations

The intersection operations analysis for 2030 Without Project traffic conditions under existing geometry conditions are summarized in Table 5-4. As shown in Table 5-4, all of the existing study area intersections will operate at unacceptable levels of service without improvements during peak hours per the City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2030 Without Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic signal under 2015 conditions.

Table 5-4 also includes the minimum improvements, for the study area intersections for 2030 Without Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-4) for 2030 Without Project conditions are graphically illustrated on Exhibit 5-C. As shown on Exhibit 5-C, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

Table 5-4

Intersection Analysis for 2030 Without Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs.)		Level of Service	
		North-Bound			South-Bound			East-Bound			West-Bound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hellman Avenue (NS) at:																	
• The Avenue (EW)	CSS	1	1	0	1	1	0	1	1	0	1	1	0	8.9	9.4	A	A
Archibald Avenue (NS) at:																	
• Chino Avenue (EW)	TS	1	3	0	1	2	0	0.5	1.5	0	1	2	0	19.3	34.9	B	C
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	3	0	1	4	0	1	1	1	1	1	0	25.3	41.2	C	D
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	1	1	0	1	1	0	27.9	25.1	C	C
• Edison Ave. (EW)	TS	1	1	1	1	1	1	1	1	1	1	1	1	--[4]	--[4]	F	F
-With Improvements	TS	1	3	1>>	1	4	0	1	2	1>>	1	4	0	34.4	40.5	C	D
"A" Street. (NS) at:																	
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	2.9	2.8	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-with improvements	TS	1	1	0	1	1	0	1	2	0	1	2	0	25.5	31.2	C	C
Turner Ave. (NS) at:																	
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0	20.5	44.0	C	D
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	3.6	6.2	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	2	1	0	1	4	0	2	4	1	29.2	46.4	C	D
PA 10 and 11 Driveway (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-with improvements	TS	1	1	0	1	1	0	1	4	0	1	3	0	24.8	30.9	C	C
Haven Ave. (NS) at:																	
• Chino Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	2	0	1	2	0	1	2	0	31.7	38.9	C	D
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	0	2	0	1	0	1	0	0	0	10.9	26.1	B	C
• Edison Ave. (EW) (Realigned)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	1	2	4	1	1	4	1	45.9	45.9	D	D
Mill Creek Ave. (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	1	1	1	0	1	4	1	1	4	1	34.3	42.8	C	D
Milliken Ave./ Hamner Ave.																	
• Edison Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	0	--[4]	--[4]	F	F
-With Improvements[5]	TS	2	4	1>	2	4	1	2	4	1	2	4	1	33.8	41.7	C	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Overlap Phase; >> = Free Right Turn Lane; 1 = improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R3 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

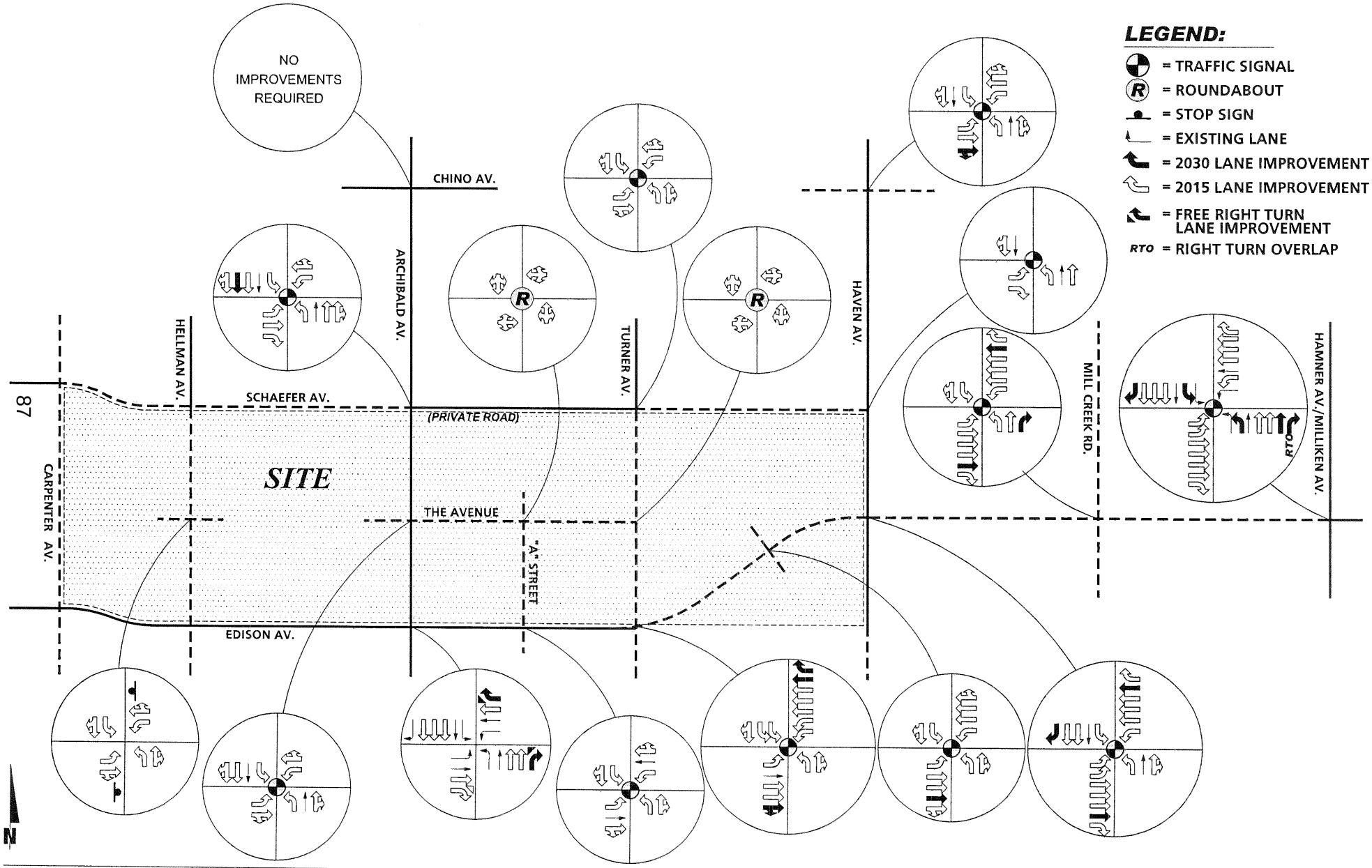
[3] TS = Traffic Signal; CSS = Cross Street Stop; RND = Roundabout

[4] -- = Delay High or V/C Ratio exceeding 1.0, Intersection Unstable, Level of Service "F".

[5] Pedestrians are assumed not to occur on every cycle.

EXHIBIT 5-C

RECOMMENDED INTERSECTION IMPROVEMENTS FOR 2030 WITHOUT PROJECT CONDITIONS



The proposed diameter for both roundabouts is 130 feet. Both of the proposed roundabouts will operate at LOS "A". The improvement analysis worksheets for all of the intersections are also included in Appendix "J".

5.5 2030 With Project Traffic Operations

The intersection operations analysis for 2030 With Project traffic conditions under existing geometry conditions are summarized in Table 5-5. As shown in Table 5-5, all of the existing study area intersections will operate at unacceptable levels of service during peak hours per City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2030 With Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic signal under 2015 conditions.

Table 5-5 also includes the minimum improvements, for the study area intersections for 2030 With Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-5) for 2030 With Project conditions are graphically illustrated on Exhibit 5-D. As shown on Exhibit 5-D and 5-C (previously presented), the improvements required to achieve acceptable LOS for With and Without Project conditions are identical. Additionally, similar to Without Project conditions, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

The proposed diameter for both roundabouts is 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A".

The improvement analysis worksheets for intersections are also included in Appendix "K".

Table 5-5

Intersection Analysis for 2030 With Project Conditions

Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs.)		Level of Service	
		North-Bound			South-Bound			East-Bound			West-Bound						
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
Hellman Avenue (NS) at:																	
• The Avenue (EW)	CSS	1	1	0	1	1	0	1	1	0	1	1	0	8.9	9.2	A	A
Archibald Avenue (NS) at:																	
• Chino Avenue (EW)	TS	1	3	0	1	2	0	0.5	1.5	0	1	2	0	19.3	35.0	B	C
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	3	0	1	4	0	1	1	1	1	1	0	25.3	41.4	C	D
• The Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	0	1	1	0	1	1	0	27.9	25.2	C	C
• Edison Ave. (EW)	TS	1	1	1	1	1	1	1	1	1	1	1	1	--[4]	--[4]	F	F
-With Improvements	TS	1	3	1>>	1	4	0	1	2	1>>	1	4	0	34.6	41.0	C	D
"A" Street. (NS) at:																	
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	2.9	2.8	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-with improvements	TS	1	1	0	1	1	0	1	2	0	1	2	0	25.6	31.6	C	C
Turner Ave. (NS) at:																	
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	1	1	0	1	1	0	1	1	0	20.6	44.7	C	D
• The "Avenue" (EW)	RND	0	1	0	0	1	0	0	1	0	0	1	0	3.6	6.2	A	A
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	0	2	1	0	1	4	0	2	4	1	29.1	45.2	C	D
PA 10 and 11 Driveway (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-with improvements	TS	1	1	0	1	1	0	1	4	0	1	3	0	25.2	35.6	C	D
Haven Ave. (NS) at:																	
• Chino Avenue (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	2	0	1	2	0	1	2	0	32.2	42.8	C	D
• Schaefer Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	0	2	0	1	0	1	0	0	0	10.8	29.7	B	C
• Edison Ave. (EW) (Realigned)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	2	0	1	3	1	2	4	1	1	4	1	46.2	46.1	D	D
Mill Creek Ave. (NS) at:																	
• Edison Ave. (EW)	--	INTERSECTION DOES NOT EXIST												--	--	--	--
-With Improvements	TS	1	1	1	1	1	0	1	4	1	1	4	1	34.4	43.0	C	D
Milliken Ave./ Hamner Ave.																	
• Edison Ave. (EW)	TS	1	1	0	1	1	0	1	1	0	1	1	0	--[4]	--[4]	F	F
-With Improvements[5]	TS	2	4	1>	2	4	1	2	4	1	2	4	1	33.9	42.0	C	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Overlap Phase; >> = Free Right Turn Lane; 1 = improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.9 R3 (2007). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

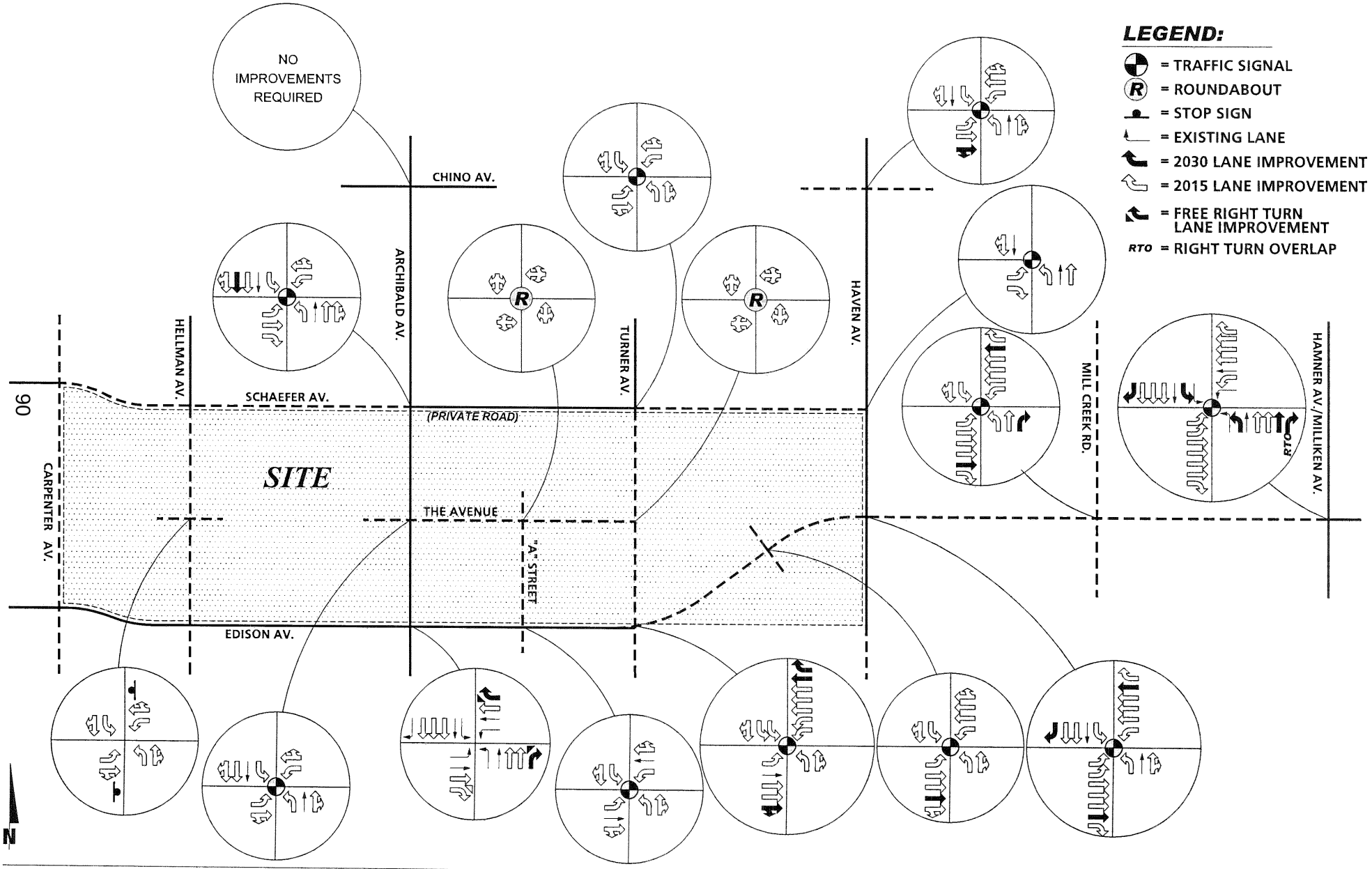
[3] TS = Traffic Signal; CSS = Cross Street Stop; RND = Roundabout

[4] -- = Delay High or V/C Ratio exceeding 1.0, Intersection Unstable, Level of Service "F".

[5] Pedestrians are assumed not to occur on every cycle.

EXHIBIT 5-D

RECOMMENDED INTERSECTION IMPROVEMENTS FOR 2030 WITH PROJECT CONDITIONS



6.0 PROJECT FAIR SHARE CALCULATION

The necessary 2030 With Project off-site improvement recommendations were described in previous sections of this report. The primary funding source for the study area is the City of Ontario Development Impact Fee (DIF) program.

Infrastructure improvements identified in the Master Facilities Plan and the DIF program are delivered through a variety of sources. Delivery of improvements will occur through City-led efforts using impact fee contributions and public funds as well as direct construction performed by developers. Arterial improvements identified and funded through the DIF program are based upon General Plan configurations. Roadways included in the DIF program which are located adjacent to the project are Chino Avenue, Edison Avenue, Vineyard Avenue, Archibald Avenue, Turner Avenue and Haven Avenue. Intersection improvements associated with the DIF program in this report are defined as the intersection of two Master Plan Roadways that are included in the DIF program.

The project contribution towards all improvements that have been identified in this traffic study that are consistent with the City of Ontario DIF program and background studies can be mitigated through payment of the DIF program fees. The cost of improvements that are not included in the DIF program are identified subsequently in this chapter, along with the project fair share contribution towards such improvements. Table 6-1 summarizes the project DIF program payment towards local area and regional traffic improvements. The project (The Avenue Specific Plan Amendment) will contribute an estimated $2,724,376 towards local and regional facilities, including the arterial roadway system and the regional freeway system. This contribution has been shown to represent the project fair share contribution towards the needed improvements to potentially impacted roadway facilities included in the DIF program. The analysis in this study confirms that no additional improvements are required as a result of the Specific Plan Amendment.

Table 6-2 identifies each individual improvement required for 2030 With Project conditions recommended in this traffic study. Improvements that are included in the DIF program are listed with an entry of "Fee Program." Improvements that primarily serve the local traffic generated by the project are identified as "Project" improvements. The project would be eligible for DIF program credit for any improvements included in the DIF program that are constructed by the project, including on-site or site adjacent improvements.

Table 6-1

The Avenue SPA DIF Program Traffic Funding Contribution

Land Use Category	Quantity	Impact Fee[1]	Fees Generated
Single Family Residential	286 units	$6,578/unit	$1,881,308
Commercial	76,000	$11.093/sq ft	$843,068
TOTAL			**$2,724,376**

[1] Per Ontario New Model Colony Development Impact Fee program as updated April 15, 2007

Table 6-2
(1 of 3)

2030 With Project Conditions Roadway Improvement Cost

Intersections	Improvements	Total Cost
Hellman Avenue (NS) at:		
• The Avenue (EW)		
	Construct 1st NB Left Turn Lane	PROJECT
	Construct 1st NB Shared Through-Right Lane	PROJECT
	Construct 1st SB Left Turn Lane	PROJECT
	Construct 1st SB Shared Through-Right Lane	PROJECT
	Construct 1st EB Left Turn Lane	PROJECT
	Construct 1st EB Shared Through-Right Lane	PROJECT
	Construct 1st WB Left Turn Lane	PROJECT
	Construct 1st WB Shared Through-Right Lane	PROJECT
	SUBTOTAL	**$0**
Archibald Avenue (NS)[2] at:		
• Schaefer Avenue (EW)		
	Install a traffic signal	$400,000
	Reconstruct NB Through Lane as 1st Exclusive Left Turn Lane	$50,000
	Construct 1st, 2nd, and 3rd NB Through Lanes	$869,160
	Reconstruct SB Through Lane as 1st Exclusive Left Turn Lane	$50,000
	Construct 1st, 2nd, and 3rd SB Through Lanes	$869,160
	Construct 4th SB Through Lane	$289,720
	Construct 1st EB Left Turn Lane	$50,000
	Construct 1st EB Through Lane	$289,720
	Construct 1st EB Right Turn Lane	$50,000
	Construct 1st WB Left Turn Lane	$50,000
	Construct 1st WB Shared Through-Right Lane	$289,720
	SUBTOTAL	**$3,257,480**
Archibald Avenue (NS) at:		
• The Avenue (EW)		
	Install a traffic signal	PROJECT
	Reconstruct NB Through Lane as 1st Exclusive Left Turn Lane	PROJECT
	Construct 1st and 2nd NB Through Lanes	PROJECT
	Reconstruct SB Through Lane as 1st Exclusive Left Turn Lane	PROJECT
	Construct 1st, 2nd, and 3rd SB Through Lanes	PROJECT
	Construct 1st EB Left Turn Lane	PROJECT
	Construct 1st EB Shared Through-Right Lane	PROJECT
	Construct 1st WB Left Turn Lane	PROJECT
	Construct 1st WB Shared Through-Right Lane	PROJECT
	SUBTOTAL	**$0**
• Edison Avenue (EW)		
	Reconstruct Existing NB Right Turn Lane as 2nd Through Lane	FEE PROGRAM
	Construct 3rd NB Through Lane	FEE PROGRAM
	Construct NB Free Right Turn Lane	FEE PROGRAM
	Reconstruct SB Right Turn Lane into 2nd SB Through Lane	FEE PROGRAM
	Construct 3rd and 4th SB Through Lanes	FEE PROGRAM
	Reconstruct EB Right Turn Lane into 2nd EB Through Lane	FEE PROGRAM
	Construct 1st EB Free Right Turn Lane	FEE PROGRAM
	Reconstruct WB Right Turn Lane as 2nd WB Through Lane	FEE PROGRAM
	Construct 3rd and 4th WB Through Lanes	FEE PROGRAM
	SUBTOTAL	**$0**
"A" Street (NS) at:		
• The "Avenue" (EW)		
	Install a Roundabout	PROJECT
	Construct 1st NB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st SB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st EB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st WB Shared Left-Through-Right Turn Lane	PROJECT
	SUBTOTAL	**$0**
• Edison Avenue (EW)		
	Install a traffic signal	PROJECT
	Construct 1st SB Left Turn Lane	PROJECT
	Construct 1st SB Right Turn Lane	PROJECT
	Construct 1st EB Left Turn Lane	PROJECT
	Construct 2nd EB Through Lane	PROJECT
	Construct 2nd WB Through Lane	PROJECT
	SUBTOTAL	**$0**

Table 6-2
(2 of 3)

2030 With Project Conditions Roadway Improvement Cost

Intersections	Improvements	Total Cost
Turner Avenue (NS) at:		
• Schaefer Avenue (EW)		
	Install a traffic signal	PROJECT
	Construct 1st NB Left Turn Lane	PROJECT
	Construct 1st NB Shared Through-Right Lane	PROJECT
	Reconstruct SB Through Lane into 1st SB Left Turn Lane	$50,000
	Construct 1st SB Shared Through-Right Lane	$289,720
	Construct 1st EB Shared Through-Right Lane	$289,720
	Construct 1st WB Left Turn Lane	PROJECT
	Construct 1st WB Shared Through-Right Lane	$289,720
	SUBTOTAL	**$919,160**
• The "Avenue" (EW)		
	Install a Roundabout	PROJECT
	Construct 1st NB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st SB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st EB Shared Left-Through-Right Turn Lane	PROJECT
	Construct 1st WB Shared Left-Through-Right Turn Lane	PROJECT
	SUBTOTAL	**$0**
• Edison Avenue (EW)		
	Install a traffic signal	PROJECT
	Construct 1st NB Left Turn Lane	PROJECT
	Construct 1st NB Shared Through-Right Lane	PROJECT
	Construct 1st and 2nd SB Left Turn Lane	PROJECT
	Construct 1st SB Shared Through-Right Lane	PROJECT
	Reconstruct EB Through Lane as 1st Exclusive Left Turn Lane	PROJECT
	Construct 1st, 2nd, 3rd, and 4th EB Through Lanes	$1,158,880
	Reconstruct WB Through Lane as 1st Exclusive Left Turn Lane	PROJECT
	Construct 2nd WB Left Turn Lane	PROJECT
	Construct 1st, 2nd, 3rd, and 4th EB Through Lanes	$1,158,880
	Construct 1st WB Right Turn Lane	PROJECT
	SUBTOTAL	**$2,317,760**
PA 10 and 11 Driveways (NS) at:		
• Edison Avenue (EW)		
	Install a traffic signal	PROJECT
	Construct 1st NB Left Turn Lane	PROJECT
	Construct 1st NB Shared Through-Right Lane	PROJECT
	Construct 1st SB Left Turn Lane	PROJECT
	Construct 1st SB Shared Through-Right Lane	PROJECT
	Construct 1st EB Left Turn Lane	PROJECT
	Construct 1st, 2nd, 3rd, and 4th EB Through Lanes	PROJECT
	Construct 1st WB Left Turn Lane	PROJECT
	Construct 1st, 2nd, and 3rd WB Through Lanes	PROJECT
	SUBTOTAL	**$0**
Haven Avenue (NS) at:		
• Chino Avenue (EW)		
	Install a traffic signal	FEE PROGRAM
	Reconstruct NB Through Lane into 1st NB Left Turn Lane	FEE PROGRAM
	Construct 1st and 2nd NB Through Lanes	FEE PROGRAM
	Reconstruct SB Through Lane into 1st SB Left Turn Lane	FEE PROGRAM
	Construct 1st and 2nd SB Through Lanes	FEE PROGRAM
	Construct 1st EB Left Turn Lane	FEE PROGRAM
	Construct 1st and 2nd EB Through Lanes	FEE PROGRAM
	Construct 1st WB Left Turn Lane	FEE PROGRAM
	Construct 1st and 2nd WB Through Lanes	FEE PROGRAM
	SUBTOTAL	**$0**
• Schaefer Avenue (EW)[1]		
	Install a traffic signal	FEE PROGRAM
	Reconstruct NB Through lane into 1st NB Left Turn Lane	FEE PROGRAM
	Construct 1st and 2nd NB Through Lanes	FEE PROGRAM
	Construct 2nd SB Through Lane	FEE PROGRAM
	Construct 1st EB Left Turn Lane	FEE PROGRAM
	Construct 1st EB Right Turn Lane	FEE PROGRAM
	SUBTOTAL	**$0**

Table 6-2
(3 of 3)

2030 With Project Conditions Roadway Improvement Cost

Intersections	Improvements	Total Cost
• Edison Avenue (EW)		
	Install a traffic signal	FEE PROGRAM
	Reconstruct NB Shared Through-Right Lane into 1st NB Left Turn La	FEE PROGRAM
	Construct 1st and 2nd NB Shared Through Lanes	FEE PROGRAM
	Reconstruct SB Shared Through-Right Lane into 1st SB Left Turn La	FEE PROGRAM
	Construct 1st, 2nd, and 3rd SB Through Lanes	FEE PROGRAM
	Construct 1st SB Right Turn Lane	FEE PROGRAM
	Construct 1st and 2nd EB Left Turn Lanes	FEE PROGRAM
	Construct 1st, 2nd, 3rd and 4th EB Through Lane	FEE PROGRAM
	Construct 1st EB Right Turn Lane	FEE PROGRAM
	Construct 1st WB Left Turn Lane	FEE PROGRAM
	Construct 1st, 2nd, 3rd, and 4th WB Through Lanes	FEE PROGRAM
	Construct 1st WB Right Turn Lane	FEE PROGRAM
	SUBTOTAL	**$0**
Mill Creek Avenue (NS) at:		
• Edison Avenue (EW)[2]		
	Install a traffic signal	$400,000
	Construct 1st NB Left Turn Lane	$50,000
	Construct 1st NB Through Lane	$289,720
	Construct 1st NB Right Turn Lane	$50,000
	Construct 1st SB Left Turn Lane	$50,000
	Construct 1st SB Shared Through-Right Lane	$289,720
	Construct 1st EB Left Turn Lane	$50,000
	Construct 1st, 2nd, 3rd, and 4th EB Through Lanes	$1,158,880
	Construct 1st EB Right Turn Lane	$50,000
	Construct 1st WB Left Turn Lane	$50,000
	Construct 1st, 2nd, 3rd, and 4th WB Through Lanes	$1,158,880
	Construct 1st WB Right Turn Lane	$50,000
	SUBTOTAL	**$3,647,200**
Milliken Avenue / Hamner Avenue (NS) at:		
• Edison Avenue (EW)		
	Reconstruct NB Through Lane as 1st Exclusive Left Turn Lane	FEE PROGRAM
	Construct 2nd NB Left Turn Lane	FEE PROGRAM
	Reconstruct NB Right Turn Lane as 1st Through Lane	FEE PROGRAM
	Construct 2nd, 3rd and 4th NB Through Lanes	FEE PROGRAM
	Construct 1st NB Right Turn Lane with Overlap Phase	FEE PROGRAM
	Reconstruct SB Through Lane as 2nd Exclusive Left Turn Lane	FEE PROGRAM
	Construct 1st, 2nd, 3rd, and 4th SB Through Lanes	FEE PROGRAM
	Construct 1st SB Right Turn Lane	FEE PROGRAM
	Construct 1st and 2nd EB Left Turn Lanes	FEE PROGRAM
	Construct 1st, 2nd, 3rd, and 4th EB Through Lanes	FEE PROGRAM
	Construct 1st EB Right Turn Lane	FEE PROGRAM
	Reconstruct WB Right Turn Lane as 2nd Exclusive Left Turn Lane	FEE PROGRAM
	Construct 1st, 2nd, 3rd, and 4th WB Through Lanes	FEE PROGRAM
	Construct 1st WB Right Turn Lane	FEE PROGRAM
	SUBTOTAL	**$0**
	TOTAL	**$10,141,600**

[1] It is recommended this location replace the intersection of Haven Avenue at Schaefer Avenue in the current fee program

[2] This roadway is part of the DIF program. However, costs have been calculated for all intersections improvements at this location.

A cost estimate is shown for any improvement that is not already included in the DIF program or that do not represent an on-site improvement that will serve the project. The cost estimates have been developed pursuant to the San Bernardino County Congestion Management Program Guidelines cost factors. These cost factors are included as Appendix "K" of this report. The total cost of study area improvements potentially not included in the City of Ontario DIF program and / or would be constructed in conjunction with the project is $10,141,600. In general, the improvements are additional improvements to intersections already along roadways included in the City of Ontario Fee Programs.

The project responsibility towards the improvements that are not part of the City of Ontario (or other) fee program has been calculated on the basis of the project percentage of new traffic. Table 6-3 summarizes the fair share contribution analysis. The project contribution is based on the cost of new improvements and the project percentage of new traffic during the AM and PM peak hour. The higher traffic contribution percentage has been used at each analysis location.

Fair share contributions have been calculated for 2030 With Project Conditions for the intersections. The project fair share analysis has been based on the proportion of project peak hour traffic contributed to the improvement location relative to the total new peak hour 2030 With Project traffic volume. As shown in Table 6-3, the project traffic contributions at study area intersections range from -1.42 percent to 0.75 percent at the study area intersections. As shown on Table 6-3, the additional project fair share contribution responsibility is $45,399.

Table 6-3

The Avenue SPA Additional Fair Share Project Improvement Cost

Intersection	Total Cost	Peak Hour	Existing Traffic	Year 2030 With Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic	(A) AM Project Cost Share	(B) PM Project Cost Share	Highest AM or PM Cost Share
Archibald Avenue (NS) at:										
• Schaefer Avenue (EW)										
	$3,257,480	AM	0	3,448	12	3,448	0.35%	$11,339	$11,339	$11,339
		PM	0	5,252	12		0.35%			
Turner Avenue (NS) at:										
• Schaefer Avenue (EW)										
	$919,160	AM	0	1,001	6	1,001	0.60%	$5,510	$0	$5,510
		PM	0	2,374	0		0.00%			
• Edison Avenue (EW)										
	$2,317,760	AM	0	5,146	3	5,146	0.06%	$1,351	-$32,879	$1,351
		PM	0	6,141	-73		-1.42%			
Mill Creek Avenue (NS) at:										
• Edison Avenue (EW)										
	$3,647,200	AM	0	5,364	23	5,364	0.43%	$15,640	$27,199	$27,199
		PM	0	6,849	40		0.75%			
TOTAL ADDITIONAL FAIR SHARE COST AT STUDY INTERSECTIONS								**$33,840**	**$5,659**	**$45,399**

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7.0 SUMMARY AND RECOMMENDATIONS

This chapter summarizes the findings of this traffic impact analysis, and provides a series of recommendations related to project implementation.

7.1 Summary

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act (CEQA) and the San Bernardino County Congestion Management Program (CMP). Previous studies conducted for the Ontario Sphere of Influence (now referred to as the New Model Colony) include the Ontario Sphere of Influence Traffic Study, the Ontario Sphere of Influence CMP Traffic Study, and the Ontario New Model Colony Transportation Implementation Plan.

As described within Section 1.3.1, the future traffic volumes have been obtained from the traffic model developed in consultation and coordination with City of Ontario staff. The Ontario New Model Colony (NMC) travel demand model is currently being used for mid- and long-range planning for the City of Ontario.

The backbone intersection volumes have been developed based on the 2015 and 2030 NMC model run which includes The Avenue Specific Plan Amendment project. Appendix "G" illustrates the 2015 and 2030 future forecast volumes conducted specifically for The Avenue Specific Plan Amendment project. Appendix "G" also includes step by step calculations/discussion to generate the final 2015 and 2030 With Project and 2015 and 2030 Without Project traffic volumes.

The Avenue Specific Plan Amendment has an increase of 76,000 square feet of commercial space and 286 dwelling units in addition to the previous plan of 174,000 square feet of commercial space and 2,320 dwelling units. This report is an amendment to the previous The Avenue Specific Plan traffic impact study and is evaluating the "project" as only the net change in trip generation.

The trip generation calculation is based on the most recent Institute of Transportation Engineers Trip Generation Rates, 7th Edition. The Avenue Specific Plan Amendment divides the development into eleven planning areas.

7.1.1 The Project

The Avenue Specific Plan project is proposed to include residential, park, commercial and School land uses. Exhibit 1-B presented previously illustrates the project site plan and the respective planning areas.

The traffic related to the project has been calculated in accordance with the following accepted procedural steps:

- Trip Generation
- Trip Distribution
- Traffic Assignment

Table 2-1 (previously presented) summarizes the trip rates utilized to calculate the trip generation for The Avenue Specific Plan Amendment. As shown on Table 2-1, the trip generation calculations consists of ITE land use codes "210" (Single Family Detached Housing), "230" (Condos), "520" (Elementary School), "522" (Middle School) and "820" (Shopping Center). Table 2-2 presents the overall trip generation calculated for The Avenue Specific Plan. The land use intensities identified on Table 2-2 reflect The Avenue Specific Plan Amendment which consists of a more intense retail component in comparison to the original The Avenue Specific Plan. As shown on Table 2-2, the entire The Avenue Specific Plan (with the proposed amendment) generates 35,147 daily vehicles with 2,730 vehicles and 3, 462 vehicles in the AM and PM peak hour, respectively.

The trip generation previously evaluated in The Avenue Specific Plan Traffic Impact Study prepared by Urban Crossroads, Inc. (dated September 22, 2006) is shown on Table 2-3 (previously presented). As shown on Table 2-3, the previously evaluated Specific Plan generates 31,876 daily vehicles with 2,619 vehicles and 3, 186 vehicles in the AM and PM peak hour, respectively.

Table 2-4 (previously presented) presents the trip generation comparison between the Avenue Specific Plan Amendment and the Avenue Specific Plan. As shown on Table 2-4, the majority of land use and intensity changes occur towards the easterly portion of the site

where Planning Areas 10 and 11 are located. As previously discussed, the net change between the Specific Plan Amendment and the Specific Plan is identified as the "project" in this report. Based on this information, the "project" generates +3,272 daily vehicles with +113 vehicles and +279 vehicles in the AM and PM peak hour, respectively.

7.1.2 Existing Study Area Conditions

Existing peak hour traffic operations have been evaluated for both AM and PM peak hours of traffic throughout the study area. The operations analysis results are presented in Table 5-1. The operations analysis worksheets for existing conditions are included in Appendix "E".

As indicated on Table 5-1 (previously presented), all of the existing study intersections currently operate at acceptable levels of service during AM or PM peak hours for Existing conditions.

7.1.3 2015 Without Project Conditions

The intersection operations analysis for 2015 Without Project traffic conditions under existing geometry conditions are summarized in Table 5-2. As shown in Table 5-2 (previously presented), all of the existing study area intersections will operate at unacceptable levels of service, without improvements, during peak hours per City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2015 Without Project traffic conditions, the following study area intersections are projected to warrant a traffic signal (all signal warrant analysis worksheets are included in Appendix "F"):

Archibald Avenue (NS) at:

- Schaefer Avenue (EW) (new intersection)
- The Avenue (EW) (new intersection)

"A" Street (NS) at:

- The Avenue (EW) (new intersection)

Turner Avenue (NS) at:

- Schaefer Avenue (EW) (new intersection)
- The Avenue (EW) (new intersection) – although this intersection currently warrants a traffic signal, a signal is not required to achieve acceptable LOS (see Table 5-2).
- Edison Avenue (EW) (new intersection)

PA 10 and 11 Driveway (NS) at:

- Edison Avenue (EW) (new intersection)

Haven Avenue (NS) at:

- Chino Avenue (EW) (new intersection)
- Schaefer Avenue (EW) (new intersection)
- Edison Avenue (EW) (new intersection)

Mill Creek Avenue (NS) at:

- Edison Avenue (EW) (new intersection)

As shown above, all of the intersections warranting a traffic signal are new intersections.

Table 5-2 also includes the minimum improvements, for the study area intersections for 2015 Without Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-2) for 2015 Without Project conditions are graphically illustrated on Exhibit 5-A. As shown on Exhibit 5-A, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

The proposed diameters for both roundabouts are 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A".

The improvement analysis worksheets for these intersections are also included in Appendix "H".

7.1.4 2015 With Project Conditions

The intersection operations analysis for 2015 With Project traffic conditions under existing geometry conditions are summarized in Table 5-3 (previously presented). As shown in Table 5-3, all of the existing study area intersections will operate at unacceptable levels of service, without improvements, during peak hours per City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2015 With Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic under 2015 Without Project conditions.

Table 5-3 also includes the needed improvements for the study area intersections for 2015 With Project conditions. The intersection geometry improvements for 2015 With Project conditions are illustrated on Exhibit 5-B. As shown on Exhibit 5-B and 5-A (previously presented), the improvements required to achieve acceptable LOS for With and Without Project conditions are identical. Additionally, similar to 2015 Without Project conditions, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street at:

- The Avenue

Turner Avenue at:

- The Avenue

The proposed diameters for both roundabouts are 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A".

The improvement analysis worksheets for intersections are also included in Appendix "I".

7.1.5 2030 Without Project Conditions

The intersection operations analysis for 2030 Without Project traffic conditions under existing geometry conditions are summarized in Table 5-4. As shown in Table 5-4 (previously presented), all of the existing study area intersections will operate at unacceptable levels of service, without improvements, during peak hours per City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2030 Without Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic signal under 2015 conditions.

Table 5-4 also includes the minimum improvements, for the study area intersections for 2030 Without Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-4) for 2030 Without Project conditions are graphically illustrated on Exhibit 5-C. As shown on Exhibit 5-C, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

The proposed diameter for both roundabouts is 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A".

The improvement analysis worksheets for intersections are also included in Appendix "J".

7.1.6 2030 With Project Conditions

The intersection operations analysis for 2030 With Project traffic conditions under existing geometry conditions are summarized in Table 5-5. As shown in Table 5-5 (previously presented), all of the existing study area intersections will operate at unacceptable levels of service, without improvements, during peak hours per City's criteria except for the following intersection:

Archibald Avenue (NS) at:

- Chino Avenue (EW)

For 2030 With Project traffic conditions, no additional study area intersections are projected to warrant a traffic signal, in addition to those that warrant a traffic signal under 2015 conditions.

Table 5-5 also includes the minimum improvements, for the study area intersections for 2030 With Project conditions, required to achieve acceptable LOS. The intersection geometry improvements (identified on Table 5-5) for 2030 With Project conditions are graphically illustrated on Exhibit 5-D. As shown on Exhibit 5-D and 5-C (previously presented), the improvements required to achieve acceptable LOS for With and Without Project conditions are identical. Additionally, similar to Without Project conditions, single lane roundabouts are proposed to be installed at the following project intersections:

"A" Street (NS) at:

- The Avenue (EW)

Turner Avenue (NS) at:

- The Avenue (EW)

The proposed diameter for both roundabouts is 130 feet. The proposed roundabout at the intersection of "A" Street at The Avenue will operate at LOS "A". Similarly, the proposed roundabout at the intersection of Turner Avenue at The Avenue will operate at LOS "A".

The improvement analysis worksheets for intersections are also included in Appendix "K".

7.2 Recommendations

The recommendations in this section address the on site improvements, off-site improvements of all necessary study area transportation improvements.

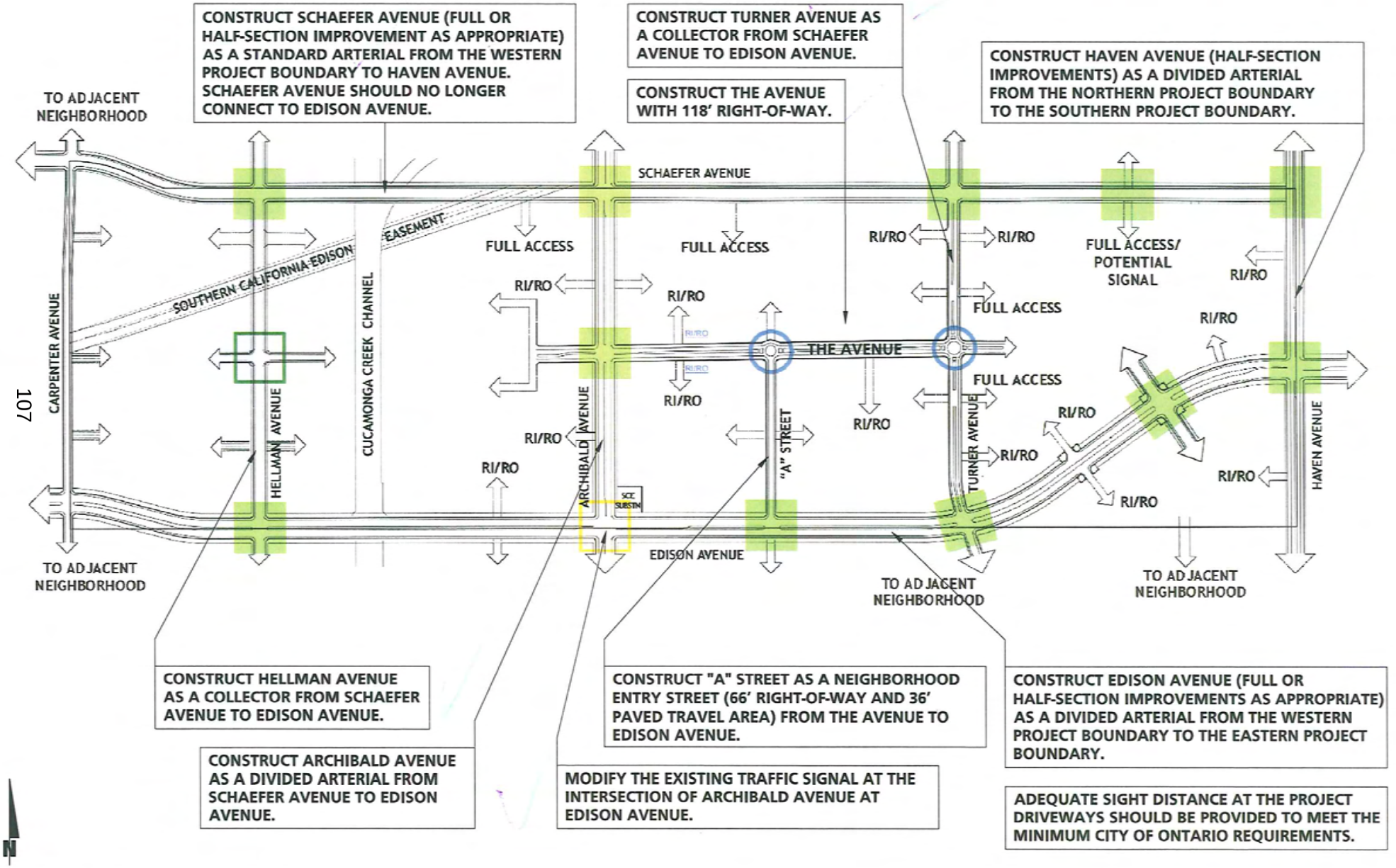
7.2.1 On-Site Improvements

On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself. Exhibit 7-A illustrates the recommended improvements to address on-site circulation requirements of the proposed specific plan amendment, which include the following:

- Construct Hellman Avenue as Collector from the Schaefer Avenue to Edison Avenue.
- Construct Archibald Avenue as a Divided Arterial from Schaefer Avenue to Edison Avenue.
- Construct "A" Street as a Neighborhood entry Street (66' right-of-way and 36 paved travel area) from The Avenue to Edison Avenue.
- Construct Turner Avenue as Collector from the Schaefer Avenue to Edison Avenue.
- Construct Haven Avenue (half-section improvements) as a Divided Arterial from the northern project boundary to the southern project boundary.

EXHIBIT 7-A

CIRCULATION RECOMMENDATIONS



- Construct Schaefer Avenue (full or half-section improvement as appropriate) as a Standard Arterial from the western project boundary to Haven Avenue. Schaefer Avenue should no longer connect to Edison Avenue.

- Construct The Avenue (118' right-of-way) within the project site.

- Construct Edison Avenue (full or half-section improvements as appropriate) as a Divided Arterial from the western project boundary to the eastern project boundary.

- Modify the existing traffic signal at the intersections of Archibald Avenue at Edison Avenue.

- Adequate sight distance at the project driveways should be provided to meet the minimum City of Ontario requirements.

7.2.2 Off-Site Improvements

The necessary off-site improvement recommendations were described in previous sections of this report. The primary funding source in the study area is the City of Ontario New Model Colony Development Impact fee (DIF) program. The project shall contribute to the installation of study area improvements through the payment of DIF program fees, or contribute on a fair share basis toward the cost of the few additional off-site improvements not included in the City fee program as described in Section 6 of this traffic study.

7.2.3 Transportation System Management Actions

a. Off-Site

As development in the area occurs, transit agencies should consider expanding service within the area.

b. On-Site

The on-site design should accommodate private and/or public bus access design and parking.

APPENDIX A

Pass-By Trips

VII. Quantifying Pass-By and Diverted Linked Trips

Background

The trip generation rates and equations contained in this report were derived from actual measurements of traffic on the driveways of land uses or buildings. However, in some cases, the driveway volume at a generator is different than the amount of traffic *added* to the street system. Buildings such as retail establishments, restaurants, banks, service stations and convenience markets attract a portion of their trips from traffic passing the site on the way from one location to another.

Trip making where this phenomenon occurs can be broken down into the following four categories of trips:

- Primary Trips (N_{PT})
- Pass-by Trips (N_{PS})
- Diverted Linked Trips (N_D)
- Non Pass-by Trips (N_{NPS})

These trips are defined as follows:

Primary Trips are trips made for the specific purpose of visiting the generator. The stop at that generator is the primary reason for the trip. For example, a home-to-shopping-to-home combination of trips is a primary trip set.

Pass-By Trips are trips made as intermediate stops on the way from an origin to a primary trip destination. Pass-by trips are attracted from traffic passing the site on an adjacent street which contains direct access to the generator. These trips do not require a diversion from another roadway.

Diverted Linked Trips are trips attracted from the traffic volume on roadways within the vicinity of the generator but which require a diversion from that roadway to another roadway to gain access to the site. These roadways could include streets or freeways adjacent to the generator but without access to the generator.

Non Pass-By Trips refer to the total of the primary trips and the diverted linked trips. This term is used when diverted linked trips are not quantified, but pass-by trips are quantified (i.e., the non pass-by trips are equal to the total trips minus the pass-by trips).

Figure VII-1 indicates an example of roadways from which pass-by trips and diverted linked trips are produced. It should be noted that the vicinity of the generator has not been defined. Research is needed to determine the size of the area or distance from a generator from which diverted linked trips are produced (much like the market area of a shopping center for primary trips).

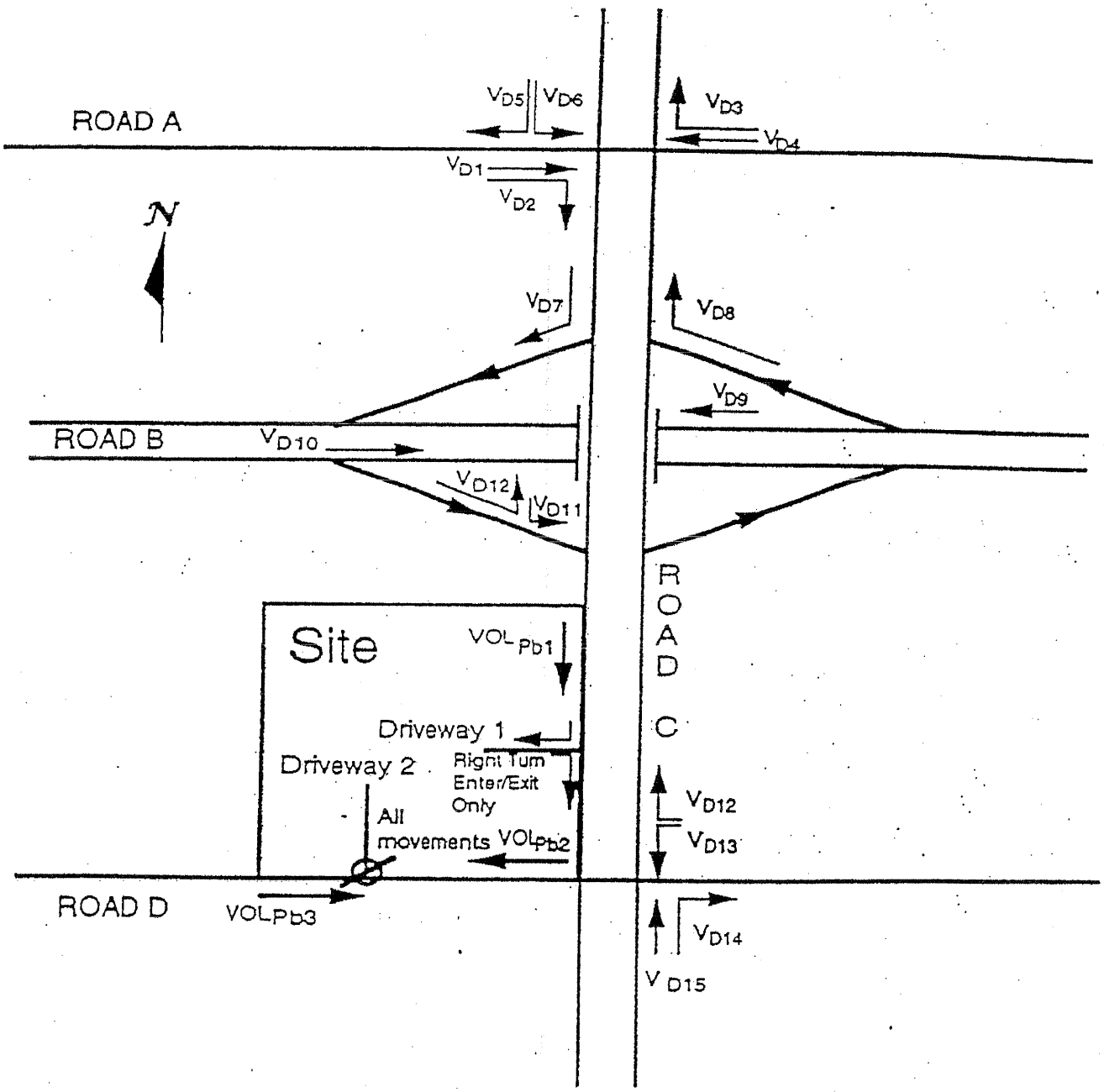
It is essential that this phenomenon be recognized when examining the traffic impact of a development on the street system. The pass-by and diverted linked trip estimation method initiated in previous editions is calculated as a percentage of the total number of trips entering the generator. Statistical correlation of the data collected by the professional community has proven difficult, with resulting low correlation indices. The results of the pass-by trip percentages analyzed to date and presented herein can be enhanced further with an expanded methodology that also accounts for the effects of the magnitude of the passing traffic stream volume on the adjacent road system. Additionally, more detailed data are needed before this estimation methodology can be statistically analyzed and formally adopted. To assist in this regard, the interview survey forms have been expanded to assist the professional community in collecting this data in a standard format for use in future analyses. The fifth edition of *Trip Generation* contains additional theoretical discussion on pass-by and diverted linked trips.

The professional community should continue to use the results of the analyses of pass-by trip percentages tempered with engineering judgment until more data are attained and the methodology produces results with higher correlation to the actual events.

Database on Pass-By Trip and Diverted Linked Trip Percentages

Surveys conducted to date have been limited to interviewing a limited sample of people to determine a pass-by trip and diverted linked trip percentage based on the interviews and relating the percentage to the size of the generator or shopping center. Some recent surveys also provided information on ADT, but not in sufficient detail

Figure VII-1: Identification of Pass-By and Diverted Linked Trip Volumes



Legend

$$V_{Pb\ TOT} = \sum VOL_{Pb1} + VOL_{Pb2} + VOL_{Pb3} \quad (VPH)$$

$$V_{D\ TOT} = \sum VOL_{D1} + VOL_{D2} + VOL_{D....} + VOL_{D15} \quad (VPH)$$

to identify traffic volume related to true pass-by trips and diverted linked trips. The data available for the land uses presented in this update are contained in the following tables.

Table VII-1	High-Turnover (Sit-Down) Restaurant (832) P.M. Peak Hour
Table VII-2	Fast-Food Restaurant with Drive-Through Window (834) A.M. Peak Hour
Table VII-3	Fast-Food Restaurant with Drive-Through Window (834) P.M. Peak Hour
Table VII-4	Gasoline/Service Station (844) A.M. Peak Hour
Table VII-5	Gasoline/Service Station (844) P.M. Peak Hour
Table VII-6	Gasoline/Service Station with Convenience Market (845) A.M. Peak Hour
Table VII-7	Gasoline/Service Station with Convenience Market (845) P.M. Peak Hour
Table VII-8	Convenience Market with Gasoline Pumps (853) A.M. Peak Hour
Table VII-9	Convenience Market with Gasoline Pumps (853) P.M. Peak Hour

Good correlation between the pass-by trip percentage and size of the generator has been illusive. The database needs to be further expanded before better predictive relationships can be developed. Therefore, the user is cautioned to use engineering judgment to establish the pass-by trip and diverted linked trip percentage before application. Whenever possible, and especially at planned expansion to existing facilities, it is recommended that the pass-by trip and diverted linked trip percentages be determined on the basis of site-specific data collected with the expanded forms provided.

Application of Pass-By Trip and Diverted Linked Trip Percentage Results

Until the estimation methodology is further developed, the results of the pass-by trip and diverted linked trip percentages may continue to be applied with caution, as explained herein. The pass-by trips and diverted linked trips estimated to enter and exit a development does not affect the driveway volumes but does affect the amount of traffic added to the adjacent street system. The following example and Figure VII-2 illustrate this point for pass-by trips.

- The p.m. peak hour traffic passing a retail center is 1,200 vehicles per hour, as shown in Figure VII-2(a).
- The driveway volumes are estimated to be 200 vehicles per hour entering and leaving the center as shown in Figure VII-2(b).
- The pass-by trips are estimated to be 25 percent of the driveway volumes, as shown in Figure VII-2(b).
- The trip distribution for the primary trips is shown in Figure VII-2(c).
- The distribution of the pass-by trips is based on the volume of traffic passing the driveway, as shown in Figure VII-2(d).
- The assignment of the pass-by trips is shown in Figure VII-2(f).
- The final assignment of all the trips entering and leaving and passing the driveway is shown in Figure VII-2(g).

Data Needs for Pass-By Trips and Diverted Linked Trips

More data are needed to further quantify the pass-by trips and diverted linked trips for all land uses where this phenomenon exists. It is essential that the data in this report be expanded through the uniform collection of data suggested in the survey forms. Following is a questionnaire to be used for conducting interviews for the purpose of collecting pass-by trip and diverted linked trip data, and a summary form. The summary form is designed to list the summary of survey results, but must also provide information related to the generator, location and traffic volumes associated with both true pass-by trips and diverted linked trips.

Table VII-1

Summary of Weekday Pass-By Trips and Diverted Linked Trips
P.M. Peak Hour of Adjacent Street Traffic

Land Use 832 - High Turnover (Sit-Down) Restaurant

Name of Development	Seats	Size (Sq. Feet GLA)	Location	Week-day Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adjacent Street Peak Hour Volume	Source
1. Denny's	-	5,808	Orlando, FL	1992	150	2 - 6 PM	-	68	-	32	n/a	TPD
2. Bob Evans	-	5,051	Casselberry, FL	1992	65	2 - 6 PM	-	42	-	58	n/a	TPD
3. Confidential	168	5,304	Louisville Area, KY	1993	n/a	4 - 6 PM	37	-	13	50	1,615	KRPDA/ JCPWTD
4. Confidential	169	2,880	Louisville Area, KY	1993	n/a	4 - 6 PM	27	-	36	37	3,935	KRPDA/ JCPWTD
5. Confidential	150	3,132	Louisville Area, KY	1993	n/a	4 - 6 PM	29	-	33	38	2,580	KRPDA/ JCPWTD
6. Confidential	250	7,120	New Albany, IN	1993	n/a	4 - 6 PM	23	-	64	23	1,585	KRPDA/ JCPWTD

Average Non-Pass-By Trip % 60%
Average Primary Trip % 28%
Average Diverted Linked Trip % 32%
Average Pass-By Trip % 40%

Table VII-2

Summary of Weekday Pass-By Trips and Diverted Linked Trips
A.M. Peak Hour of Adjacent Street Traffic

Land Use 834 - Fast Food Restaurant With Drive Through Window

Name of Development	Seats	Size (Sq. Feet GLA)	Location	Week-day Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adjacent Street Peak Hour Volume	Source
1. Burger King	-	<5,000	Chicago suburbs, IL	1987	84	7-9 AM		56		44	-	Kenig, O'Hara, Humes, Flock
2. Confidential	88	1,350	Louisville Area, KY	1993	n/a	7-9 AM	22	-	18	82	1,407	KRPDA/ JCPWTD
3. Confidential	100	3,584	Louisville, KY	1993	n/a	7-9 AM	46	-	21	32	437	KRPDA/ JCPWTD
4. Confidential	87	4,224	New Albany, IN	1993	n/a	7-9 AM	23	-	31	46	1,049	KRPDA/ JCPWTD
5. Confidential	150	2,952	Louisville Area, KY	1993	n/a	7-9 AM	15	-	43	43	2,903	KRPDA/ JCPWTD

Average Non-Pass-By Trip % 55%
Average Primary Trip % 28%
Average Diverted Linked Trip % 27%
Average Pass-By Trip % 45%

Table VII-3

Summary of Weekday Pass-By Trips and Diverted Linked Trips
P.M. Peak Hour of Adjacent Street Traffic

Land Use 834 - Fast Food Restaurant With Drive Through Window

Name of Development	Seats	Size (Sq. Feet GLA)	Location	Week-day Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adjacent Street Peak Hour Volume	Source
1. Burger King	-	2,600	Minneapolis-St. Paul, MN	1987	50	3-7 PM	27		48	25	-	n/a
2. McDonalds	-	<5,000	Chicago suburbs, IL	1987	80	3-6 PM		62		38	-	Kenig, O'Hara, Humes, Flock
3. Wendy's	-	<5,000	Chicago suburbs, IL	1987	100	3-6 PM		45		55	-	Kenig, O'Hara, Humes, Flock
4. Wendy's	-	<5,000	Chicago suburbs, IL	1987	159	3-6 PM		44		56	-	Kenig, O'Hara, Humes, Flock
5. McDonalds	-	<5,000	Chicago suburbs, IL	1987	225	3-6 PM		52		48	-	Kenig, O'Hara, Humes, Flock
6. McDonalds	-	<5,000	Chicago suburbs, IL	1987	88	3-6 PM		65		35	-	Kenig, O'Hara, Humes, Flock
9. Confidential	88	1,350	Louisville Area, KY	1993	n/a	4-6 PM	22	-	10	68	2,055	KRPDA/ JCPWTD
10. Confidential	86	3,239	Louisville Area, KY	1993	n/a	4-6 PM	26	-	47	26	826	KRPDA/ JCPWTD
11. Confidential	120	1,862	Louisville Area, KY	1993	n/a	4-6 PM	24	-	9	67	2,447	KRPDA/ JCPWTD
13. Confidential	100	3,584	Louisville, KY	1993	n/a	4-6 PM	35	-	16	49	670	KRPDA/ JCPWTD
15. Confidential	87	4,224	New Albany, IN	1993	n/a	4-6 PM	25	-	19	56	1,632	KRPDA/ JCPWTD
16. Confidential	85	2,912	Louisville Area, KY	1993	n/a	4-6 PM	14	-	29	57	2,402	KRPDA/ JCPWTD
17. Confidential	85	3,286	Louisville Area, KY	1993	n/a	4-6 PM	56	-	11	33	2,429	KRPDA/ JCPWTD
18. Confidential	76	2,400	Louisville Area, KY	1993	n/a	4-6 PM	25	-	13	63	2,265	KRPDA/ JCPWTD
20. Confidential	150	2,952	Louisville Area, KY	1993	n/a	4-6 PM	31	-	38	31	4,250	KRPDA/ JCPWTD

Average Non-Pass-By Trip %	**53%**
Average Primary Trip %	**29%**
Average Diverted Linked Trip %	**24%**
Average Pass-By Trip %	**47%**

Table VII-4

Summary of Weekday Pass-By Trips and Diverted Linked Trips
A.M. Peak Hour of Adjacent Street Traffic

Land Use 844 - Gasoline/Service Station

Name of Development	Size (Sq. Feet GLA)	Vehicle Fueling Positions	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adj. Street Peak Hour Volume	Source
1. Confidential	2,300	6	Gaithersburg, MD	1992	37	7 - 9 AM	41	-	27	32	2,080	RBA
2. Confidential	2,120	6	Bethesda, MD	1992	26	7 - 9 AM	23	-	19	58	2,080	RBA
3. Confidential	1,650	8	Wheaton, MD	1992	21	7 - 9 AM	14	-	19	67	900	RBA
4. Confidential	1,950	8	Gaithersburg, MD	1992	46	7 - 9 AM	13	-	0	87	2,235	RBA
5. Confidential	1,200	6	Damascus, MD	1992	21	7 - 9 AM	20	-	29	43	870	RBA
6. Confidential	300	12	Wheaton, MD	1992	36	7 - 9 AM	8	-	31	61	3,480	RBA

Average Non-Pass-By Trip % 42%
Average Primary Trip % 21%
Average Diverted Linked Trip % 21%
Average Pass-By Trip % 58%

Table VII-5

Summary of Weekday Pass-By Trips and Diverted Linked Trips
P.M. Peak Hour of Adjacent Street Traffic

Land Use 044 - Gasoline/Service Station

Name of Development	Size (Sq. Feet GLA)	Vehicle Fueling Positions	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adj. Street Peak Hour Volume	Source
1. Confidential	2,300	6	Gaithersburg, MD	1992	55	4 - 6 PM	11	-	49	40	2,760	RBA
2. Confidential	2,120	8	Bethesda, MD	1992	30	4 - 6 PM	20	-	27	53	1,080	RBA
3. Confidential	1,650	6	Wheaton, MD	1992	18	4 - 6 PM	6	-	33	61	2,510	RBA
4. Confidential	1,950	8	Gaithersburg, MD	1992	47	4 - 6 PM	23	-	15	62	2,635	RBA
5. Confidential	1,200	6	Damacus, MD	1992	26	4 - 6 PM	11	-	31	58	1,020	RBA
6. Confidential	300	12	Wheaton, MD	1992	52	4 - 6 PM	10	-	52	38	3,835	RBA

Average Non-Pass-By Trip % 48%
Average Primary Trip % 13%
Average Diverted Linked Trip % 35%
Average Pass-By Trip % 52%

Table VII-6

Summary of Pass-By Trips and Diverted Linked Trips
A.M. Peak Hour of Adjacent Street Traffic

Land Use 845 - Gasoline/Service Station with Convenience Market

Name of Development	Size (Sq. Feet GLA)	Vehicle Fueling Positions	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adj. Street Peak Hour Volume	Source
1. Confidential	600	8	Louisville Area, KY	1993	n/a	7 - 9 AM	15	-	25	61	4,000	KRPDA/ JCPWTD
2. Confidential	564	8	Louisville, KY	1993	n/a	7 - 9 AM	13	-	19	69	1,307	KRPDA/ JCPWTD
3. Confidential	720	10	Louisville, KY	1993	n/a	7 - 9 AM	11	-	22	67	1,105	KRPDA/ JCPWTD
4. Confidential	726	8	Louisville Area, KY	1993	n/a	7 - 9 AM	22	-	22	57	1,211	KRPDA/ JCPWTD
5. Confidential	607	10	Louisville Area, KY	1993	n/a	7 - 9 AM	31	-	12	47	1,211	KRPDA/ JCPWTD
6. Confidential	800	8	Silver Spring, MD	1992	36	7 - 9 AM	14	-	39	47	3,095	RBA
7. Confidential	390	8	Derwood, MD	1992	46	7 - 9 AM	0	-	25	75	3,770	RBA
8. Confidential	2,160	8	Kensington, MD	1992	31	7 - 9 AM	34	-	19	47	1,785	RBA
9. Confidential	1,000	8	Silver Spring, MD	1992	35	7 - 9 AM	9	-	13	78	7,080	RBA

Average Non-Pass-By Trip % 39%
Average Primary Trip % 17%
Average Diverted Linked Trip % 22%
Average Pass-By Trip % 61%

Table VII-7

Summary of Weekday Pass-By Trips and Diverted Linked Trips
P.M. Peak Hour of Adjacent Street Traffic

Land Use 845 - Gasoline/Service Station with Convenience Market

Name of Development	Size (Sq. Feet GLA)	Vehicle Fueling Positions	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adj. Street Peak Hour Volume	Source
1. Confidential	800	8	Louisville Area, KY	1993	n/a	4 - 6 PM	8	-	40	52	4,985	KRPDA/ JCPWTD
2. Confidential	564	8	Louisville, KY	1993	n/a	4 - 6 PM	20	-	27	53	1,491	KRPDA/ JCPWTD
3. Confidential	720	10	Louisville, KY	1993	n/a	4 - 6 PM	19	-	24	56	1,812	KRPDA/ JCPWTD
4. Confidential	726	8	Louisville Area, KY	1993	n/a	4 - 6 PM	7	-	21	71	2,857	KRPDA/ JCPWTD
5. Confidential	697	10	Louisville Area, KY	1993	n/a	4 - 6 PM	16	-	29	55	2,657	KRPDA/ JCPWTD
6. Confidential	800	8	Silver Spring, MD	1992	36	4 - 6 PM	14	-	19	67	3,095	RBA
7. Confidential	390	8	Derwood, MD	1992	46	4 - 6 PM	11	-	43	46	3,770	RBA
8. Confidential	2,160	8	Kensington, MD	1992	31	4 - 6 PM	13	-	35	52	1,785	RBA
9. Confidential	1,000	8	Silver Spring, MD	1992	35	4 - 6 PM	3	-	43	54	7,080	RBA

Average Non-Pass-By Trip % 44%
Average Primary Trip % 13%
Average Diverted Linked Trip % 31%
Average Pass-By Trip % 56%

Table VII-8

Summary of Weekday Pass-By Trips and Diverted Linked Trips
A.M. Peak Hour of Adjacent Street Traffic

Land Use 853 - Convenience Market with Gasoline Pumps

Name of Development	Size (Sq. Feet GLA)	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adjacent Street Peak Hour Volume	Source
1. Confidential	2,761	Louisville Area, KY	1993	n/a	7 - 9 AM	11	-	35	54	1,240	KRPDA/ JCPWTD
2. Confidential	2,400	Louisville Area, KY	1993	n/a	7 - 9 AM	17	-	35	48	1,210	KRPDA/ JCPWTD
3. Confidential	4,176	Louisville Area, KY	1993	n/a	7 - 9 AM	24	-	18	58	1,705	KRPDA/ JCPWTD
4. Confidential	2,620	Crestwood, KY	1993	n/a	7 - 9 AM	15	-	13	72	940	KRPDA/ JCPWTD
5. Confidential	3,696	Louisville Area, KY	1993	n/a	7 - 9 AM	16	-	18	66	990	KRPDA/ JCPWTD
6. Confidential	2,982	Albany, IN	1993	n/a	7 - 9 AM	10	-	16	74	790	KRPDA/ JCPWTD
7. Confidential	2,310	Louisville, KY	1993	n/a	7 - 9 AM	5	-	31	64	1,255	KRPDA/ JCPWTD
8. Confidential	2,170	New Albany, IN	1993	n/a	7 - 9 AM	6	-	38	56	635	KRPDA/ JCPWTD
9. Confidential	3,600	Louisville Area, KY	1993	n/a	7 - 9 AM	4	-	29	67	1,985	KRPDA/ JCPWTD

Average Non-Pass-By Trip% 38%

Average Primary Trip % 12%

Average Diverted Linked Trip % 26%

Average Pass-By Trip % 62%

Table VII-9

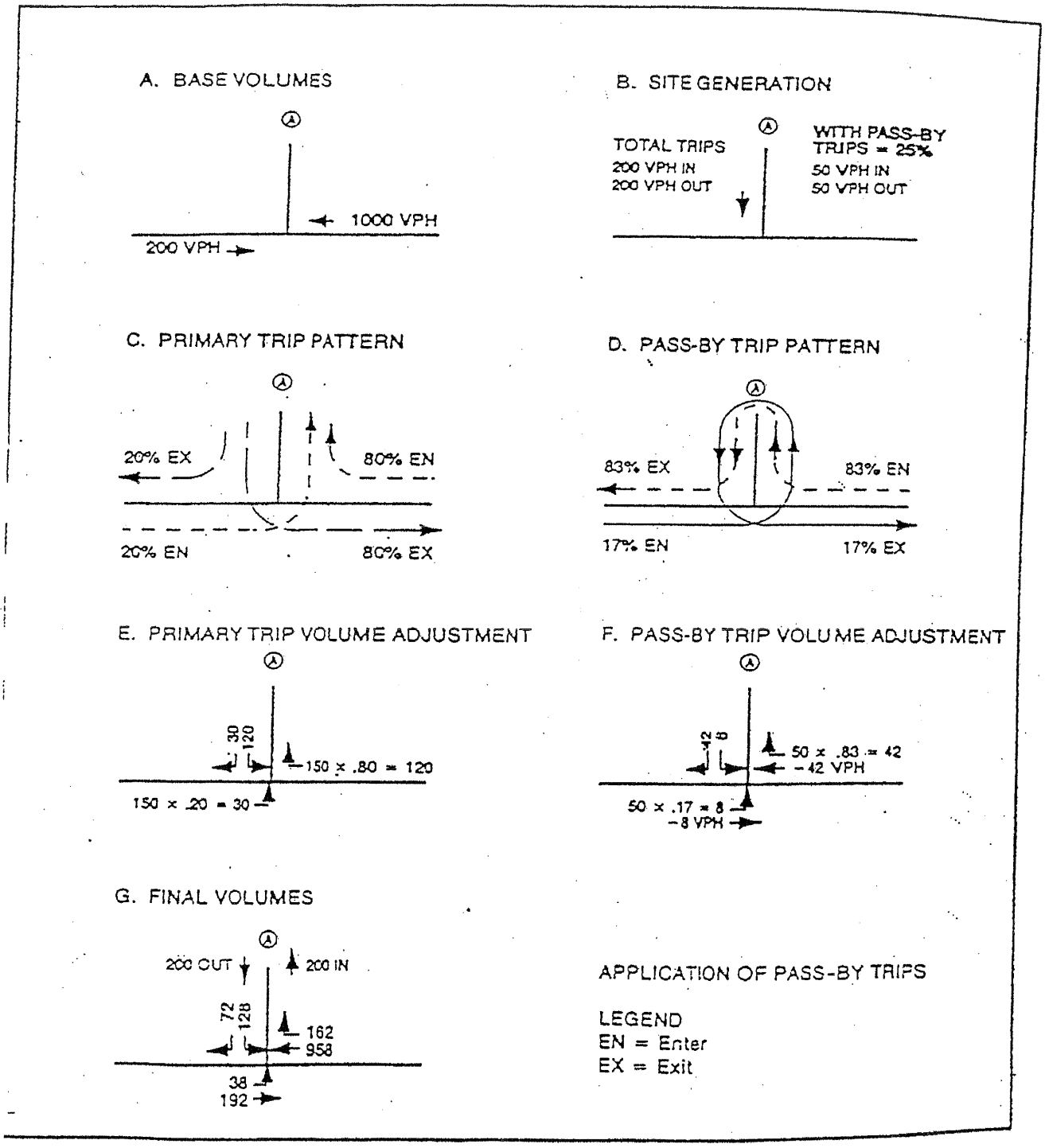
Summary of Weekday Pass-By Trips and Diverted Linked Trips
P.M. Peak Hour of Adjacent Street Traffic

Land Use 853 - Convenience Market with Gasoline Pumps

Name of Development	Size (Sq. Feet GLA)	Location	Weekday Survey Date	No. of Inter-views	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adjacent Street Peak Hour Volume	Source
1. Confidential	2,761	Louisville Area, KY	1993	n/a	4 - 6 PM	11	-	27	62	2,875	KRPDA/ JCPWTD
2. Confidential	2,400	Louisville Area, KY	1993	n/a	4 - 6 PM	13	-	29	58	2,655	KRPDA/ JCPWTD
3. Confidential	4,176	Louisville Area, KY	1993	n/a	4 - 6 PM	26	-	16	58	2,300	KRPDA/ JCPWTD
4. Confidential	2,620	Crestwood, KY	1993	n/a	4 - 6 PM	13	-	18	69	950	KRPDA/ JCPWTD
5. Confidential	3,696	Louisville Area, KY	1993	n/a	4 - 6 PM	16	-	23	61	2,175	KRPDA/ JCPWTD
6. Confidential	2,982	Albany, IN	1993	n/a	4 - 6 PM	15	-	20	65	1,165	KRPDA/ JCPWTD
7. Confidential	2,310	Louisville, KY	1993	n/a	4 - 6 PM	16	-	27	57	1,054	KRPDA/ JCPWTD
8. Confidential	2,170	New Albany, IN	1993	n/a	4 - 6 PM	16	-	36	48	820	KRPDA/ JCPWTD
9. Confidential	3,600	Louisville Area, KY	1993	n/a	4 - 6 PM	17	-	27	57	2,505	KRPDA/ JCPWTD
10. 7-Eleven	2,585	Seminole County, FL	1993	82	4 - 6 PM	20	-	7	73	n/a	Tipton Assoc.
11. 7-Eleven	2,585	Seminole County, FL	1993	98	4 - 6 PM	15	-	4	81	n/a	Tipton Assoc.
12. Circle K	2,612	Seminole County, FL	1993	115	4 - 6 PM	16	-	15	69	n/a	Tipton Assoc.
13. 7-Eleven	2,650	Volusia County, FL	1993	98	4 - 6 PM	15	-	11	74	n/a	Tipton Assoc.
14. Handy Way	2,400	Volusia County, FL	1993	38	4 - 6 PM	24	-	2	74	n/a	Tipton Assoc.
15. 7- Eleven	2,650	Volusia County, FL	1993	82	4 - 6 PM	8	-	5	87	n/a	Tipton Assoc.

Average Non-Pass-By Trip %	**34%**
Average Primary Trip %	**16%**
Average Diverted Linked Trip %	**18%**
Average Pass-By Trip %	**66%**

Figure VII-2


A. BASE VOLUMES
1000 VPH
200 VPH
B. SITE GENERATION
TOTAL TRIPS
200 VPH IN
200 VPH OUT
WITH PASS-BY TRIPS = 25%
50 VPH IN
50 VPH OUT
C. PRIMARY TRIP PATTERN
20% EX
80% EN
20% EN
80% EX
D. PASS-BY TRIP PATTERN
83% EX
83% EN
17% EN
17% EX
E. PRIMARY TRIP VOLUME ADJUSTMENT
30
120
150 x .80 = 120
150 x .20 = 30
F. PASS-BY TRIP VOLUME ADJUSTMENT
42
8
50 x .83 = 42
-42 VPH
50 x .17 = 8
-8 VPH
G. FINAL VOLUMES
200 OUT
200 IN
72
128
162
958
38
192
APPLICATION OF PASS-BY TRIPS
LEGEND
EN = Enter
EX = Exit

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APPENDIX B

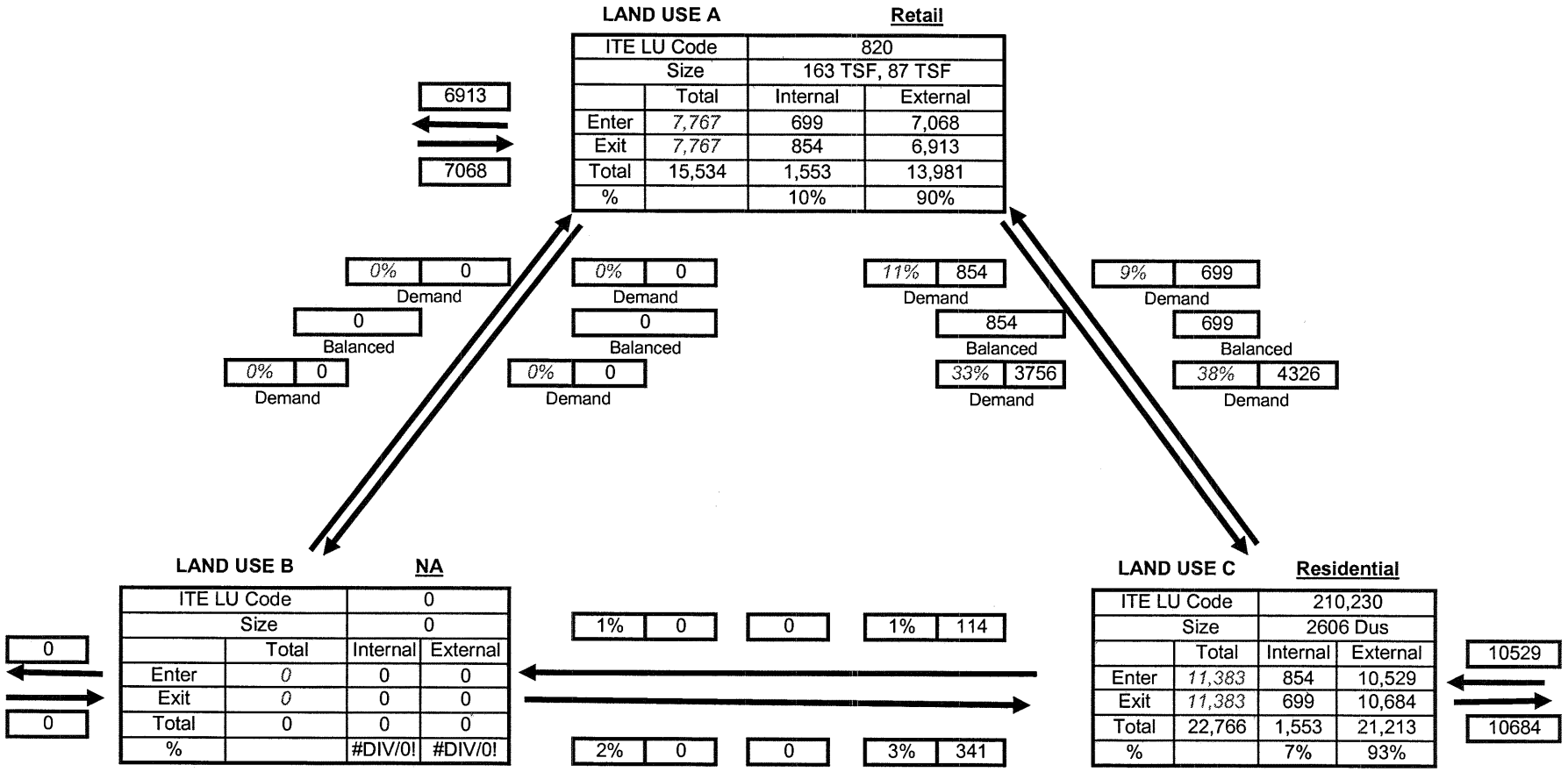
Internal Capture Calculations

TABLE 2-4

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY (DAILY)

Analyst DM
Date 7/22/2008

Project Name: The Avenue SPA
JN: 5279
Time Period: Daily



Net External Trips fro Multi-Use Development					
	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	7,068	0	10,529	17,597	
Exit	6,913	0	10,684	17,597	INTERNAL CAPTURE
Total	13,981	0	21,213	35,194	
Single-Use Trip Gen. Est.	15,534	0	22,766	38,300	8%

Input data, see Table 7.1 and 7.2 for rates.

Source: ITE Trip Generation Handbook, Chapter 7 - Multi-Use Development

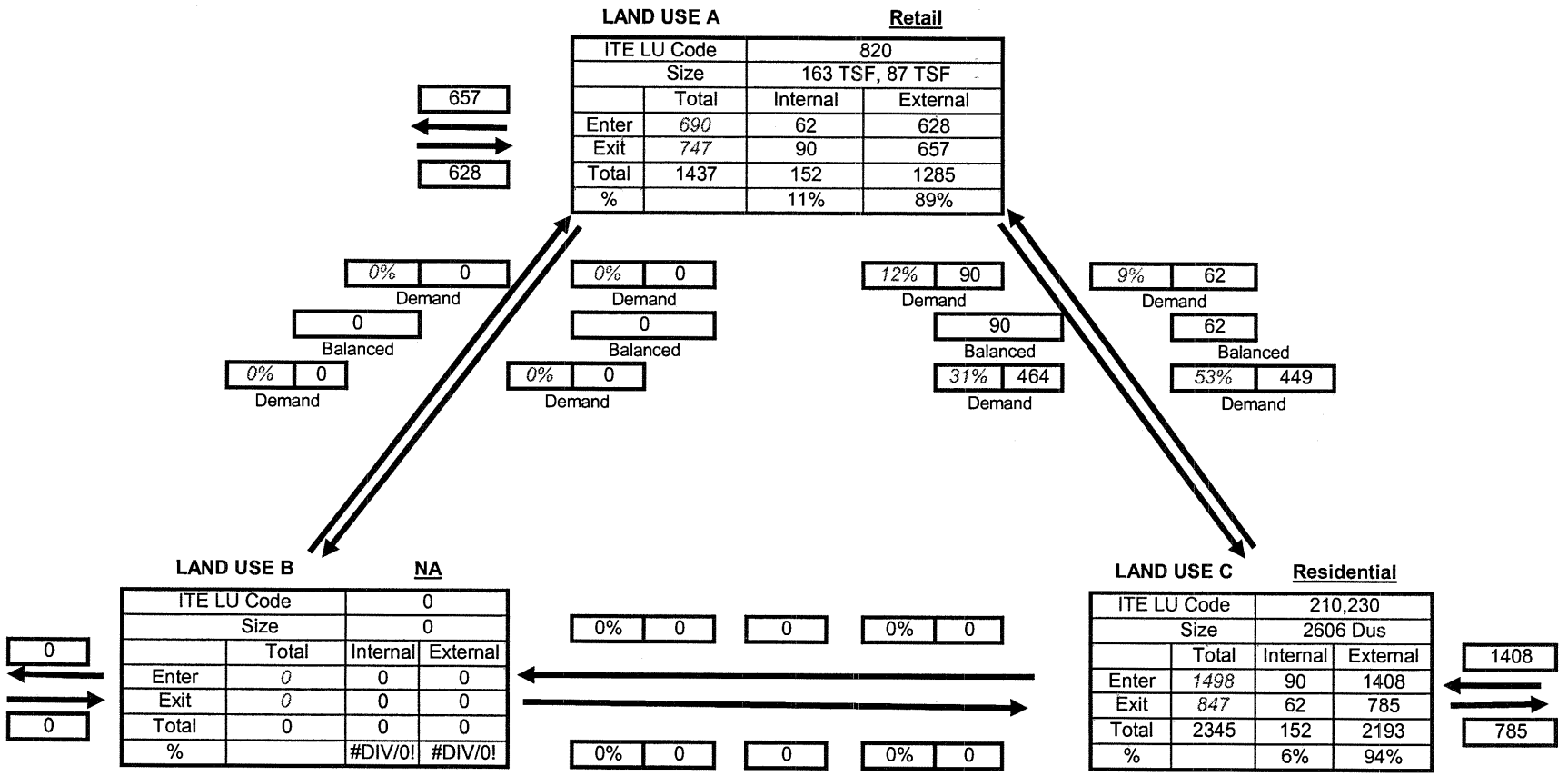
U:\UcJobs_05100-05500_05200\05279\Excel\05279-03\[Internal Capture.xls]INTERNALCAPTURE(Daily)

TABLE 2-6

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY (PM)

Analyst DM
Date 7/22/2008

Project Name: The Avenue SPA
JN: 5279
Time Period: PM Peak Hour



Net External Trips fro Multi-Use Development					
	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	628	0	1408	2036	
Exit	657	0	785	1442	
Total	1285	0	2193	3478	INTERNAL CAPTURE
Single-Use Trip Gen. Est.	1437	0	2345	3782	8%

Input data, see Table 7.1 and 7.2 for rates.

Source: ITE Trip Generation Handbook, Chapter 7 - Multi-Use Development

U:\UcJobs_05100-05500_05200\05279\Excel\05279-03\[Internal Capture.xls]INTERNALCAPTURE(PM)

APPENDIX C

Trip Distribution Excerpts From
The Avenue Specific Plan Traffic Study
(Dated September 2006)

TABLE 2-3

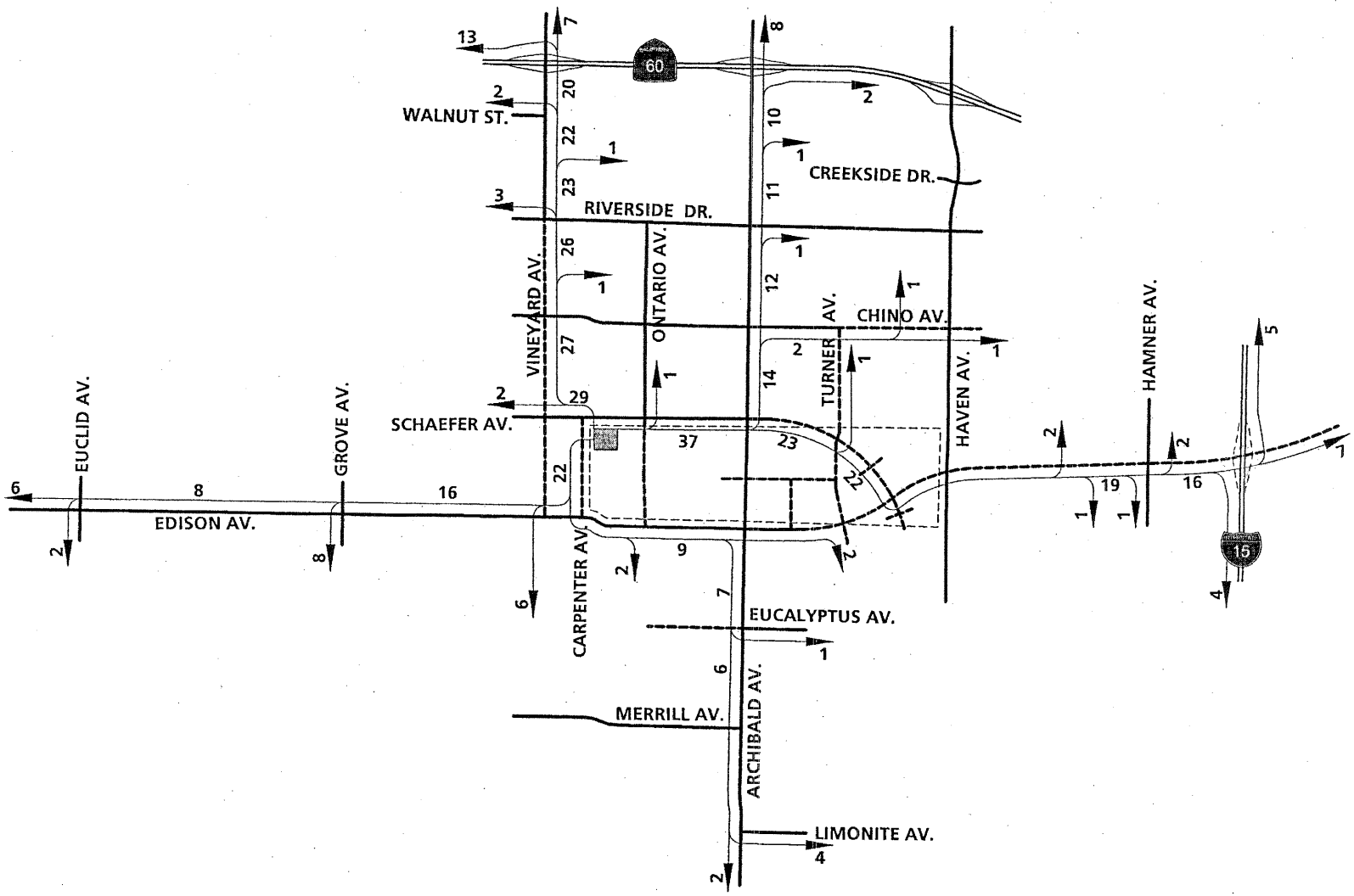
CORRESPONDENCE TABLE FOR TAZ AND THE PLANNING AREAS

TAZ	Planning Areas
TAZ 778	1A, 1B, 2A, 2B
TAZ 779	3A, 3B, 4, 5
TAZ 780	6A, 6B, 7, 8A, 8B, 9A, 9B, 9C
TAZ 781	9D, 10B, 11
TAZ 791	10A

U:\UcJobs_02600-03000_02700\02717\excel\[02717-05.xls]T2-3

EXHIBIT 2-A

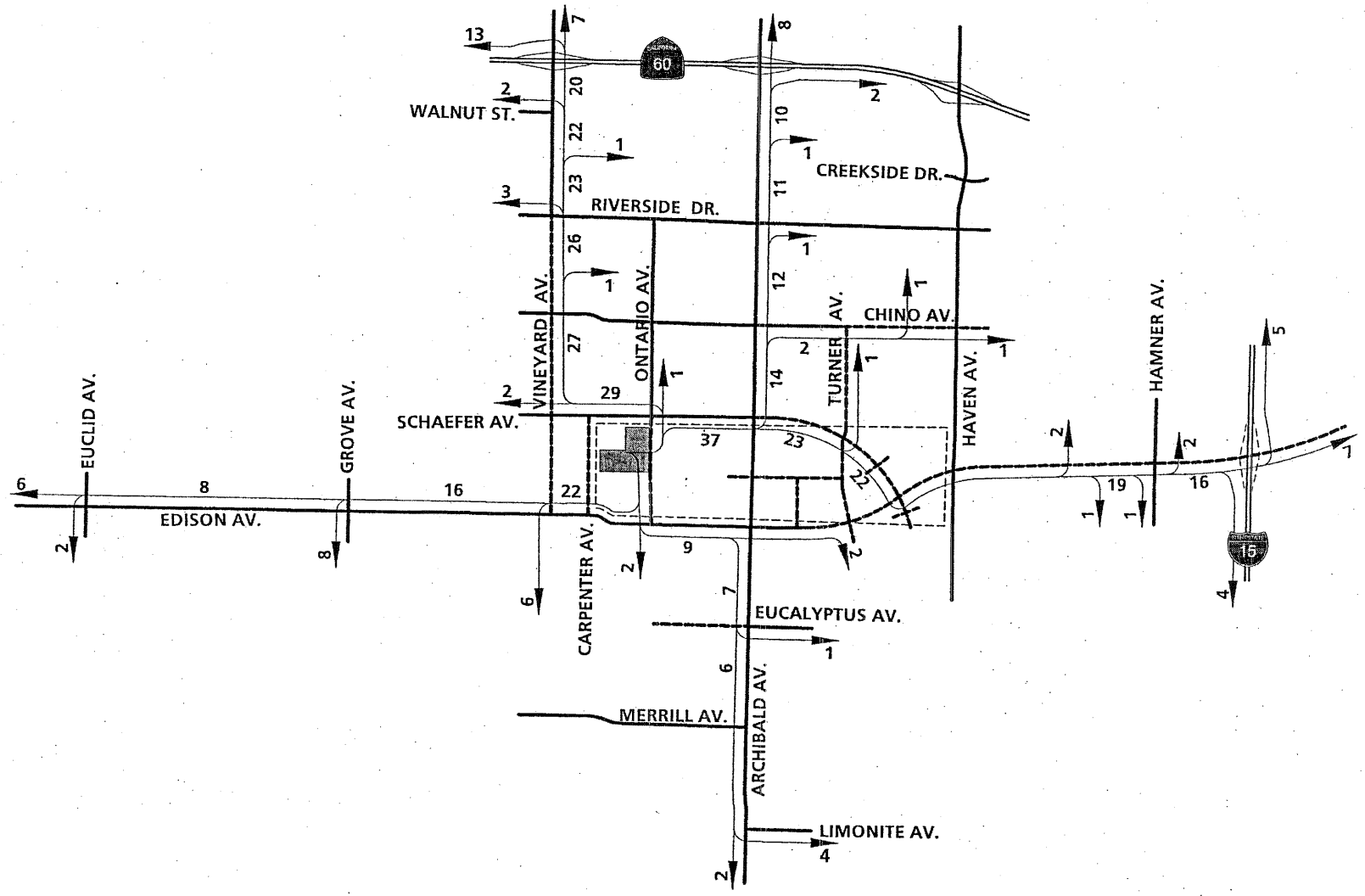
PLANNING AREA 1A TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-B

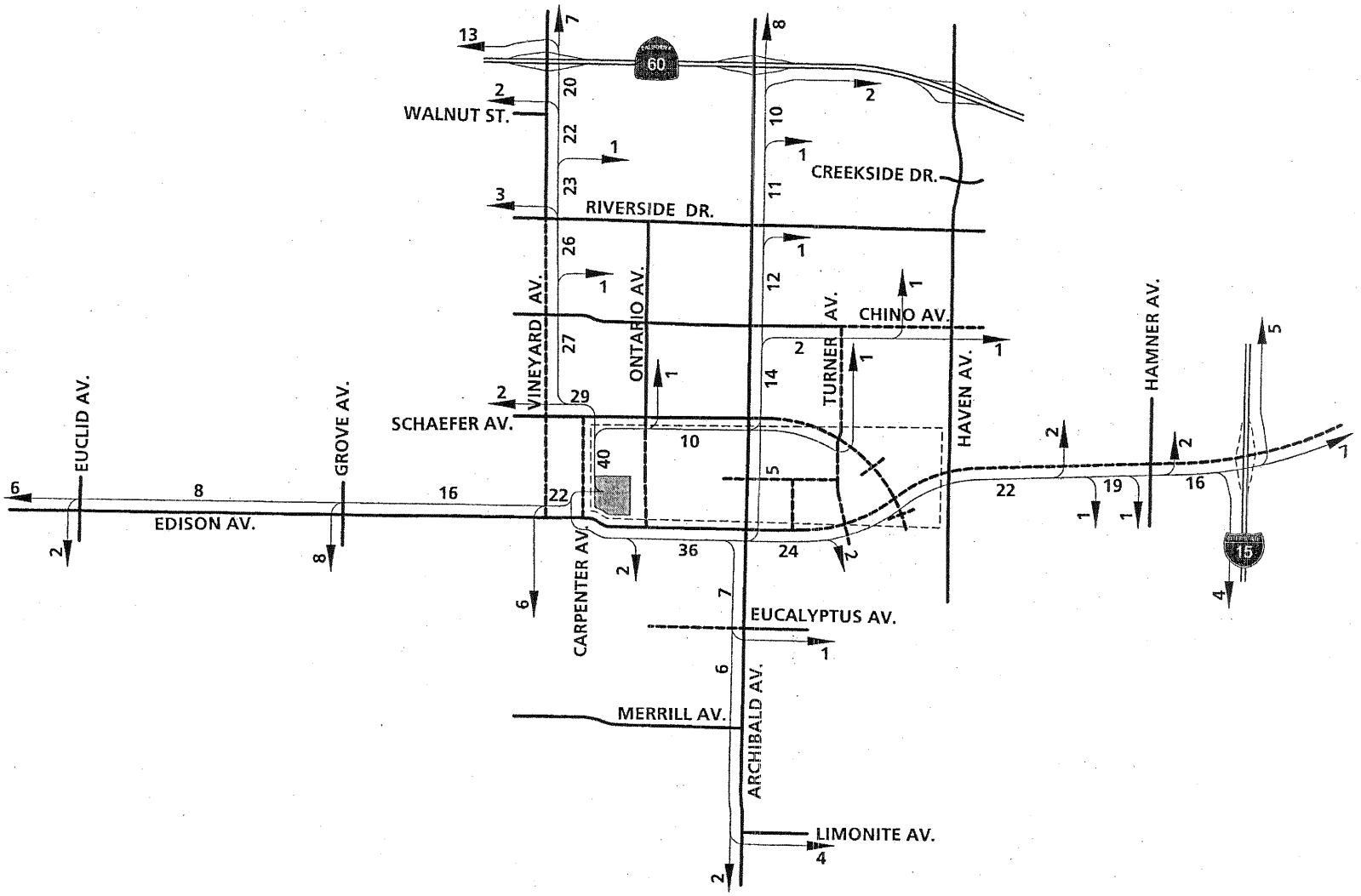
PLANNING AREA 1B TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-C

PLANNING AREA 2A TRIP DISTRIBUTION



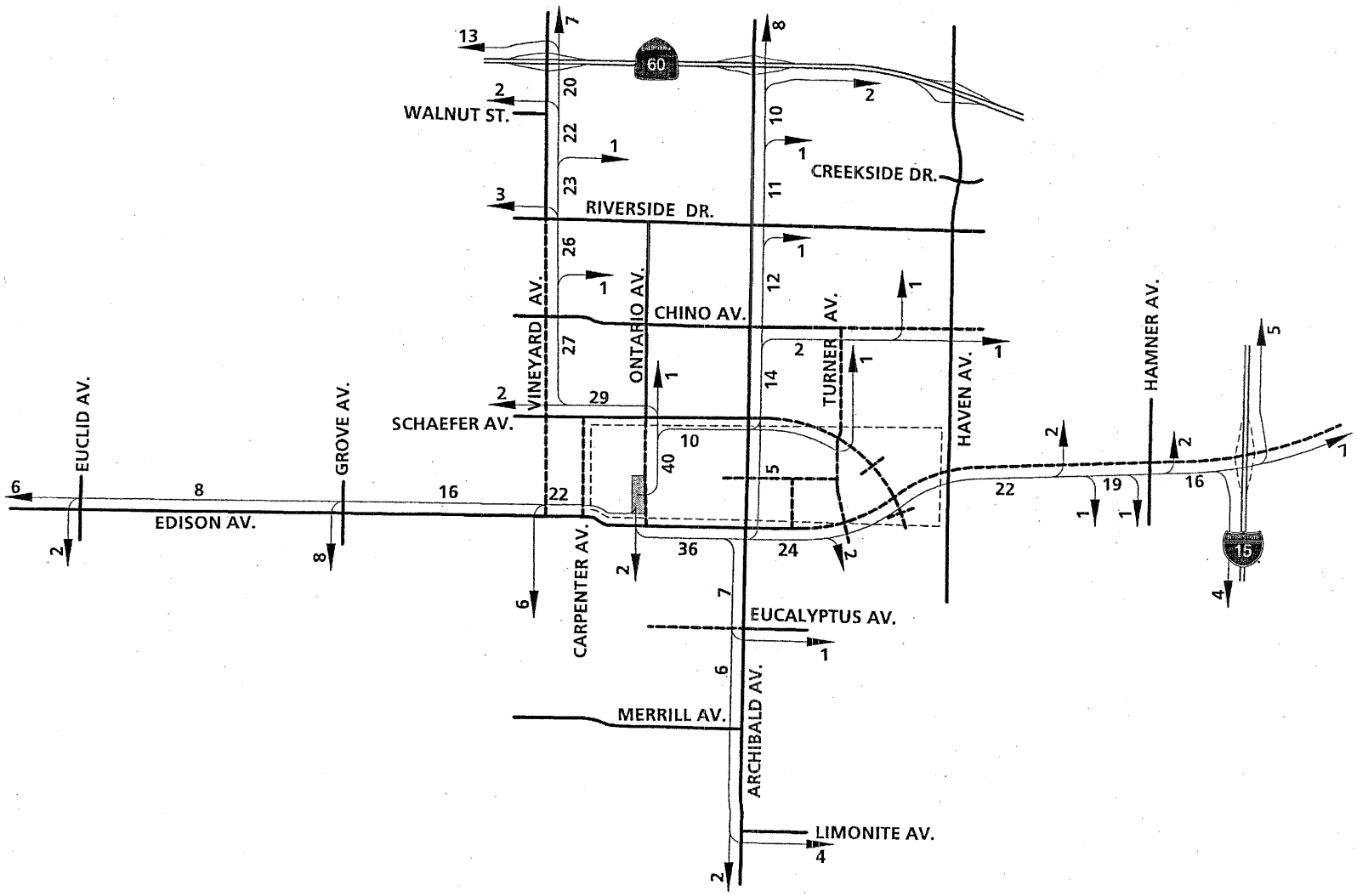
C-6

N

URBAN CROSSROADS

EXHIBIT 2-D

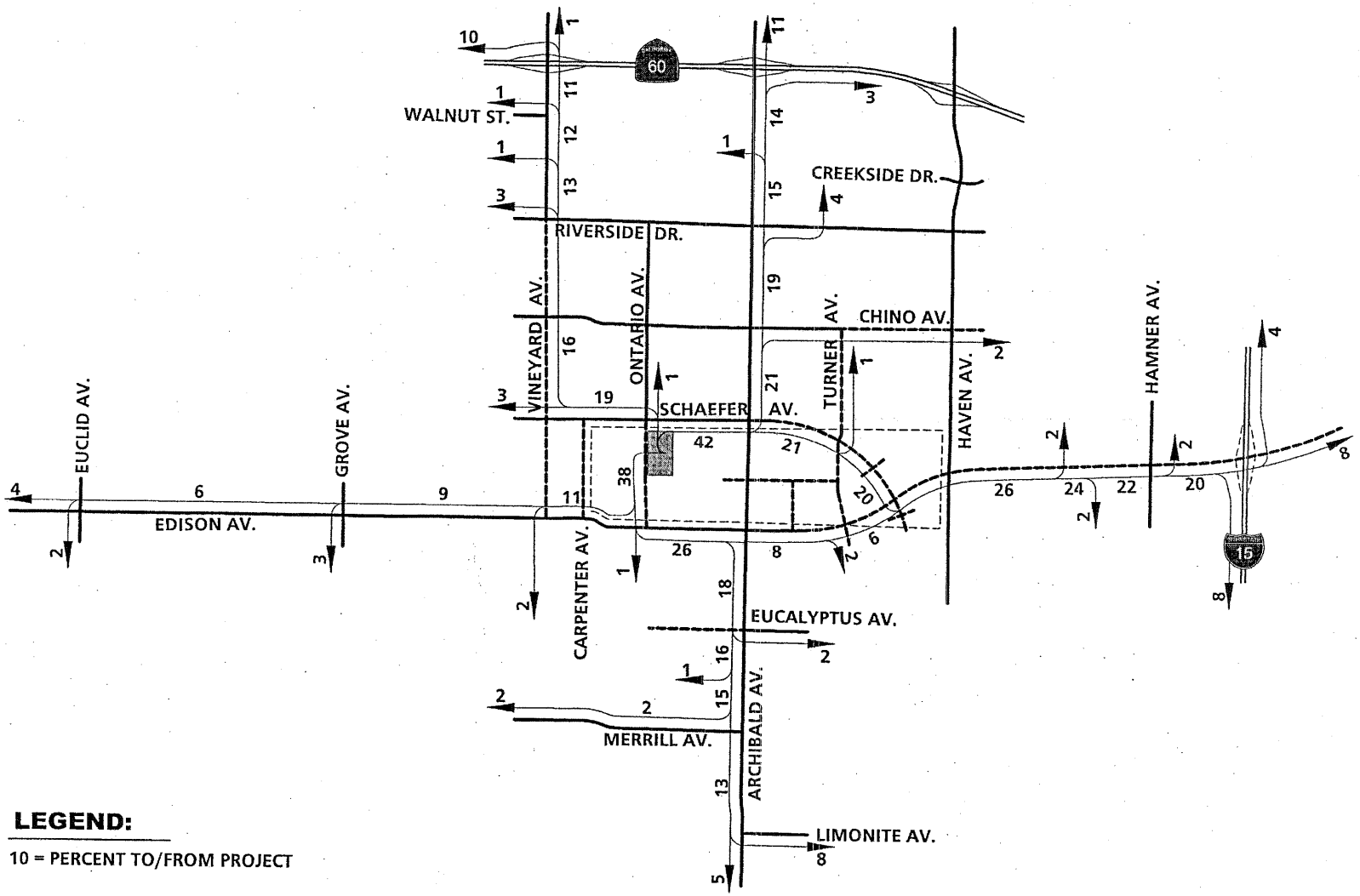
PLANNING AREA 2B TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-E

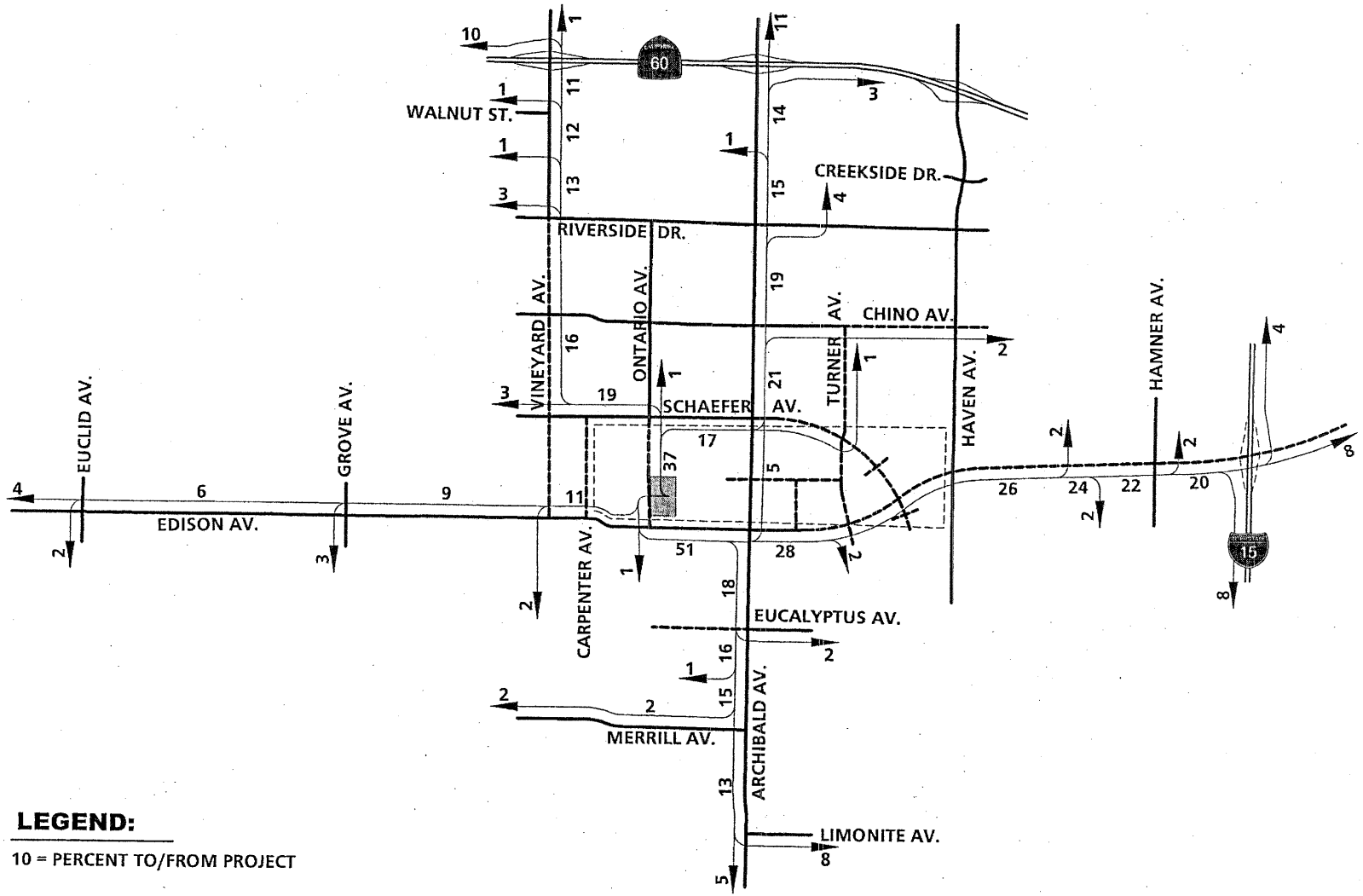
PLANNING AREA 3A TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-F

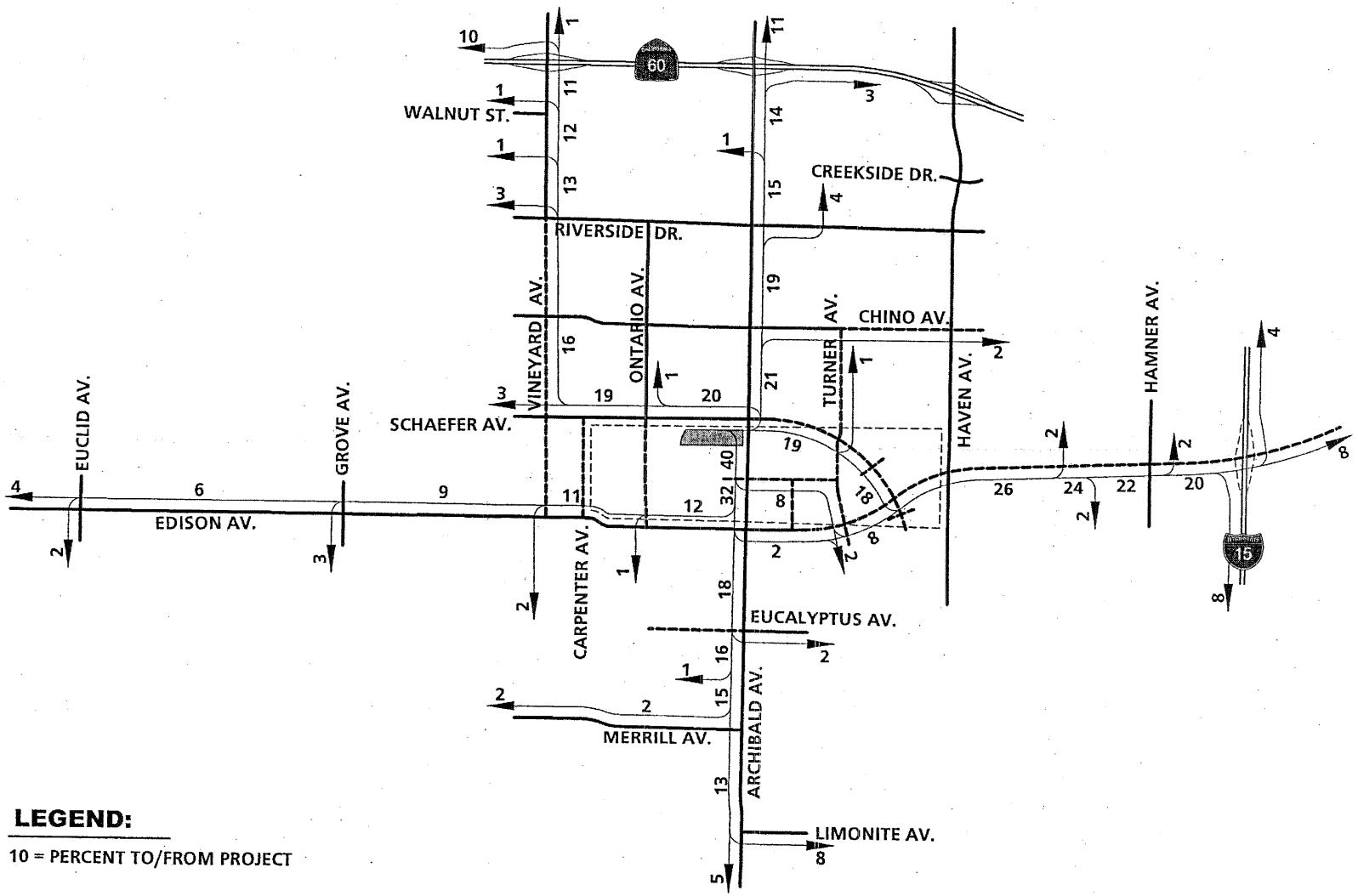
PLANNING AREA 3B TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-G

PLANNING AREA 4 TRIP DISTRIBUTION



LEGEND:

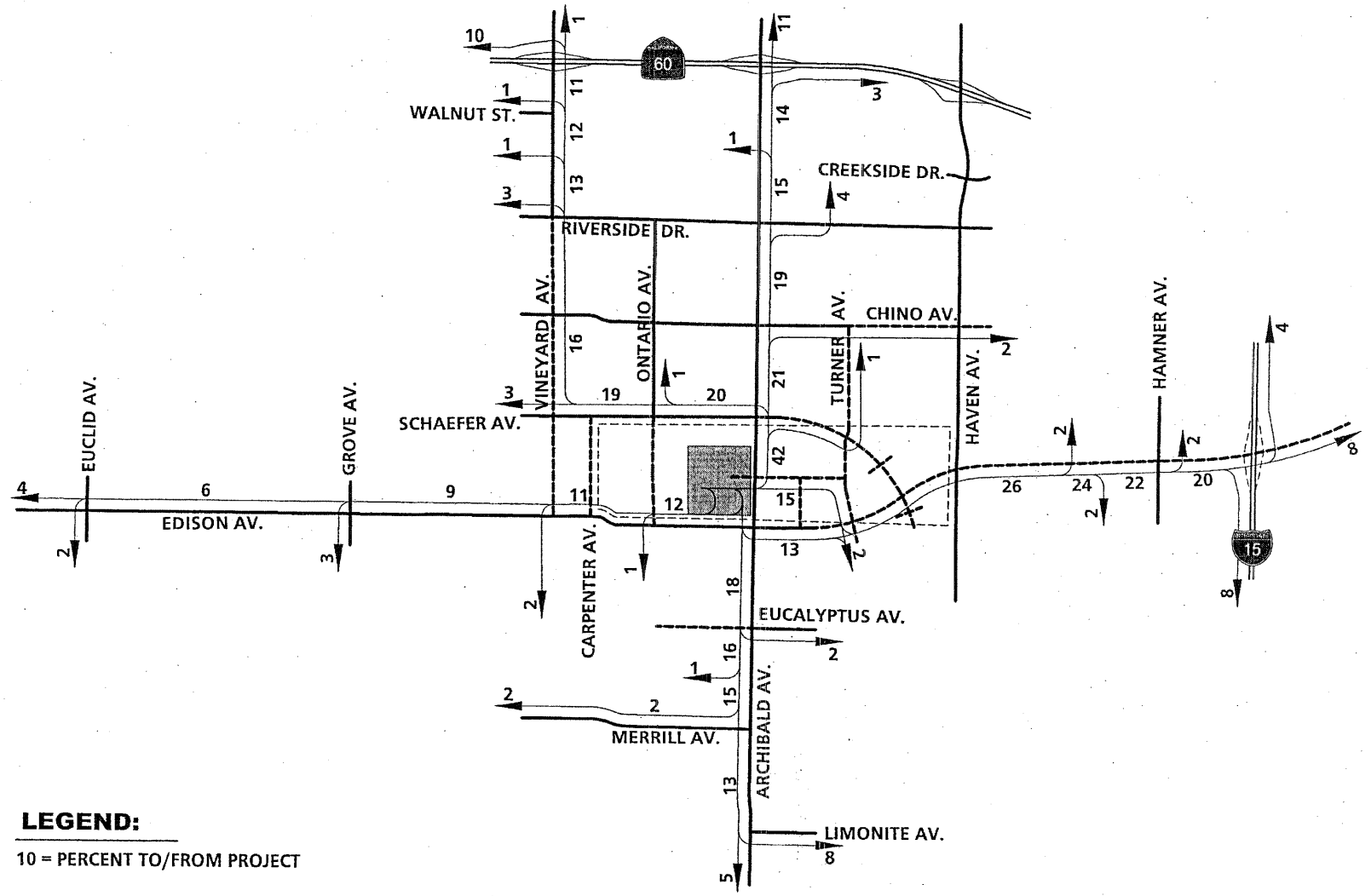
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-H

PLANNING AREA 5 (RESIDENTIAL) TRIP DISTRIBUTION



LEGEND:

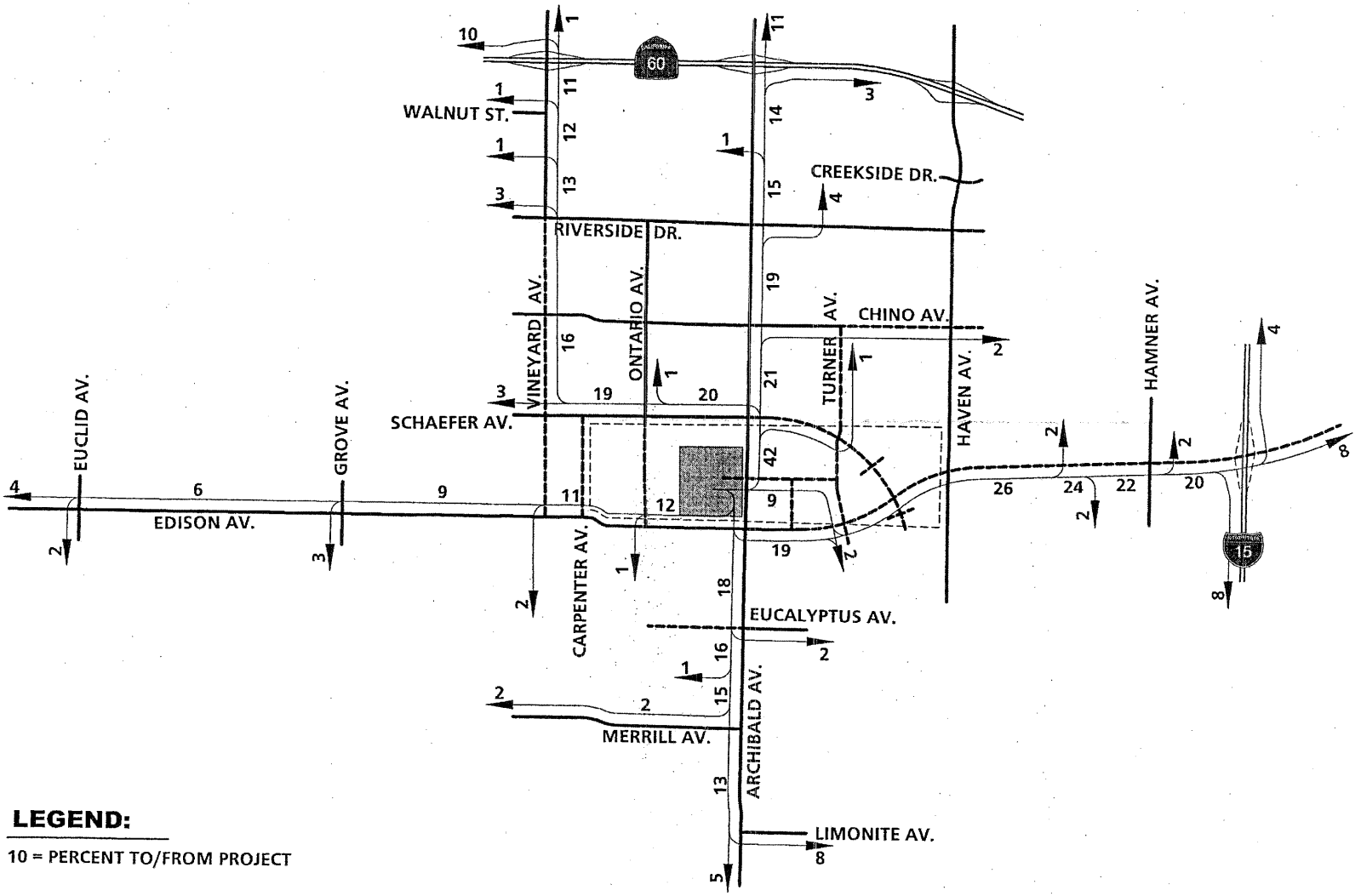
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-I

PLANNING AREA 5 (ELEMENTARY SCHOOL) TRIP DISTRIBUTION



LEGEND:

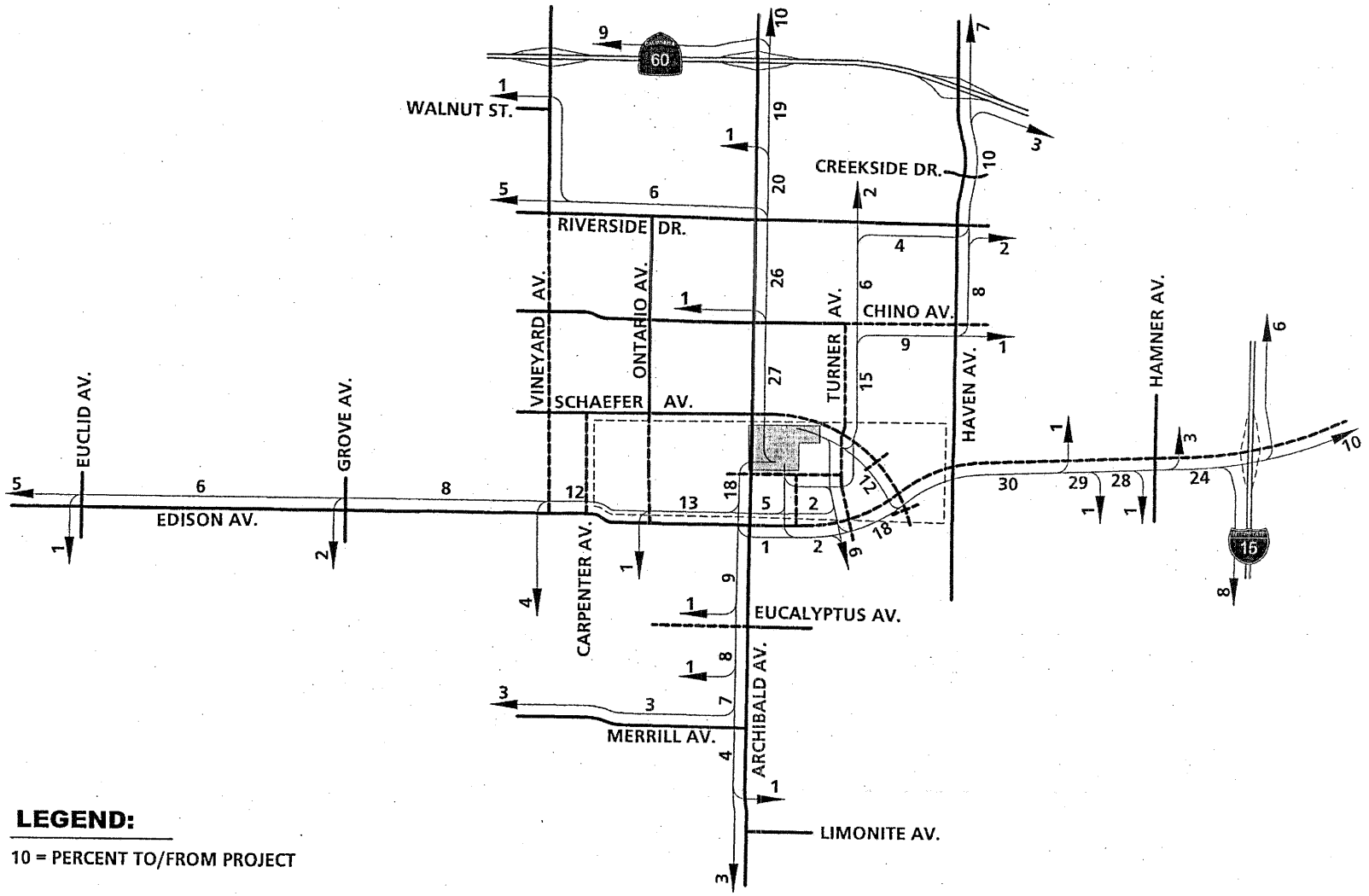
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-J

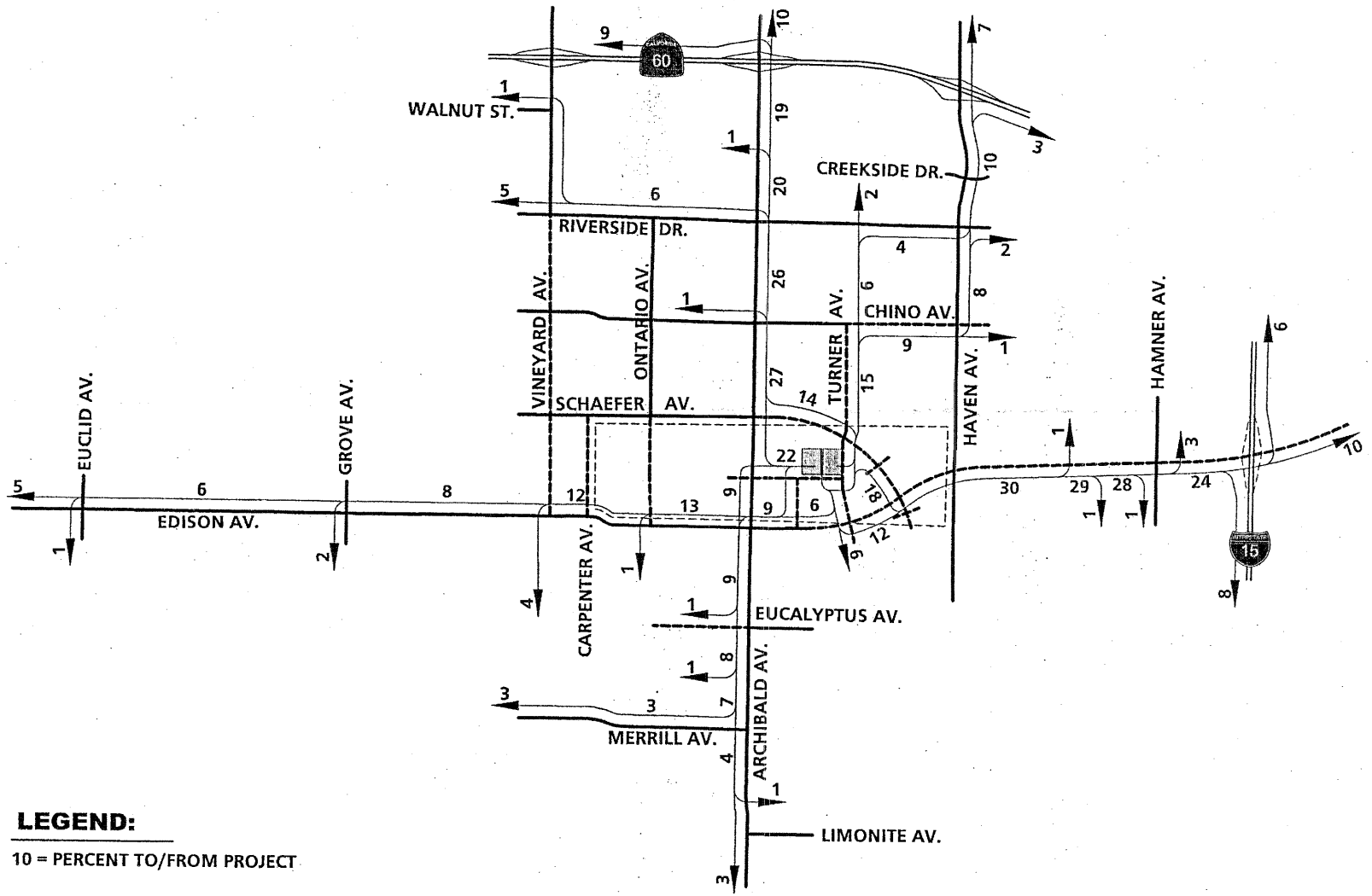
PLANNING AREA 6A TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-K

PLANNING AREA 6B AND 9B (MIDDLE SCHOOL) TRIP DISTRIBUTION



LEGEND:

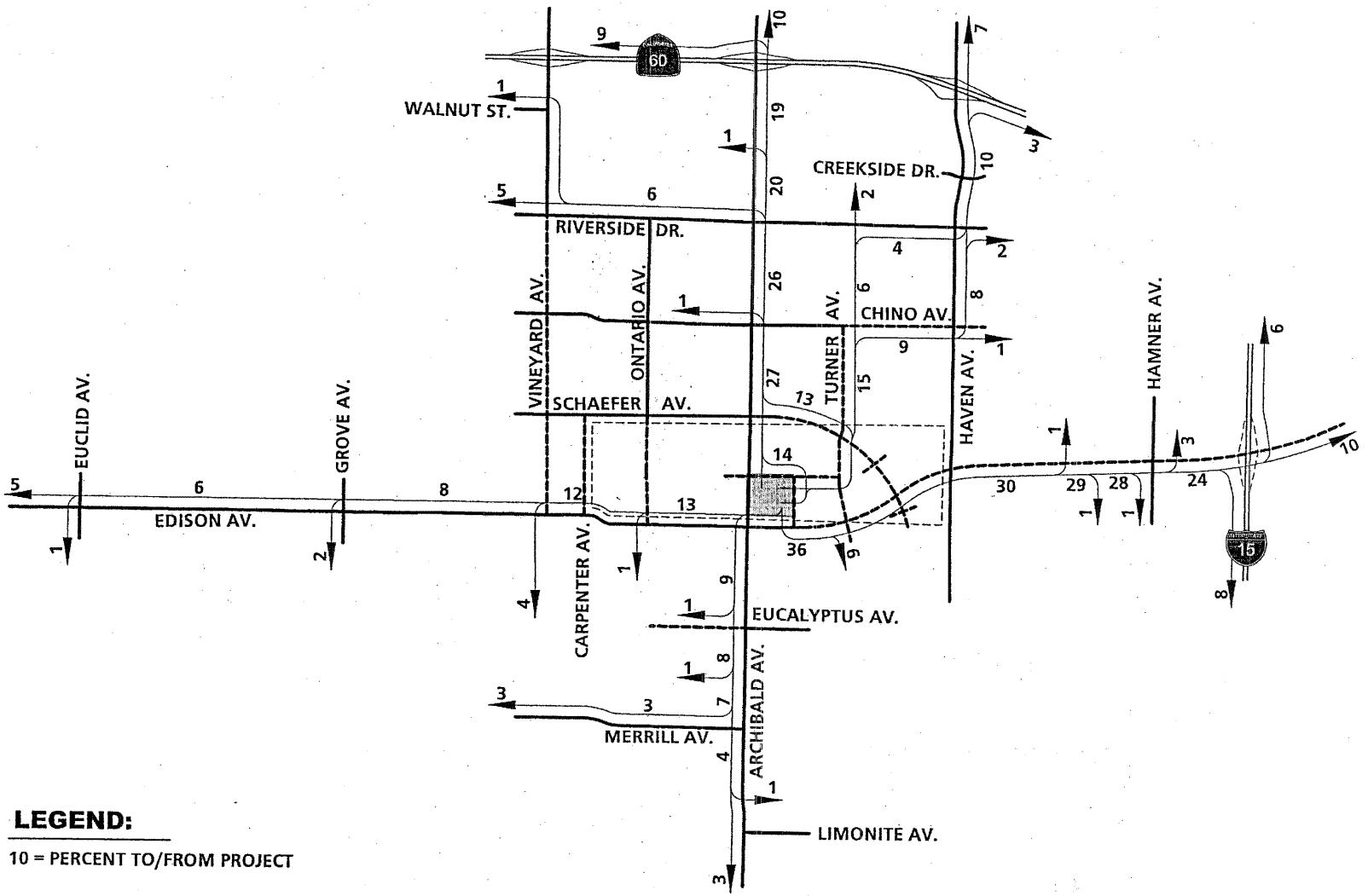
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-L

PLANNING AREA 7 TRIP DISTRIBUTION



LEGEND:

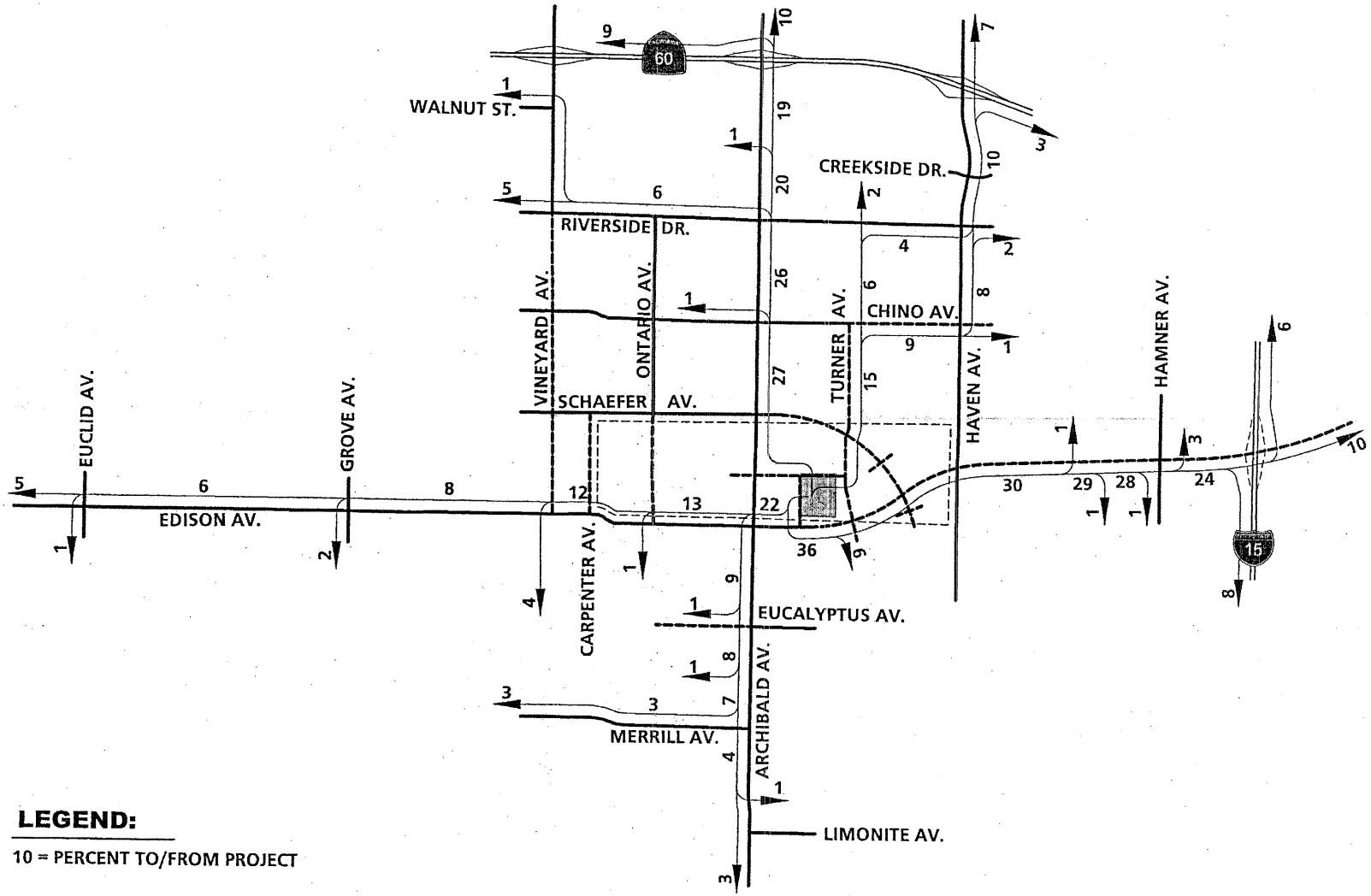
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-M

PLANNING AREA 8A TRIP DISTRIBUTION



LEGEND:

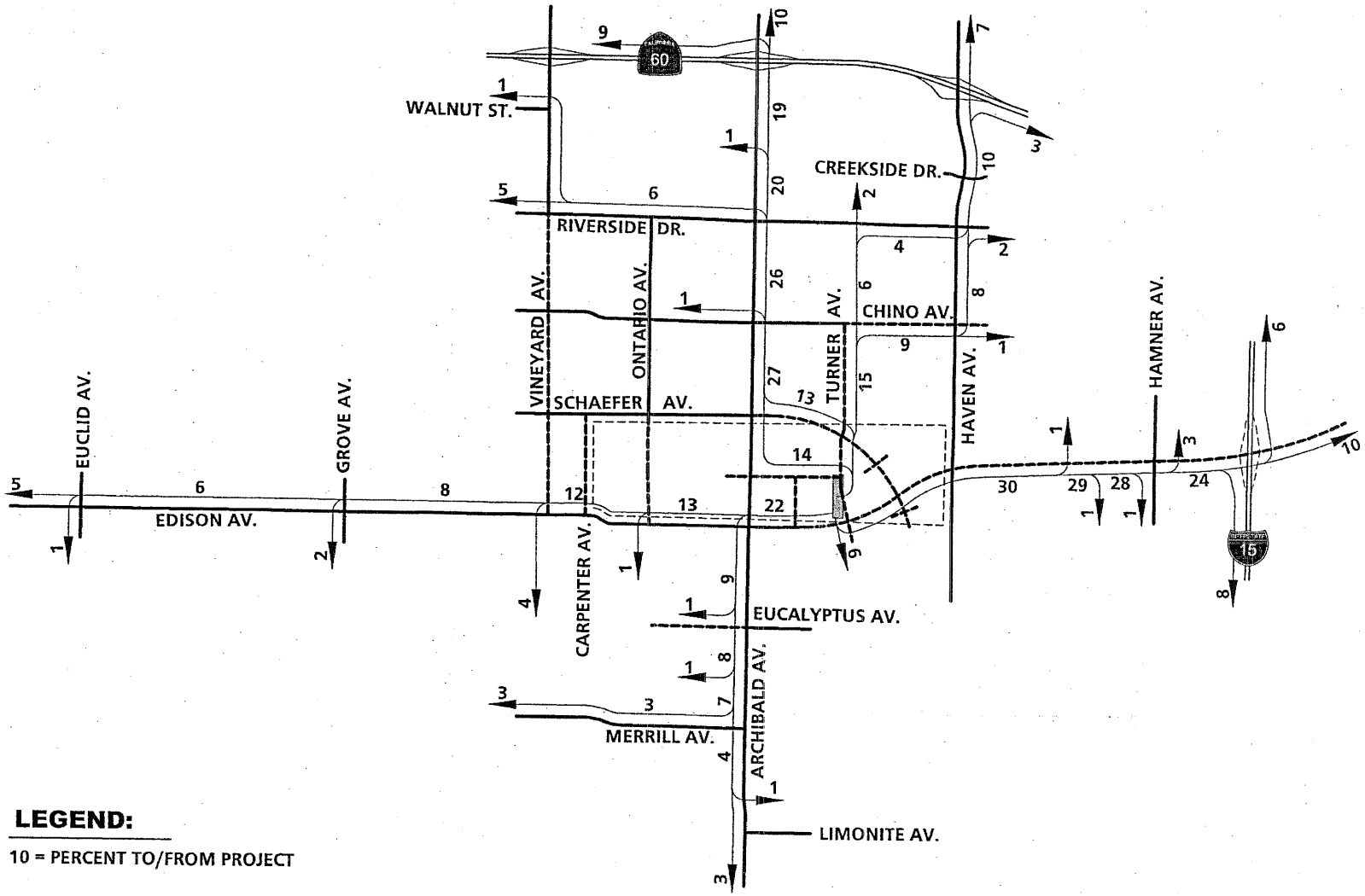
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-N

PLANNING AREA 8B TRIP DISTRIBUTION



LEGEND:

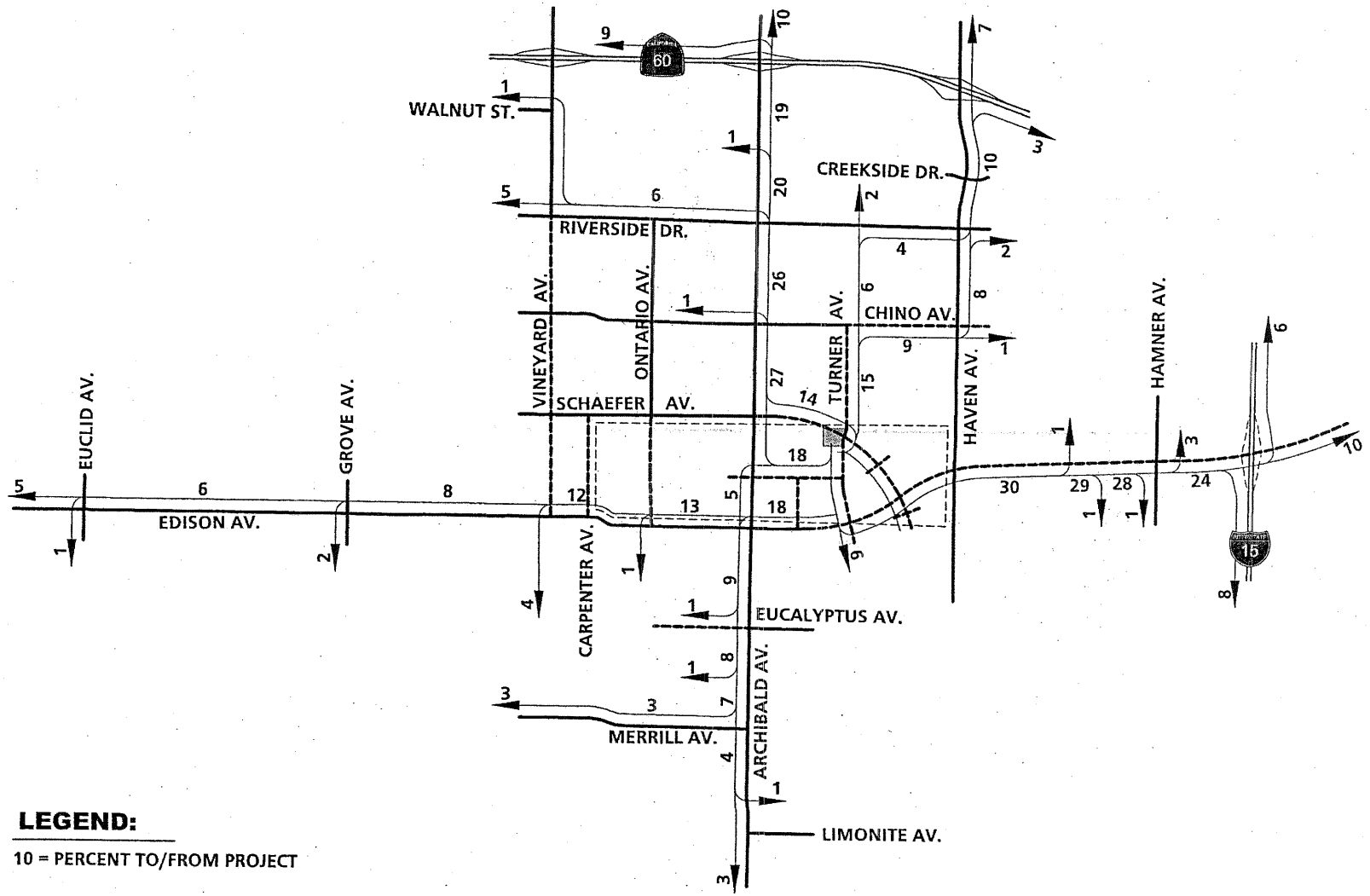
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-O

PLANNING AREA 9A TRIP DISTRIBUTION



LEGEND:

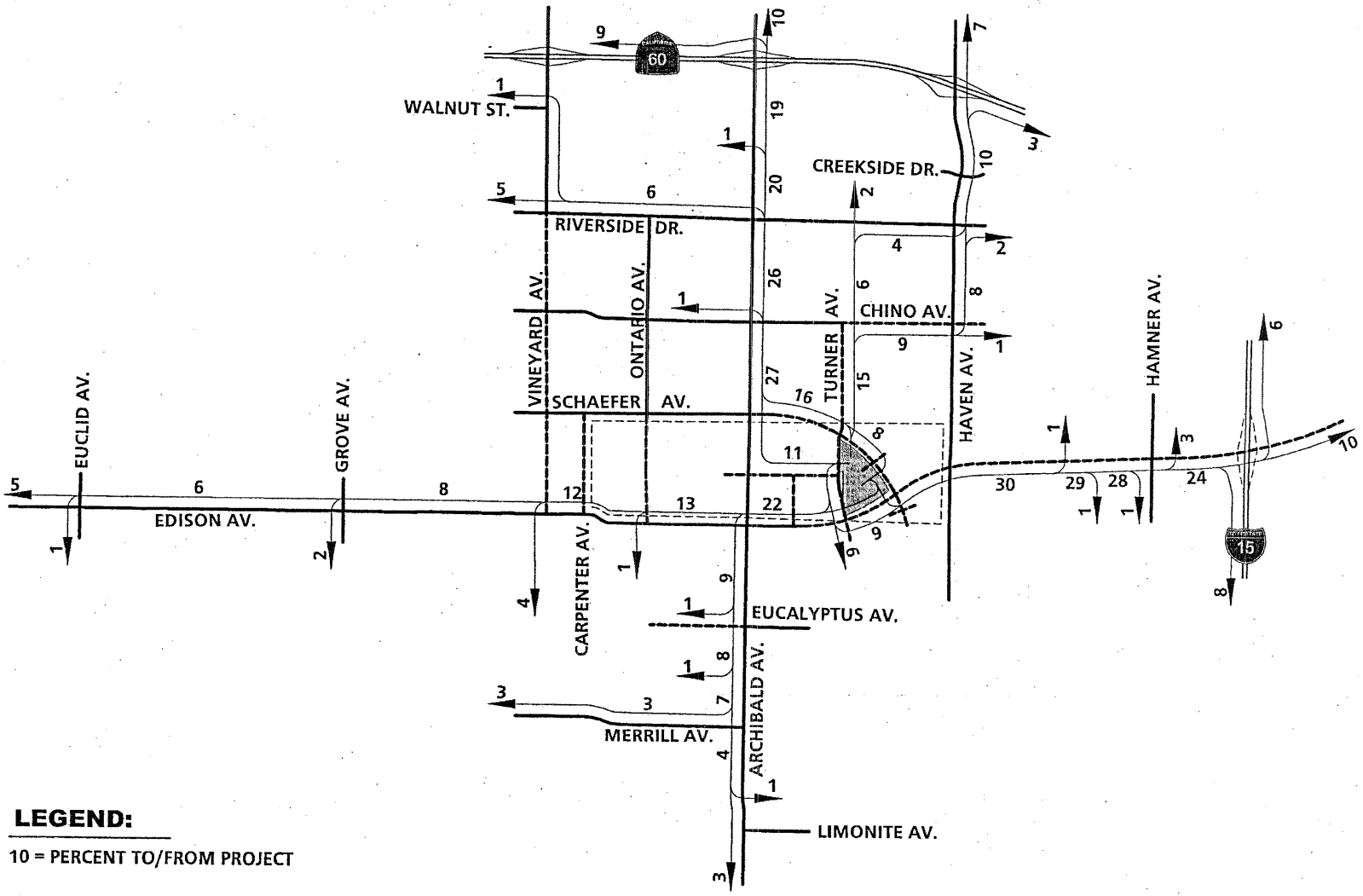
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-P

PLANNING AREA 9C (NORTH) TRIP DISTRIBUTION



LEGEND:

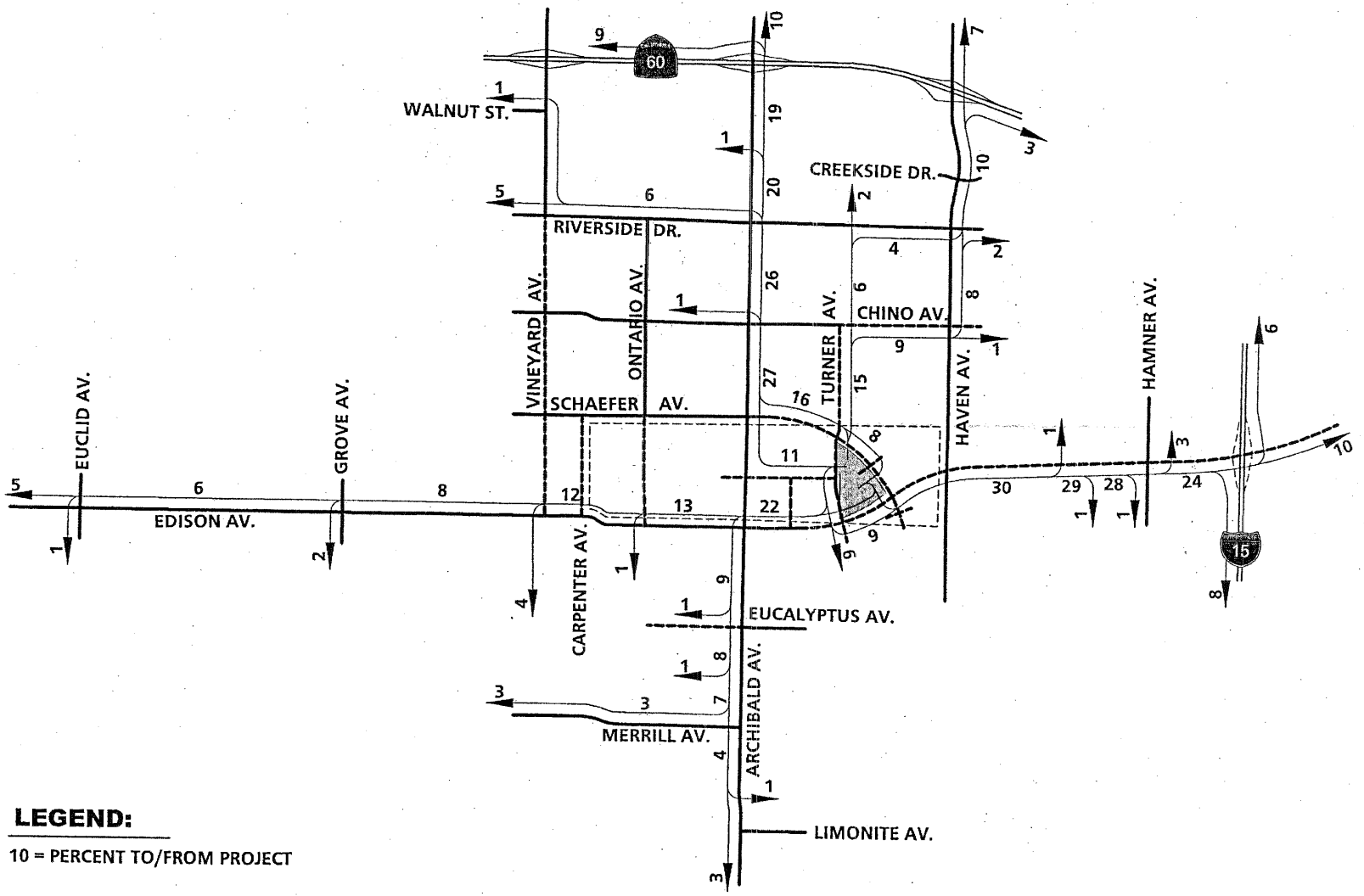
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-Q

PLANNING AREA 9C (SOUTH) TRIP DISTRIBUTION



LEGEND:

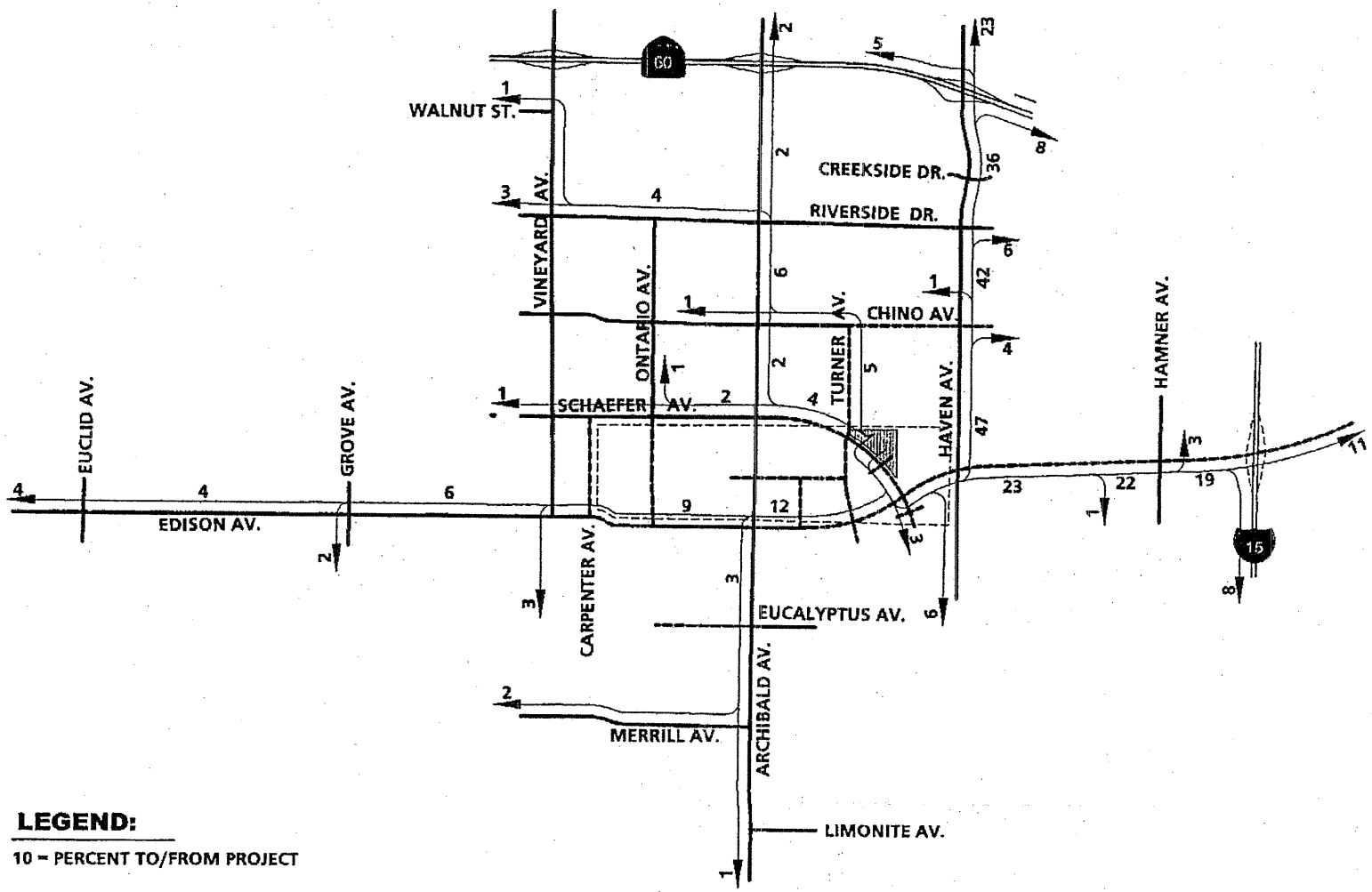
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-R

PLANNING AREA 9D TRIP DISTRIBUTION



LEGEND:

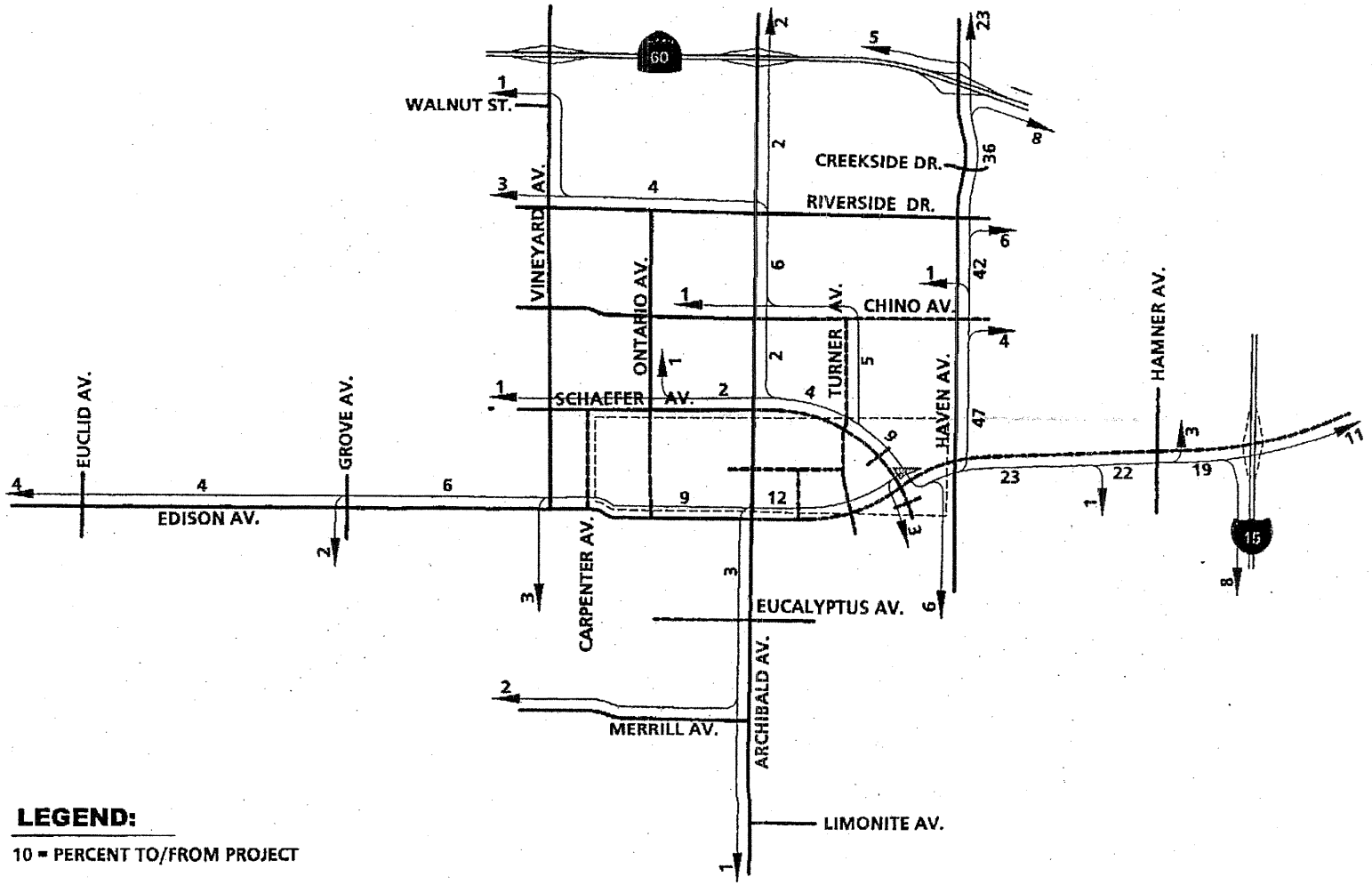
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-S

PLANNING AREA 10B TRIP DISTRIBUTION



LEGEND:

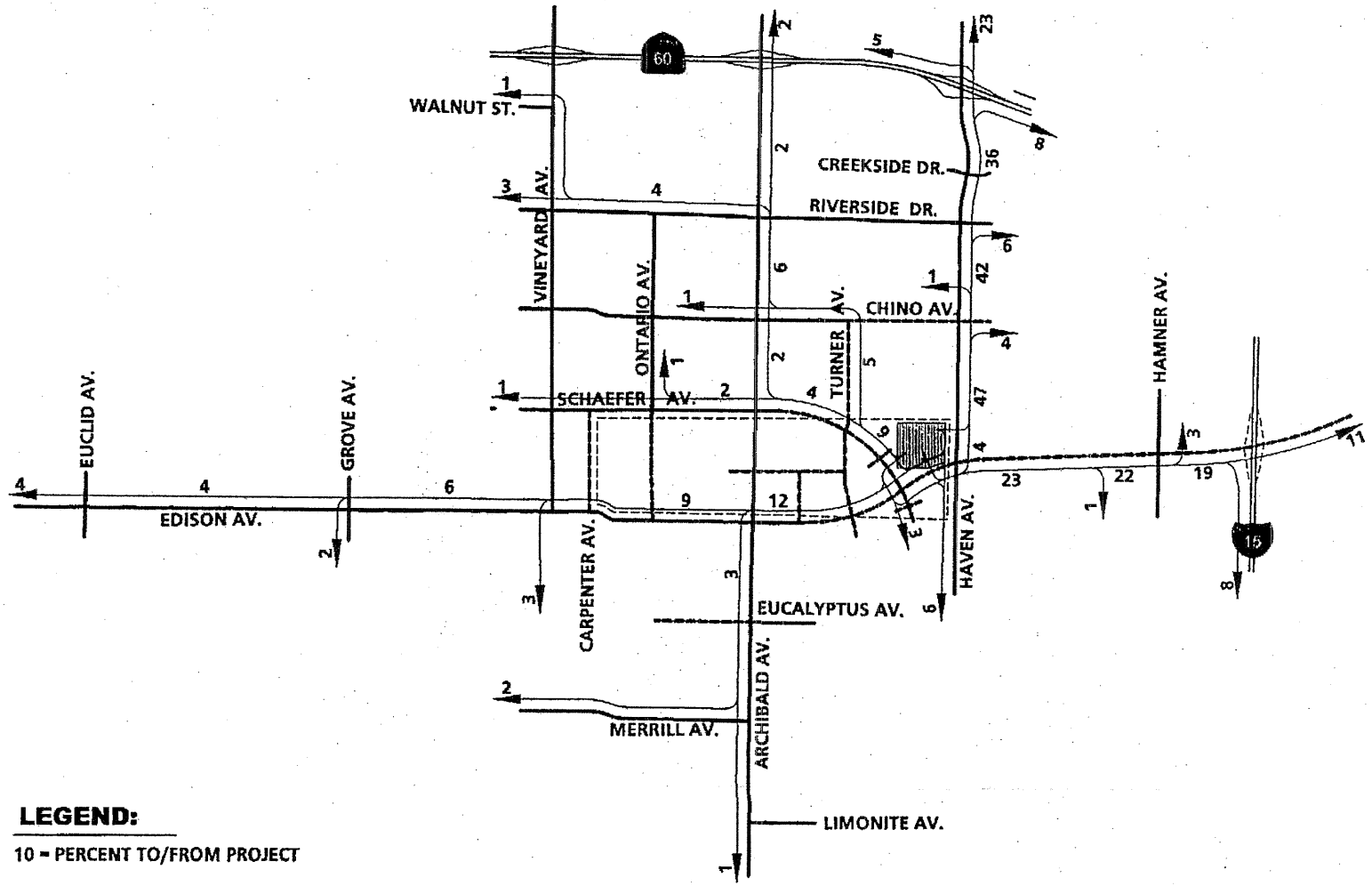
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-T

PLANNING AREA 11 TRIP DISTRIBUTION



LEGEND:

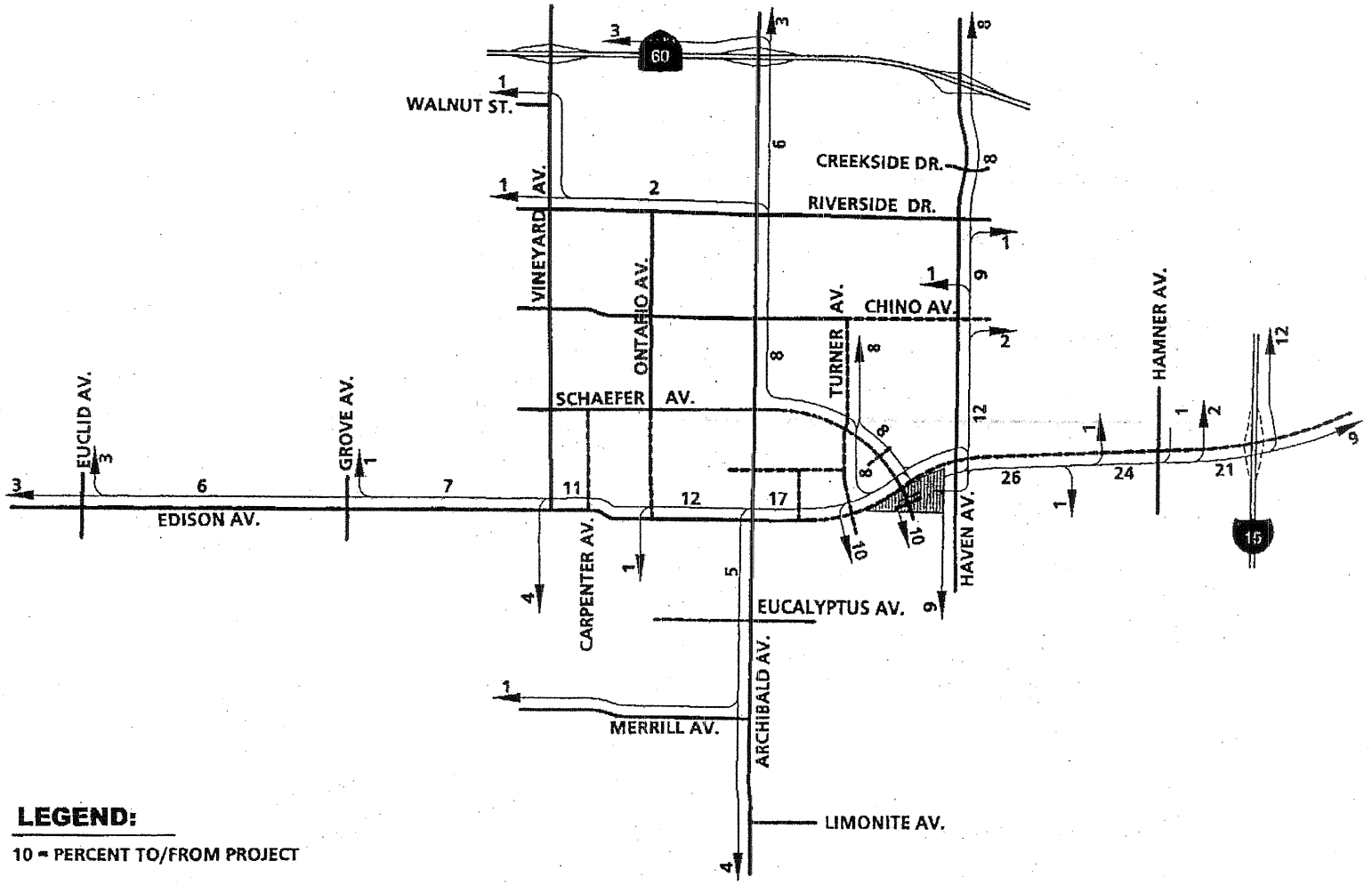
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-U

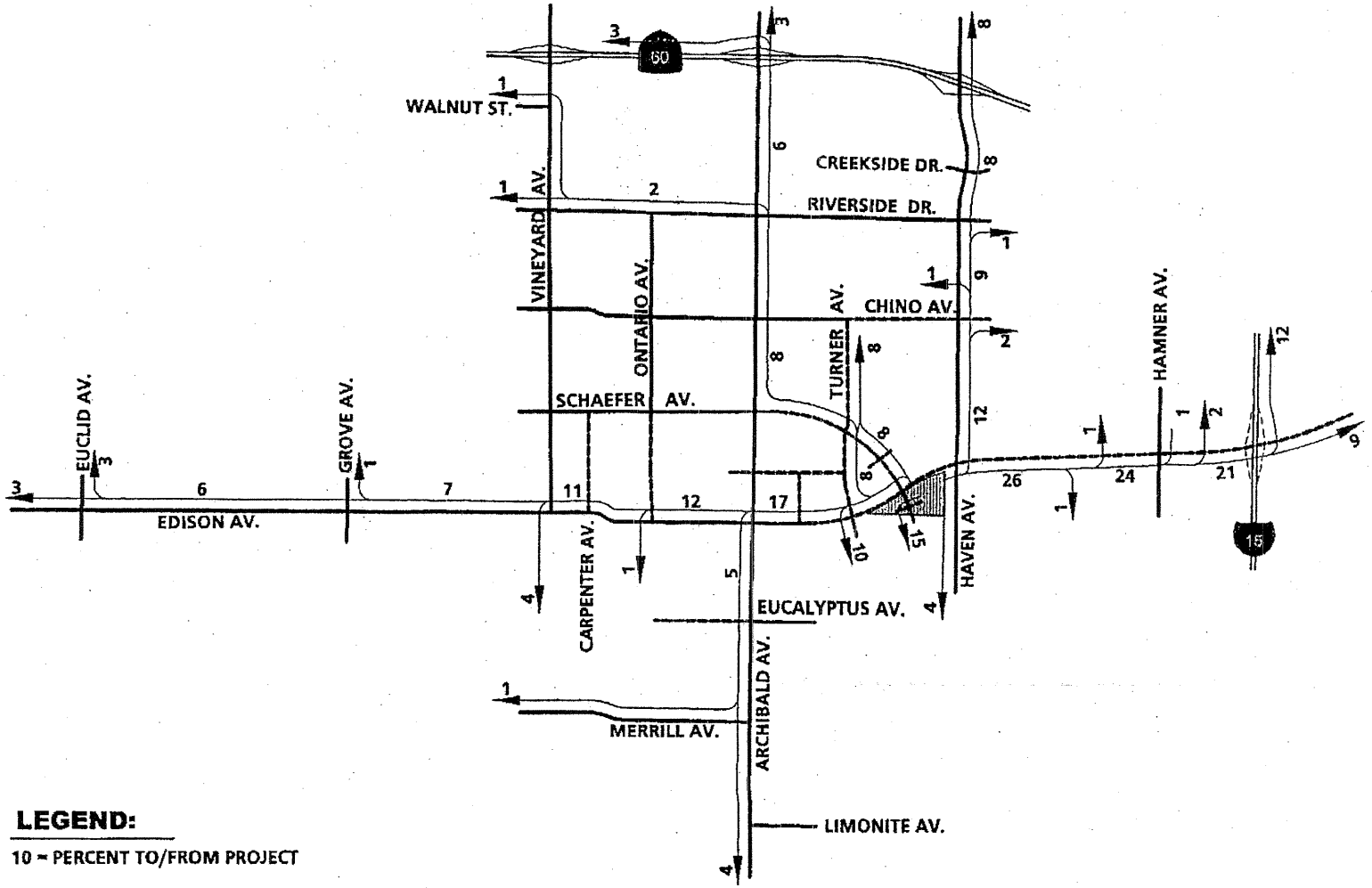
PLANNING AREA 10A (COMMERCIAL) TRIP DISTRIBUTION



URBAN CROSSROADS

EXHIBIT 2-V

PLANNING AREA 10A (RESIDENTIAL EAST OF SCHAFER) TRIP DISTRIBUTION



LEGEND:

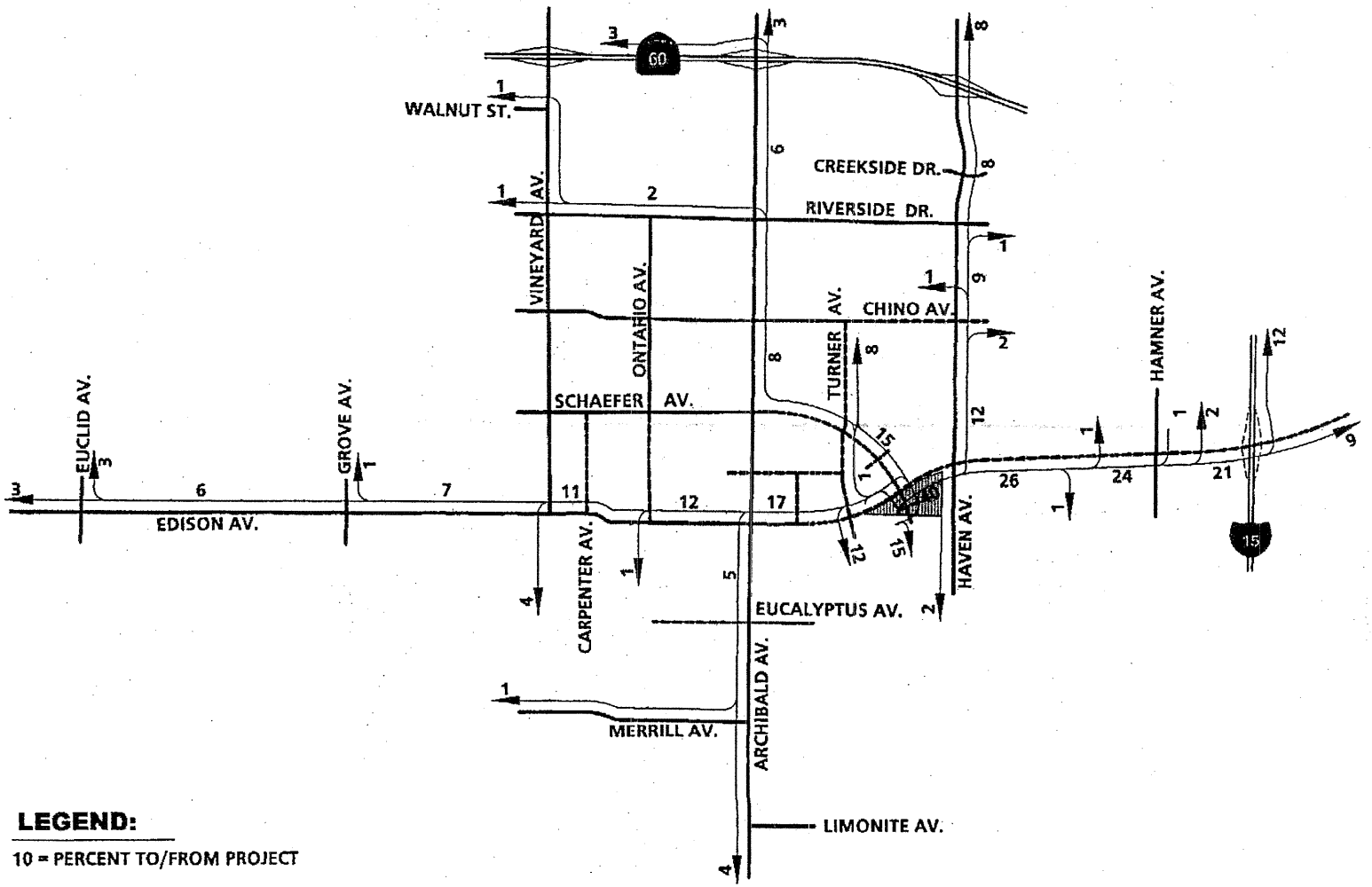
10 = PERCENT TO/FROM PROJECT

N

URBAN CROSSROADS

EXHIBIT 2-W

PLANNING AREA 10A (RESIDENTIAL WEST OF SCHAFER) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

URBAN CROSSROADS

APPENDIX D

Traffic Count Worksheets

Daily Traffic Volume
Count Worksheets

The total AM and PM RAW (Non PCE) peak hour turning movements (10,027) were summed up and compared to the total AM and PM RAW (PCE) peak hour turning movements sum (10,410). The resulting average factor for the study area to obtain PCE volumes from RAW (NON PCE) volumes is 1.038. The factor 1.038 was then applied to the ADT data to adjust the ADT data upwards to reflect truck activity within the study area.

RAW ADT TO PCE ADT CONVERSION FACTOR CALCULATION

TOTAL RAW PEAK HOUR (AM + PM) =	10027
TOTAL PCE PEAK HOUR (AM + PM) =	10410

PCE/RAW Factor = $\dfrac{\text{TOTAL PCE PEAK HOUR (AM + PM) =}}{\text{TOTAL RAW PEAK HOUR (AM + PM)}}$ **1.038**

U:\UcJobs_05100-05500_05200\05279\Excel\Volumes_use me for 5279-03\[JN05279ADTS#4.xls]RAW TO ADT

(5)

Counts Unlimtied, Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of Ontario
Archibald Avenue
N/ Edison Avenue
24 Hour Directional Volume Count

ONARNED
Site Code: 051432
Date Start: 11-Oct-07
Date End: 11-Oct-07

Start Time	11-Oct-07 Thu	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		17	75			25	92				
12:15		13	84			13	77				
12:30		13	93			17	86				
12:45		5	88	48	340	18	77	73	332	121	672
01:00		8	84			9	78				
01:15		8	98			15	97				
01:30		7	93			11	112				
01:45		3	77	26	352	9	110	44	397	70	749
02:00		10	98			9	84				
02:15		8	96			7	109				
02:30		10	92			11	117				
02:45		16	129	44	415	12	93	39	403	83	818
03:00		11	116			16	133				
03:15		25	105			6	152				
03:30		11	107			17	172				
03:45		13	111	60	439	21	152	60	609	120	1048
04:00		22	107			16	167				
04:15		31	129			22	172				
04:30		55	123			14	173				
04:45		58	**121**	166	480	31	**181**	83	693	249	1173
05:00		79	**126**			25	**199**				
05:15		64	**162**			48	**201**				
05:30		90	**133**			63	**211**				
05:45		98	115	331	536	64	141	200	752	531	1288
06:00		105	97			78	149				
06:15		133	123			84	161				
06:30		125	95			106	147				
06:45		139	79	502	394	88	137	356	594	858	988
07:00		149	88			**111**	135				
07:15		**164**	68			**133**	135				
07:30		**200**	59			**139**	101				
07:45		**213**	82	726	297	**98**	118	481	489	1207	786
08:00		**159**	64			96	93				
08:15		150	68			71	106				
08:30		134	60			76	81				
08:45		137	52	580	244	62	92	305	372	885	616
09:00		114	40			67	101				
09:15		97	55			66	65				
09:30		96	45			57	64				
09:45		97	44	404	184	79	58	269	288	673	472
10:00		101	42			54	60				
10:15		92	40			64	68				
10:30		78	22			73	54				
10:45		108	27	379	131	61	50	252	232	631	363
11:00		102	26			77	30				
11:15		104	19			75	34				
11:30		89	19			89	28				
11:45		83	16	378	80	78	32	319	124	697	204
Total		3644	3892	3644	3892	2481	5285	2481	5285	6125	9177
Combined Total		7536		7536		7766		7766		15302	
AM Peak		07:15				07:00					
Vol.		736				481					
P.H.F.		0.864				0.865					
PM Peak			04:45				04:45				
Vol.			542				792				
P.H.F.			0.836				0.938				
Percentage		48.4%	51.6%			31.9%	68.1%				
ADT/AADT		ADT 15,302		AADT 15,302							

x 1.038

ADT= 15,883 PCE

(5)

Counts Unlimtied, Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
(951) 485-7934

City of Ontario
Edison Avenue
W/ Archibald Avenue
24 Hour Directional Volume Count

ONEDWAR
Site Code: 051432
Date Start: 11-Oct-07
Date End: 11-Oct-07

Start Time	11-Oct-07 Thu	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		4	47			3	32				
12:15		3	34			3	35				
12:30		3	34			0	22				
12:45		3	34	13	149	2	41	8	130	21	279
01:00		2	50			0	35				
01:15		3	48			3	30				
01:30		1	55			4	34				
01:45		3	49	9	202	0	32	7	131	16	333
02:00		0	63			5	38				
02:15		2	48			0	32				
02:30		4	86			2	51				
02:45		5	112	11	309	3	40	10	161	21	470
03:00		7	72			2	34				
03:15		3	108			7	39				
03:30		8	114			3	55				
03:45		5	141	23	435	7	45	19	173	42	608
04:00		2	142			9	31				
04:15		4	127			12	28				
04:30		3	120			24	45				
04:45		3	**166**	12	555	25	**47**	70	151	82	706
05:00		9	**124**			34	**37**				
05:15		13	**162**			52	**40**				
05:30		19	**143**			67	**51**				
05:45		22	127	63	556	120	44	273	172	336	728
06:00		19	89			111	32				
06:15		18	94			115	41				
06:30		15	75			140	28				
06:45		34	48	86	306	**172**	28	538	129	624	435
07:00		29	47			**117**	24				
07:15		**46**	46			**138**	18				
07:30		**41**	45			**146**	23				
07:45		**43**	29	159	167	131	14	532	79	691	246
08:00		**43**	26			106	12				
08:15		40	22			95	17				
08:30		40	21			62	13				
08:45		38	32	161	101	51	14	314	56	475	157
09:00		37	20			34	14				
09:15		28	18			56	11				
09:30		26	16			38	6				
09:45		40	17	131	71	35	8	163	39	294	110
10:00		36	11			56	10				
10:15		37	10			34	8				
10:30		40	11			31	5				
10:45		40	13	153	45	26	1	147	24	300	69
11:00		34	8			34	2				
11:15		46	9			35	3				
11:30		45	8			31	3				
11:45		40	7	165	32	46	1	146	9	311	41
Total		986	2928	986	2928	2227	1254	2227	1254	3213	4182
Combined Total		3914		3914		3481		3481		7395	
AM Peak		07:15				06:45					
Vol.		173				573					
P.H.F.		0.940				0.833					
PM Peak			04:45				04:45				
Vol.			595				175				
P.H.F.			0.896				0.795				
Percentage		25.2%	74.8%			64.0%	36.0%				
ADT/AADT		ADT 7,395		AADT 7,395							

7395
x1.038
ADT= 7,676 PCE

Existing Peak Hour Volume to Average Daily Relationship

Intsec NumID	Roadway/Segment	LEG	RAW ADT counts	PCE'D ADT (RAW * 1.038)	AM PH Count	AM Ratio	PM PH Count	PM Ratio
5	Archibald	North of Edison	15,302	15,883	1,316	8%	1,337	8%
5	Edison	West of Archibald	7,395	7,676	738	10%	775	10%
					AVERAGE	9%		9%
				PEAK HOUR TO ADT CALCULATION FACTOR				**5.49**

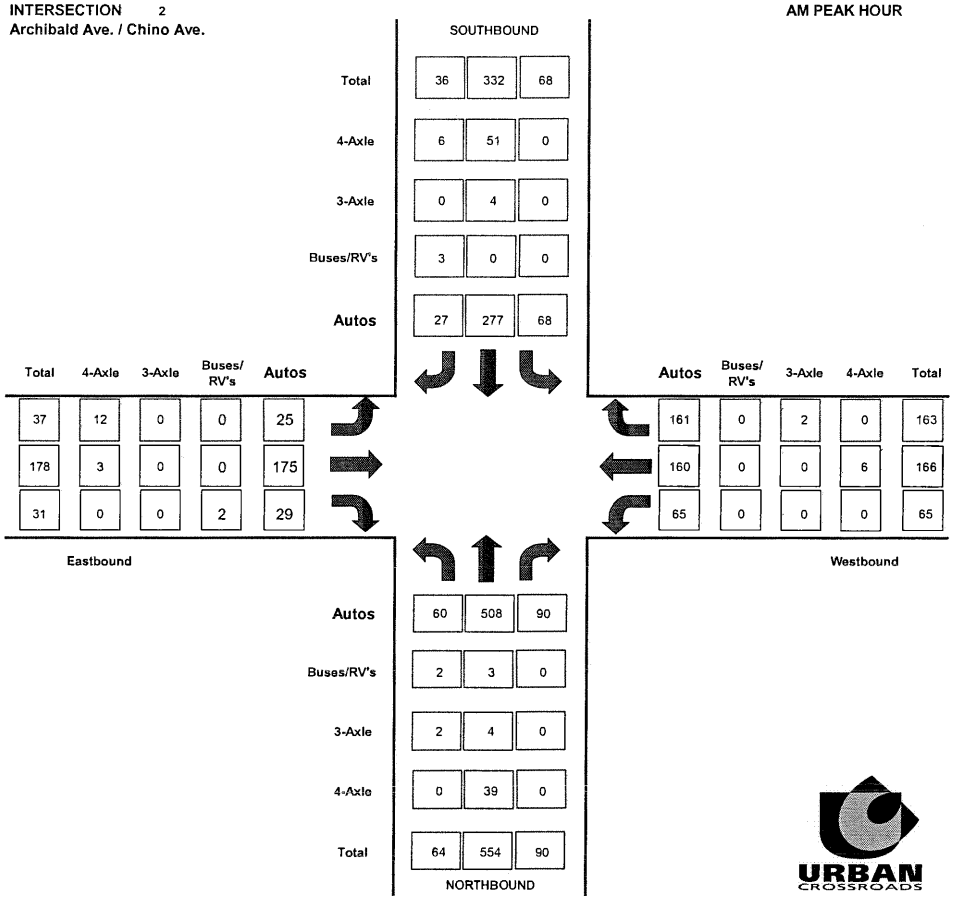
U:\UcJobs_05100-05500_05200\05279\Excel\Volumes_use me for 5279-03\[JN05279ADTS#4.xls]ADTFACTOR

Peak Hour
Count Worksheets

PASSENGER CAR EQUIVALENCY PEAK HOUR COUNT SUMMARY

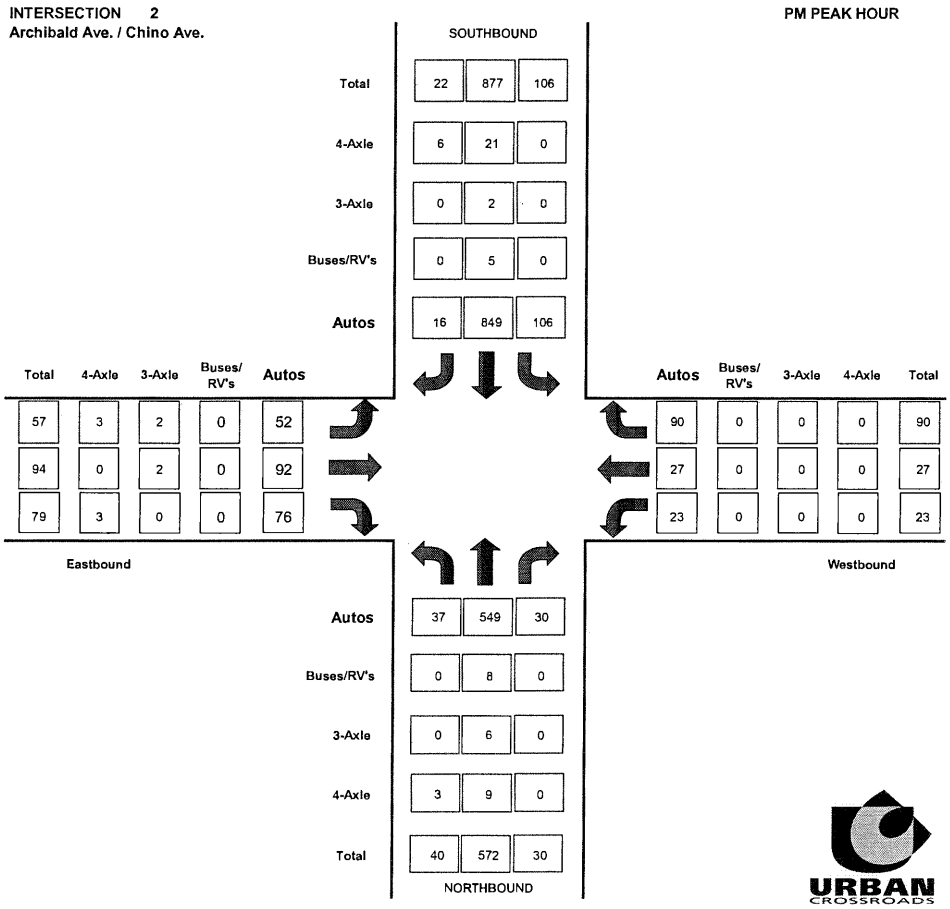
INTERSECTION 2
Archibald Ave. / Chino Ave.

AM PEAK HOUR



INTERSECTION 2
Archibald Ave. / Chino Ave.

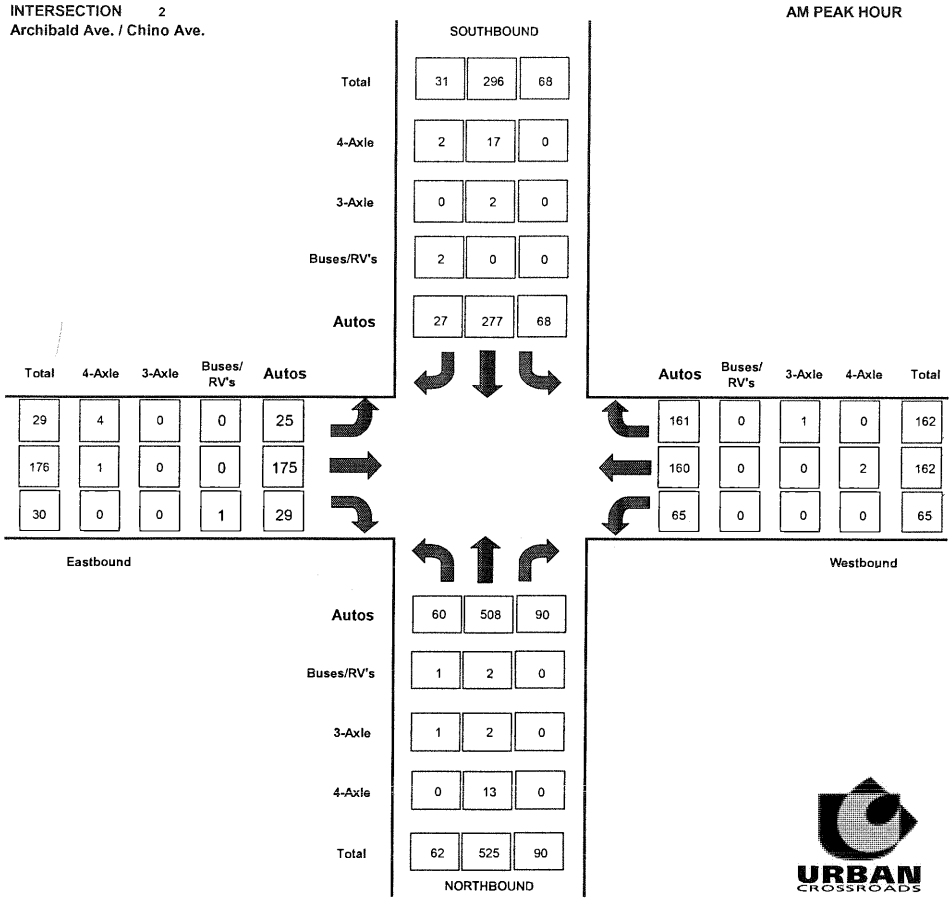
PM PEAK HOUR



RAW PEAK HOUR COUNT SUMMARY

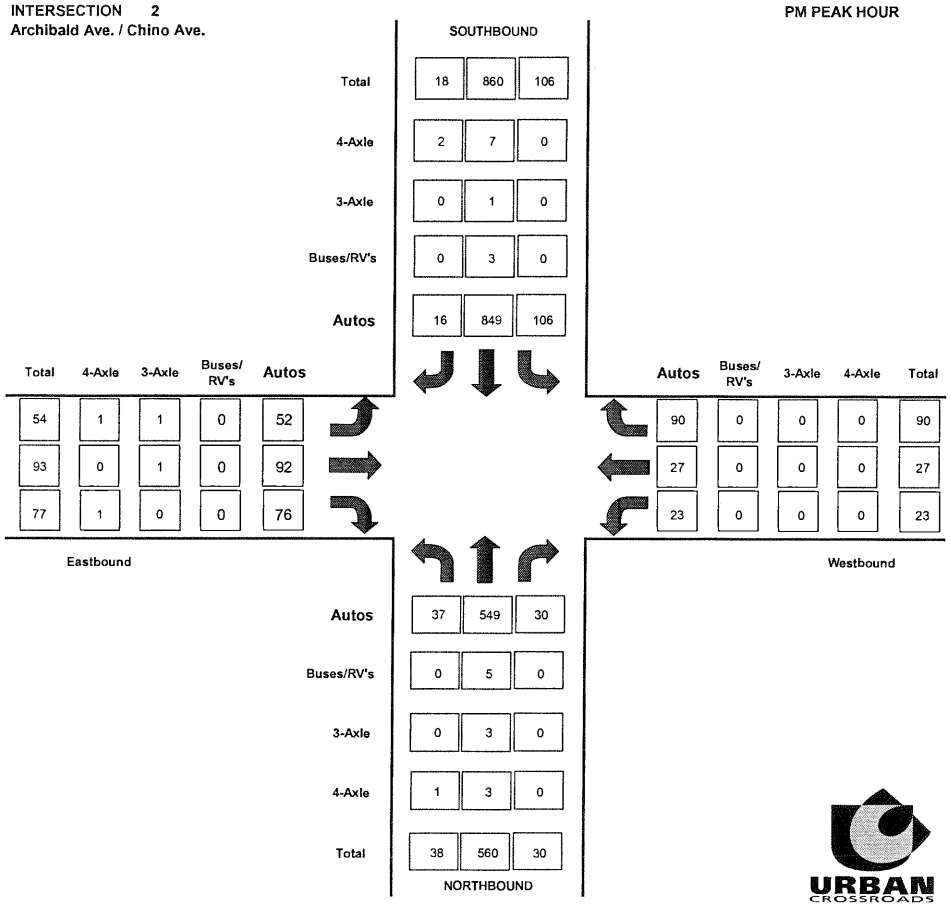
INTERSECTION 2
Archibald Ave. / Chino Ave.

AM PEAK HOUR



INTERSECTION 2
Archibald Ave. / Chino Ave.

PM PEAK HOUR



(2)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIAM
Site Code : 05143246
Start Date : 10/11/2007
Page No : 1

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

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	10	56	8	74	3	11	24	38	16	105	3	124	8	10	12	30	266
07:15 AM	14	91	4	109	9	19	34	62	13	163	10	186	9	11	4	24	381
07:30 AM	23	112	12	147	5	21	43	69	20	172	14	206	2	7	9	18	440
07:45 AM	19	47	14	80	40	87	41	168	21	76	46	143	12	133	11	156	547
Total	66	306	38	410	57	138	142	337	70	516	73	659	31	161	36	228	1634
08:00 AM	12	46	1	59	11	35	44	90	8	114	20	142	6	25	6	37	328
08:15 AM	8	94	6	108	4	27	33	64	10	116	1	127	9	18	5	32	331
08:30 AM	9	80	7	96	0	8	26	34	2	112	2	116	7	6	7	20	266
08:45 AM	9	90	11	110	8	9	36	53	14	122	3	139	5	3	6	14	316
Total	38	310	25	373	23	79	139	241	34	464	26	524	27	52	24	103	1241
Grand Total	104	616	63	783	80	217	281	578	104	980	99	1183	58	213	60	331	2875
Apprch %	13.3	78.7	8		13.8	37.5	48.6		8.8	82.8	8.4		17.5	64.4	18.1		
Total %	3.6	21.4	2.2	27.2	2.8	7.5	9.8	20.1	3.6	34.1	3.4	41.1	2	7.4	2.1	11.5	
Passenger Vehicles	103	571	58	732	79	212	278	569	99	942	99	1140	53	211	56	320	2761
% Passenger Vehicles	99	92.7	92.1	93.5	98.8	97.7	98.9	98.4	95.2	96.1	100	96.4	91.4	99.1	93.3	96.7	96
Large 2 Axle Vehicles	0	2	2	4	0	0	1	1	3	4	0	7	0	0	3	3	15
% Large 2 Axle Vehicles	0	0.3	3.2	0.5	0	0	0.4	0.2	2.9	0.4	0	0.6	0	0	5	0.9	0.5
3 Axle Vehicles	0	7	0	7	0	0	1	1	1	4	0	5	1	0	0	1	14
% 3 Axle Vehicles	0	1.1	0	0.9	0	0	0.4	0.2	1	0.4	0	0.4	1.7	0	0	0.3	0.5
4+Axle Truks	1	36	3	40	1	5	1	7	1	30	0	31	4	2	1	7	85
% 4+Axle Truks	1	5.8	4.8	5.1	1.2	2.3	0.4	1.2	1	3.1	0	2.6	6.9	0.9	1.7	2.1	3

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	91	4	109	9	19	34	62	13	163	10	186	9	11	4	24	381
07:30 AM	**23**	**112**	12	**147**	5	21	43	69	20	**172**	14	**206**	2	7	9	18	440
07:45 AM	19	47	**14**	80	**40**	**87**	41	**168**	**21**	76	**46**	143	**12**	**133**	**11**	**156**	**547**
08:00 AM	12	46	1	59	11	35	**44**	90	8	114	20	142	6	25	6	37	328
Total Volume	68	296	31	395	65	162	162	389	62	525	90	677	29	176	30	235	1696
% App. Total	17.2	74.9	7.8		16.7	41.6	41.6		9.2	77.5	13.3		12.3	74.9	12.8		
PHF	.739	.661	.554	.672	.406	.466	.920	.579	.738	.763	.489	.822	.604	.331	.682	.377	.775

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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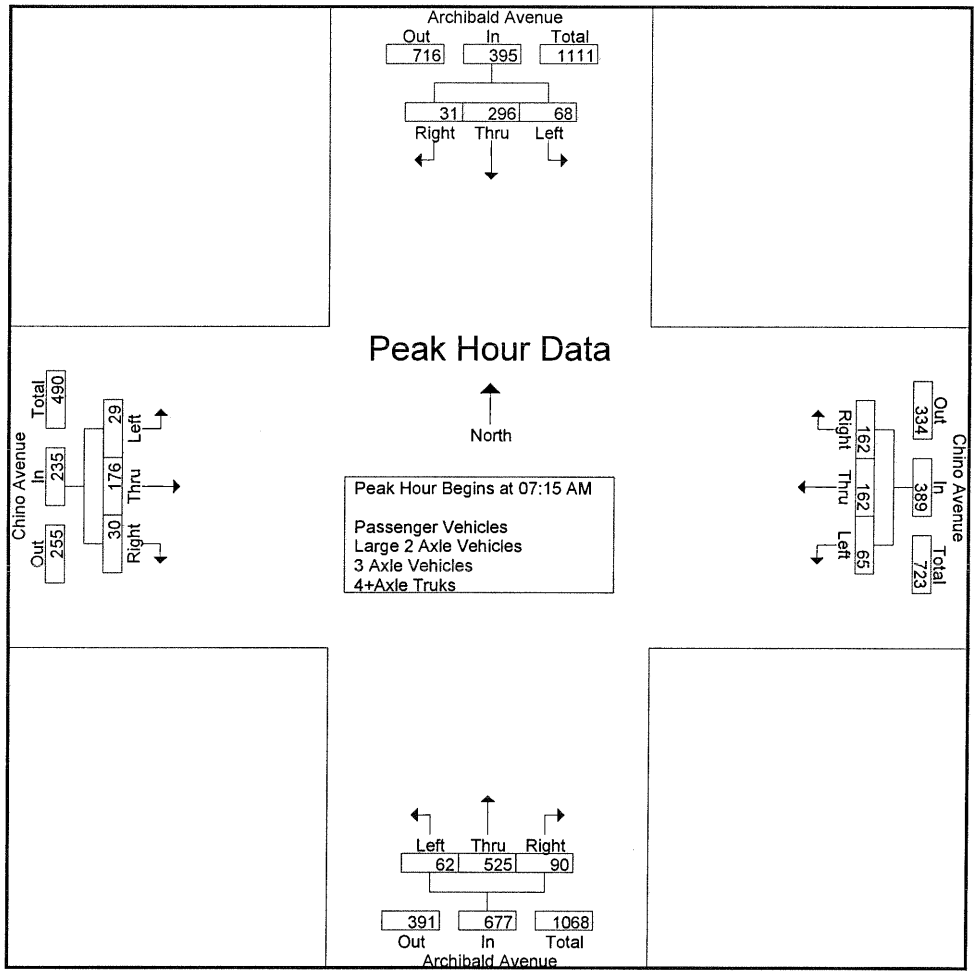
Weather: Sunny

File Name : ONARCHIAM
Site Code : 05143246
Start Date : 10/11/2007
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:45 AM			
+0 mins.	**10**	**56**	**8**	**74**	**5**	**21**	**43**	**69**	**13**	**163**	**10**	**186**	12	133	11	156
+15 mins.	14	91	4	109	**40**	**87**	41	**168**	20	**172**	14	**206**	6	25	6	37
+30 mins.	**23**	**112**	12	**147**	11	35	**44**	90	**21**	76	**46**	143	9	18	5	32
+45 mins.	19	47	**14**	80	4	27	33	64	8	114	20	142	7	6	7	20
Total Volume	66	306	38	410	60	170	161	391	62	525	90	677	34	182	29	245
% App. Total	16.1	74.6	9.3		15.3	43.5	41.2		9.2	77.5	13.3		13.9	74.3	11.8	
PHF	.717	.683	.679	.697	.375	.489	.915	.582	.738	.763	.489	.822	.708	.342	.659	.393

Counts Unlimited Inc.
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951-485-7934

City of Ontario
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Weather: Sunny

File Name : ONARCHIAM
Site Code : 05143246
Start Date : 10/11/2007
Page No : 1

Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	10	50	8	68	3	10	22	35	16	102	3	121	8	9	12	29	253
07:15 AM	14	86	4	104	9	18	34	61	12	163	10	185	7	10	4	21	371
07:30 AM	23	108	11	142	5	21	43	69	20	168	14	202	2	7	8	17	430
07:45 AM	19	43	12	74	40	87	40	167	21	69	46	136	11	133	11	155	532
Total	66	287	35	388	57	136	139	332	69	502	73	644	28	159	35	222	1586
08:00 AM	12	40	0	52	11	34	44	89	7	108	20	135	5	25	6	36	312
08:15 AM	8	90	6	104	3	27	33	63	10	112	1	123	9	18	5	32	322
08:30 AM	8	76	6	90	0	7	26	33	1	109	2	112	7	6	6	19	254
08:45 AM	9	78	11	98	8	8	36	52	12	111	3	126	4	3	4	11	287
Total	37	284	23	344	22	76	139	237	30	440	26	496	25	52	21	98	1175
Grand Total	103	571	58	732	79	212	278	569	99	942	99	1140	53	211	56	320	2761
Apprch %	14.1	78	7.9		13.9	37.3	48.9		8.7	82.6	8.7		16.6	65.9	17.5		
Total %	3.7	20.7	2.1	26.5	2.9	7.7	10.1	20.6	3.6	34.1	3.6	41.3	1.9	7.6	2	11.6	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	86	4	104	9	18	34	61	12	163	10	185	7	10	4	21	371
07:30 AM	**23**	**108**	11	**142**	5	21	43	69	20	**168**	14	**202**	2	7	8	17	430
07:45 AM	19	43	**12**	74	**40**	**87**	40	**167**	**21**	69	**46**	136	**11**	**133**	**11**	**155**	**532**
08:00 AM	12	40	0	52	11	34	**44**	89	7	108	20	135	5	25	6	36	312
Total Volume	68	277	27	372	65	160	161	386	60	508	90	658	25	175	29	229	1645
% App. Total	18.3	74.5	7.3		16.8	41.5	41.7		9.1	77.2	13.7		10.9	76.4	12.7		
PHF	.739	.641	.563	.655	.406	.460	.915	.578	.714	.756	.489	.814	.568	.329	.659	.369	.773

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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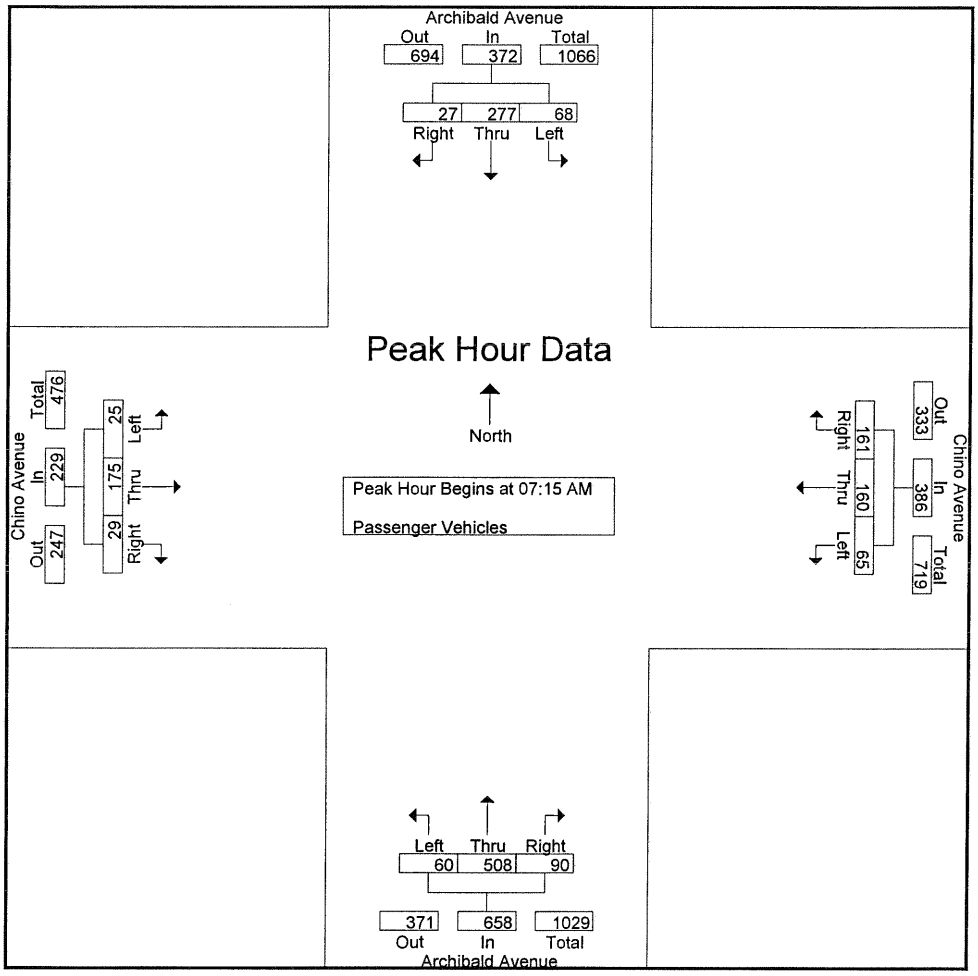

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:45 AM			
+0 mins.	10	50	8	68	5	21	43	69	12	163	10	185	**11**	**133**	**11**	**155**
+15 mins.	14	86	4	104	**40**	**87**	40	**167**	20	**168**	14	**202**	5	25	6	36
+30 mins.	**23**	**108**	11	**142**	11	34	**44**	89	**21**	69	**46**	136	9	18	5	32
+45 mins.	19	43	**12**	74	3	27	33	63	7	108	20	135	7	6	6	19
Total Volume	66	287	35	388	59	169	160	388	60	508	90	658	32	182	28	242
% App. Total	17	74	9		15.2	43.6	41.2		9.1	77.2	13.7		13.2	75.2	11.6	
PHF	.717	.664	.729	.683	.369	.486	.909	.581	.714	.756	.489	.814	.727	.342	.636	.390

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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
07:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	1	2	0	0	1	1	0	2	0	2	0	0	1	1	6
08:00 AM	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	1	0	1	0	0	0	0	2	1	0	3	0	0	1	1	5
Total	0	1	1	2	0	0	0	0	3	2	0	5	0	0	2	2	9
Grand Total	0	2	2	4	0	0	1	1	3	4	0	7	0	0	3	3	15
Apprch %	0	50	50		0	0	100		42.9	57.1	0		0	0	100		
Total %	0	13.3	13.3	26.7	0	0	6.7	6.7	20	26.7	0	46.7	0	0	20	20	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	**1**	**1**	**3**
07:45 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	1	1	0	0	0	0	**1**	0	0	1	0	0	0	0	2
Total Volume	0	0	2	2	0	0	0	0	1	2	0	3	0	0	1	1	6
% App. Total	0	0	100		0	0	0		33.3	66.7	0		0	0	100		
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.250	.250	.000	.375	.000	.000	.250	.250	.500

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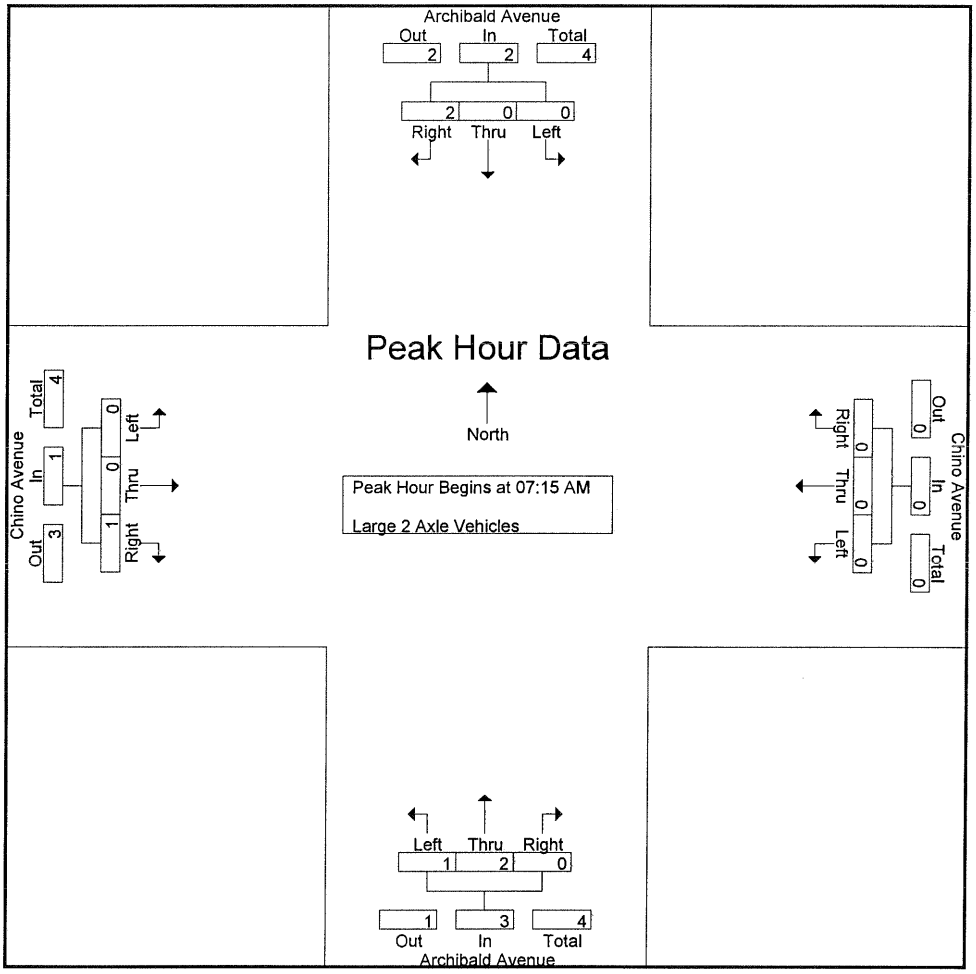

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
+15 mins.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	[illegible]	0	[illegible]	0	0	[illegible]	[illegible]
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0
Total Volume	0	0	2	2	0	0	0	0	1	2	0	3	0	0	1	1
% App. Total	0	0	100		0	0	0		33.3	66.7	0		0	0	100	
PHF	.000	.000	.500	.500	.000	.000	.000	.000	.250	.250	.000	.375	.000	.000	.250	.250

Counts Unlimited Inc.
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File Name : ONARCHIAM
Site Code : 05143246
Start Date : 10/11/2007
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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
Total	0	2	0	2	0	0	1	1	1	1	0	2	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	3	0	3	0	0	0	0	0	2	0	2	1	0	0	1	6
Total	0	5	0	5	0	0	0	0	0	3	0	3	1	0	0	1	9
Grand Total	0	7	0	7	0	0	1	1	1	4	0	5	1	0	0	1	14
Apprch %	0	100	0		0	0	100		20	80	0		100	0	0		
Total %	0	50	0	50	0	0	7.1	7.1	7.1	28.6	0	35.7	7.1	0	0	7.1	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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**	0	0	**1**	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	**1**	**1**	0	**1**	0	1	0	0	0	0	**3**
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	2	0	2	0	0	1	1	1	2	0	3	0	0	0	0	6
% App. Total	0	100	0		0	0	100		33.3	66.7	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.250	.250	.250	.500	.000	.750	.000	.000	.000	.000	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIAM
Site Code : 05143246
Start Date : 10/11/2007
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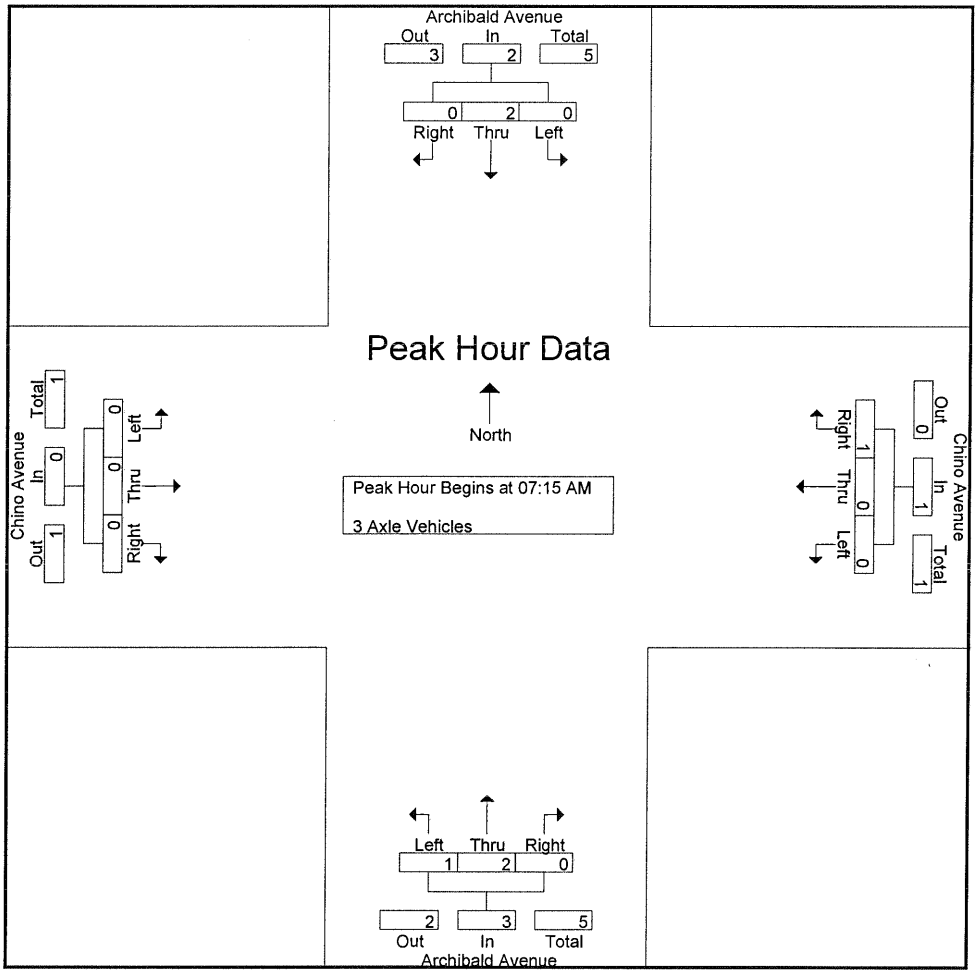

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

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

Counts Unlimited Inc.
25286 Jaclyn Avenue
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Groups Printed- 4+Axle Truks

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	5	0	5	0	1	1	2	0	3	0	3	0	1	0	1	11
07:15 AM	0	4	0	4	0	1	0	1	0	0	0	0	2	1	0	3	8
07:30 AM	0	4	1	5	0	0	0	0	0	2	0	2	0	0	0	0	7
07:45 AM	0	3	1	4	0	0	0	0	0	6	0	6	1	0	0	1	11
Total	0	16	2	18	0	2	1	3	0	11	0	11	3	2	0	5	37
08:00 AM	0	6	0	6	0	1	0	1	0	5	0	5	1	0	0	1	13
08:15 AM	0	3	0	3	1	0	0	1	0	3	0	3	0	0	0	0	7
08:30 AM	1	3	1	5	0	1	0	1	1	3	0	4	0	0	0	0	10
08:45 AM	0	8	0	8	0	1	0	1	0	8	0	8	0	0	1	1	18
Total	1	20	1	22	1	3	0	4	1	19	0	20	1	0	1	2	48
Grand Total	1	36	3	40	1	5	1	7	1	30	0	31	4	2	1	7	85
Apprch %	2.5	90	7.5		14.3	71.4	14.3		3.2	96.8	0		57.1	28.6	14.3		
Total %	1.2	42.4	3.5	47.1	1.2	5.9	1.2	8.2	1.2	35.3	0	36.5	4.7	2.4	1.2	8.2	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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	**4**	0	4	0	**1**	0	**1**	0	0	0	0	**2**	**1**	0	**3**	8
07:30 AM	0	4	**1**	5	0	0	0	0	0	2	0	2	0	0	0	0	7
07:45 AM	0	3	1	4	0	0	0	0	0	**6**	0	**6**	1	0	0	1	11
08:00 AM	0	**6**	0	**6**	0	1	0	1	0	5	0	5	1	0	0	1	**13**
Total Volume	0	17	2	19	0	2	0	2	0	13	0	13	4	1	0	5	39
% App. Total	0	89.5	10.5		0	100	0		0	100	0		80	20	0		
PHF	.000	.708	.500	.792	.000	.500	.000	.500	.000	.542	.000	.542	.500	.250	.000	.417	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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Weather: Sunny

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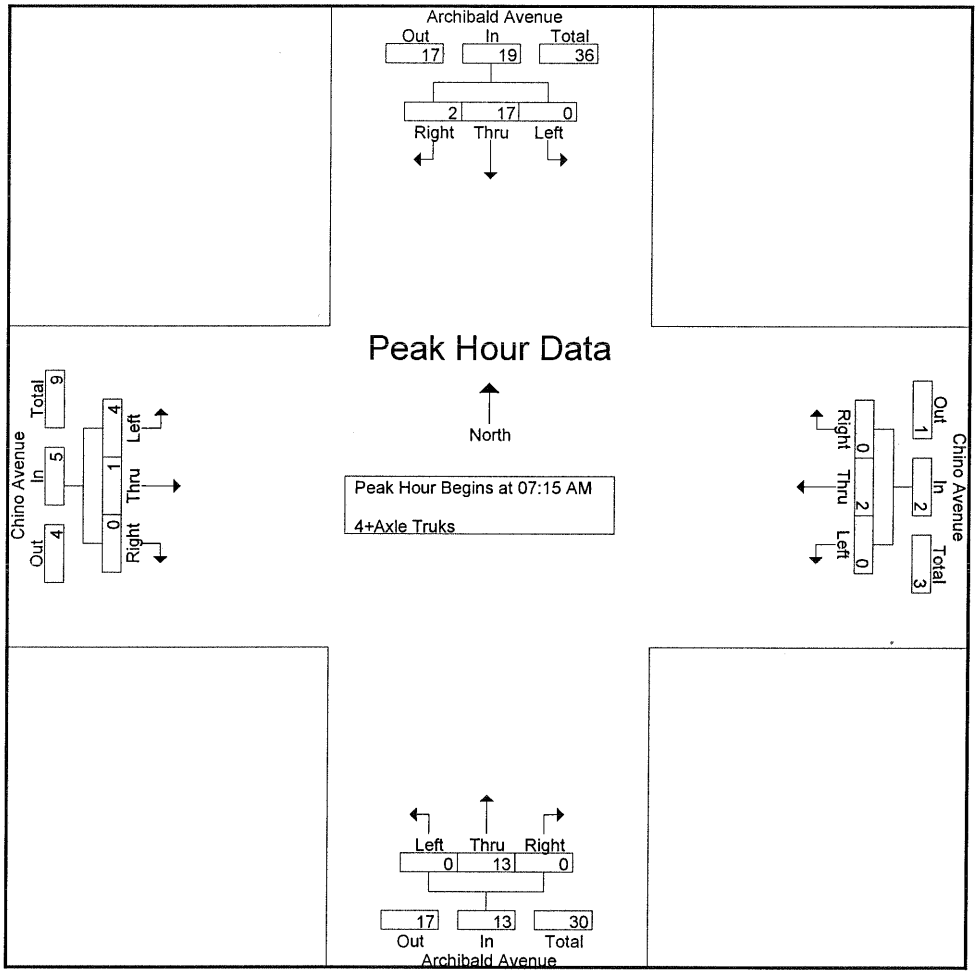
Site Code : 05143246
Start Date : 10/11/2007
Page No : 2



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	4	0	4	0	**1**	0	**1**	0	0	0	0	**2**	**1**	0	**3**
+15 mins.	0	4	**1**	5	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	3	1	4	0	0	0	0	0	**6**	0	**6**	1	0	0	1
+45 mins.	0	**6**	0	**6**	0	1	0	1	0	5	0	5	1	0	0	1
Total Volume	0	17	2	19	0	2	0	2	0	13	0	13	4	1	0	5
% App. Total	0	89.5	10.5		0	100	0		0	100	0		80	20	0	
PHF	.000	.708	.500	.792	.000	.500	.000	.500	.000	.542	.000	.542	.500	.250	.000	.417

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25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Truks

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	15	163	2	180	5	4	14	23	12	155	7	174	10	16	17	43	420
04:15 PM	16	189	6	211	7	4	7	18	10	123	2	135	13	34	12	59	423
04:30 PM	21	162	3	186	4	10	22	36	6	143	7	156	22	27	15	64	442
04:45 PM	22	212	6	240	7	5	22	34	7	140	9	156	10	19	22	51	481
Total	74	726	17	817	23	23	65	111	35	561	25	621	55	96	66	217	1766
05:00 PM	34	218	1	253	6	9	22	37	13	125	6	144	20	23	19	62	496
05:15 PM	22	215	6	243	6	8	19	33	9	163	12	184	14	35	25	74	534
05:30 PM	28	215	5	248	4	5	27	36	9	132	3	144	10	16	11	37	465
05:45 PM	17	223	7	247	8	4	14	26	20	140	4	164	14	14	4	32	469
Total	101	871	19	991	24	26	82	132	51	560	25	636	58	88	59	205	1964
Grand Total	175	1597	36	1808	47	49	147	243	86	1121	50	1257	113	184	125	422	3730
Apprch %	9.7	88.3	2		19.3	20.2	60.5		6.8	89.2	4		26.8	43.6	29.6		
Total %	4.7	42.8	1	48.5	1.3	1.3	3.9	6.5	2.3	30.1	1.3	33.7	3	4.9	3.4	11.3	
Passenger Vehicles	174	1566	32	1772	47	49	147	243	82	1095	50	1227	109	183	122	414	3656
% Passenger Vehicles	99.4	98.1	88.9	98	100	100	100	100	95.3	97.7	100	97.6	96.5	99.5	97.6	98.1	98
Large 2 Axle Vehicles	1	13	1	15	0	0	0	0	1	13	0	14	1	0	2	3	32
% Large 2 Axle Vehicles	0.6	0.8	2.8	0.8	0	0	0	0	1.2	1.2	0	1.1	0.9	0	1.6	0.7	0.9
3 Axle Vehicles	0	4	1	5	0	0	0	0	0	5	0	5	1	1	0	2	12
% 3 Axle Vehicles	0	0.3	2.8	0.3	0	0	0	0	0	0.4	0	0.4	0.9	0.5	0	0.5	0.3
4+ Axle Truks	0	14	2	16	0	0	0	0	3	8	0	11	2	0	1	3	30
% 4+ Axle Truks	0	0.9	5.6	0.9	0	0	0	0	3.5	0.7	0	0.9	1.8	0	0.8	0.7	0.8

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	22	212	**6**	240	**7**	5	22	34	7	140	9	156	10	19	22	51	481
05:00 PM	**34**	**218**	1	**253**	6	**9**	22	**37**	**13**	125	6	144	**20**	23	19	62	496
05:15 PM	22	215	6	243	6	8	19	33	9	**163**	**12**	**184**	**14**	**35**	**25**	**74**	**534**
05:30 PM	28	215	5	248	4	5	**27**	36	9	132	3	144	10	16	11	37	465
Total Volume	106	860	18	984	23	27	90	140	38	560	30	628	54	93	77	224	1976
% App. Total	10.8	87.4	1.8		16.4	19.3	64.3		6.1	89.2	4.8		24.1	41.5	34.4		
PHF	.779	.986	.750	.972	.821	.750	.833	.946	.731	.859	.625	.853	.675	.664	.770	.757	.925

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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Weather: Sunny

File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
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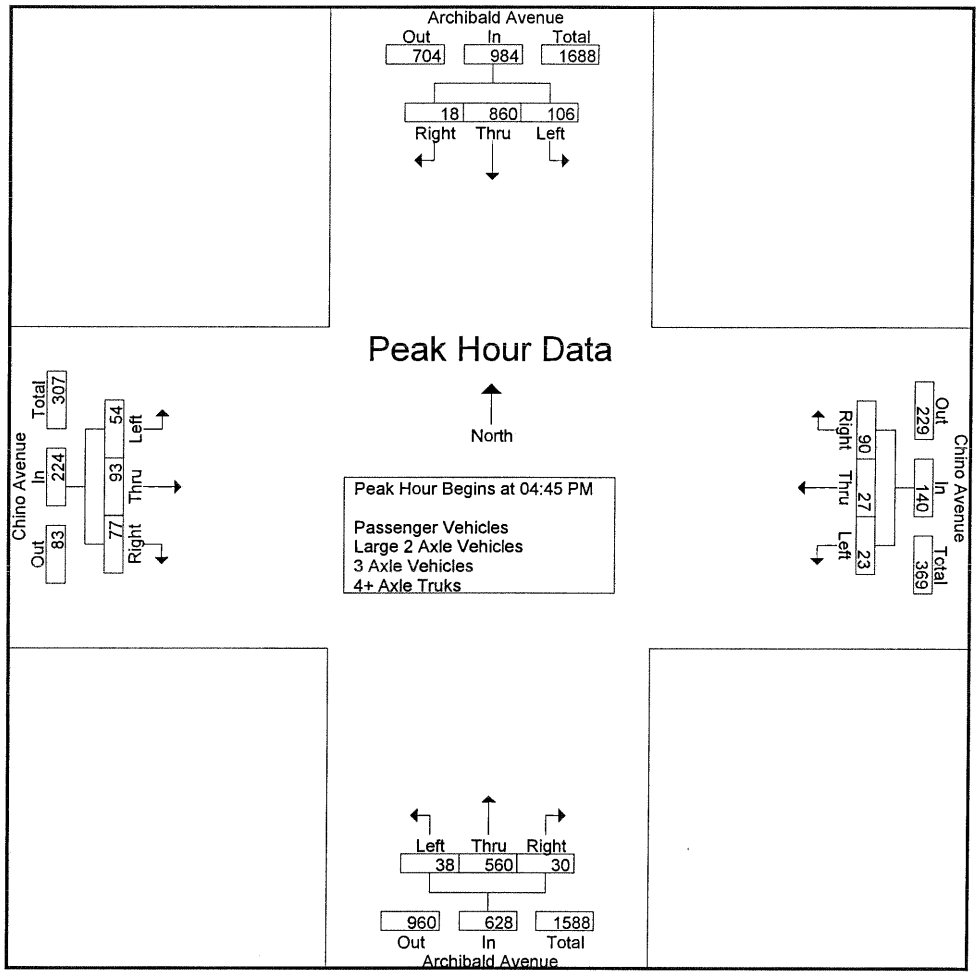

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**22**	**212**	6	240	7	5	22	34	7	140	9	156	10	19	22	51
+15 mins.	34	218	1	**253**	6	**9**	22	**37**	**13**	125	6	144	**20**	23	19	62
+30 mins.	22	215	6	243	6	8	19	33	9	**163**	**12**	**184**	14	**35**	**25**	**74**
+45 mins.	28	215	5	248	4	5	**27**	36	9	132	3	144	10	16	11	37
Total Volume	106	860	18	984	23	27	90	140	38	560	30	628	54	93	77	224
% App. Total	10.8	87.4	1.8		16.4	19.3	64.3		6.1	89.2	4.8		24.1	41.5	34.4	
PHF	.779	.986	.750	.972	.821	.750	.833	.946	.731	.859	.625	.853	.675	.664	.770	.757

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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	14	158	2	174	5	4	14	23	12	150	7	169	10	16	17	43	409
04:15 PM	16	180	4	200	7	4	7	18	9	121	2	132	12	34	11	57	407
04:30 PM	21	159	3	183	4	10	22	36	6	138	7	151	21	27	14	62	432
04:45 PM	22	212	5	239	7	5	22	34	7	137	9	153	9	18	21	48	474
Total	73	709	14	796	23	23	65	111	34	546	25	605	52	95	63	210	1722
05:00 PM	34	216	1	251	6	9	22	37	13	121	6	140	19	23	19	61	489
05:15 PM	22	208	5	235	6	8	19	33	9	160	12	181	14	35	25	74	523
05:30 PM	28	213	5	246	4	5	27	36	8	131	3	142	10	16	11	37	461
05:45 PM	17	220	7	244	8	4	14	26	18	137	4	159	14	14	4	32	461
Total	101	857	18	976	24	26	82	132	48	549	25	622	57	88	59	204	1934
Grand Total	174	1566	32	1772	47	49	147	243	82	1095	50	1227	109	183	122	414	3656
Apprch %	9.8	88.4	1.8		19.3	20.2	60.5		6.7	89.2	4.1		26.3	44.2	29.5		
Total %	4.8	42.8	0.9	48.5	1.3	1.3	4	6.6	2.2	30	1.4	33.6	3	5	3.3	11.3	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	22	212	**5**	239	7	5	22	34	7	137	9	153	9	18	21	48	474
05:00 PM	**34**	**216**	1	**251**	6	**9**	22	**37**	**13**	121	6	140	**19**	23	19	61	489
05:15 PM	22	208	5	235	6	8	19	33	9	**160**	**12**	**181**	14	**35**	**25**	**74**	**523**
05:30 PM	28	213	5	246	4	5	**27**	36	8	131	3	142	10	16	11	37	461
Total Volume	106	849	16	971	23	27	90	140	37	549	30	616	52	92	76	220	1947
% App. Total	10.9	87.4	1.6		16.4	19.3	64.3		6	89.1	4.9		23.6	41.8	34.5		
PHF	.779	.983	.800	.967	.821	.750	.833	.946	.712	.858	.625	.851	.684	.657	.760	.743	.931

Counts Unlimited Inc.
25286 Jaclyn Avenue
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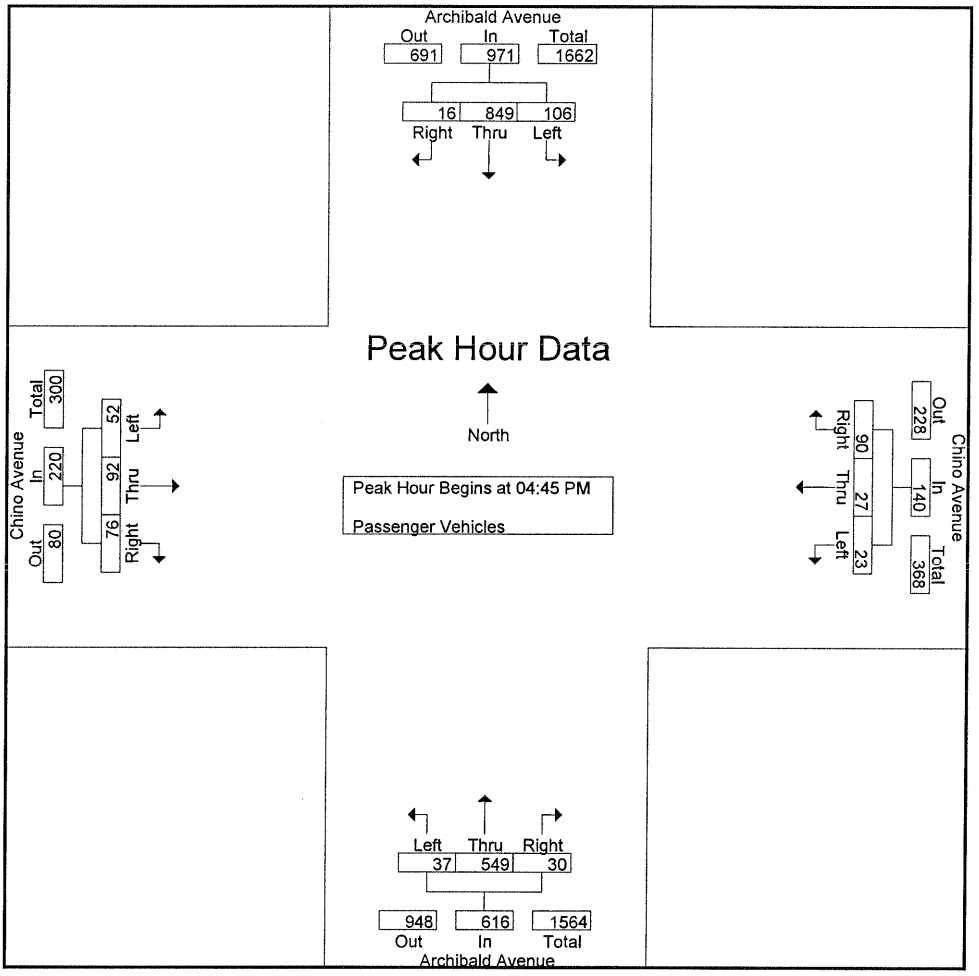

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	22	212	**5**	239	**7**	5	22	34	7	137	9	153	9	18	21	48
+15 mins.	**34**	**216**	1	**251**	6	**9**	22	**37**	**13**	121	6	140	**19**	23	19	61
+30 mins.	22	208	5	235	6	8	19	33	9	**160**	**12**	**181**	14	**35**	**25**	**74**
+45 mins.	28	213	5	246	4	5	**27**	36	8	131	3	142	10	16	11	37
Total Volume	106	849	16	971	23	27	90	140	37	549	30	616	52	92	76	220
% App. Total	10.9	87.4	1.6		16.4	19.3	64.3		6	89.1	4.9		23.6	41.8	34.5	
PHF	.779	.983	.800	.967	.821	.750	.833	.946	.712	.858	.625	.851	.684	.657	.760	.743

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Site Code : 05143242
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Groups Printed- Large 2 Axle Vehicles

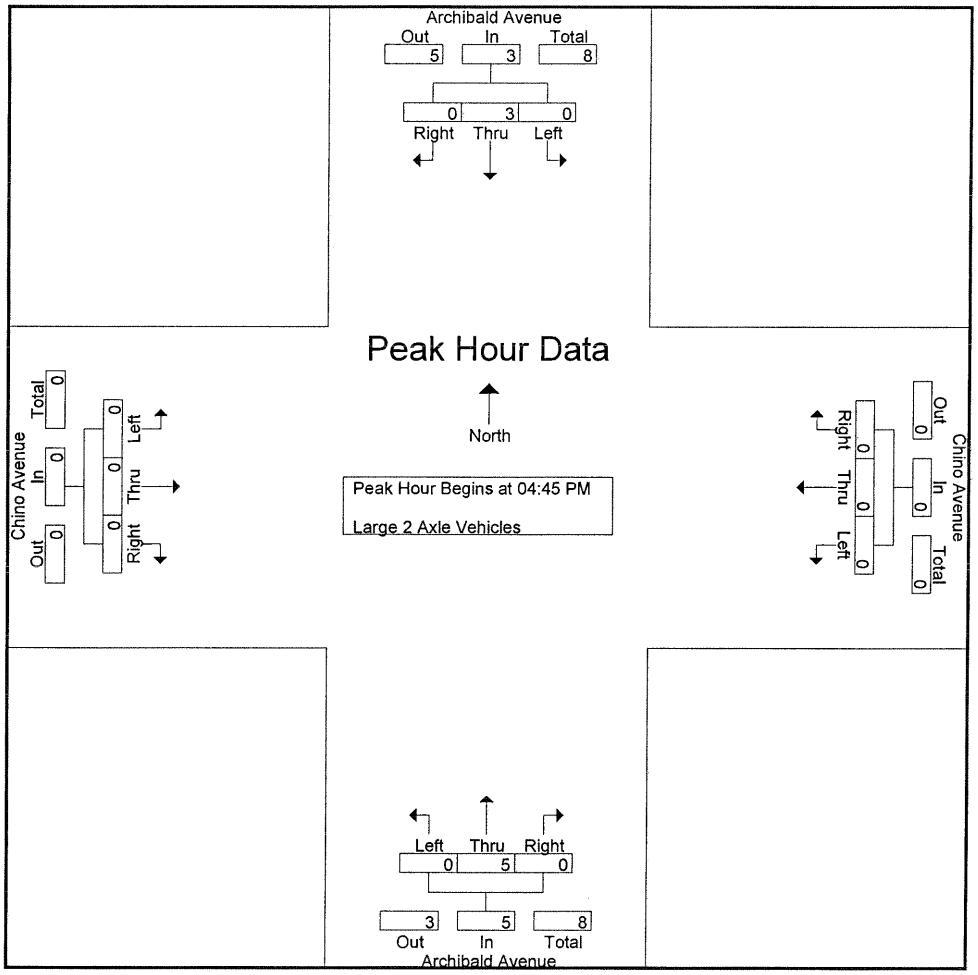
	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
04:15 PM	0	5	1	6	0	0	0	0	0	1	0	1	0	0	1	1	8
04:30 PM	0	2	0	2	0	0	0	0	0	3	0	3	1	0	1	2	7
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	1	10	1	12	0	0	0	0	0	8	0	8	1	0	2	3	23
05:00 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	3
Total	0	3	0	3	0	0	0	0	1	5	0	6	0	0	0	0	9
Grand Total	1	13	1	15	0	0	0	0	1	13	0	14	1	0	2	3	32
Apprch %	6.7	86.7	6.7		0	0	0		7.1	92.9	0		33.3	0	66.7		
Total %	3.1	40.6	3.1	46.9	0	0	0	0	3.1	40.6	0	43.8	3.1	0	6.2	9.4	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 04:45 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	**2**	0	**2**	0	0	0	0	2
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	2	0	2	0	0	0	0	**3**
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0	8
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.667

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
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				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	0	2				
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	5	0	5	0	0	0	0
Total Volume	0	3	0	3	0	0	0	0	0	100	0		0	0	0	
% App. Total	0	100	0		0	0	0		0	.625	.000	.625	.000	.000	.000	.000
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000							

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
Page No : 1

Groups Printed- 3 Axle Vehicles

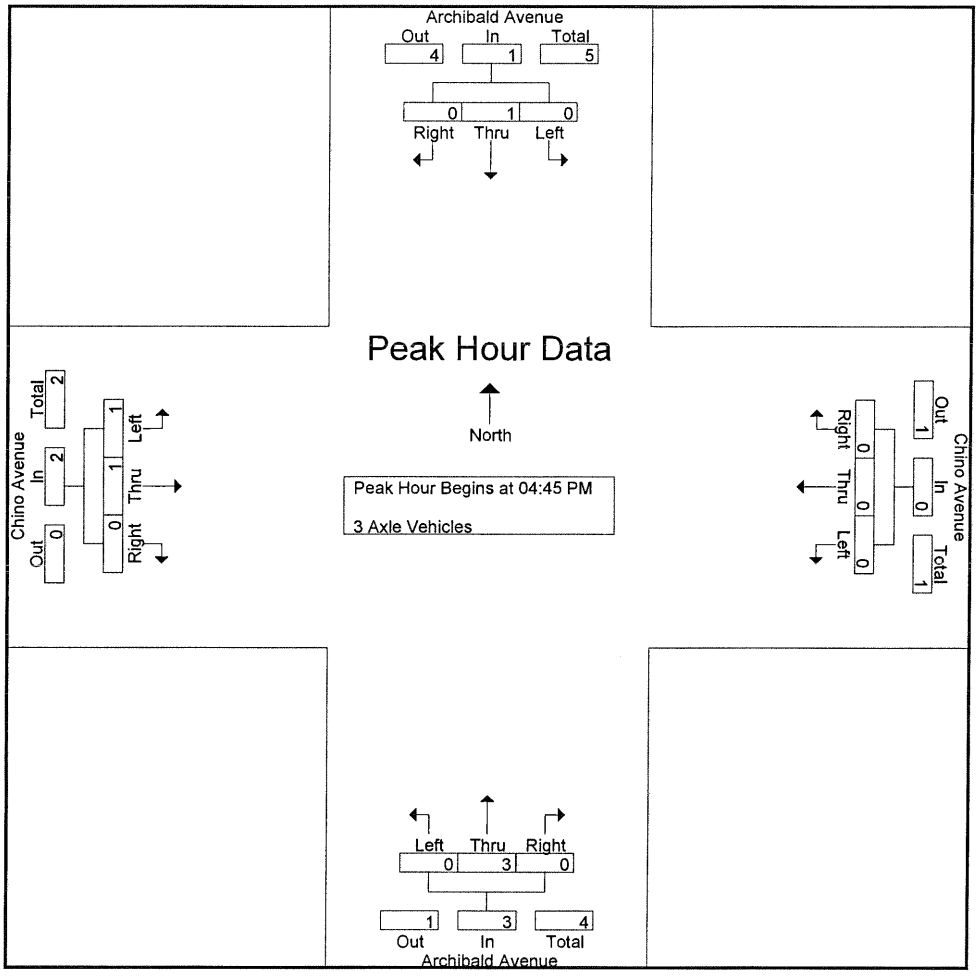
	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:15 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Total	0	3	1	4	0	0	0	0	0	3	0	3	0	1	0	1	8
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	4
Grand Total	0	4	1	5	0	0	0	0	0	5	0	5	1	1	0	2	12
Apprch %	0	80	20		0	0	0		0	100	0		50	50	0		
Total %	0	33.3	8.3	41.7	0	0	0	0	0	41.7	0	41.7	8.3	8.3	0	16.7	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 04:45 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	0	**1**	0	**1**	**2**
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	2
05:30 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	3	0	3	1	1	0	2	6
% App. Total	0	100	0		0	0	0		0	100	0		50	50	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.250	.250	.000	.500	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
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				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	**1**	0	**1**
+15 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	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	3	0	3	**1**	1	0	2
% App. Total	0	100	0		0	0	0		0	100	0		50	50	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.250	.250	.000	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONARCHIPMCLASS
Site Code : 05143242
Start Date : 10/11/2007
Page No : 1

Groups Printed- 4+ Axle Truks

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:15 PM	0	2	0	2	0	0	0	0	1	1	0	2	1	0	0	1	5
04:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	2	3
Total	0	4	1	5	0	0	0	0	1	4	0	5	2	0	1	3	13
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:15 PM	0	6	1	7	0	0	0	0	0	1	0	1	0	0	0	0	8
05:30 PM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
05:45 PM	0	3	0	3	0	0	0	0	1	1	0	2	0	0	0	0	5
Total	0	10	1	11	0	0	0	0	2	4	0	6	0	0	0	0	17
Grand Total	0	14	2	16	0	0	0	0	3	8	0	11	2	0	1	3	30
Apprch %	0	87.5	12.5		0	0	0		27.3	72.7	0		66.7	0	33.3		
Total %	0	46.7	6.7	53.3	0	0	0	0	10	26.7	0	36.7	6.7	0	3.3	10	

	Archibald Avenue Southbound				Chino Avenue Westbound				Archibald Avenue Northbound				Chino 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**	3
05:00 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	2
05:15 PM	0	**6**	1	**7**	0	0	0	0	0	**1**	0	1	0	0	0	0	**8**
05:30 PM	0	1	0	1	0	0	0	0	**1**	0	0	1	0	0	0	0	2
Total Volume	0	7	2	9	0	0	0	0	1	3	0	4	1	0	1	2	15
% App. Total	0	77.8	22.2		0	0	0		25	75	0		50	0	50		
PHF	.000	.292	.500	.321	.000	.000	.000	.000	.250	.375	.000	.500	.250	.000	.250	.250	.469

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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Weather: Sunny

File Name : ONARCHIPMCLASS
Site Code : 05143242
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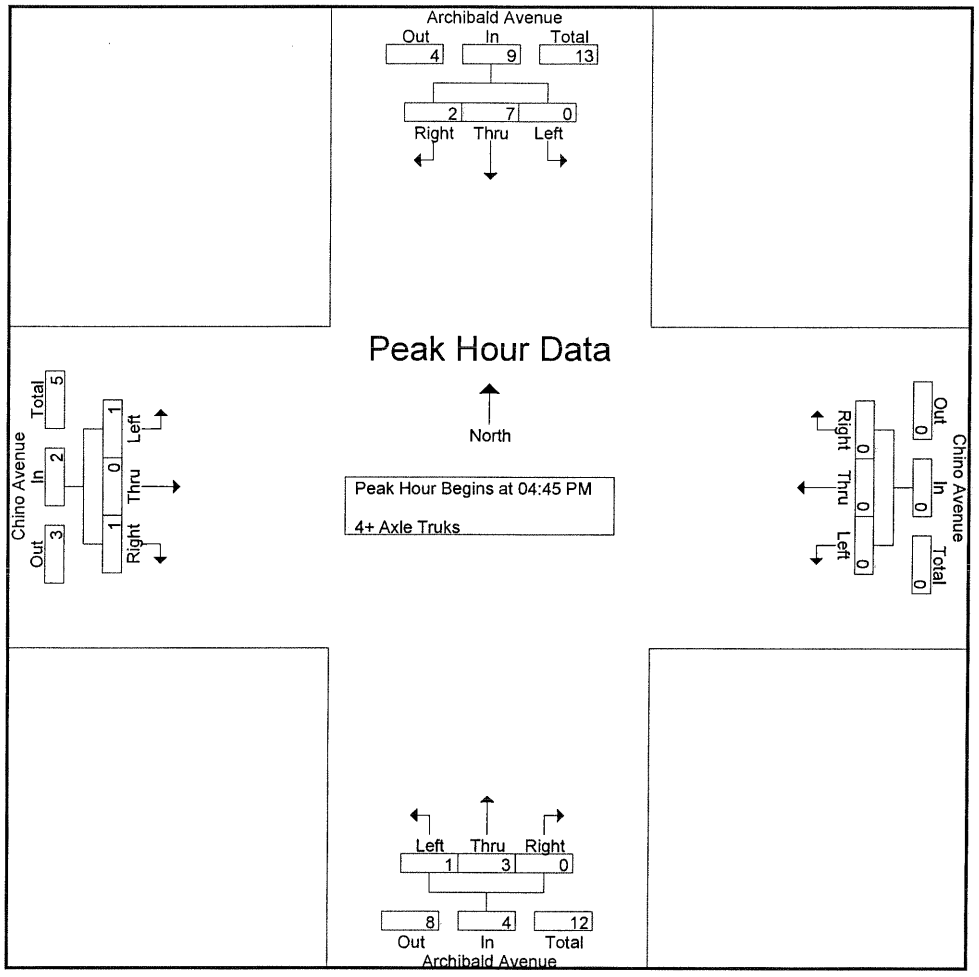


Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

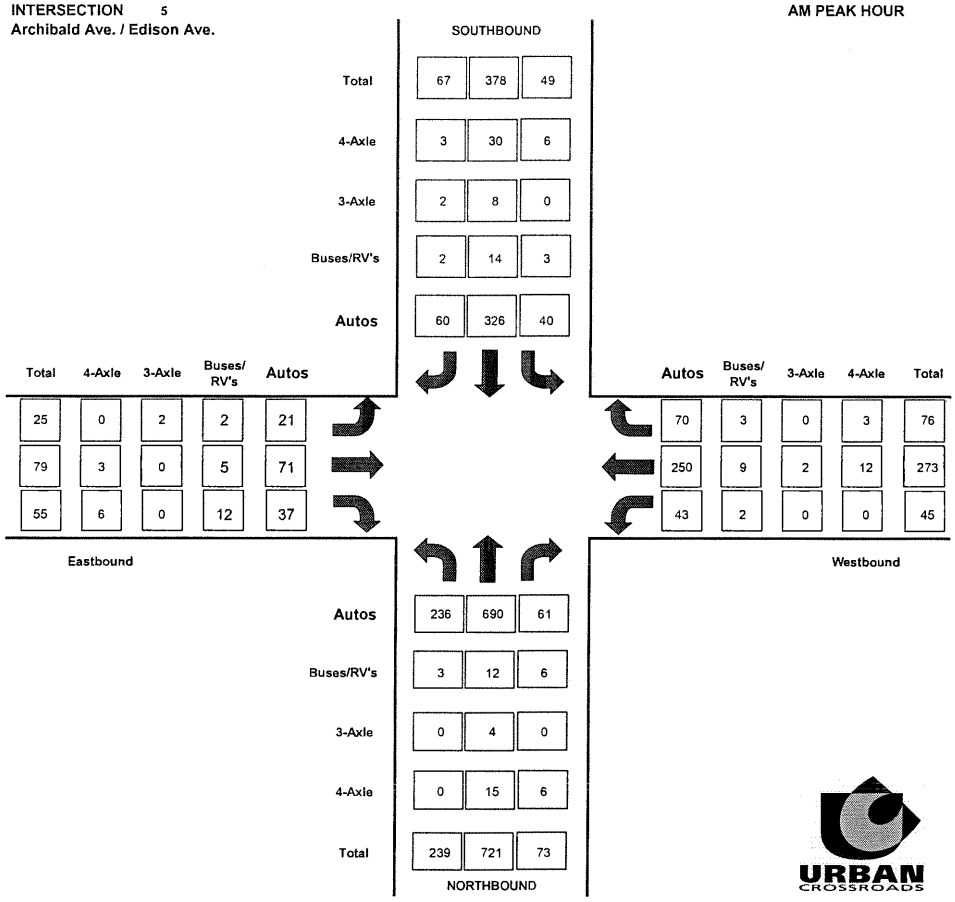
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	**1**	1	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**
+15 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0
+30 mins.	0	**6**	1	**7**	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	**1**	0	0	1	0	0	0	0
Total Volume	0	7	2	9	0	0	0	0	1	3	0	4	1	0	1	2
% App. Total	0	77.8	22.2		0	0	0		25	75	0		50	0	50	
PHF	.000	.292	.500	.321	.000	.000	.000	.000	.250	.375	.000	.500	.250	.000	.250	.250

PASSENGER CAR EQUIVALENCY PEAK HOUR COUNT SUMMARY

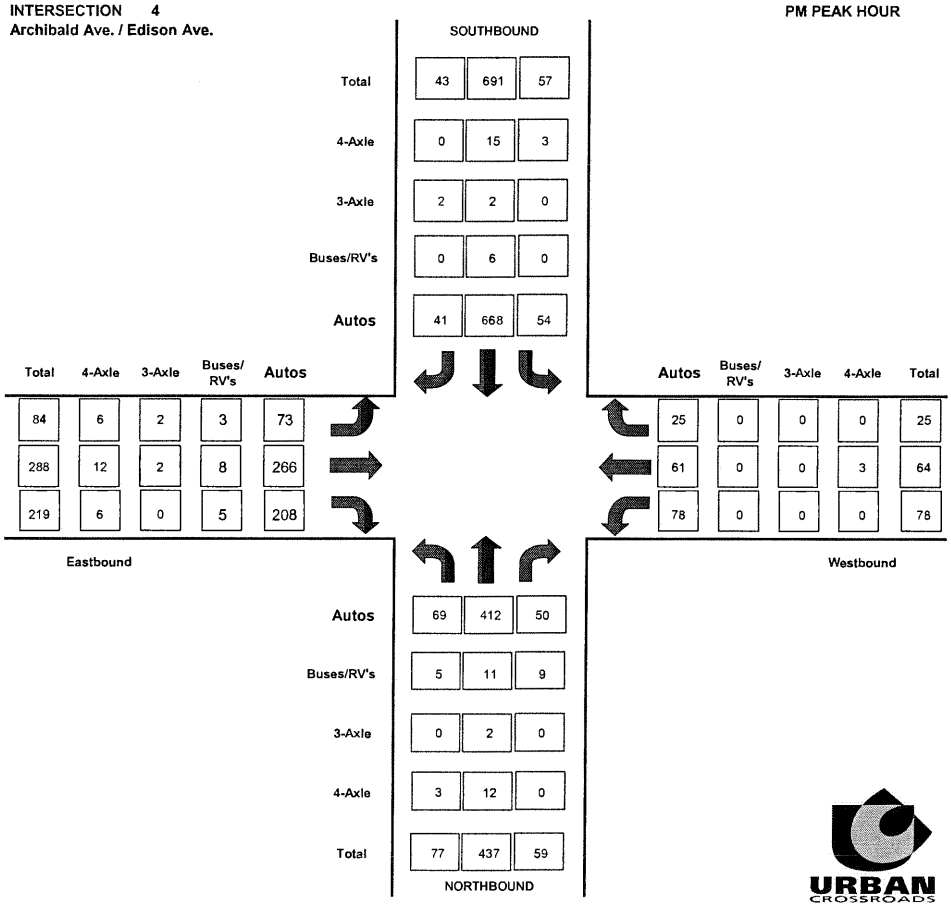
INTERSECTION 5
Archibald Ave. / Edison Ave.

AM PEAK HOUR



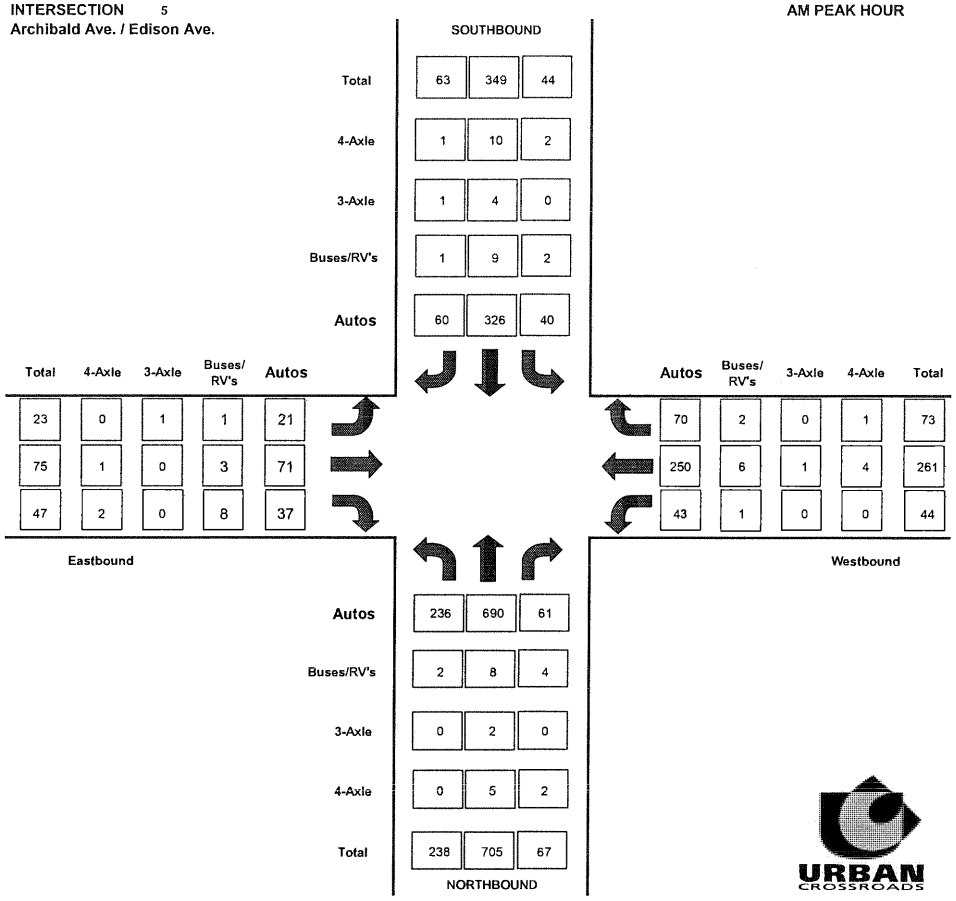
INTERSECTION 4
Archibald Ave. / Edison Ave.

PM PEAK HOUR



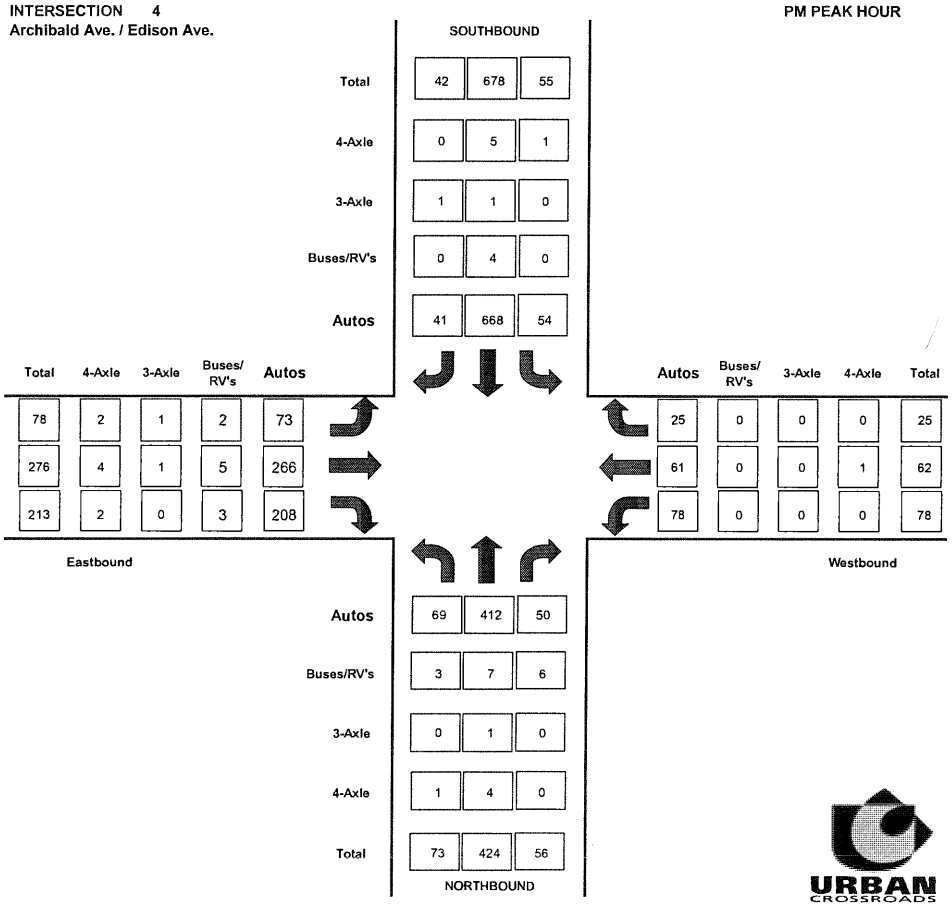
INTERSECTION 5
Archibald Ave. / Edison Ave.

AM PEAK HOUR



INTERSECTION 4
Archibald Ave. / Edison Ave.

PM PEAK HOUR



(5)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
Page No : 1

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

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	7	67	11	85	6	61	19	86	53	171	17	241	5	22	10	37	449
07:15 AM	17	84	16	117	7	71	11	89	69	166	27	262	5	16	10	31	499
07:30 AM	6	98	17	121	17	79	25	121	59	187	12	258	10	19	12	41	541
07:45 AM	14	100	19	133	14	50	18	82	57	181	11	249	3	18	15	36	500
Total	44	349	63	456	44	261	73	378	238	705	67	1010	23	75	47	145	1989
08:00 AM	9	70	11	90	10	38	6	54	49	146	14	209	8	9	15	32	385
08:15 AM	5	70	10	85	13	30	11	54	42	143	12	197	4	16	20	40	376
08:30 AM	3	53	8	64	10	26	6	42	24	114	16	154	4	10	18	32	292
08:45 AM	8	62	11	81	2	21	6	29	22	129	4	155	5	14	16	35	300
Total	25	255	40	320	35	115	29	179	137	532	46	715	21	49	69	139	1353
Grand Total	69	604	103	776	79	376	102	557	375	1237	113	1725	44	124	116	284	3342
Apprch %	8.9	77.8	13.3		14.2	67.5	18.3		21.7	71.7	6.6		15.5	43.7	40.8		
Total %	2.1	18.1	3.1	23.2	2.4	11.3	3.1	16.7	11.2	37	3.4	51.6	1.3	3.7	3.5	8.5	
Passenger Vehicles	60	554	99	713	68	361	97	526	366	1195	101	1662	38	106	100	244	3145
% Passenger Vehicles	87	91.7	96.1	91.9	86.1	96	95.1	94.4	97.6	96.6	89.4	96.3	86.4	85.5	86.2	85.9	94.1
Large 2 Axle Vehicles	3	22	1	26	9	10	2	21	6	16	6	28	3	10	9	22	97
% Large 2 Axle Vehicles	4.3	3.6	1	3.4	11.4	2.7	2	3.8	1.6	1.3	5.3	1.6	6.8	8.1	7.8	7.7	2.9
3 Axle Vehicles	2	9	2	13	1	1	1	3	3	12	1	16	1	2	4	7	39
% 3 Axle Vehicles	2.9	1.5	1.9	1.7	1.3	0.3	1	0.5	0.8	1	0.9	0.9	2.3	1.6	3.4	2.5	1.2
4+ Axle Truks	4	19	1	24	1	4	2	7	0	14	5	19	2	6	3	11	61
% 4+ Axle Truks	5.8	3.1	1	3.1	1.3	1.1	2	1.3	0	1.1	4.4	1.1	4.5	4.8	2.6	3.9	1.8

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	7	67	11	85	6	61	19	86	53	171	17	241	5	**22**	10	37	449
07:15 AM	**17**	84	16	117	7	71	11	89	**69**	166	**27**	**262**	5	16	10	31	499
07:30 AM	6	98	17	121	**17**	**79**	**25**	**121**	59	**187**	12	258	**10**	19	12	**41**	**541**
07:45 AM	14	**100**	**19**	**133**	14	50	18	82	57	181	11	249	3	18	**15**	36	500
Total Volume	44	349	63	456	44	261	73	378	238	705	67	1010	23	75	47	145	1989
% App. Total	9.6	76.5	13.8		11.6	69	19.3		23.6	69.8	6.6		15.9	51.7	32.4		
PHF	.647	.873	.829	.857	.647	.826	.730	.781	.862	.943	.620	.964	.575	.852	.783	.884	.919

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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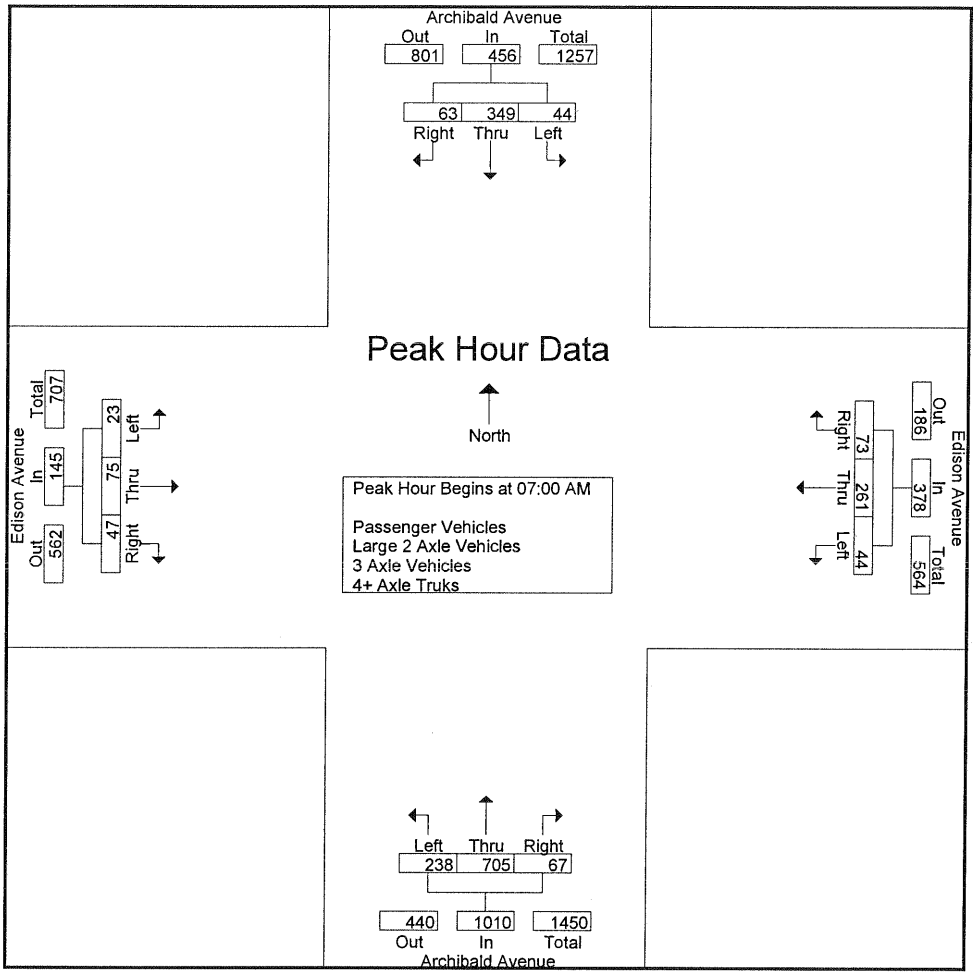

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	17	84	16	117	6	61	19	86	53	171	17	241	10	19	12	41
+15 mins.	6	98	17	121	7	71	11	89	**69**	166	**27**	**262**	3	18	15	36
+30 mins.	14	**100**	**19**	**133**	**17**	**79**	**25**	**121**	59	**187**	12	258	8	9	15	32
+45 mins.	9	70	11	90	14	50	18	82	57	181	11	249	4	16	**20**	40
Total Volume	46	352	63	461	44	261	73	378	238	705	67	1010	25	62	62	149
% App. Total	10	76.4	13.7		11.6	69	19.3		23.6	69.8	6.6		16.8	41.6	41.6	
PHF	.676	.880	.829	.867	.647	.826	.730	.781	.862	.943	.620	.964	.625	.816	.775	.909

Counts Unlimited Inc.
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File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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Groups Printed- Passenger Vehicles

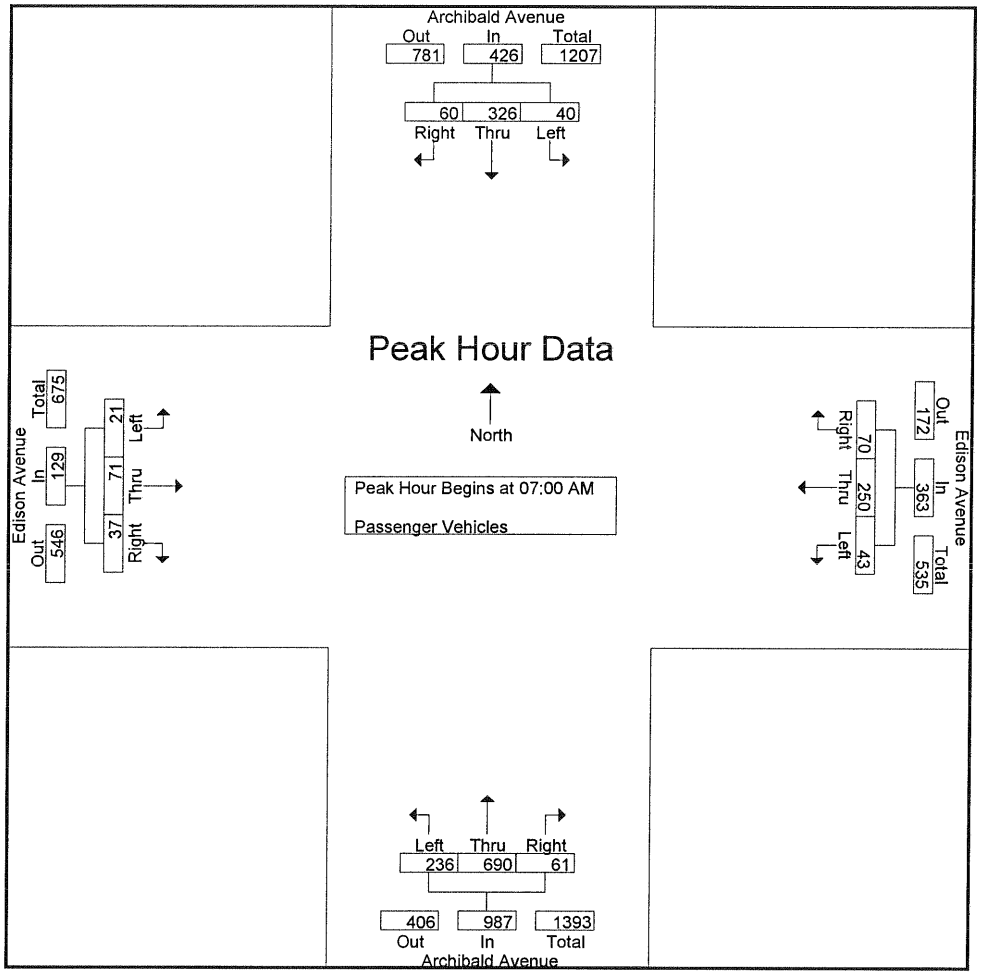
	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	7	63	10	80	5	60	19	84	53	169	14	236	4	21	8	33	433
07:15 AM	16	80	15	111	7	68	11	86	68	163	26	257	5	16	7	28	482
07:30 AM	5	95	17	117	17	76	24	117	58	181	11	250	9	16	10	35	519
07:45 AM	12	88	18	118	14	46	16	76	57	177	10	244	3	18	12	33	471
Total	40	326	60	426	43	250	70	363	236	690	61	987	21	71	37	129	1905
08:00 AM	8	63	11	82	6	37	6	49	47	141	12	200	6	7	13	26	357
08:15 AM	5	63	10	78	9	29	10	48	42	141	11	194	3	9	18	30	350
08:30 AM	3	51	8	62	8	25	5	38	22	108	13	143	4	8	16	28	271
08:45 AM	4	51	10	65	2	20	6	28	19	115	4	138	4	11	16	31	262
Total	20	228	39	287	25	111	27	163	130	505	40	675	17	35	63	115	1240
Grand Total	60	554	99	713	68	361	97	526	366	1195	101	1662	38	106	100	244	3145
Apprch %	8.4	77.7	13.9		12.9	68.6	18.4		22	71.9	6.1		15.6	43.4	41		
Total %	1.9	17.6	3.1	22.7	2.2	11.5	3.1	16.7	11.6	38	3.2	52.8	1.2	3.4	3.2	7.8	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	7	63	10	80	5	60	19	84	53	169	14	236	4	**21**	8	33	433
07:15 AM	**16**	80	15	111	7	68	11	86	**68**	163	**26**	**257**	5	16	7	28	482
07:30 AM	5	**95**	17	117	**17**	**76**	**24**	**117**	58	**181**	11	250	**9**	16	10	**35**	**519**
07:45 AM	12	88	**18**	**118**	14	46	16	76	57	177	10	244	3	18	**12**	33	471
Total Volume	40	326	60	426	43	250	70	363	236	690	61	987	21	71	37	129	1905
% App. Total	9.4	76.5	14.1		11.8	68.9	19.3		23.9	69.9	6.2		16.3	55	28.7		
PHF	.625	.858	.833	.903	.632	.822	.729	.776	.868	.953	.587	.960	.583	.845	.771	.921	.918

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	7	63	10	80	5	60	19	84	53	169	14	236	4	**21**	8	33
+15 mins.	**16**	80	15	111	7	68	11	86	**68**	163	**26**	**257**	5	16	7	28
+30 mins.	5	**95**	17	117	**17**	**76**	**24**	**117**	58	**181**	11	250	**9**	16	10	**35**
+45 mins.	12	88	**18**	**118**	14	46	16	76	57	177	10	244	3	18	**12**	33
Total Volume	40	326	60	426	43	250	70	363	236	690	61	987	21	71	37	129
% App. Total	9.4	76.5	14.1		11.8	68.9	19.3		23.9	69.9	6.2		16.3	55	28.7	
PHF	.625	.858	.833	.903	.632	.822	.729	.776	.868	.953	.587	.960	.583	.845	.771	.921

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	3	0	3	1	1	0	2	0	1	2	3	0	1	1	2	10
07:15 AM	1	1	0	2	0	0	0	0	1	0	1	2	0	0	3	3	7
07:30 AM	0	2	0	2	0	1	1	2	1	4	1	6	1	2	2	5	15
07:45 AM	1	3	1	5	0	4	1	5	0	3	0	3	0	0	2	2	15
Total	2	9	1	12	1	6	2	9	2	8	4	14	1	3	8	12	47
08:00 AM	0	4	0	4	3	1	0	4	2	2	0	4	1	2	1	4	16
08:15 AM	0	3	0	3	4	1	0	5	0	0	0	0	1	3	0	4	12
08:30 AM	0	1	0	1	1	1	0	2	1	2	2	5	0	1	0	1	9
08:45 AM	1	5	0	6	0	1	0	1	1	4	0	5	0	1	0	1	13
Total	1	13	0	14	8	4	0	12	4	8	2	14	2	7	1	10	50
Grand Total	3	22	1	26	9	10	2	21	6	16	6	28	3	10	9	22	97
Apprch %	11.5	84.6	3.8		42.9	47.6	9.5		21.4	57.1	21.4		13.6	45.5	40.9		
Total %	3.1	22.7	1	26.8	9.3	10.3	2.1	21.6	6.2	16.5	6.2	28.9	3.1	10.3	9.3	22.7	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	**3**	0	3	**1**	1	0	2	0	1	**2**	3	0	1	1	2	10
07:15 AM	**1**	1	0	2	0	0	0	0	**1**	0	1	2	0	0	**3**	3	7
07:30 AM	0	2	0	2	0	1	**1**	2	1	**4**	1	**6**	**1**	**2**	2	**5**	**15**
07:45 AM	1	3	**1**	**5**	0	**4**	1	**5**	0	3	0	3	0	0	2	2	15
Total Volume	2	9	1	12	1	6	2	9	2	8	4	14	1	3	8	12	47
% App. Total	16.7	75	8.3		11.1	66.7	22.2		14.3	57.1	28.6		8.3	25	66.7		
PHF	.500	.750	.250	.600	.250	.375	.500	.450	.500	.500	.500	.583	.250	.375	.667	.600	.783

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
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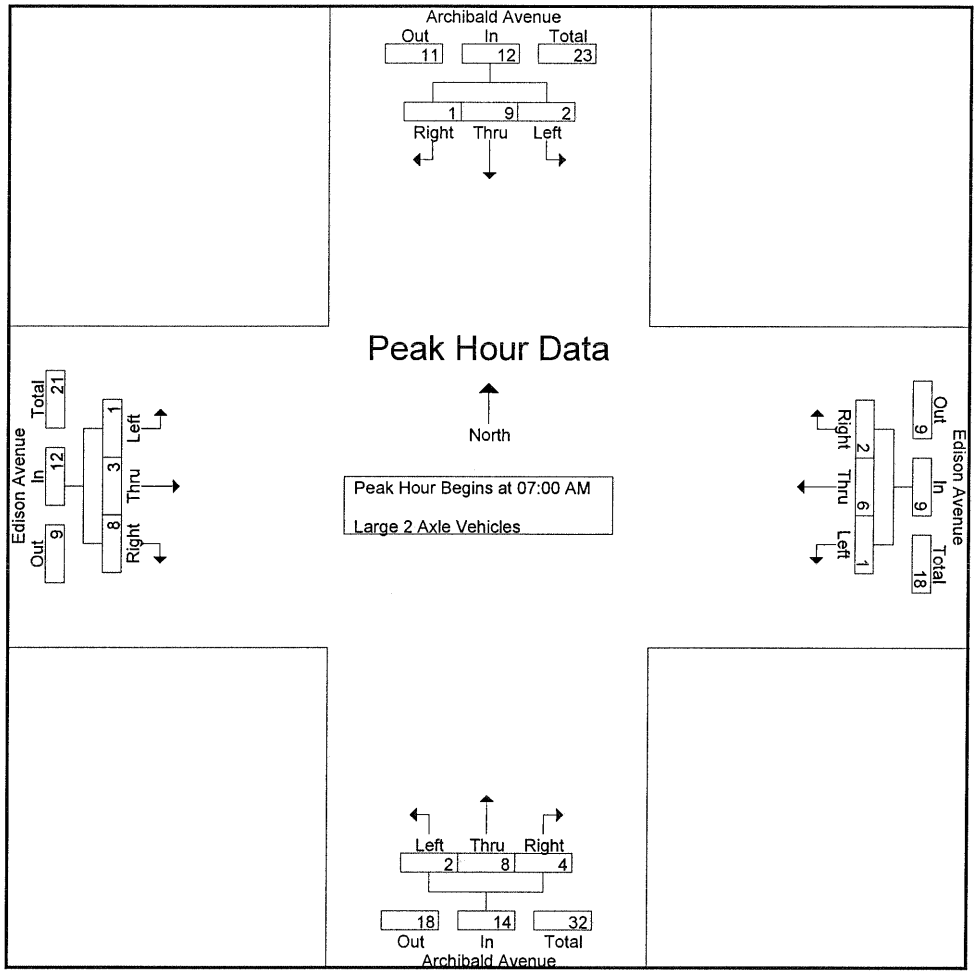

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	**0**	3	0	3	1	1	0	2	0	1	2	3	0	1	1	2
+15 mins.	1	1	0	2	0	0	0	0	**1**	0	1	2	0	0	**3**	3
+30 mins.	0	2	0	2	0	**1**	**1**	2	1	**4**	1	**6**	**1**	**2**	2	**5**
+45 mins.	1	3	**1**	**5**	0	**4**	1	**5**	0	3	0	3	0	0	2	2
Total Volume	2	9	1	12	1	6	2	9	2	8	4	14	1	3	8	12
% App. Total	16.7	75	8.3		11.1	66.7	22.2		14.3	57.1	28.6		8.3	25	66.7	
PHF	.500	.750	.250	.600	.250	.375	.500	.450	.500	.500	.500	.583	.250	.375	.667	.600

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	4	1	5	0	1	0	1	0	2	0	2	1	0	0	1	9
08:00 AM	1	0	0	1	1	0	0	1	0	2	0	2	0	0	1	1	5
08:15 AM	0	2	0	2	0	0	1	1	0	1	0	1	0	0	1	1	5
08:30 AM	0	1	0	1	0	0	0	0	1	1	1	3	0	0	2	2	6
08:45 AM	1	2	1	4	0	0	0	0	2	6	0	8	0	2	0	2	14
Total	2	5	1	8	1	0	1	2	3	10	1	14	0	2	4	6	30
Grand Total	2	9	2	13	1	1	1	3	3	12	1	16	1	2	4	7	39
Apprch %	15.4	69.2	15.4		33.3	33.3	33.3		18.8	75	6.2		14.3	28.6	57.1		
Total %	5.1	23.1	5.1	33.3	2.6	2.6	2.6	7.7	7.7	30.8	2.6	41	2.6	5.1	10.3	17.9	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total Volume	0	4	1	5	0	1	0	1	0	2	0	2	1	0	0	1	9
% App. Total	0	80	20		0	100	0		0	100	0		100	0	0		
PHF	.000	.250	.250	.313	.000	.250	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250	.563

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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Weather: Sunny

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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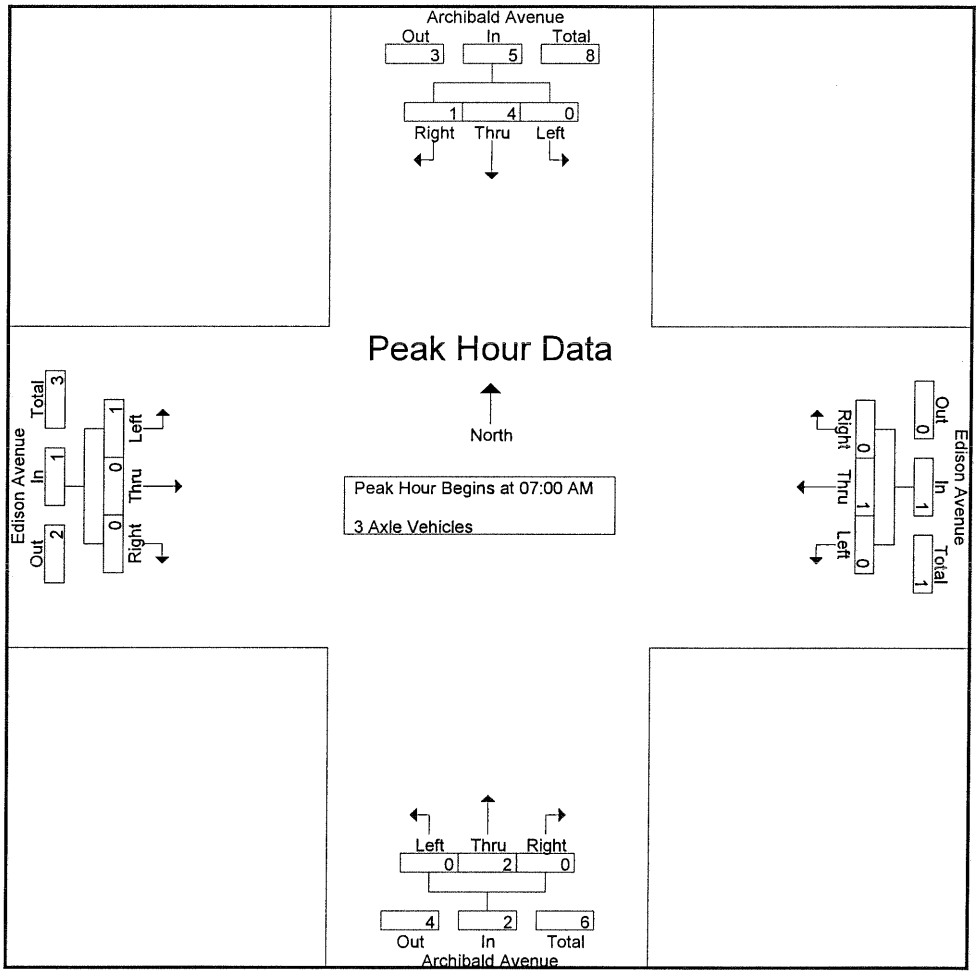

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+15 mins.	0	0	**1**	1	0	**1**	0	**1**	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	**4**	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	1	5	0	1	0	1	0	2	0	2	1	0	0	1
% App. Total	0	80	20		0	100	0		0	100	0		100	0	0	
PHF	.000	.250	.250	.313	.000	.250	.000	.250	.000	.500	.000	.500	.250	.000	.000	.250

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDAM
Site Code : 05143242
Start Date : 10/11/2007
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Groups Printed- 4+ Axle Truks

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
07:00 AM	0	1	1	2	0	0	0	0	0	1	1	2	0	0	1	1	5
07:15 AM	0	3	0	3	0	2	0	2	0	2	0	2	0	0	0	0	7
07:30 AM	1	1	0	2	0	2	0	2	0	1	0	1	0	1	0	1	6
07:45 AM	1	5	0	6	0	0	1	1	0	1	1	2	0	0	1	1	10
Total	2	10	1	13	0	4	1	5	0	5	2	7	0	1	2	3	28
08:00 AM	0	3	0	3	0	0	0	0	0	1	2	3	1	0	0	1	7
08:15 AM	0	2	0	2	0	0	0	0	0	1	1	2	0	4	1	5	9
08:30 AM	0	0	0	0	1	0	1	2	0	3	0	3	0	1	0	1	6
08:45 AM	2	4	0	6	0	0	0	0	0	4	0	4	1	0	0	1	11
Total	2	9	0	11	1	0	1	2	0	9	3	12	2	5	1	8	33
Grand Total	4	19	1	24	1	4	2	7	0	14	5	19	2	6	3	11	61
Apprch %	16.7	79.2	4.2		14.3	57.1	28.6		0	73.7	26.3		18.2	54.5	27.3		
Total %	6.6	31.1	1.6	39.3	1.6	6.6	3.3	11.5	0	23	8.2	31.1	3.3	9.8	4.9	18	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	**1**	2	0	0	0	0	0	1	**1**	**2**	0	0	**1**	**1**	5
07:15 AM	0	3	0	3	0	**2**	0	**2**	0	**2**	0	2	0	0	0	0	7
07:30 AM	**1**	1	0	2	0	2	0	2	0	1	0	1	0	**1**	0	1	6
07:45 AM	1	**5**	0	**6**	0	0	**1**	1	0	1	1	2	0	0	1	1	**10**
Total Volume	2	10	1	13	0	4	1	5	0	5	2	7	0	1	2	3	28
% App. Total	15.4	76.9	7.7		0	80	20		0	71.4	28.6		0	33.3	66.7		
PHF	.500	.500	.250	.542	.000	.500	.250	.625	.000	.625	.500	.875	.000	.250	.500	.750	.700

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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Weather: Sunny

File Name : ONAREDAM
Site Code : 05143242
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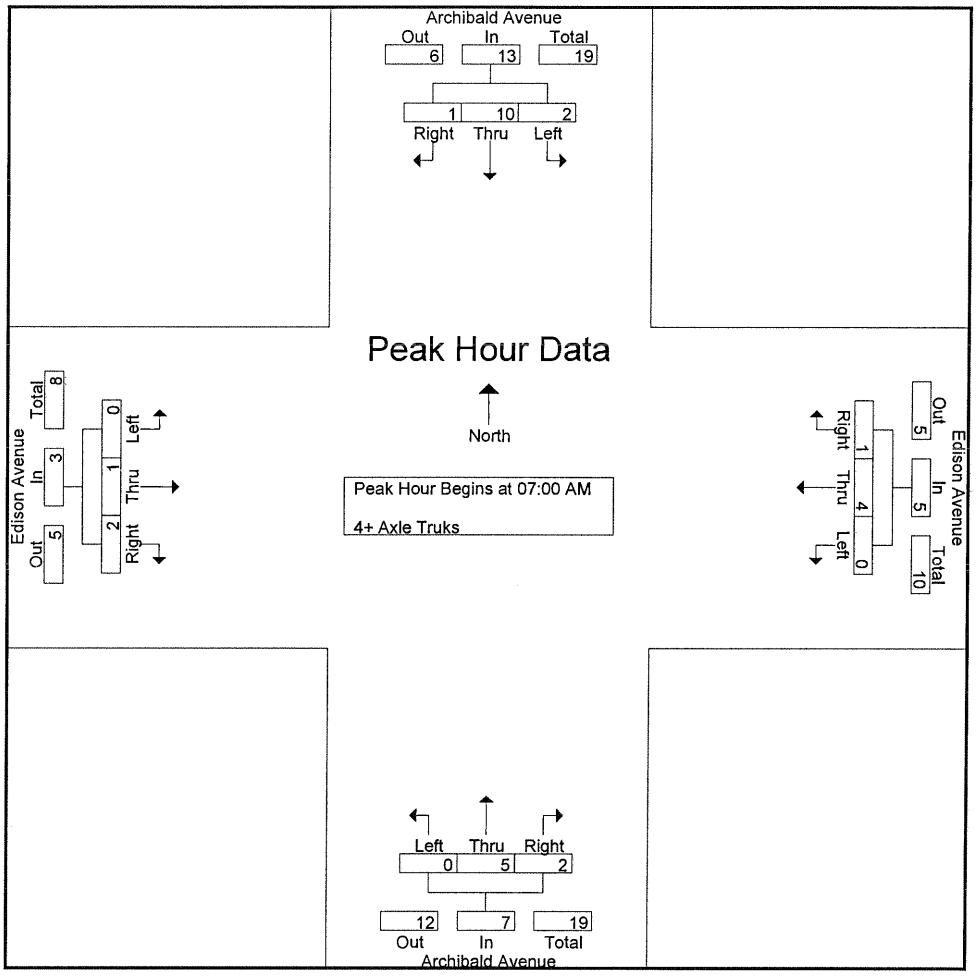

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	1	**1**	2	0	0	0	0	0	1	**1**	**2**	0	0	**1**	**1**
+15 mins.	0	3	0	3	0	**2**	0	**2**	0	**2**	0	2	0	0	0	0
+30 mins.	**1**	1	0	2	0	2	0	2	0	1	0	1	0	**1**	0	1
+45 mins.	1	**5**	0	**6**	0	0	**1**	1	0	1	1	2	0	0	1	1
Total Volume	2	10	1	13	0	4	1	5	0	5	2	7	0	1	2	3
% App. Total	15.4	76.9	7.7		0	80	20		0	71.4	28.6		0	33.3	66.7	
PHF	.500	.500	.250	.542	.000	.500	.250	.625	.000	.625	.500	.875	.000	.250	.500	.750

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDPM
Site Code : 05143222
Start Date : 10/11/2007
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Truks

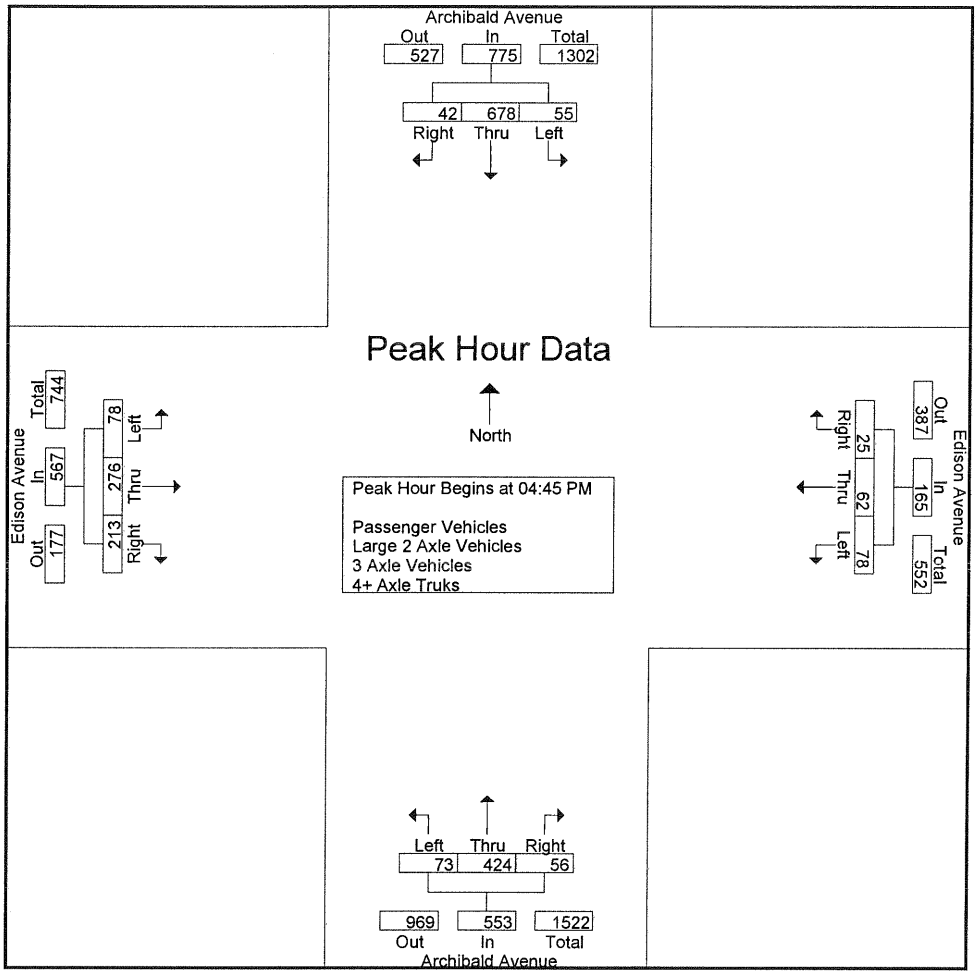
	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	11	143	6	160	20	12	4	36	27	127	9	163	18	90	40	148	507
04:15 PM	11	160	5	176	13	18	5	36	23	106	11	140	20	70	57	147	499
04:30 PM	11	126	7	144	11	20	6	37	21	108	14	143	15	68	57	140	464
04:45 PM	12	149	15	176	17	13	8	38	15	113	15	143	21	77	48	146	503
Total	45	578	33	656	61	63	23	147	86	454	49	589	74	305	202	581	1973
05:00 PM	15	149	16	180	17	24	7	48	22	90	12	124	19	69	63	151	503
05:15 PM	13	205	5	223	21	9	4	34	12	116	16	144	21	56	48	125	526
05:30 PM	15	175	6	196	23	16	6	45	24	105	13	142	17	74	54	145	528
05:45 PM	11	157	5	173	8	10	5	23	28	102	10	140	21	47	46	114	450
Total	54	686	32	772	69	59	22	150	86	413	51	550	78	246	211	535	2007
Grand Total	99	1264	65	1428	130	122	45	297	172	867	100	1139	152	551	413	1116	3980
Apprch %	6.9	88.5	4.6		43.8	41.1	15.2		15.1	76.1	8.8		13.6	49.4	37		
Total %	2.5	31.8	1.6	35.9	3.3	3.1	1.1	7.5	4.3	21.8	2.5	28.6	3.8	13.8	10.4	28	
Passenger Vehicles	96	1241	61	1398	129	113	45	287	164	842	87	1093	143	522	403	1068	3846
% Passenger Vehicles	97	98.2	93.8	97.9	99.2	92.6	100	96.6	95.3	97.1	87	96	94.1	94.7	97.6	95.7	96.6
Large 2 Axle Vehicles	1	10	1	12	0	2	0	2	4	16	11	31	2	14	8	24	69
% Large 2 Axle Vehicles	1	0.8	1.5	0.8	0	1.6	0	0.7	2.3	1.8	11	2.7	1.3	2.5	1.9	2.2	1.7
3 Axle Vehicles	1	4	2	7	0	1	0	1	2	3	0	5	1	2	0	3	16
% 3 Axle Vehicles	1	0.3	3.1	0.5	0	0.8	0	0.3	1.2	0.3	0	0.4	0.7	0.4	0	0.3	0.4
4+ Axle Truks	1	9	1	11	1	6	0	7	2	6	2	10	6	13	2	21	49
% 4+ Axle Truks	1	0.7	1.5	0.8	0.8	4.9	0	2.4	1.2	0.7	2	0.9	3.9	2.4	0.5	1.9	1.2

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	12	149	15	176	17	13	**8**	38	15	113	15	143	**21**	**77**	48	146	503
05:00 PM	**15**	149	**16**	180	17	**24**	7	**48**	22	90	12	124	19	69	**63**	**151**	503
05:15 PM	13	**205**	5	**223**	21	9	4	34	12	**116**	**16**	**144**	21	56	48	125	526
05:30 PM	15	175	6	196	**23**	16	6	45	**24**	105	13	142	17	74	54	145	**528**
Total Volume	55	678	42	775	78	62	25	165	73	424	56	553	78	276	213	567	2060
% App. Total	7.1	87.5	5.4		47.3	37.6	15.2		13.2	76.7	10.1		13.8	48.7	37.6		
PHF	.917	.827	.656	.869	.848	.646	.781	.859	.760	.914	.875	.960	.929	.896	.845	.939	.975

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDPM
Site Code : 05143222
Start Date : 10/11/2007
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				04:45 PM			
+0 mins.	**12**	**149**	**15**	**176**	**17**	**13**	8	38	15	113	15	143	21	77	48	146
+15 mins.	15	149	**16**	180	17	**24**	7	**48**	22	90	12	124	19	69	**63**	**151**
+30 mins.	13	**205**	5	**223**	21	9	4	34	12	**116**	**16**	**144**	21	56	48	125
+45 mins.	15	175	6	196	**23**	16	6	45	**24**	105	13	142	17	74	54	145
Total Volume	55	678	42	775	78	62	25	165	73	424	56	553	78	276	213	567
% App. Total	7.1	87.5	5.4		47.3	37.6	15.2		13.2	76.7	10.1		13.8	48.7	37.6	
PHF	.917	.827	.656	.869	.848	.646	.781	.859	.760	.914	.875	.960	.929	.896	.845	.939

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
E/W: Edison Avenue
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File Name : ONAREDPM
Site Code : 05143222
Start Date : 10/11/2007
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Groups Printed- Passenger Vehicles

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	11	141	4	156	20	9	4	33	26	121	8	155	18	84	39	141	485
04:15 PM	11	156	5	172	13	16	5	34	22	105	7	134	20	68	55	143	483
04:30 PM	10	120	7	137	10	18	6	34	20	105	14	139	12	63	57	132	442
04:45 PM	12	148	14	174	17	13	8	38	15	110	15	140	20	75	47	142	494
Total	44	565	30	639	60	56	23	139	83	441	44	568	70	290	198	558	1904
05:00 PM	14	146	16	176	17	23	7	47	20	85	11	116	19	67	60	146	485
05:15 PM	13	200	5	218	21	9	4	34	10	116	14	140	17	53	47	117	509
05:30 PM	15	174	6	195	23	16	6	45	24	101	10	135	17	71	54	142	517
05:45 PM	10	156	4	170	8	9	5	22	27	99	8	134	20	41	44	105	431
Total	52	676	31	759	69	57	22	148	81	401	43	525	73	232	205	510	1942
Grand Total	96	1241	61	1398	129	113	45	287	164	842	87	1093	143	522	403	1068	3846
Apprch %	6.9	88.8	4.4		44.9	39.4	15.7		15	77	8		13.4	48.9	37.7		
Total %	2.5	32.3	1.6	36.3	3.4	2.9	1.2	7.5	4.3	21.9	2.3	28.4	3.7	13.6	10.5	27.8	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	12	148	14	174	17	13	**8**	38	15	110	**15**	**140**	**20**	**75**	47	142	494
05:00 PM	14	146	**16**	176	17	**23**	7	**47**	20	85	11	116	19	67	**60**	**146**	485
05:15 PM	13	**200**	5	**218**	21	9	4	34	10	**116**	14	140	17	53	47	117	509
05:30 PM	**15**	174	6	195	**23**	16	6	45	**24**	101	10	135	17	71	54	142	**517**
Total Volume	54	668	41	763	78	61	25	164	69	412	50	531	73	266	208	547	2005
% App. Total	7.1	87.5	5.4		47.6	37.2	15.2		13	77.6	9.4		13.3	48.6	38		
PHF	.900	.835	.641	.875	.848	.663	.781	.872	.719	.888	.833	.948	.913	.887	.867	.937	.970

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
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Weather: Sunny

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Site Code : 05143222
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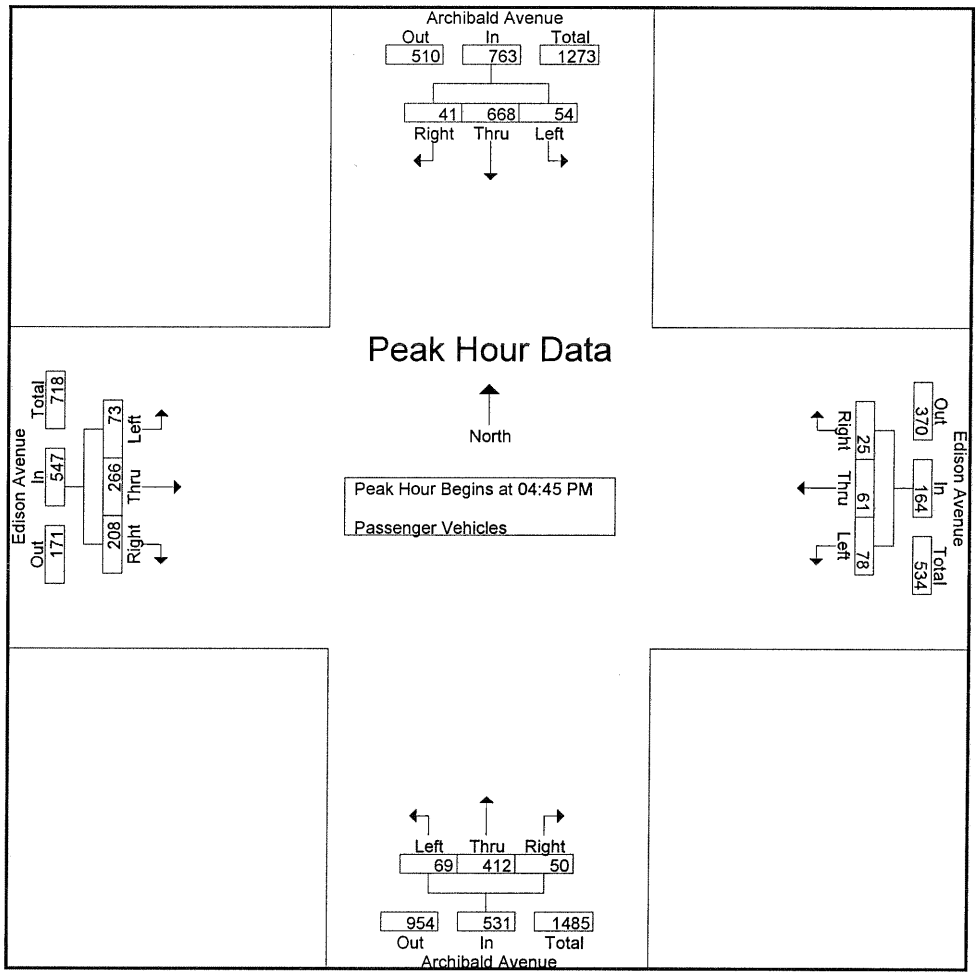

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	12	148	14	174	17	13	**8**	38	15	110	**15**	**140**	**20**	**75**	47	142
+15 mins.	14	146	**16**	176	17	**23**	7	**47**	20	85	11	116	19	67	**60**	**146**
+30 mins.	13	**200**	5	**218**	21	9	4	34	10	**116**	14	140	17	53	47	117
+45 mins.	**15**	174	6	195	**23**	16	6	45	**24**	101	10	135	17	71	54	142
Total Volume	54	668	41	763	78	61	25	164	69	412	50	531	73	266	208	547
% App. Total	7.1	87.5	5.4		47.6	37.2	15.2		13	77.6	9.4		13.3	48.6	38	
PHF	.900	.835	.641	.875	.848	.663	.781	.872	.719	.888	.833	.948	.913	.887	.867	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDPM
Site Code : 05143222
Start Date : 10/11/2007
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Groups Printed- Large 2 Axle Vehicles

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	1	1	2	0	0	0	0	0	2	1	3	0	0	1	1	6
04:15 PM	0	3	0	3	0	1	0	1	0	1	2	3	0	0	2	2	9
04:30 PM	1	2	0	3	0	1	0	1	1	3	0	4	0	3	0	3	11
04:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	1	0	1	5
Total	1	7	1	9	0	2	0	2	1	9	3	13	0	4	3	7	31
05:00 PM	0	1	0	1	0	0	0	0	2	3	1	6	0	1	3	4	11
05:15 PM	0	2	0	2	0	0	0	0	1	0	2	3	2	0	0	2	7
05:30 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	3	0	3	7
05:45 PM	0	0	0	0	0	0	0	0	0	3	2	5	0	6	2	8	13
Total	0	3	0	3	0	0	0	0	3	7	8	18	2	10	5	17	38
Grand Total	1	10	1	12	0	2	0	2	4	16	11	31	2	14	8	24	69
Apprch %	8.3	83.3	8.3		0	100	0		12.9	51.6	35.5		8.3	58.3	33.3		
Total %	1.4	14.5	1.4	17.4	0	2.9	0	2.9	5.8	23.2	15.9	44.9	2.9	20.3	11.6	34.8	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	0	0	0	**3**	0	3	0	1	0	1	5
05:00 PM	0	1	0	1	0	0	0	0	**2**	3	1	**6**	0	1	**3**	**4**	**11**
05:15 PM	0	**2**	0	**2**	0	0	0	0	1	0	2	3	**2**	0	0	2	7
05:30 PM	0	0	0	0	0	0	0	0	0	1	**3**	4	0	**3**	0	3	7
Total Volume	0	4	0	4	0	0	0	0	3	7	6	16	2	5	3	10	30
% App. Total	0	100	0		0	0	0		18.8	43.8	37.5		20	50	30		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.375	.583	.500	.667	.250	.417	.250	.625	.682

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
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E/W: Edison Avenue
Weather: Sunny

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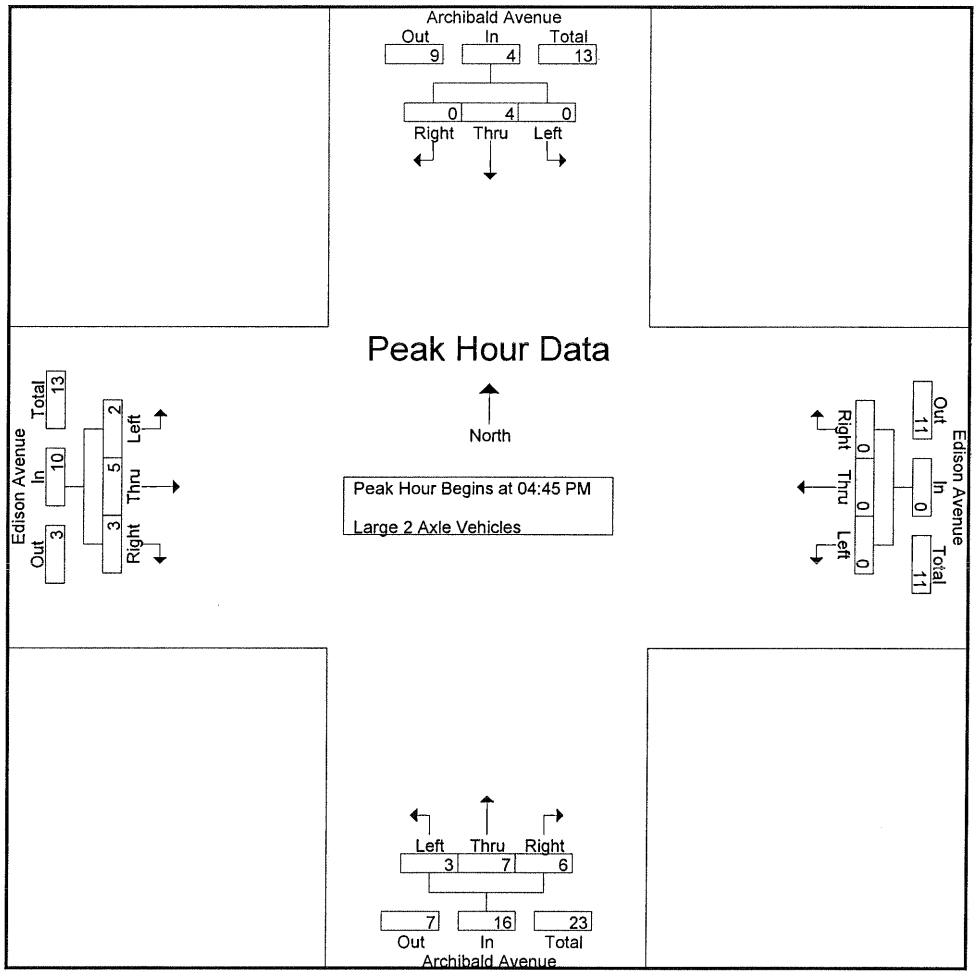

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	3	0	3	0	1	0	1
+15 mins.	0	1	0	1	0	0	0	0	2	3	1	6	0	1	3	**4**
+30 mins.	0	**2**	0	**2**	0	0	0	0	1	0	2	3	**2**	0	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	1	**3**	**4**	0	**3**	0	3
Total Volume	0	4	0	4	0	0	0	0	3	7	6	16	2	5	3	10
% App. Total	0	100	0		0	0	0		18.8	43.8	37.5		20	50	30	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.375	.583	.500	.667	.250	.417	.250	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
N/S: Archibald Avenue
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Weather: Sunny

File Name : ONAREDPM
Site Code : 05143222
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Groups Printed- 3 Axle Vehicles

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	0	1	1	0	0	0	0	0	2	0	2	0	1	0	1	4
04:15 PM	0	1	0	1	0	1	0	1	1	0	0	1	0	0	0	0	3
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Total	0	3	2	5	0	1	0	1	1	2	0	3	1	1	0	2	11
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	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total	1	1	0	2	0	0	0	0	1	1	0	2	0	1	0	1	5
Grand Total	1	4	2	7	0	1	0	1	2	3	0	5	1	2	0	3	16
Apprch %	14.3	57.1	28.6		0	100	0		40	60	0		33.3	66.7	0		
Total %	6.2	25	12.5	43.8	0	6.2	0	6.2	12.5	18.8	0	31.2	6.2	12.5	0	18.8	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**2**
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	0	0	0	0	**1**	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
Total Volume	0	1	1	2	0	0	0	0	0	1	0	1	1	1	0	2	5
% App. Total	0	50	50		0	0	0		0	100	0		50	50	0		
PHF	.000	.250	.250	.500	.000	.000	.000	.000	.000	.250	.000	.250	.250	.250	.000	.500	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
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951-485-7934

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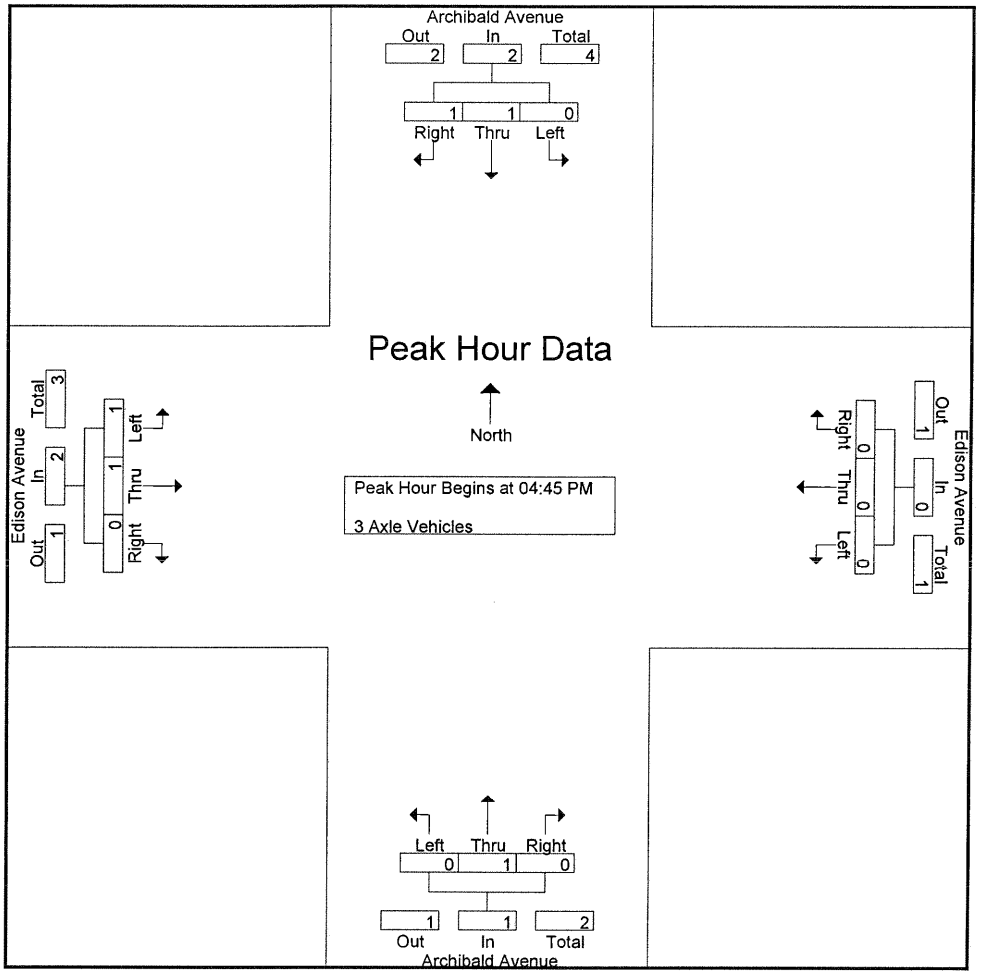

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	**1**	0	1	0	0	0	0	0	0	0	0	0	**1**	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
Total Volume	0	1	1	2	0	0	0	0	0	1	0	1	1	1	0	2
% App. Total	0	50	50		0	0	0		0	100	0		50	50	0	
PHF	.000	.250	.250	.500	.000	.000	.000	.000	.000	.250	.000	.250	.250	.250	.000	.500

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of Ontario
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Site Code : 05143222
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Groups Printed- 4+ Axle Truks

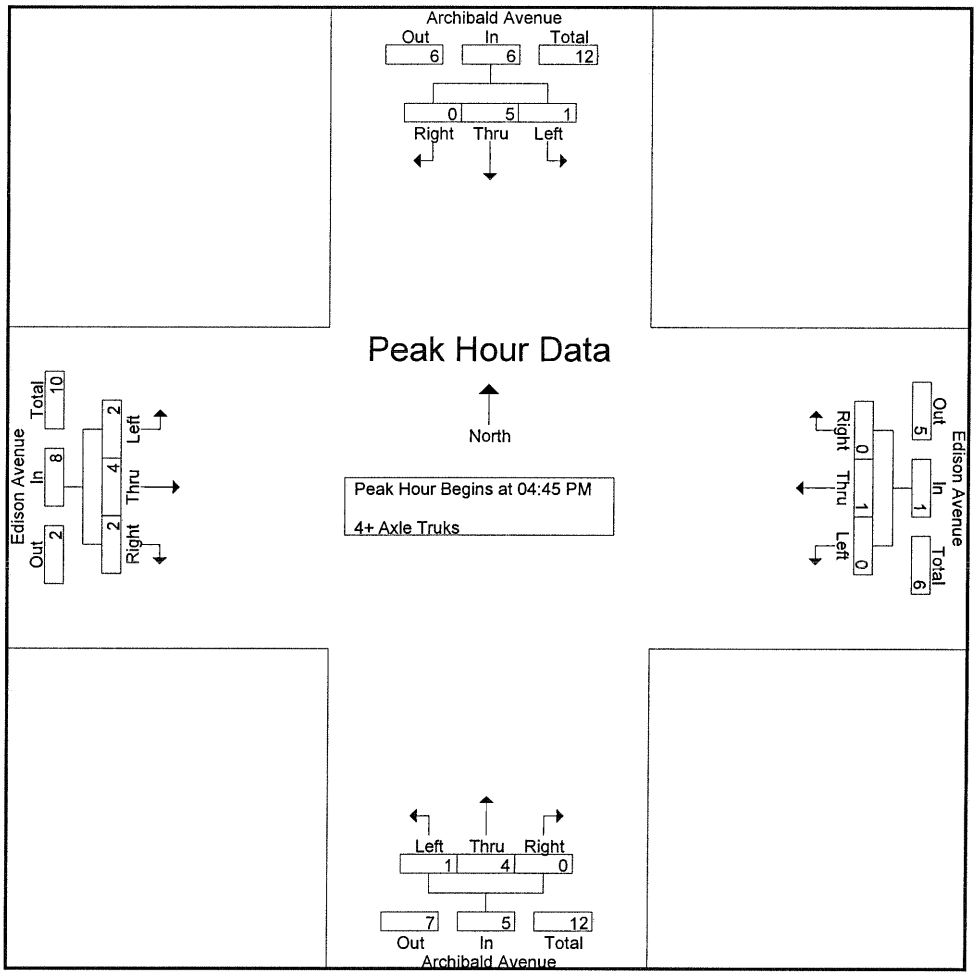
	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Factor	1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		1.0	1.0	1.0		
04:00 PM	0	1	0	1	0	3	0	3	1	2	0	3	0	5	0	5	12
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	2	0	2	4
04:30 PM	0	2	0	2	1	1	0	2	0	0	0	0	3	2	0	5	9
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Total	0	3	0	3	1	4	0	5	1	2	2	5	3	10	1	14	27
05:00 PM	1	2	0	3	0	1	0	1	0	2	0	2	0	1	0	1	7
05:15 PM	0	2	0	2	0	0	0	0	1	0	0	1	2	2	1	5	8
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	1	1	2	0	1	0	1	0	0	0	0	1	0	0	1	4
Total	1	6	1	8	0	2	0	2	1	4	0	5	3	3	1	7	22
Grand Total	1	9	1	11	1	6	0	7	2	6	2	10	6	13	2	21	49
Apprch %	9.1	81.8	9.1		14.3	85.7	0		20	60	20		28.6	61.9	9.5		
Total %	2	18.4	2	22.4	2	12.2	0	14.3	4.1	12.2	4.1	20.4	12.2	26.5	4.1	42.9	

	Archibald Avenue Southbound				Edison Avenue Westbound				Archibald Avenue Northbound				Edison 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 04:45 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	0	0	0	0	1	**1**	2	2
05:00 PM	**1**	**2**	0	**3**	0	**1**	0	**1**	0	**2**	0	**2**	0	1	0	1	7
05:15 PM	0	2	0	2	0	0	0	0	**1**	0	0	1	**2**	**2**	1	**5**	**8**
05:30 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total Volume	1	5	0	6	0	1	0	1	1	4	0	5	2	4	2	8	20
% App. Total	16.7	83.3	0		0	100	0		20	80	0		25	50	25		
PHF	.250	.625	.000	.500	.000	.250	.000	.250	.250	.500	.000	.625	.250	.500	.500	.400	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

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

File Name : ONAREDPM
Site Code : 05143222
Start Date : 10/11/2007
Page No : 2



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

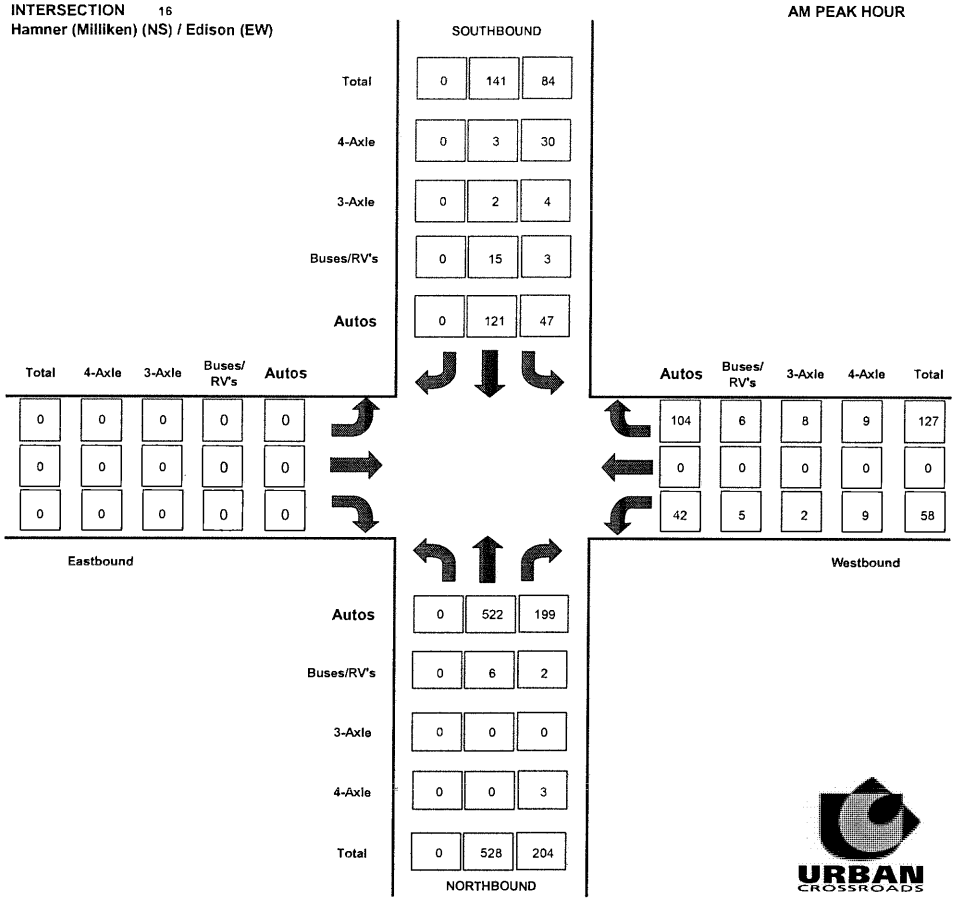
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**1**	2
+15 mins.	**1**	**2**	0	**3**	0	**1**	0	**1**	0	**2**	0	**2**	0	1	0	1
+30 mins.	0	2	0	2	0	0	0	0	**1**	0	0	1	**2**	**2**	1	**5**
+45 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	1	5	0	6	0	1	0	1	1	4	0	5	2	4	2	8
% App. Total	16.7	83.3	0		0	100	0		20	80	0		25	50	25	
PHF	.250	.625	.000	.500	.000	.250	.000	.250	.250	.500	.000	.625	.250	.500	.500	.400

PASSENGER CAR EQUIVALENCY PEAK HOUR COUNT SUMMARY

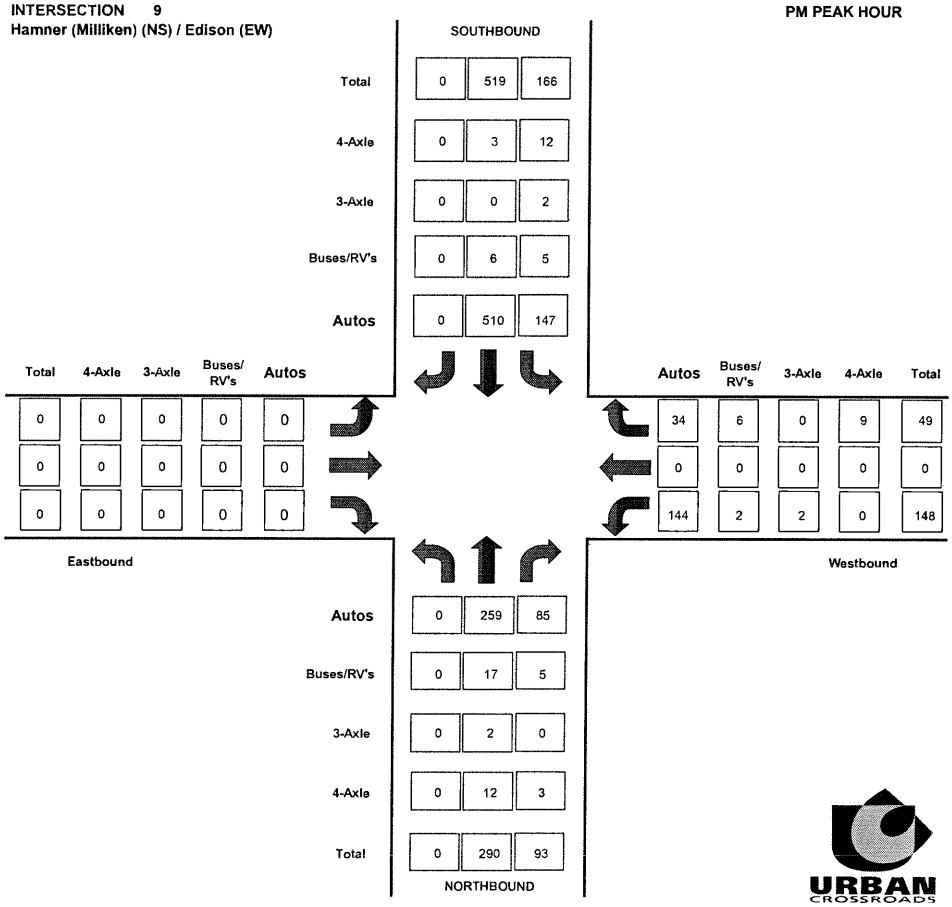
INTERSECTION 16
Hamner (Milliken) (NS) / Edison (EW)

AM PEAK HOUR



INTERSECTION 9
Hamner (Milliken) (NS) / Edison (EW)

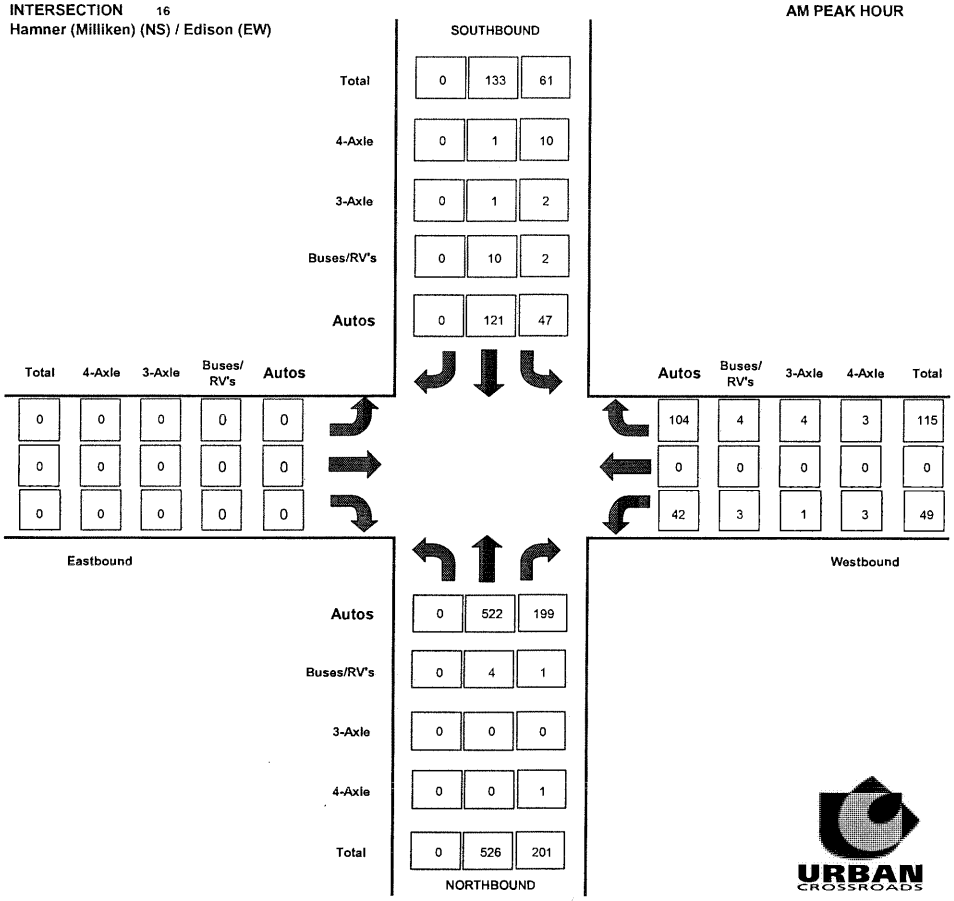
PM PEAK HOUR



RAW PEAK HOUR COUNT SUMMARY

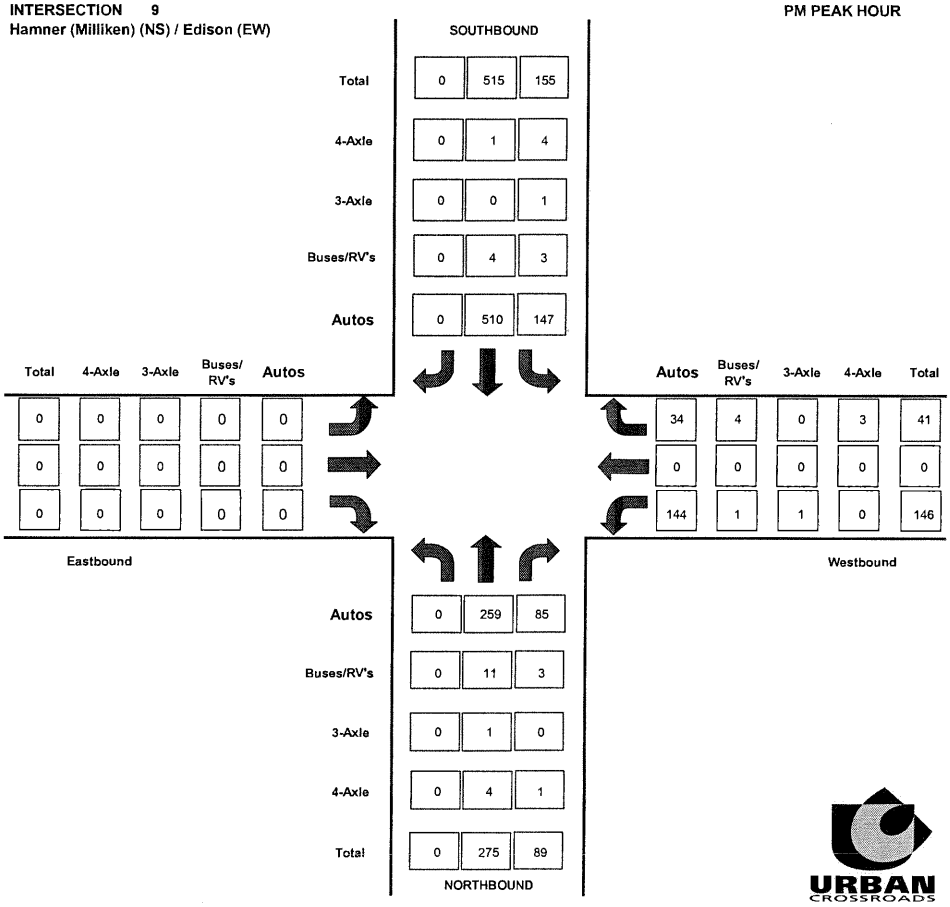
INTERSECTION 16
Hamner (Milliken) (NS) / Edison (EW)

AM PEAK HOUR



INTERSECTION 9
Hamner (Milliken) (NS) / Edison (EW)

PM PEAK HOUR



16

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

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

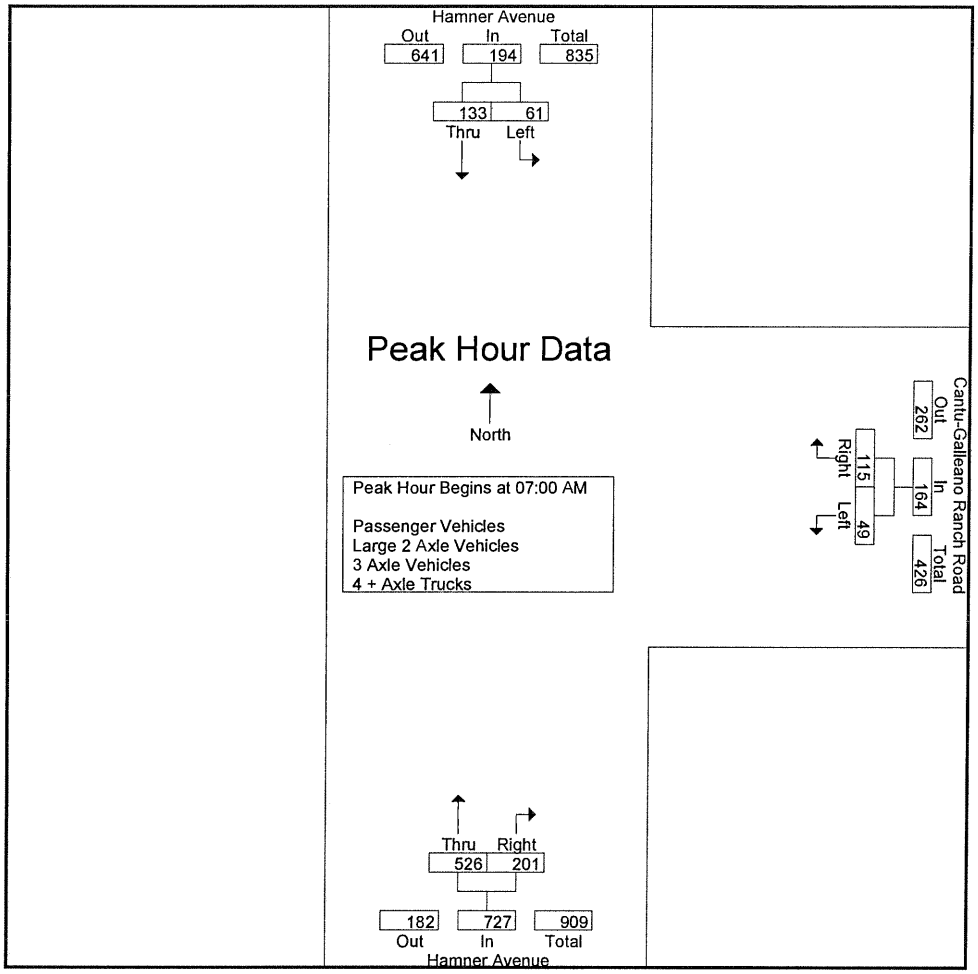
	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	14	31	45	9	33	42	120	47	167	254
07:15 AM	14	36	50	20	34	54	141	58	199	303
07:30 AM	16	28	44	10	17	27	136	55	191	262
07:45 AM	17	38	55	10	31	41	129	41	170	266
Total	61	133	194	49	115	164	526	201	727	1085
08:00 AM	14	40	54	14	17	31	84	45	129	214
08:15 AM	12	46	58	13	19	32	99	38	137	227
08:30 AM	12	37	49	12	21	33	86	28	114	196
08:45 AM	16	37	53	13	25	38	88	20	108	199
Total	54	160	214	52	82	134	357	131	488	836
Grand Total	115	293	408	101	197	298	883	332	1215	1921
Apprch %	28.2	71.8		33.9	66.1		72.7	27.3		
Total %	6	15.3	21.2	5.3	10.3	15.5	46	17.3	63.2	
Passenger Vehicles	79	271	350	87	173	260	863	323	1186	1796
% Passenger Vehicles	68.7	92.5	85.8	86.1	87.8	87.2	97.7	97.3	97.6	93.5
Large 2 Axle Vehicles	15	18	33	5	10	15	15	6	21	69
% Large 2 Axle Vehicles	13	6.1	8.1	5	5.1	5	1.7	1.8	1.7	3.6
3 Axle Vehicles	4	1	5	1	9	10	5	1	6	21
% 3 Axle Vehicles	3.5	0.3	1.2	1	4.6	3.4	0.6	0.3	0.5	1.1
4 + Axle Trucks	17	3	20	8	5	13	0	2	2	35
% 4 + Axle Trucks	14.8	1	4.9	7.9	2.5	4.4	0	0.6	0.2	1.8

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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 07:00 AM										
07:00 AM	14	31	45	9	33	42	120	47	167	254
07:15 AM	14	36	50	**20**	**34**	**54**	**141**	**58**	**199**	**303**
07:30 AM	16	28	44	10	17	27	136	55	191	262
07:45 AM	**17**	**38**	**55**	10	31	41	129	41	170	266
Total Volume	61	133	194	49	115	164	526	201	727	1085
% App. Total	31.4	68.6		29.9	70.1		72.4	27.6		
PHF	.897	.875	.882	.613	.846	.759	.933	.866	.913	.895

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:45 AM			07:00 AM			07:00 AM		
+0 mins.	**17**	38	55	9	33	42	120	47	167
+15 mins.	14	40	54	**20**	**34**	**54**	**141**	**58**	**199**
+30 mins.	12	**46**	**58**	10	17	27	136	55	191
+45 mins.	12	37	49	10	31	41	129	41	170
Total Volume	55	161	216	49	115	164	526	201	727
% App. Total	25.5	74.5		29.9	70.1		72.4	27.6	
PHF	.809	.875	.931	.613	.846	.759	.933	.866	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- Passenger Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	12	25	37	9	31	40	120	47	167	244
07:15 AM	10	35	45	14	31	45	140	57	197	287
07:30 AM	12	25	37	10	12	22	135	54	189	248
07:45 AM	13	36	49	9	30	39	127	41	168	256
Total	47	121	168	42	104	146	522	199	721	1035
08:00 AM	5	39	44	12	16	28	81	41	122	194
08:15 AM	9	46	55	11	13	24	93	38	131	210
08:30 AM	8	31	39	9	19	28	82	25	107	174
08:45 AM	10	34	44	13	21	34	85	20	105	183
Total	32	150	182	45	69	114	341	124	465	761
Grand Total	79	271	350	87	173	260	863	323	1186	1796
Apprch %	22.6	77.4		33.5	66.5		72.8	27.2		
Total %	4.4	15.1	19.5	4.8	9.6	14.5	48.1	18	66	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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 07:00 AM										
07:00 AM	12	25	37	9	**31**	40	120	47	167	244
07:15 AM	10	35	45	**14**	31	**45**	**140**	**57**	**197**	**287**
07:30 AM	12	25	37	10	12	22	135	54	189	248
07:45 AM	**13**	**36**	**49**	9	30	39	127	41	168	256
Total Volume	47	121	168	42	104	146	522	199	721	1035
% App. Total	28	72		28.8	71.2		72.4	27.6		
PHF	.904	.840	.857	.750	.839	.811	.932	.873	.915	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
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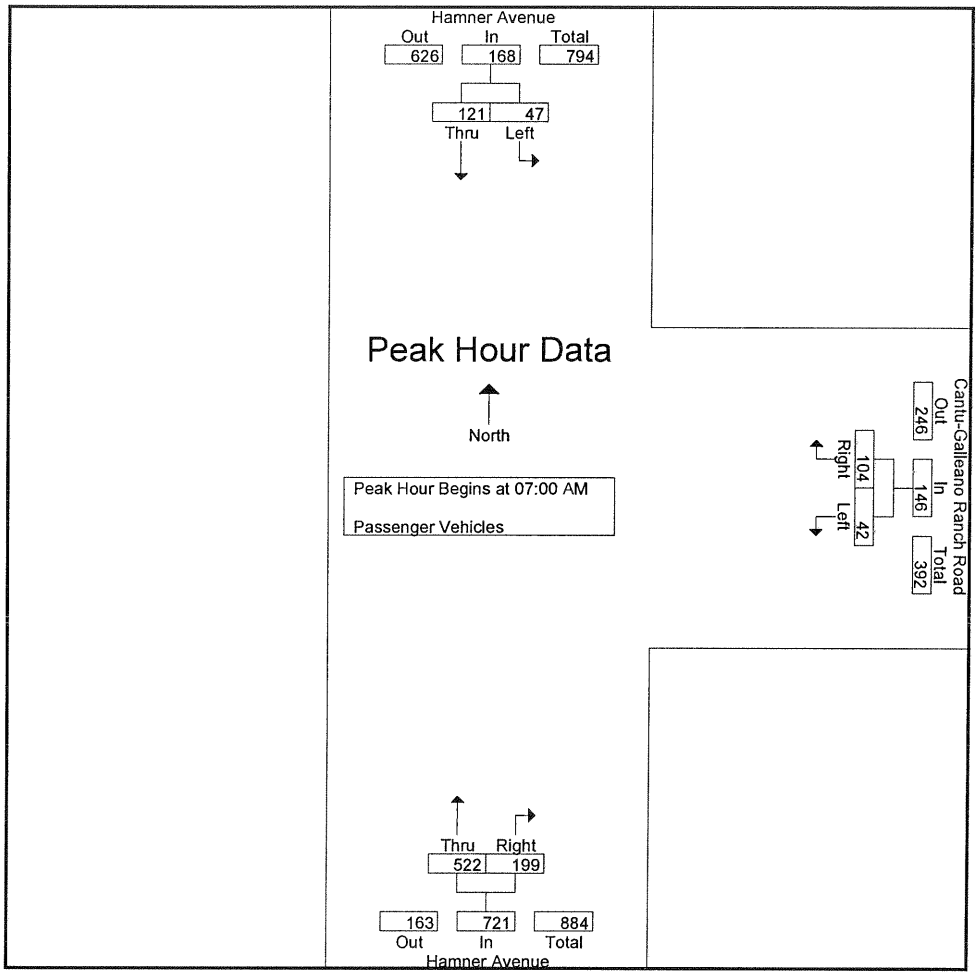

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM			07:00 AM			07:00 AM		
+0 mins.	**13**	36	49	9	**31**	40	120	47	167
+15 mins.	5	39	44	**14**	31	**45**	**140**	**57**	**197**
+30 mins.	9	**46**	**55**	10	12	22	135	54	189
+45 mins.	8	31	39	9	30	39	127	41	168
Total Volume	35	152	187	42	104	146	522	199	721
% App. Total	18.7	81.3		28.8	71.2		72.4	27.6	
PHF	.673	.826	.850	.750	.839	.811	.932	.873	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	6	0	0	0	0	0	0	6
07:15 AM	1	1	2	2	1	3	1	1	2	7
07:30 AM	0	2	2	0	2	2	1	0	1	5
07:45 AM	1	1	2	1	1	2	2	0	2	6
Total	2	10	12	3	4	7	4	1	5	24
08:00 AM	4	1	5	0	1	1	3	2	5	11
08:15 AM	2	0	2	1	4	5	5	0	5	12
08:30 AM	3	4	7	1	0	1	1	3	4	12
08:45 AM	4	3	7	0	1	1	2	0	2	10
Total	13	8	21	2	6	8	11	5	16	45
Grand Total	15	18	33	5	10	15	15	6	21	69
Apprch %	45.5	54.5		33.3	66.7		71.4	28.6		
Total %	21.7	26.1	47.8	7.2	14.5	21.7	21.7	8.7	30.4	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**6**	**6**	0	0	0	0	0	0	6
07:15 AM	**1**	1	2	**2**	1	**3**	1	**1**	**2**	**7**
07:30 AM	0	2	2	0	**2**	2	1	0	1	5
07:45 AM	1	1	2	1	1	2	**2**	0	2	6
Total Volume	2	10	12	3	4	7	4	1	5	24
% App. Total	16.7	83.3		42.9	57.1		80	20		
PHF	.500	.417	.500	.375	.500	.583	.500	.250	.625	.857

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
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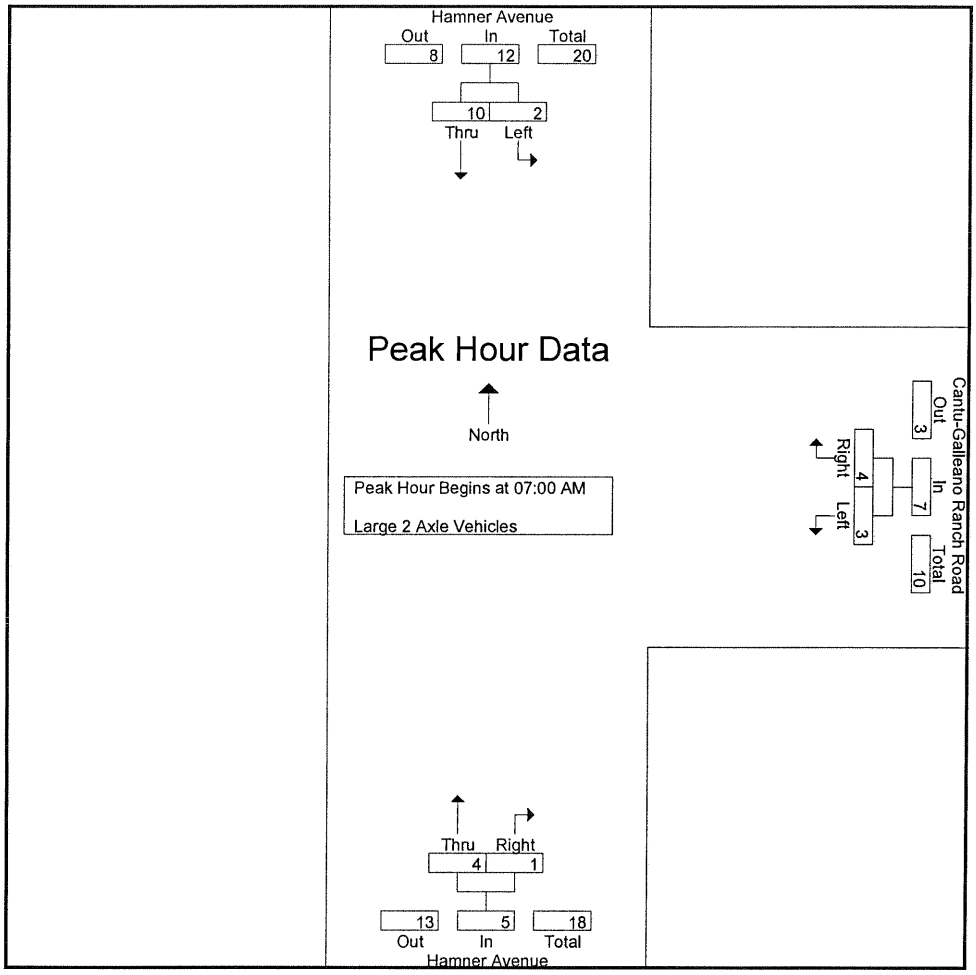

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	**6**	**6**	0	0	0	0	0	0
+15 mins.	**1**	1	2	**2**	1	**3**	1	**1**	**2**
+30 mins.	0	2	2	0	**2**	2	1	0	1
+45 mins.	1	1	2	1	1	2	**2**	0	2
Total Volume	2	10	12	3	4	7	4	1	5
% App. Total	16.7	83.3		42.9	57.1		80	20	
PHF	.500	.417	.500	.375	.500	.583	.500	.250	.625

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- 3 Axle Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	1	1	0	0	0	1
07:15 AM	1	0	1	1	1	2	0	0	0	3
07:30 AM	0	0	0	0	2	2	0	0	0	2
07:45 AM	1	1	2	0	0	0	0	0	0	2
Total	2	1	3	1	4	5	0	0	0	8
08:00 AM	1	0	1	0	0	0	0	1	1	2
08:15 AM	0	0	0	0	2	2	1	0	1	3
08:30 AM	0	0	0	0	1	1	3	0	3	4
08:45 AM	1	0	1	0	2	2	1	0	1	4
Total	2	0	2	0	5	5	5	1	6	13
Grand Total	4	1	5	1	9	10	5	1	6	21
Apprch %	80	20		10	90		83.3	16.7		
Total %	19	4.8	23.8	4.8	42.9	47.6	23.8	4.8	28.6	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	1	1	0	0	0	1
07:15 AM	**1**	0	1	**1**	1	**2**	0	0	0	**3**
07:30 AM	0	0	0	0	**2**	2	0	0	0	2
07:45 AM	1	**1**	**2**	0	0	0	0	0	0	2
Total Volume	2	1	3	1	4	5	0	0	0	8
% App. Total	66.7	33.3		20	80		0	0		
PHF	.500	.250	.375	.250	.500	.625	.000	.000	.000	.667

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
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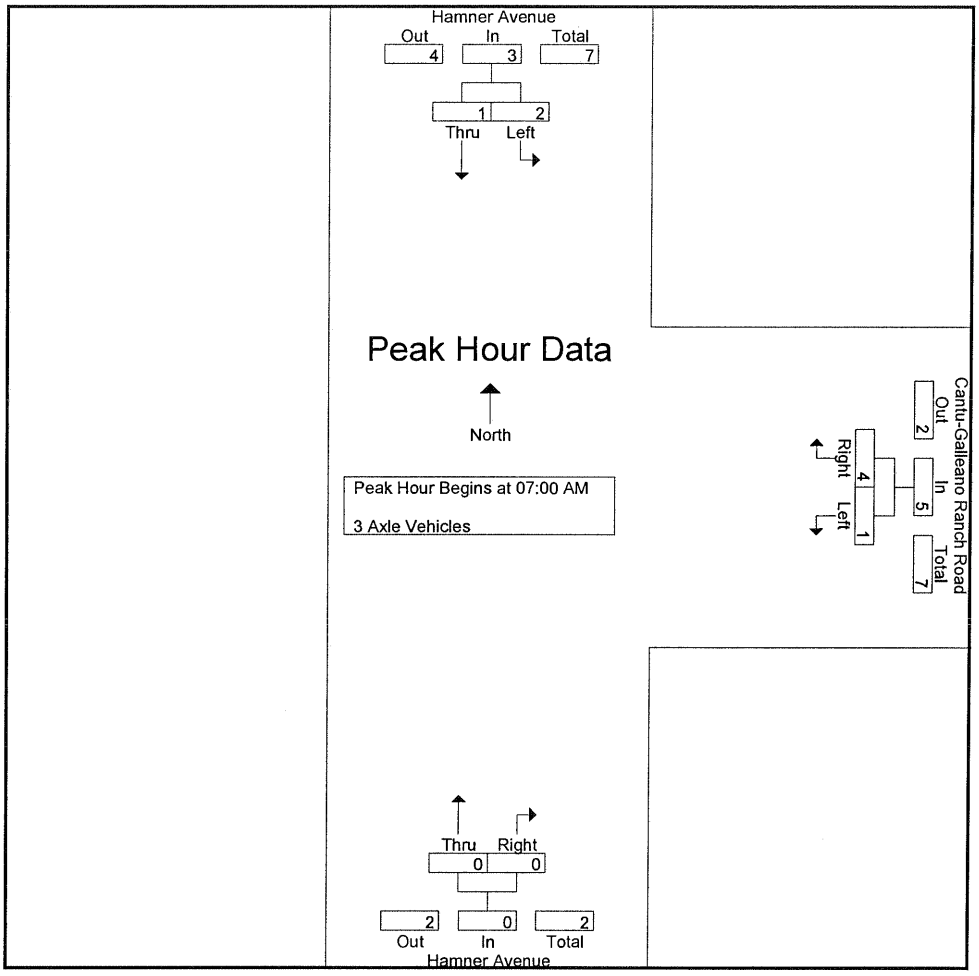

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	1	1	0	0	0
+15 mins.	**1**	0	1	**1**	1	**2**	0	0	0
+30 mins.	0	0	0	0	**2**	2	0	0	0
+45 mins.	1	**1**	**2**	0	0	0	0	0	0
Total Volume	2	1	3	1	4	5	0	0	0
% App. Total	66.7	33.3		20	80		0	0	
PHF	.500	.250	.375	.250	.500	.625	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- 4 + Axle Trucks

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	2	0	2	0	1	1	0	0	0	3
07:15 AM	2	0	2	3	1	4	0	0	0	6
07:30 AM	4	1	5	0	1	1	0	1	1	7
07:45 AM	2	0	2	0	0	0	0	0	0	2
Total	10	1	11	3	3	6	0	1	1	18
08:00 AM	4	0	4	2	0	2	0	1	1	7
08:15 AM	1	0	1	1	0	1	0	0	0	2
08:30 AM	1	2	3	2	1	3	0	0	0	6
08:45 AM	1	0	1	0	1	1	0	0	0	2
Total	7	2	9	5	2	7	0	1	1	17
Grand Total	17	3	20	8	5	13	0	2	2	35
Apprch %	85	15		61.5	38.5		0	100		
Total %	48.6	8.6	57.1	22.9	14.3	37.1	0	5.7	5.7	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	2	0	2	0	**1**	1	0	0	0	3
07:15 AM	2	0	2	**3**	1	4	0	0	0	6
07:30 AM	**4**	**1**	**5**	0	1	1	0	**1**	**1**	7
07:45 AM	2	0	2	0	0	0	0	0	0	2
Total Volume	10	1	11	3	3	6	0	1	1	18
% App. Total	90.9	9.1		50	50		0	100		
PHF	.625	.250	.550	.250	.750	.375	.000	.250	.250	.643

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGAM
Site Code : 05138552
Start Date : 9/11/2007
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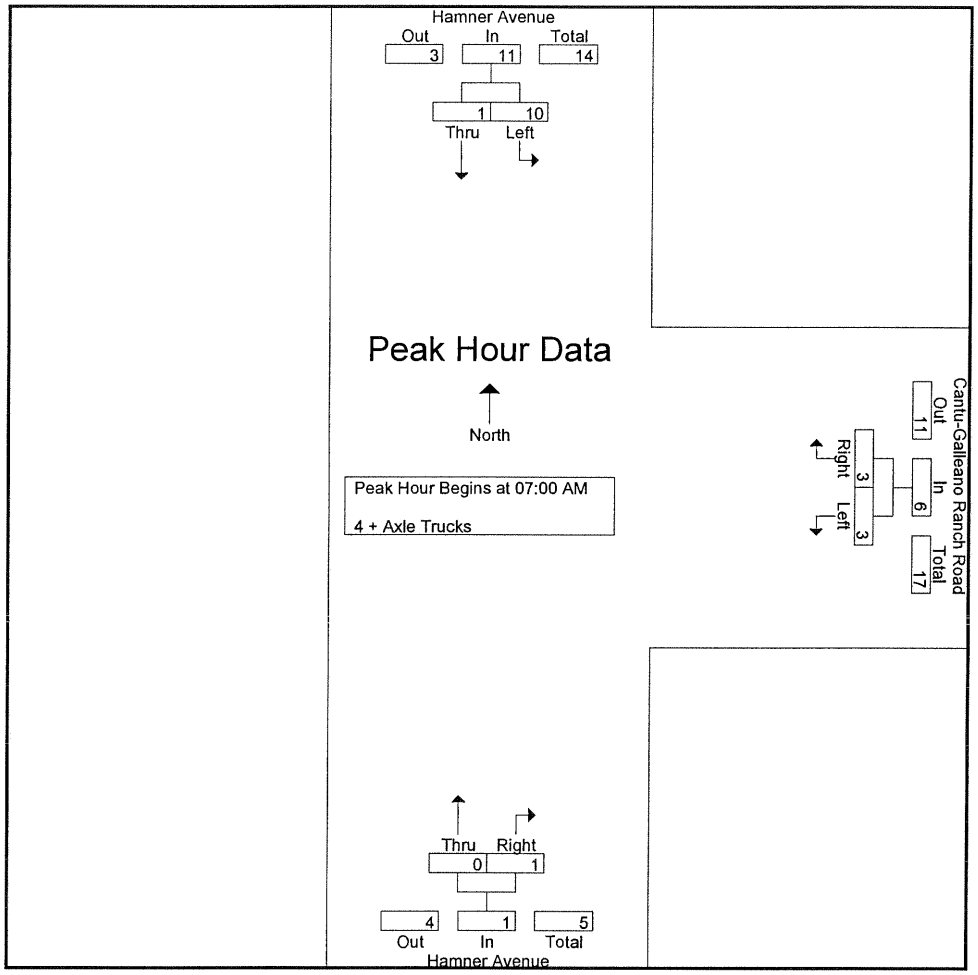

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	2	0	2	0	**1**	1	0	0	0
+15 mins.	2	0	2	**3**	1	**4**	0	0	0
+30 mins.	**4**	**1**	**5**	0	1	1	0	**1**	**1**
+45 mins.	2	0	2	0	0	0	0	0	0
Total Volume	10	1	11	3	3	6	0	1	1
% App. Total	90.9	9.1		50	50		0	100	
PHF	.625	.250	.550	.250	.750	.375	.000	.250	.250

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

County of Riverside
N/S: Hamner Avenue
E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGPM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

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

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	58	122	180	26	9	35	56	25	81	296
04:15 PM	44	126	170	18	10	28	67	28	95	293
04:30 PM	40	123	163	35	12	47	59	24	83	293
04:45 PM	30	123	153	48	11	59	65	18	83	295
Total	172	494	666	127	42	169	247	95	342	1177
05:00 PM	43	116	159	27	11	38	73	26	99	296
05:15 PM	34	149	183	42	11	53	62	22	84	320
05:30 PM	48	127	175	29	8	37	75	23	98	310
05:45 PM	17	114	131	27	9	36	64	23	87	254
Total	142	506	648	125	39	164	274	94	368	1180
Grand Total	314	1000	1314	252	81	333	521	189	710	2357
Apprch %	23.9	76.1		75.7	24.3		73.4	26.6		
Total %	13.3	42.4	55.7	10.7	3.4	14.1	22.1	8	30.1	
Passenger Vehicles	291	991	1282	248	66	314	498	179	677	2273
% Passenger Vehicles	92.7	99.1	97.6	98.4	81.5	94.3	95.6	94.7	95.4	96.4
Large 2 Axle Vehicles	14	7	21	3	7	10	17	7	24	55
% Large 2 Axle Vehicles	4.5	0.7	1.6	1.2	8.6	3	3.3	3.7	3.4	2.3
3 Axle Vehicles	4	0	4	1	2	3	1	0	1	8
% 3 Axle Vehicles	1.3	0	0.3	0.4	2.5	0.9	0.2	0	0.1	0.3
4 + Axle Trucks	5	2	7	0	6	6	5	3	8	21
% 4 + Axle Trucks	1.6	0.2	0.5	0	7.4	1.8	1	1.6	1.1	0.9

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	30	123	153	**48**	**11**	**59**	65	18	83	295
05:00 PM	43	116	159	27	11	38	73	**26**	**99**	296
05:15 PM	34	**149**	**183**	42	11	53	62	22	84	**320**
05:30 PM	**48**	127	175	29	8	37	**75**	23	98	310
Total Volume	155	515	670	146	41	187	275	89	364	1221
% App. Total	23.1	76.9		78.1	21.9		75.5	24.5		
PHF	.807	.864	.915	.760	.932	.792	.917	.856	.919	.954

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Site Code : 05138552
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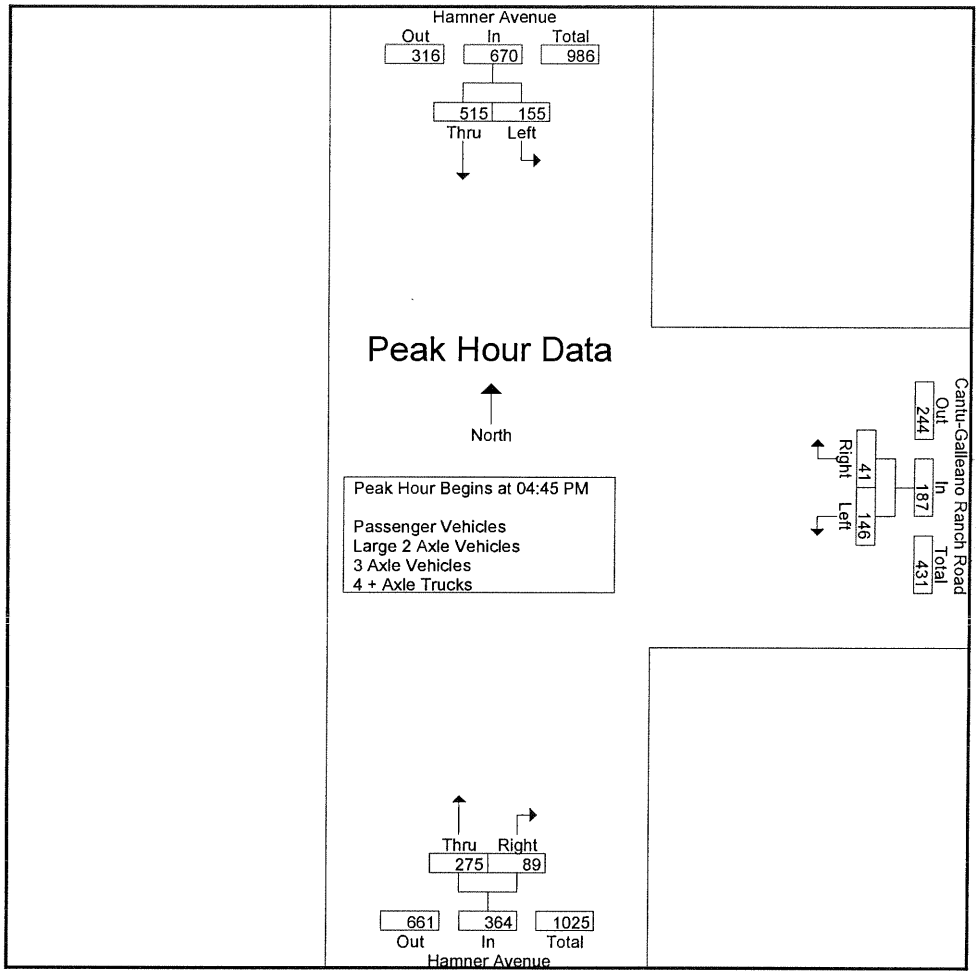

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:30 PM			05:00 PM		
+0 mins.	30	123	153	35	**12**	47	73	**26**	**99**
+15 mins.	43	116	159	**48**	11	**59**	62	22	84
+30 mins.	34	**149**	**183**	27	11	38	**75**	23	98
+45 mins.	**48**	127	175	42	11	53	64	23	87
Total Volume	155	515	670	152	45	197	274	94	368
% App. Total	23.1	76.9		77.2	22.8		74.5	25.5	
PHF	.807	.864	.915	.792	.938	.835	.913	.904	.929

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E/W: Cantu-Galleano Ranch Road
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File Name : CRHACGPM
Site Code : 05138552
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Groups Printed- Passenger Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	50	121	171	25	5	30	54	23	77	278
04:15 PM	39	125	164	18	10	28	64	26	90	282
04:30 PM	39	121	160	34	10	44	58	23	81	285
04:45 PM	26	122	148	47	9	56	59	16	75	279
Total	154	489	643	124	34	158	235	88	323	1124
05:00 PM	40	115	155	26	11	37	68	25	93	285
05:15 PM	33	147	180	42	7	49	60	22	82	311
05:30 PM	48	126	174	29	7	36	72	22	94	304
05:45 PM	16	114	130	27	7	34	63	22	85	249
Total	137	502	639	124	32	156	263	91	354	1149
Grand Total	291	991	1282	248	66	314	498	179	677	2273
Apprch %	22.7	77.3		79	21		73.6	26.4		
Total %	12.8	43.6	56.4	10.9	2.9	13.8	21.9	7.9	29.8	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	26	122	148	**47**	9	**56**	59	16	75	279
05:00 PM	40	115	155	26	**11**	37	68	**25**	93	285
05:15 PM	33	**147**	**180**	42	7	49	60	22	82	**311**
05:30 PM	**48**	126	174	29	7	36	**72**	22	**94**	304
Total Volume	147	510	657	144	34	178	259	85	344	1179
% App. Total	22.4	77.6		80.9	19.1		75.3	24.7		
PHF	.766	.867	.913	.766	.773	.795	.899	.850	.915	.948

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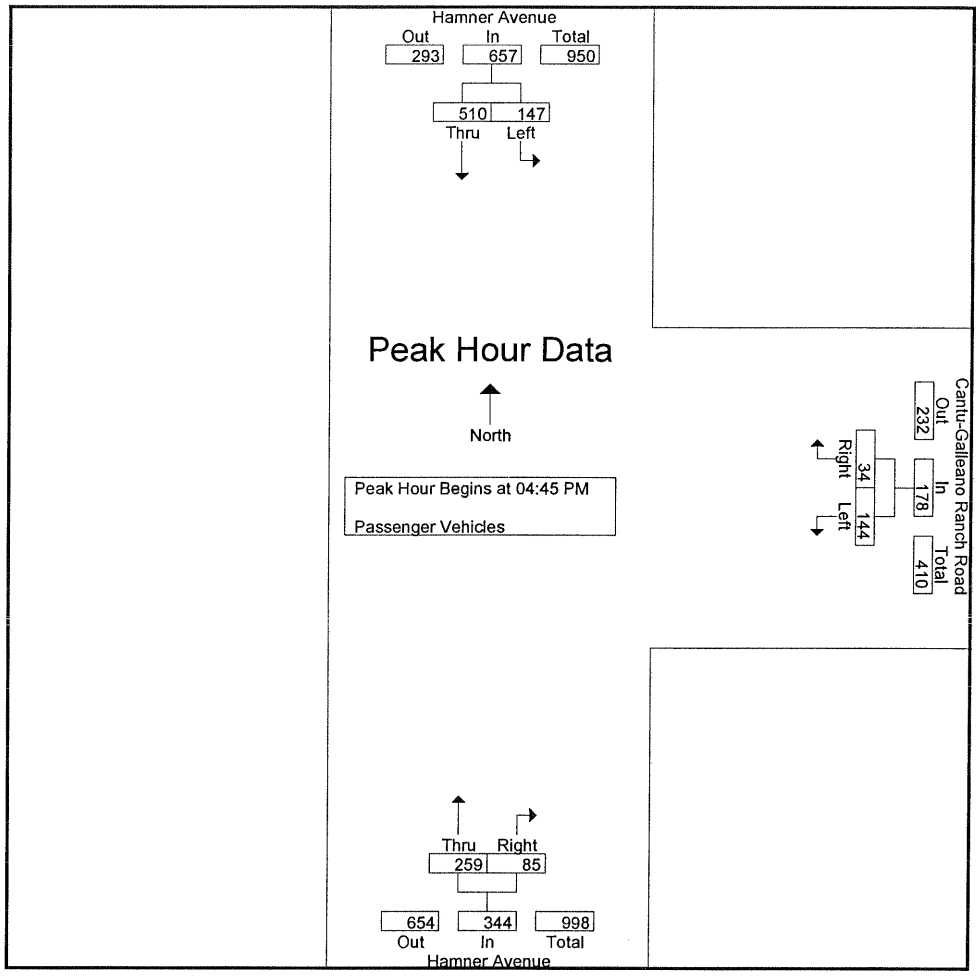

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:30 PM			05:00 PM		
+0 mins.	26	122	148	34	10	44	68	**25**	93
+15 mins.	40	115	155	**47**	9	**56**	60	22	82
+30 mins.	33	**147**	**180**	26	**11**	37	**72**	22	**94**
+45 mins.	**48**	126	174	42	7	49	63	22	85
Total Volume	147	510	657	149	37	186	263	91	354
% App. Total	22.4	77.6		80.1	19.9		74.3	25.7	
PHF	.766	.867	.913	.793	.841	.830	.913	.910	.941

Counts Unlimited Inc.
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County of Riverside
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File Name : CRHACGPM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	5	1	6	1	1	2	2	1	3	11
04:15 PM	5	1	6	0	0	0	3	2	5	11
04:30 PM	1	1	2	1	0	1	1	0	1	4
04:45 PM	2	1	3	1	2	3	4	2	6	12
Total	13	4	17	3	3	6	10	5	15	38
05:00 PM	1	1	2	0	0	0	2	0	2	4
05:15 PM	0	1	1	0	2	2	2	0	2	5
05:30 PM	0	1	1	0	0	0	3	1	4	5
05:45 PM	0	0	0	0	2	2	0	1	1	3
Total	1	3	4	0	4	4	7	2	9	17
Grand Total	14	7	21	3	7	10	17	7	24	55
Apprch %	66.7	33.3		30	70		70.8	29.2		
Total %	25.5	12.7	38.2	5.5	12.7	18.2	30.9	12.7	43.6	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	**2**	**1**	**3**	**1**	**2**	**3**	**4**	**2**	**6**	**12**
05:00 PM	1	1	2	0	0	0	2	0	2	4
05:15 PM	0	1	1	0	2	2	2	0	2	5
05:30 PM	0	1	1	0	0	0	3	1	4	5
Total Volume	3	4	7	1	4	5	11	3	14	26
% App. Total	42.9	57.1		20	80		78.6	21.4		
PHF	.375	1.000	.583	.250	.500	.417	.688	.375	.583	.542

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File Name : CRHACGPM
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Start Date : 9/11/2007
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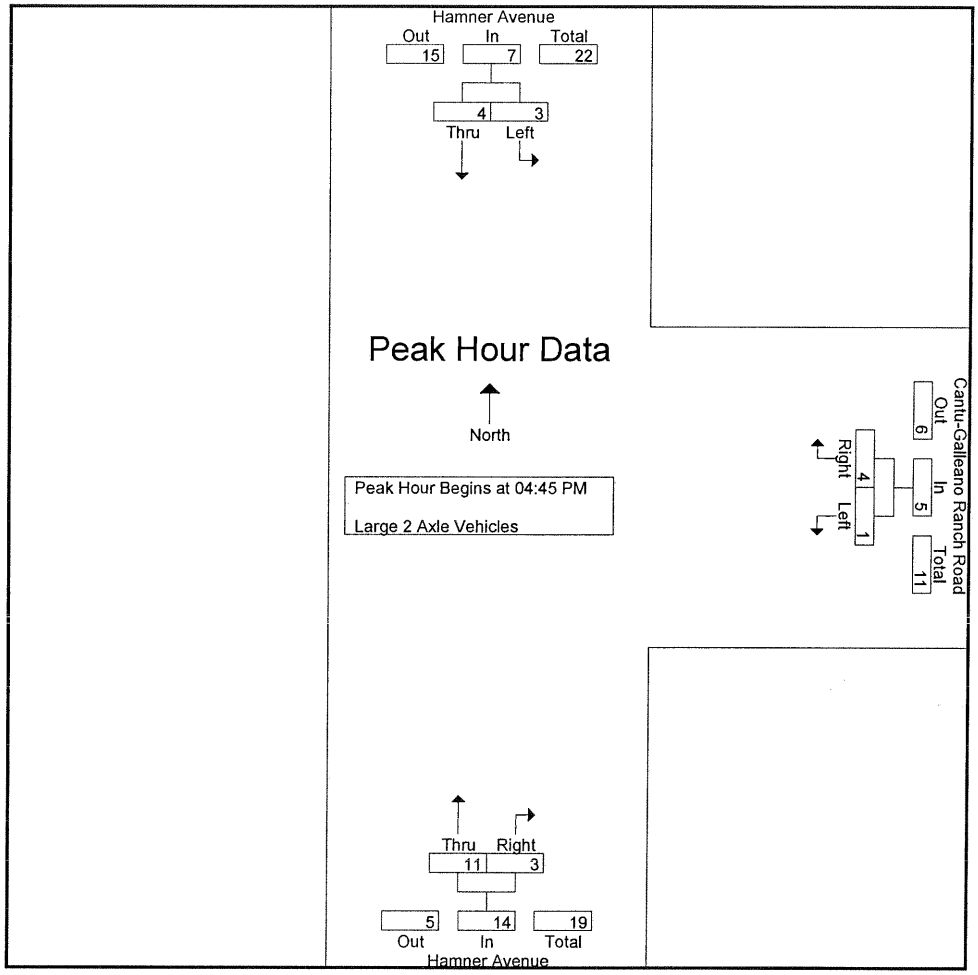

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	2	1	3	1	2	3	4	2	6
+15 mins.	1	1	2	0	0	0	2	0	2
+30 mins.	0	1	1	0	2	2	2	0	2
+45 mins.	0	1	1	0	0	0	3	1	4
Total Volume	3	4	7	1	4	5	11	3	14
% App. Total	42.9	57.1		20	80		78.6	21.4	
PHF	.375	1.000	.583	.250	.500	.417	.688	.375	.583

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951-485-7934

County of Riverside
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E/W: Cantu-Galleano Ranch Road
Weather: Sunny

File Name : CRHACGPM
Site Code : 05138552
Start Date : 9/11/2007
Page No : 1

Groups Printed- 3 Axle Vehicles

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	2	0	2	0	1	1	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	2	0	2	0	2	2	1	0	1	5
05:00 PM	1	0	1	1	0	1	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	1	0	0	0	0	0	0	1
Total	2	0	2	1	0	1	0	0	0	3
Grand Total	4	0	4	1	2	3	1	0	1	8
Apprch %	100	0		33.3	66.7		100	0		
Total %	50	0	50	12.5	25	37.5	12.5	0	12.5	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	**1**	0	**1**	**1**	0	**1**	0	0	0	**2**
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	1	0	1	1	0	1	3
% App. Total	100	0		100	0		100	0		
PHF	.250	.000	.250	.250	.000	.250	.250	.000	.250	.375

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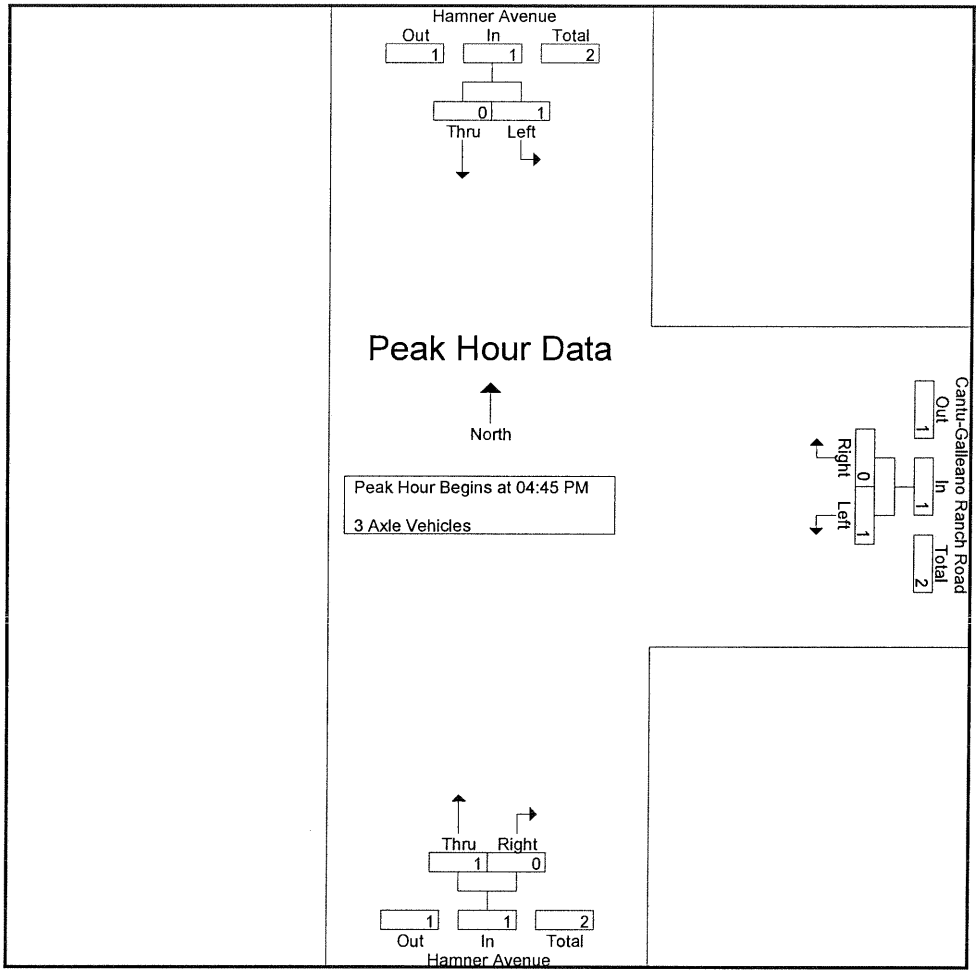

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

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

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Groups Printed- 4 + Axle Trucks

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	0	2	2	0	1	1	4
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	1	1	0	1	1	3
04:45 PM	2	0	2	0	0	0	1	0	1	3
Total	3	1	4	0	3	3	1	2	3	10
05:00 PM	1	0	1	0	0	0	3	1	4	5
05:15 PM	1	1	2	0	2	2	0	0	0	4
05:30 PM	0	0	0	0	1	1	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total	2	1	3	0	3	3	4	1	5	11
Grand Total	5	2	7	0	6	6	5	3	8	21
Apprch %	71.4	28.6		0	100		62.5	37.5		
Total %	23.8	9.5	33.3	0	28.6	28.6	23.8	14.3	38.1	

	Hamner Avenue Southbound			Cantu-Galleano Ranch Road Westbound			Hamner 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	**2**	0	**2**	0	0	0	1	0	1	3
05:00 PM	1	0	1	0	0	0	**3**	**1**	**4**	**5**
05:15 PM	1	**1**	2	0	**2**	**2**	0	0	0	4
05:30 PM	0	0	0	0	1	1	0	0	0	1
Total Volume	4	1	5	0	3	3	4	1	5	13
% App. Total	80	20		0	100		80	20		
PHF	.500	.250	.625	.000	.375	.375	.333	.250	.313	.650

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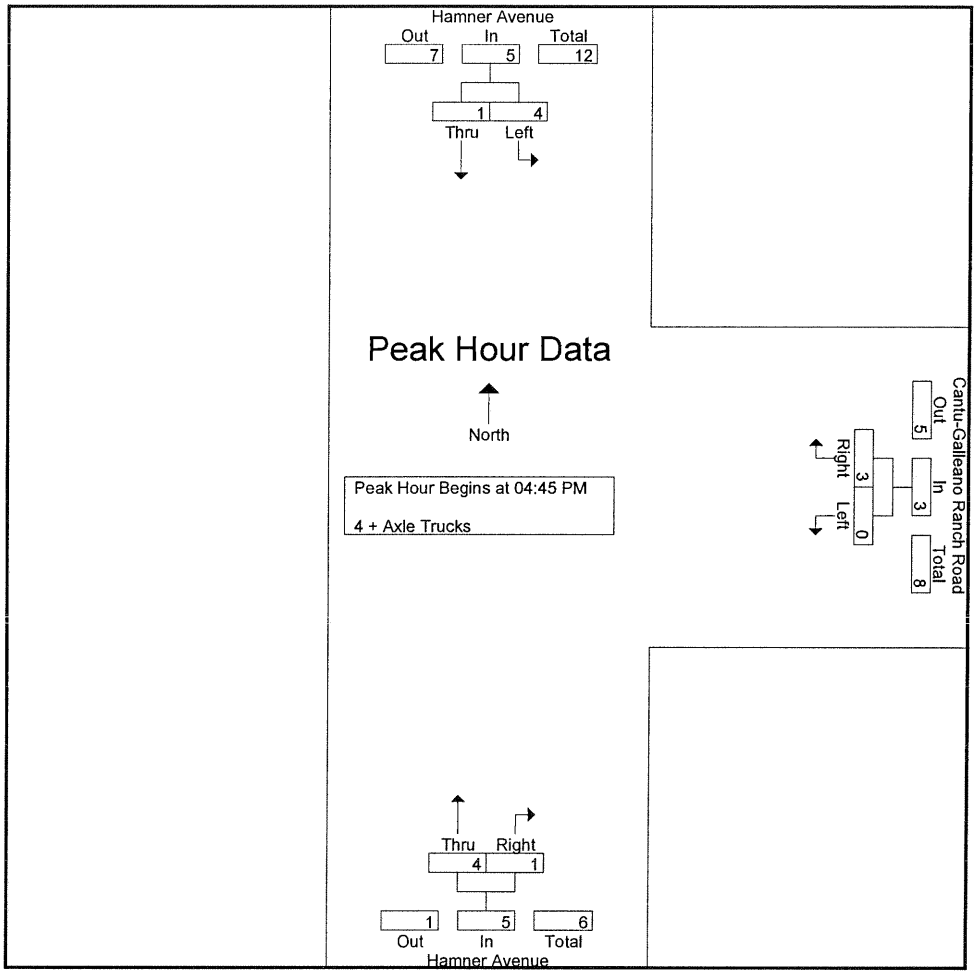


Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	**2**	0	**2**	0	0	0	1	0	1
+15 mins.	1	0	1	0	0	0	**3**	**1**	**4**
+30 mins.	1	**1**	2	0	**2**	**2**	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	4	1	5	0	3	3	4	1	5
% App. Total	80	20		0	100		80	20	
PHF	.500	.250	.625	.000	.375	.375	.333	.250	.313

APPENDIX E

Existing Conditions
Intersection Analysis Worksheets

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
AM Peak Hour

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.377
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: OPTIMIZED 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:	10	22	22	10	22	22	25	25	25	24	24	24
Lanes:	1 0	2 1	0	1 0	1 1	0	0 1	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	64	554	90	68	332	36	37	178	31	65	166	163
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:	64	554	90	68	332	36	37	178	31	65	166	163
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:	0.82	0.82	0.82	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	78	676	110	91	443	48	49	237	41	87	221	217
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	676	110	91	443	48	49	237	41	87	221	217
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	1.10	1.10	1.00	1.05	1.05	1.05	1.05	1.05	1.00	1.05	1.05
FinalVolume:	78	743	121	91	465	50	52	249	43	87	232	228
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.58	0.42	1.00	1.80	0.20	0.32	1.43	0.25	1.00	1.01	0.99
Final Sat.:	1700	4645	755	1700	3248	352	537	2582	450	1700	1816	1784
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.05	0.14	0.14	0.10	0.10	0.10	0.05	0.13	0.13
Crit Moves:		****		****							****	
Green/Cycle:	0.16	0.37	0.37	0.16	0.36	0.36	0.38	0.38	0.38	0.38	0.38	0.38
Volume/Cap:	0.28	0.44	0.44	0.34	0.40	0.40	0.25	0.25	0.25	0.13	0.34	0.34
Delay/Veh:	23.6	15.3	15.3	24.3	15.3	15.3	13.5	13.5	13.5	12.8	14.0	14.0
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:	23.6	15.3	15.3	24.3	15.3	15.3	13.5	13.5	13.5	12.8	14.0	14.0
LOS by Move:	C	B	B	C	B	B	B	B	B	B	B	B
HCM2kAvgQ:	2	5	5	2	4	4	2	2	2	1	3	3

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

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
AM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.717
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 34.7
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	239	721	73	49	378	67	25	79	55	45	273	76
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:	239	721	73	49	378	67	25	79	55	45	273	76
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:	0.96	0.96	0.96	0.86	0.86	0.86	0.88	0.88	0.88	0.78	0.78	0.78
PHF Volume:	249	751	76	57	440	78	28	90	63	58	350	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	751	76	57	440	78	28	90	63	58	350	97
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:	249	751	76	57	440	78	28	90	63	58	350	97
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.42	0.04	0.03	0.24	0.04	0.02	0.05	0.03	0.03	0.19	0.05
Crit Moves:		****		****			****				****	
Green/Cycle:	0.22	0.50	0.50	0.10	0.37	0.37	0.10	0.24	0.24	0.10	0.24	0.24
Volume/Cap:	0.66	0.84	0.09	0.35	0.66	0.12	0.18	0.21	0.15	0.36	0.82	0.23
Delay/Veh:	41.6	30.3	14.0	45.8	30.1	21.9	44.2	32.3	31.7	45.8	49.4	32.5
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:	41.6	30.3	14.0	45.8	30.1	21.9	44.2	32.3	31.7	45.8	49.4	32.5
LOS by Move:	D	C	B	D	C	C	D	C	C	D	D	C
HCM2kAvgQ:	9	23	1	2	13	2	1	2	2	2	13	3

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

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
AM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.693
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: OPTIMIZED 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				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	14		14	10	14		0	0	0		0	21	0		21
Lanes:	0 0	1	0	1	1 0	1	0	0	0 0	0	0	0 0	1 0	0	0	1
Volume Module:																
Base Vol:	0	528		204	84	141		0	0	0		0	58	0		127
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	528		204	84	141		0	0	0		0	58	0		127
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:	1.00	0.91		0.91	0.88	0.88		1.00	1.00	1.00		1.00	0.76	1.00		0.76
PHF Volume:	0	580		224	95	160		0	0	0		0	76	0		167
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	580		224	95	160		0	0	0		0	76	0		167
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	580		224	95	160		0	0	0		0	76	0		167
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	0.00	1.00		1.00	1.00	1.00		0.00	0.00	0.00		0.00	1.00	0.00		1.00
Final Sat.:	0	1800		1800	1700	1800		0	0	0		0	1700	0		1800
Capacity Analysis Module:																
Vol/Sat:	0.00	0.32		0.12	0.06	0.09		0.00	0.00	0.00		0.00	0.04	0.00		0.09
Crit Moves:		****			****								****			
Green/Cycle:	0.00	0.54		0.54	0.13	0.66		0.00	0.00	0.00		0.00	0.26	0.00		0.26
Volume/Cap:	0.00	0.60		0.23	0.45	0.13		0.00	0.00	0.00		0.00	0.17	0.00		0.35
Delay/Veh:	0.0	13.7		9.9	34.0	5.1		0.0	0.0	0.0		0.0	23.0	0.0		24.4
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	13.7		9.9	34.0	5.1		0.0	0.0	0.0		0.0	23.0	0.0		24.4
LOS by Move:	A	B		A	C	A		A	A	A		A	C	A		C
HCM2kAvgQ:	0	10		3	3	1		0	0	0		0	2	0		4

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

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
PM Peak Hour

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 75 Critical Vol./Cap.(X): 0.421
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 17.1
Optimal Cycle: OPTIMIZED 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:	10	22	22		10	22	22		25	25	25		24	24	24	
Lanes:	1	0 2	1	0	1	0 1	1	0	0	1 0	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	40	572	30		106	877	22		57	94	79		23	27	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:	40	572	30		106	877	22		57	94	79		23	27	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:	0.85	0.85	0.85		0.97	0.97	0.97		0.76	0.76	0.76		0.95	0.95	0.95	
PHF Volume:	47	673	35		109	904	23		75	124	104		24	28	95	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	47	673	35		109	904	23		75	124	104		24	28	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	1.10	1.10		1.00	1.05	1.05		1.05	1.05	1.05		1.00	1.05	1.05	
FinalVolume:	47	740	39		109	949	24		79	130	109		24	30	99	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.85	0.15		1.00	1.95	0.05		0.52	0.80	0.68		1.00	1.00	1.00	
Final Sat.:	1700	5131	269		1700	3512	88		879	1450	1219		1700	1800	1800	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.14	0.14		0.06	0.27	0.27		0.09	0.09	0.09		0.01	0.02	0.06	
Crit Moves:	****					****				****						
Green/Cycle:	0.13	0.40	0.40		0.18	0.45	0.45		0.33	0.33	0.33		0.33	0.33	0.33	
Volume/Cap:	0.21	0.36	0.36		0.35	0.60	0.60		0.27	0.27	0.27		0.04	0.05	0.17	
Delay/Veh:	29.4	15.7	15.7		27.4	16.0	16.0		18.4	18.4	18.4		16.9	17.0	17.7	
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:	29.4	15.7	15.7		27.4	16.0	16.0		18.4	18.4	18.4		16.9	17.0	17.7	
LOS by Move:	C	B	B		C	B	B		B	B	B		B	B	B	
HCM2kAvgQ:	1	4	4		3	9	9		3	3	3		0	0	2	

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

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
PM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.768
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 34.4
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	77	437	59	57	691	43	84	288	219	78	64	25
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:	77	437	59	57	691	43	84	288	219	78	64	25
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:	0.96	0.96	0.96	0.87	0.87	0.87	0.94	0.94	0.94	0.86	0.86	0.86
PHF Volume:	80	455	61	66	794	49	89	306	233	91	74	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	455	61	66	794	49	89	306	233	91	74	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:	80	455	61	66	794	49	89	306	233	91	74	29
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.25	0.03	0.04	0.44	0.03	0.05	0.17	0.13	0.05	0.04	0.02
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.45	0.45	0.16	0.52	0.52	0.09	0.23	0.23	0.09	0.23	0.23
Volume/Cap:	0.52	0.56	0.08	0.24	0.85	0.05	0.58	0.75	0.57	0.59	0.18	0.07
Delay/Veh:	50.8	23.4	17.4	40.7	30.4	13.2	53.3	47.1	39.6	53.8	34.5	33.5
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:	50.8	23.4	17.4	40.7	30.4	13.2	53.3	47.1	39.6	53.8	34.5	33.5
LOS by Move:	D	C	B	D	C	B	D	D	D	D	C	C
HCM2kAvgQ:	3	12	1	2	25	1	4	11	8	4	2	1

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

THE AVENUE SPECIFIC PLAN AMENDMENT (JN 05279)
Existing Conditions
PM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 60 Critical Vol./Cap.(X): 0.435
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: OPTIMIZED 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				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	14		14	10	14		0	0	0		0	21	0		21
Lanes:	0	0	1	0 1	1	0	1	0 0	0	0	0	0 0	1	0	0	0 1
Volume Module:																
Base Vol:	0	290		93	166	519		0	0	0		0	148	0		49
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	290		93	166	519		0	0	0		0	148	0		49
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:	1.00	0.92		0.92	0.92	0.92		1.00	1.00	1.00		1.00	0.79	1.00		0.79
PHF Volume:	0	315		101	180	564		0	0	0		0	187	0		62
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	0	315		101	180	564		0	0	0		0	187	0		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:	0	315		101	180	564		0	0	0		0	187	0		62
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	0.00	1.00		1.00	1.00	1.00		0.00	0.00	0.00		0.00	1.00	0.00		1.00
Final Sat.:	0	1800		1800	1700	1800		0	0	0		0	1700	0		1800
Capacity Analysis Module:																
Vol/Sat:	0.00	0.18		0.06	0.11	0.31		0.00	0.00	0.00		0.00	0.11	0.00		0.03
Crit Moves:		****			****								****			
Green/Cycle:	0.00	0.34		0.34	0.21	0.55		0.00	0.00	0.00		0.00	0.35	0.00		0.35
Volume/Cap:	0.00	0.51		0.16	0.51	0.57		0.00	0.00	0.00		0.00	0.31	0.00		0.10
Delay/Veh:	0.0	16.5		13.9	22.3	9.6		0.0	0.0	0.0		0.0	14.6	0.0		13.2
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	16.5		13.9	22.3	9.6		0.0	0.0	0.0		0.0	14.6	0.0		13.2
LOS by Move:	A	B		B	C	A		A	A	A		A	B	A		B
HCM2kAvgQ:	0	5		1	4	7		0	0	0		0	3	0		1

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

APPENDIX F

Signal Warrants

TRAFFIC SIGNAL WARRANTS (1) NO

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Hellman Ave. Minor St: Connector St. Year = IY WOP

Volume = 1,021 ✓ Lanes= 1 Volume = 445 ✓ Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,021 / Minor Street 445 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 8,000 / 5,600 9,600 / 6,720 9,600 / 6,720 8,000 / 5,600	Urban / Rural 2,400 / 1,680 2,400 / 1,680 3,200 / 2,240 3,200 / 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,021 / Minor Street 445 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 12,000 / 8,400 14,400 / 10,080 14,000 / 10,080 12,000 / 8,400	Urban / Rural 1,200 / 850 1,200 / 850 1,600 / 1,120 1,600 / 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 18% / 12% 1 / 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (3) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Archibald Ave. Minor St: Schaefer Ave. Year = IY WOP

Volume = 33,768 Lanes= 1 Volume = 3,948 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 33,768 / Minor Street 3,948	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 33,768 / Minor Street 3,948	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400 *	1,200 / 850 *
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 / 100% 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (4) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Archibald Ave. Minor St: The Avenue Year = IY WOP

Volume = 33,789 Lanes= 1 Volume = 1,996 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 33,789 Minor Street 1,996	Urban Rural	Urban Rural
1 1	8,000 5,600 *	2,400 1,680 *
2 + 1	9,600 6,720	2,400 1,680
2 + 2 +	9,600 6,720	3,200 2,240
1 2 +	8,000 5,600	3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 33,789 Minor Street 1,996	Urban Rural	Urban Rural
1 1	12,000 8,400 *	1,200 850 *
2 + 1	14,400 10,080	1,200 850
2 + 2 +	14,000 10,080	1,600 1,120
1 2 +	12,000 8,400	1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

(6) NO

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: The Avenue Minor St: "A" Street Year = IY WOP
Volume = 2,600 Lanes= 1 Volume = 1,100 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,600 Minor Street 1,100 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,600 Minor Street 1,100 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 46% 31% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Edison Ave. Minor St: "A" Street Year = IY WOP
Volume = 29,680 Lanes= 1 Volume = 2,000 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 29,680 Minor Street 2,000 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 29,680 Minor Street 2,000 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

(7) Yes!

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Interim Year Without Project (PM PEAK HOUR)

Major Street Name = **Edison Ave**

Total of Both Approaches (VPH) = **2582**

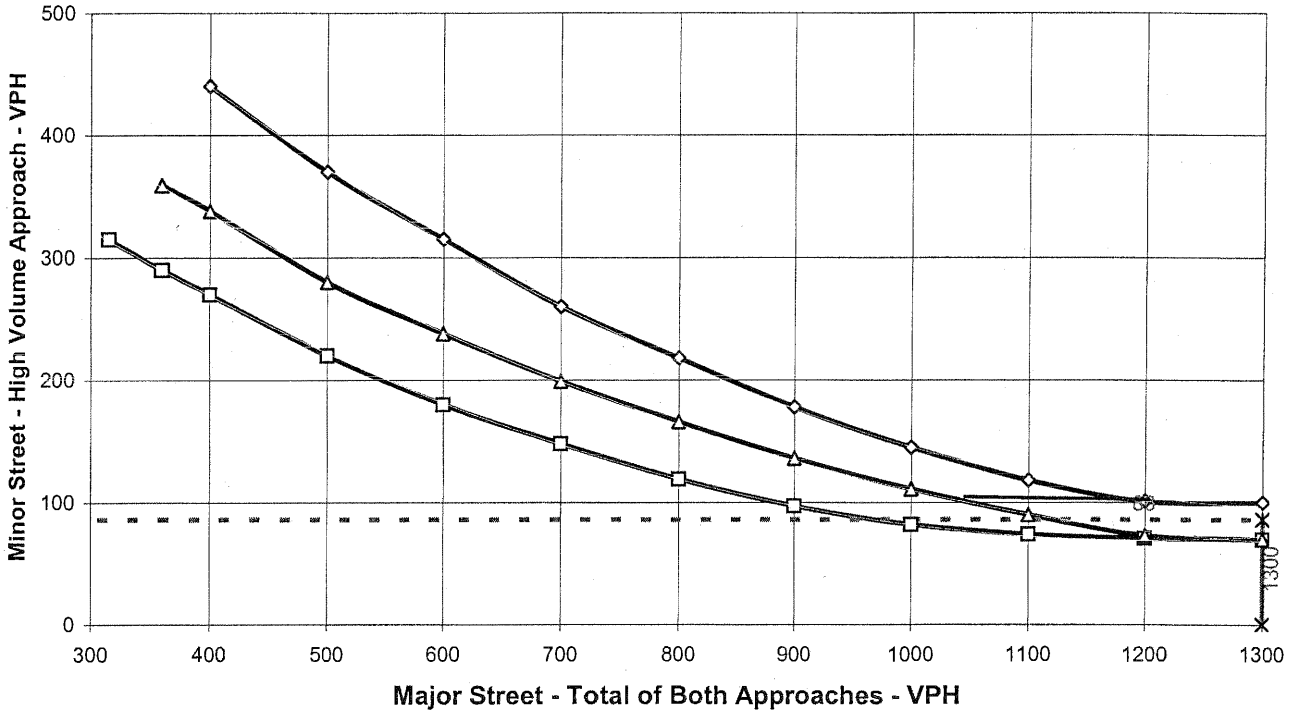
Number of Approach Lanes Major Street = **1**

Minor Street Name = **"A" Street**

High Volume Approach (VPH) = **86**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



1 Lane (Major) & 1 Lane (Minor)

2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)

2+ Lanes (Major) & 2+ Lanes (Minor)

Major Street Approaches

Minor Street Approaches

** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

TRAFFIC SIGNAL WARRANTS (8) yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Turner Ave. Minor St: Schaefer Ave. Year = IY WOP
Volume = 11,579 Lanes= 1 Volume = 1,888 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 11,579 Minor Street 1,888 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 11,579 Minor Street 1,888 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (9) yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Turner Ave. Minor St: The Avenue Year = IY WP
Volume = 11,800 Lanes= 1 Volume = 1,250 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 11,800 Minor Street 1,250	Urban Rural	Urban Rural
1 1 2 + 1 2 + 2 + 1 2 +	8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 11,800 Minor Street 1,250	Urban Rural	Urban Rural
1 1 2 + 1 2 + 2 + 1 2 +	12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 74% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (10) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Edison Ave. Minor St: Turner Ave. Year = IY WOP

Volume = 36,553 Lanes= 1 Volume = 6,254 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 36,553 Minor Street 6,254	Urban / Rural	Urban / Rural
1 1	8,000 / 5,600 *	2,400 / 1,680 *
2 + 1	9,600 / 6,720	2,400 / 1,680
2 + 2 +	9,600 / 6,720	3,200 / 2,240
1 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 36,553 Minor Street 6,254	Urban / Rural	Urban / Rural
1 1	12,000 / 8,400 *	1,200 / 850 *
2 + 1	14,400 / 10,080	1,200 / 850
2 + 2 +	14,000 / 10,080	1,600 / 1,120
1 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 1 100% 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (11) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Edison Ave. Minor St: Connector St. Year = IY WOP

Volume = 43,343 Lanes= 1 Volume = 2,076 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 43,343 Minor Street 2,076 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 43,343 Minor Street 2,076 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (12) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Haven Ave. Minor St: Chino Ave. Year = IY WOP

Volume = 25,384 Lanes= 1 Volume = 6,759 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 25,384 Minor Street 6,759 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 25,384 Minor Street 6,759 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (13) NO

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Haven Ave. Minor St: Schaefer Ave. Year = IY WOP

Volume = 29,080 Lanes= 1 Volume = 658 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 29,080 Minor Street 658 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 29,080 Minor Street 658 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 39% 77% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

13 yes!

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Interim Year Without Project (PM PEAK HOUR)

Major Street Name = **Haven Avenue**

Total of Both Approaches (VPH) = **2300**

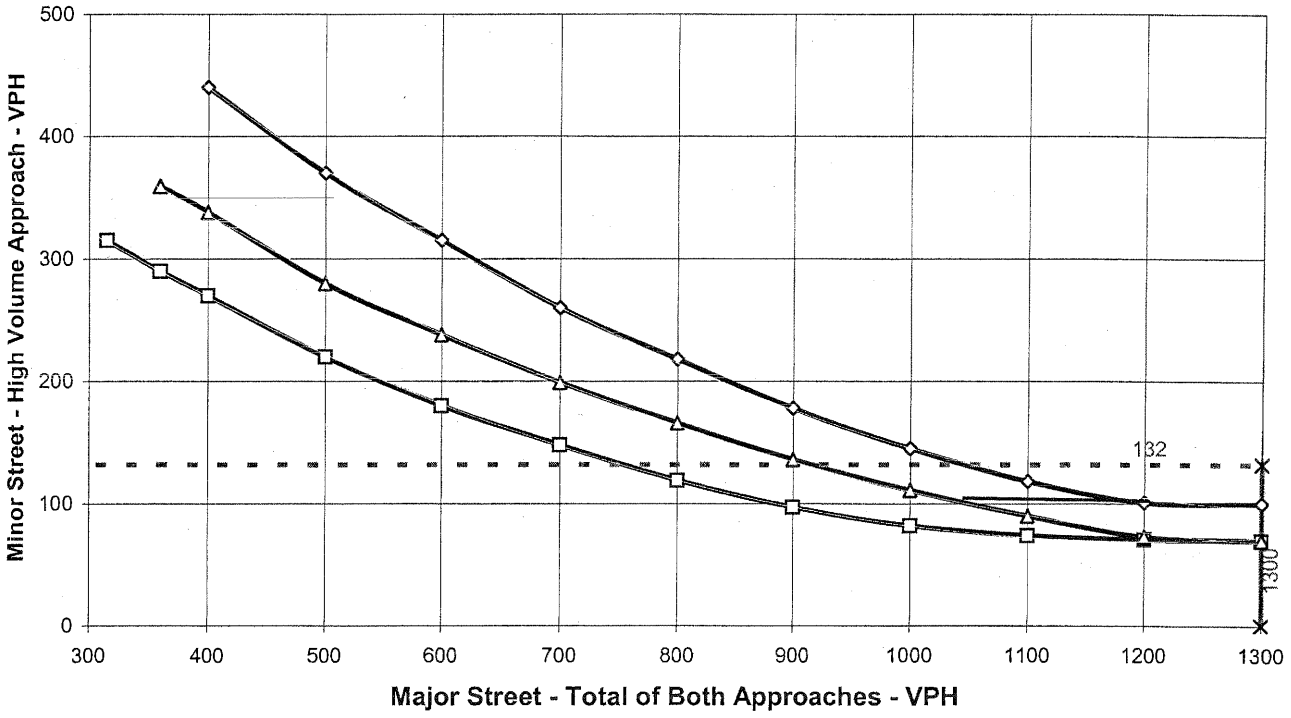
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Schaefer Avenue**

High Volume Approach (VPH) = **132**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



1 Lane (Major) & 1 Lane (Minor)

2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)

2+ Lanes (Major) & 2+ Lanes (Minor)

Major Street Approaches

Minor Street Approaches

** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

TRAFFIC SIGNAL WARRANTS (14) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Edison Ave. Minor St: Haven Ave. Year = IY WOP

Volume = 39,096 Lanes= 1 Volume = 14,911 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 39,096 Minor Street 14,911 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 39,096 Minor Street 14,911 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(15) Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Edison Ave. Minor St: Mill Creek Ave. Year = IY WOP

Volume = 46,108 Lanes= 1 Volume = 5,256 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 46,108 Minor Street 5,256 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 * 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 * 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 46,108 Minor Street 5,256 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 * 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100% 100% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (1) NC

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Hellman Ave. Minor St: Connector St. Year = IY WP

Volume = 1,021 Lanes= 1 Volume = 445 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,021 / Minor Street 445 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 8,000 / 5,600 9,600 / 6,720 9,600 / 6,720 8,000 / 5,600	Urban / Rural 2,400 / 1,680 2,400 / 1,680 3,200 / 2,240 3,200 / 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,021 / Minor Street 445 1 / 1 2 + / 1 2 + / 2 + 1 / 2 +	Urban / Rural 12,000 / 8,400 14,400 / 10,080 14,000 / 10,080 12,000 / 8,400	Urban / Rural 1,200 / 850 1,200 / 850 1,600 / 1,120 1,600 / 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 18% 12% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (6) No

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: The Avenue Minor St: "A" Street Year = IY WP

Volume = 2,693 Lanes= 1 Volume = 1,109 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,693 Minor Street 1,109	Urban Rural	Urban Rural
1 1 2 + 1 2 + 2 + 1 2 +	8,000 5,600 9,600 6,720 9,600 6,720 8,000 5,600	2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,693 Minor Street 1,109	Urban Rural	Urban Rural
1 1 2 + 1 2 + 2 + 1 2 +	12,000 8,400 14,400 10,080 14,000 10,080 12,000 8,400	1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 48% 32% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

13 Yes

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Haven Ave. Minor St: Schaefer Ave. Year = IY WP

Volume = 30,317 Lanes= 1 Volume = 2,113 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied: XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street: 1 (30,317); 2 +; 2 +; 1 Minor Street: 1 (2,113); 1; 2 +; 2 +	Urban: 8,000; 9,600; 9,600; 8,000 Rural: 5,600 *; 6,720; 6,720; 5,600	Urban: 2,400; 2,400; 3,200; 3,200 Rural: 1,680 *; 1,680; 2,240; 2,240
2. Interruption of Continuous traffic Satisfied: XX Not Satisfied	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street: 1 (30,317); 2 +; 2 +; 1 Minor Street: 1 (2,113); 1; 2 +; 2 +	Urban: 12,000; 14,400; 14,000; 12,000 Rural: 8,400 *; 10,080; 10,080; 8,400	Urban: 1,200; 1,200; 1,600; 1,600 Rural: 850 *; 850; 1,120; 1,120
3. Combination Satisfied: XX Not Satisfied No one warrant satisfied but following warrants fulfilled 80% or more.. 100%: 1 100%: 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

(1) NO

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Hellman Ave. Minor St: Connector St. Year = 2030 WOP
Volume = 1,024 Lanes= 1 Volume = 445 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,024 / Minor Street 445	Urban / Rural	Urban / Rural
1 / 1	8,000 / 5,600	2,400 / 1,680
2 + / 1	9,600 / 6,720	2,400 / 1,680
2 + / 2 +	9,600 / 6,720	3,200 / 2,240
1 / 2 +	8,000 / 5,600	3,200 / 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,024 / Minor Street 445	Urban / Rural	Urban / Rural
1 / 1	12,000 / 8,400	1,200 / 850
2 + / 1	14,400 / 10,080	1,200 / 850
2 + / 2 +	14,000 / 10,080	1,600 / 1,120
1 / 2 +	12,000 / 8,400	1,600 / 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 18% 12% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS (6) NO

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: The Avenue Minor St: "A" Street Year = 2030 WOP
Volume = 2,600 Lanes= 1 Volume = 1,100 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,600 Minor Street 1,100 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,600 Minor Street 1,100 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 46% 31% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Hellman Ave. Minor St: Connector St. Year = 2030 WP

Volume = 1,024 Lanes= 1 Volume = 445 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,024 Minor Street 445	Urban Rural	Urban Rural
1 1	8,000 5,600	2,400 1,680
2 + 1	9,600 6,720	2,400 1,680
2 + 2 +	9,600 6,720	3,200 2,240
1 2 +	8,000 5,600	3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 1,024 Minor Street 445	Urban Rural	Urban Rural
1 1	12,000 8,400	1,200 850
2 + 1	14,400 10,080	1,200 850
2 + 2 +	14,000 10,080	1,600 1,120
1 2 +	12,000 8,400	1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 18% 12% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

TRAFFIC SIGNAL WARRANTS

(6) No

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: The Avenue Minor St: "A" Street Year = 2030 WP

Volume = 2,693 Lanes= 1 Volume = 1,109 Lanes= 1 (one-way)

URBAN RURAL XX	Minimum Requirements EADT	
1. Minimum Vehicular Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,693 Minor Street 1,109 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 8,000 5,600 9,600 6,720 9,600 6,720 8,000 5,600	Urban Rural 2,400 1,680 2,400 1,680 3,200 2,240 3,200 2,240
2. Interruption of Continuous traffic Satisfied Not Satisfied XX	Vehicles per day on major street (both approaches)	Vehicles per day on higher volume minor-street approach (one direction only)
Number of lanes for moving traffic on each approach. Major Street 2,693 Minor Street 1,109 1 1 2 + 1 2 + 2 + 1 2 +	Urban Rural 12,000 8,400 14,400 10,080 14,000 10,080 12,000 8,400	Urban Rural 1,200 850 * 1,200 850 1,600 1,120 1,600 1,120
3. Combination Satisfied Not Satisfied XX No one warrant satisfied but following warrants fulfilled 80% or more.. 48% 32% 1 2	2 Warrants	2 Warrants

NOTES: 1. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

APPENDIX G

Future Traffic Volume Calculations

The Avenue Specific Plan Amendment Volume Development Methodology

The following steps summarize the calculations used to develop the 2015 and 2030 traffic volumes for this traffic study.

Step 1 – Compare 'Existing' traffic volumes to '2015 With Project' traffic volumes obtained from the NMC model. Use the larger movement from Existing or 2015 With Project traffic volumes. For non-backbone intersections, enter turning movements obtained from manual procedure as described in the CMP traffic study guidelines (utilizing the trip distribution from each planning area and the trip generation from the entire Specific Plan With Amendment which consists of 35,147 daily trips).

Step 2 – Flow conserve and finalize 2015 With Project volumes

Step 3 – Use manual procedure to obtain the 'project only' traffic volumes for the Specific Plan AMENDMENT (utilizing the trip distribution from each planning area and the trip generation from only the Specific Plan Amendment which consists of 3,272 daily trips). Subtract these 'project only' volumes from the '2015 With Project' volumes (in Step 2) and obtain '2015 Without Project' volumes.

NOTE: The same procedure is utilized to obtain 2030 traffic volumes. However, for Step 1, the 2030 With Project model volumes are compared to the 2015 With Project traffic volumes (not Existing traffic volumes).

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STEP 1

Compare 'Existing' and the

Model's '2015 With Project' traffic volumes

Existing (2007) AM Peak Hour Volume

Int. #	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1												
2	64	554	90	68	332	36	37	178	31	65	166	163
3												
4												
5	239	721	73	49	378	67	25	79	55	45	273	76
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16	0	528	204	84	141	0	0	0	0	58	0	127

Model 2015 With Project AM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	194	1381	89	110	468	16	6	323	84	55	181	201
3	206	1442	8	41	625	21	58	44	16	11	100	112
4	0	0	0	0	0	0	0	0	0	0	0	0
5	94	1480	353	0	453	103	128	790	313	182	1190	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	71	391	14	32	173	7	0	41	52	7	29	65
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	146	311	234	87	42	51	996	0	139	1261	300
11	0	0	0	0	0	0	0	0	0	0	0	0
12	79	1118	79	216	704	10	5	336	191	50	211	150
13	14	1277	0	0	1000	38	130	0	27	0	0	0
14	203	923	102	123	481	196	525	1029	125	12	1297	24
15	228	314	66	73	57	41	138	1374	62	246	1702	299
16	167	1349	244	111	171	201	155	1436	100	71	2536	73

2015 With Project AM Peak Hour Volume Without Flow Conservation

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	194	1381	90	110	468	36	37	323	84	65	181	201
3	206	1442	8	41	625	21	58	44	16	11	100	112
4	103	28	27	52	16	89	140	50	39	42	38	78
5	239	1480	353	49	453	103	128	790	313	182	1190	76
6	39	19	13	50	20	69	58	73	4	8	52	35
7	0	0	0	34	0	59	30	135	0	0	139	11
8	71	391	14	32	173	7	0	41	52	7	29	65
9	83	98	16	7	75	13	34	0	105	32	0	0
10	0	146	311	234	87	42	51	996	0	139	1261	300
11	57	5	48	108	11	11	5	265	9	8	170	46
12	79	1118	79	216	704	10	5	336	191	50	211	150
13	14	1277	0	0	1000	38	130	0	27	0	0	0
14	203	923	102	123	481	196	525	1029	125	12	1297	24
15	228	314	66	73	57	41	138	1374	62	246	1702	299
16	167	1349	244	111	171	201	155	1436	100	71	2536	127

Existing (2007) PM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1												
2	40	572	30	106	877	22	57	94	79	23	27	90
3												
4												
5	77	437	59	57	691	43	84	288	219	78	64	25
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16	0	290	93	166	519	0	0	0	0	148	0	49

Model's 2015 With Project PM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	71	1192	115	192	1768	50	25	451	236	93	392	233
3	250	1312	7	93	1969	25	59	298	259	11	131	89
4	0	0	0	0	0	0	0	0	0	0	0	0
5	35	1378	379	0	1926	197	167	1177	1192	141	1054	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	59	451	4	151	656	3	2	113	193	10	111	158
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	142	224	608	209	36	102	1364	0	320	1128	351
11	0	0	0	0	0	0	0	0	0	0	0	0
12	164	1056	75	172	1348	23	10	319	95	148	468	272
13	136	1276	0	0	1585	182	141	0	102	0	0	0
14	248	675	35	269	1141	360	379	1524	377	108	1387	171
15	163	189	32	233	133	75	179	2289	235	84	1953	177
16	125	766	170	102	1480	210	235	2577	422	367	2275	164

2015 WIth Project PM Peak Hour Volumes Without Flow Conservation

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1192	115	192	1768	50	57	451	236	93	392	233
3	250	1312	7	93	1969	25	59	298	259	11	131	89
4	90	70	19	78	80	48	62	22	8	21	38	54
5	77	1378	379	57	1926	197	167	1177	1192	141	1054	25
6	28	8	8	25	8	28	16	72	14	29	63	37
7	0	0	0	22	0	34	44	168	0	0	173	38
8	59	451	4	151	656	3	2	113	193	10	111	158
9	97	52	56	25	68	32	27	0	69	46	0	0
10	0	142	224	608	209	36	102	1364	0	320	1128	351
11	33	19	28	152	15	15	19	155	34	33	246	162
12	164	1056	75	172	1348	23	10	319	95	148	468	272
13	136	1276	0	0	1585	182	141	0	102	0	0	0
14	248	675	35	269	1141	360	379	1524	377	108	1387	171
15	163	189	32	233	133	75	179	2289	235	84	1953	177
16	125	766	170	166	1480	210	235	2577	422	367	2275	164

STEP 2

Flow conserve and finalize '2015 With Project' volumes

Final 2015 WP AM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	194	1381	90	110	468	36	37	323	84	65	181	201
3	206	1559	8	41	638	21	58	44	16	11	100	112
4	103	1555	27	52	524	89	140	50	39	42	38	78
5	239	1480	353	49	453	103	128	790	313	182	1190	76
6	39	19	13	50	51	69	58	73	4	8	52	35
7	0	0	0	34	0	59	30	1161	0	0	1389	11
8	71	391	14	32	173	7	0	41	52	7	29	65
9	83	398	16	7	226	13	34	0	105	32	0	0
10	0	146	311	234	87	42	51	1144	0	139	1358	300
11	57	5	48	108	11	11	5	1675	9	8	1730	46
12	79	1118	79	216	704	10	5	336	191	50	211	150
13	14	1277	0	0	1000	38	130	0	27	0	0	0
14	203	923	102	123	481	284	525	1181	125	12	1297	24
15	228	314	66	73	57	41	138	1374	62	246	1702	299
16	167	1349	244	111	171	201	155	1436	100	71	2536	127

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Final 2015 WP PM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1192	115	192	1768	50	57	451	236	93	392	233
3	250	1321	7	93	2008	25	59	298	259	11	131	89
4	90	1461	19	78	2152	48	62	22	8	21	38	54
5	77	1378	379	57	1926	197	167	1177	1192	141	1054	25
6	28	8	8	25	8	28	16	72	14	29	63	37
7	0	0	0	22	0	34	44	1568	0	0	1187	38
8	59	451	4	151	656	3	2	113	193	10	111	158
9	97	442	56	25	738	32	27	0	69	46	0	0
10	0	142	224	608	209	36	102	1488	0	320	1189	351
11	33	19	28	152	15	15	19	2267	34	33	1813	162
12	164	1056	75	172	1348	23	10	319	95	148	468	272
13	136	1276	0	0	1585	182	141	0	102	0	0	0
14	248	675	35	269	1141	373	379	1691	377	108	1387	171
15	163	189	32	233	133	75	179	2289	235	84	1953	177
16	125	766	170	166	1480	210	235	2577	422	367	2275	164

STEP 3

Subtract the 'Project Only' volumes from Step 2 and obtain '2015 Without Project' volumes

Project Only
AM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	9	0	0	0	0	0	0	0	0	0	0
3	0	8	0	-3	2	0	0	2	0	0	1	2
4	0	0	0	2	0	0	0	0	0	0	0	8
5	0	0	0	0	0	0	0	1	0	4	8	0
6	7	0	0	0	0	0	0	2	1	0	1	0
7	0	0	0	1	0	6	2	0	0	0	7	0
8	1	5	0	1	-2	0	0	2	-3	0	1	1
9	0	1	7	3	-4	2	3	0	0	5	0	0
10	0	1	-7	0	2	6	7	-7	0	-1	1	1
11	-4	2	-3	17	2	2	2	10	-14	-14	3	19
12	0	23	2	0	26	1	3	0	0	2	0	0
13	0	1	0	0	-4	32	24	0	1	0	0	0
14	4	0	0	1	-3	-3	1	19	3	-4	7	0
15	0	0	0	0	0	0	0	19	0	0	4	0
16	0	0	0	0	0	1	2	17	0	0	3	0

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Final 2015 WOP AM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	194	1372	90	110	468	36	37	323	84	65	181	201
3	206	1551	8	44	636	21	58	42	16	11	99	110
4	103	1555	27	50	524	89	140	50	39	42	38	70
5	239	1480	353	49	453	103	128	789	313	178	1182	76
6	32	19	13	50	51	69	58	71	3	8	51	35
7	81	8	134	33	8	53	28	1161	119	131	1382	11
8	70	386	14	31	175	7	0	39	55	7	28	64
9	83	397	9	4	230	11	31	0	105	27	0	0
10	0	145	318	234	85	36	44	1151	0	140	1357	299
11	61	3	51	91	9	9	3	1665	23	22	1727	27
12	79	1095	77	216	678	9	2	336	191	48	211	150
13	14	1276	0	0	1004	6	106	0	26	0	0	0
14	199	923	102	122	484	287	524	1162	122	16	1290	24
15	228	314	66	73	57	41	138	1355	62	246	1698	299
16	167	1349	244	111	171	200	153	1419	100	71	2533	127
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/ = Volumes obtained Dec 2008

Project Only PM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	-4	0	0	3	0	0	0	0	0	0	0
3	0	5	0	-6	9	0	0	6	0	0	7	-9
4	0	0	1	9	0	0	0	0	0	0	0	5
5	0	1	3	0	0	0	0	10	0	1	6	0
6	5	0	0	0	0	0	0	6	4	1	1	0
7	0	0	0	1	0	4	6	6	0	0	3	1
8	-10	-7	0	6	-2	0	0	6	-6	0	7	6
9	0	-26	25	11	-21	2	3	0	0	28	0	0
10	0	2	-20	-21	1	28	27	-20	0	-24	-24	-22
11	-91	8	-77	92	9	9	8	7	-43	-42	12	72
12	1	110	8	0	101	3	2	0	1	8	0	0
13	1	-12	0	0	-9	120	132	0	0	0	0	0
14	17	0	0	0	-10	-10	-12	16	18	-12	35	1
15	1	0	0	0	0	-1	-2	17	1	0	24	0
16	0	0	0	0	0	2	2	14	0	0	21	0

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Final 2015 WOP PM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1196	115	192	1765	50	57	451	236	93	392	233
3	250	1316	7	99	1999	25	59	292	259	11	124	98
4	90	1461	18	69	2152	48	62	22	8	21	38	49
5	77	1377	376	57	1926	197	167	1167	1192	140	1048	25
6	23	8	8	25	8	28	16	66	10	28	62	37
7	~~845~~	~~85~~	~~873~~	21	~~87~~	30	38	1562	~~854~~	~~888~~	1184	37
8	69	458	4	145	658	3	2	107	199	10	104	152
9	97	468	31	14	759	30	24	0	69	18	0	0
10	0	140	244	629	208	8	75	1508	0	344	1213	373
11	124	11	105	60	6	6	11	2260	77	75	1801	90
12	163	946	67	172	1247	20	8	319	94	140	468	272
13	135	1288	0	0	1594	62	9	0	102	0	0	0
14	231	675	35	269	1151	383	391	1675	359	120	1352	170
15	162	189	32	233	133	76	181	2272	234	84	1929	177
16	125	766	170	166	1480	208	233	2563	422	367	2254	164

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/=Volumes obtained Dec 2003

2030 TRAFFIC VOLUMES

STEP 1

Compare the final '2015 With Project' traffic volumes to the Model's '2030 With Project' traffic volumes to ensure no negative growth occurred

Model's 2030 With Project AM Peak Hour Volumes

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	212	1360	26	109	637	31	68	526	26	73	342	148
3	98	1525	6	106	731	4	3	116	0	9	74	122
4	0	0	0	0	0	0	0	0	0	0	0	0
5	57	1612	1015	0	809	7	5	941	564	192	1700	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	39	315	11	52	147	7	1	138	1	3	29	57
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	13	258	149	6	92	87	1755	0	123	1750	268
11	0	0	0	0	0	0	0	0	0	0	0	0
12	109	1100	64	226	693	23	34	500	147	23	391	154
13	16	1461	0	0	965	8	30	0	141	0	0	0
14	184	840	71	122	505	236	765	1371	142	0	1677	29
15	225	391	79	96	114	48	165	1644	41	271	1966	253
16	141	1789	347	249	280	161	308	1317	78	169	2391	385

2030 With Project AM Peak Hour Volumes Without Flow Conservation

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	212	1381	90	110	637	36	68	526	84	73	342	201
3	206	1559	8	106	731	21	58	116	16	11	100	122
4	103	1555	27	52	524	89	140	50	39	42	38	78
5	239	1612	1015	49	809	103	128	941	564	192	1700	76
6	39	19	13	50	51	69	58	73	4	8	52	35
7	0	0	0	34	0	59	30	1161	0	0	1389	11
8	71	391	14	52	173	7	1	138	52	7	29	65
9	83	398	16	7	226	13	34	0	105	32	0	0
10	0	146	311	234	87	92	87	1755	0	139	1750	300
11	57	5	48	108	11	11	5	1675	9	8	1730	46
12	109	1118	79	226	704	23	34	500	191	50	391	154
13	16	1461	0	0	1000	38	130	0	141	0	0	0
14	203	923	102	123	505	284	765	1371	142	12	1677	29
15	228	391	79	96	114	48	165	1644	62	271	1966	299
16	167	1789	347	249	280	201	308	1436	100	169	2536	385

Model's 2030 With Project PM Peak Hour Volumes

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	38	1217	42	168	1675	102	54	678	21	40	659	158
3	421	1304	3	113	1684	21	13	392	62	53	309	95
4	0	0	0	0	0	0	0	0	0	0	0	0
5	87	1740	1134	3	1688	74	3	1152	1739	157	1756	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	71	366	3	239	378	51	2	146	236	8	253	255
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	20	183	521	26	75	223	1934	0	282	1804	284
11	0	0	0	0	0	0	0	0	0	0	0	0
12	73	1049	50	211	1195	24	34	615	58	73	675	242
13	378	1313	0	0	1511	32	18	0	234	0	0	0
14	246	717	29	188	1103	471	505	1851	304	133	1801	209
15	144	246	262	292	382	94	84	2330	219	218	2271	173
16	129	1061	397	563	2014	296	254	2312	320	372	2071	407

2030 WIth Project PM Peak Hour Volumes Without Flow Conservation

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1217	115	192	1768	102	57	678	236	93	659	233
3	421	1321	7	113	2008	25	59	392	259	53	309	95
4	90	1461	19	78	2152	48	62	22	8	21	38	54
5	87	1740	1134	57	1926	197	167	1177	1739	157	1756	25
6	28	8	8	25	8	28	16	72	14	29	63	37
7	0	0	0	22	0	34	44	1568	0	0	1187	38
8	71	451	4	239	656	51	2	146	236	10	253	255
9	97	442	56	25	738	32	27	0	69	46	0	0
10	0	142	224	608	209	75	223	1934	0	320	1804	351
11	33	19	28	152	15	15	19	2267	34	33	1813	162
12	164	1056	75	211	1348	24	34	615	95	148	675	272
13	378	1313	0	0	1585	182	141	0	234	0	0	0
14	248	717	35	269	1141	471	505	1851	377	133	1801	209
15	163	246	262	292	382	94	179	2330	235	218	2271	177
16	129	1061	397	563	2014	296	254	2577	422	372	2275	407

STEP 2

Flow conserve and finalize '2030 With Project' volumes

FINAL 2030 WITH PROJECT AM PEAK HOUR VOLUMES

Int. #	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	212	1481	90	110	812	36	68	526	84	73	342	201
3	206	1691	8	106	994	21	58	116	16	11	100	122
4	103	1687	27	52	880	89	140	50	39	42	38	78
5	239	1612	1015	49	809	103	128	941	564	192	1700	76
6	39	19	13	50	51	69	58	73	4	8	52	35
7	0	0	0	34	0	59	30	1974	0	0	1909	11
8	71	391	14	52	173	7	1	138	52	7	29	65
9	83	398	16	7	226	13	34	0	105	32	0	0
10	0	146	311	234	87	92	87	1921	0	139	1828	300
11	57	5	48	108	11	11	5	2453	9	8	2200	46
12	109	1118	79	226	704	23	34	500	191	50	391	154
13	16	1461	0	0	1000	38	130	0	141	0	0	0
14	203	923	102	123	505	374	765	1702	142	12	1677	29
15	228	391	79	96	114	48	165	1644	62	271	1966	299
16	167	1789	347	249	280	201	308	1436	100	169	2536	385

FINAL 2030 WITH PROJECT PM PEAK HOUR VOLUMES

Int. #	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1342	115	192	1768	102	57	678	236	93	659	233
3	421	1512	7	113	2008	25	59	392	259	53	309	95
4	90	1823	19	78	2194	48	62	22	8	21	38	54
5	87	1740	1134	57	1968	197	167	1177	1739	157	1756	25
6	28	8	8	25	8	28	16	72	14	29	63	37
7	0	0	0	22	0	34	44	2324	0	0	1903	38
8	71	451	4	239	656	51	2	146	236	10	253	255
9	97	563	56	25	777	32	27	0	69	46	0	0
10	0	142	224	608	209	75	223	2123	0	320	1866	351
11	33	19	28	152	15	15	19	2902	34	33	2490	162
12	164	1056	75	211	1348	24	34	615	95	148	675	272
13	378	1313	0	0	1585	182	141	0	234	0	0	0
14	248	717	35	269	1141	471	505	2199	377	133	1967	209
15	163	246	262	292	382	94	179	2330	235	218	2271	177
16	129	1061	397	563	2014	296	254	2577	422	372	2275	407

STEP 3

Subtract the 'Project Only' volumes from Step 2
and obtain '2030 Without Project' volumes

Project Only AM Peak Hour Volume

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	9	0	0	0	0	0	0	0	0	0	0
3	0	8	0	-3	2	0	0	2	0	0	1	2
4	0	0	0	2	0	0	0	0	0	0	0	8
5	0	0	0	0	0	0	0	1	0	4	8	0
6	7	0	0	0	0	0	0	2	1	0	1	0
7	0	0	0	1	0	6	2	0	0	0	7	0
8	1	5	0	1	-2	0	0	2	-3	0	1	1
9	0	1	7	3	-4	2	3	0	0	5	0	0
10	0	1	-7	0	2	6	7	-7	0	-1	1	1
11	-4	2	-3	17	2	2	2	10	-14	-14	3	19
12	0	23	2	0	26	1	3	0	0	2	0	0
13	0	1	0	0	-4	32	24	0	1	0	0	0
14	4	0	0	1	-3	-3	1	19	3	-4	7	0
15	0	0	0	0	0	0	0	19	0	0	4	0
16	0	0	0	0	0	1	2	17	0	0	3	0

FINAL 2030 WITHOUT PROJECT AM PEAK HOUR VOLUMES

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	5	22	6	2	7	13	37	0	14	17	0	6
2	212	1472	90	110	812	36	68	526	84	73	342	201
3	206	1683	8	109	992	21	58	114	16	11	99	120
4	103	1687	27	50	880	89	140	50	39	42	38	70
5	239	1612	1015	49	809	103	128	940	564	188	1692	76
6	32	19	13	50	51	69	58	71	3	8	51	35
7	~~81~~	~~8~~	~~134~~	33	~~8~~	53	28	1974	~~119~~	~~131~~	1902	11
8	70	386	14	51	175	7	1	136	55	7	28	64
9	83	397	9	4	230	11	31	0	105	27	0	0
10	0	145	318	234	85	86	80	1928	0	140	1827	299
11	61	3	51	91	9	9	3	2443	23	22	2197	27
12	109	1095	77	226	678	22	31	500	191	48	391	154
13	16	1460	0	0	1004	6	106	0	140	0	0	0
14	199	923	102	122	508	377	764	1683	139	16	1670	29
15	228	391	79	96	114	48	165	1625	62	271	1962	299
16	167	1789	347	249	280	200	306	1419	100	169	2533	385

/ = Volumes obtained Dec 2008

Project Only PM Peak Hour Volumes

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	-4	0	0	3	0	0	0	0	0	0	0
3	0	5	0	-6	9	0	0	6	0	0	7	-9
4	0	0	1	9	0	0	0	0	0	0	0	5
5	0	1	3	0	0	0	0	10	0	1	6	0
6	5	0	0	0	0	0	0	6	4	1	1	0
7	0	0	0	1	0	4	6	6	0	0	3	1
8	-10	-7	0	6	-2	0	0	6	-6	0	7	6
9	0	-26	25	11	-21	2	3	0	0	28	0	0
10	0	2	-20	-21	1	28	27	-20	0	-24	-24	-22
11	-91	8	-77	92	9	9	8	7	-43	-42	12	72
12	1	110	8	0	101	3	2	0	1	8	0	0
13	1	-12	0	0	-9	120	132	0	0	0	0	0
14	17	0	0	0	-10	-10	-12	16	18	-12	35	1
15	1	0	0	0	0	-1	-2	17	1	0	24	0
16	0	0	0	0	0	2	2	14	0	0	21	0

FINAL 2030 WITHOUT PROJECT PM PEAK HOUR VOLUMES

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
Int. #	L	T	R	L	T	R	L	T	R	L	T	R
1	16	16	19	7	24	43	25	0	9	11	0	4
2	71	1346	115	192	1765	102	57	678	236	93	659	233
3	421	1507	7	119	1999	25	59	386	259	53	302	104
4	90	1823	18	69	2194	48	62	22	8	21	38	49
5	87	1739	1131	57	1968	197	167	1167	1739	156	1750	25
6	23	8	8	25	8	28	16	66	10	28	62	37
7	~~045~~	~~05~~	~~073~~	21	~~0~~ 7	30	38	2318	~~054~~	~~088~~	1900	37
8	81	458	4	233	658	51	2	140	242	10	246	249
9	97	589	31	14	798	30	24	0	69	18	0	0
10	0	140	244	629	208	47	196	2143	0	344	1890	373
11	124	11	105	60	6	6	11	2895	77	75	2478	90
12	163	946	67	211	1247	21	32	615	94	140	675	272
13	377	1325	0	0	1594	62	9	0	234	0	0	0
14	231	717	35	269	1151	481	517	2183	359	145	1932	208
15	162	246	262	292	382	95	181	2313	234	218	2247	177
16	129	1061	397	563	2014	294	252	2563	422	372	2254	407

U:\UcJobs_05100-05500_05200\05279\Excel\Future Vols\2030 Traffic Forecasts\[2030 WP CALCS_use me!.xls]2030 WOP PM

APPENDIX H

2015 Without Project
HCM Intersection Analysis Worksheets

The Avenue
AM 2015 Without Project Conditions
JN 5279

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

Intersection #1 Hellman/Ontario Ave, (NS) / PA 1 Access (EW)

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: A[8.9]

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		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	5	22		6			2	7		13			37		0	14			17		0	6		
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:	5	22		6			2	7		13			37		0	14			17		0	6		
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:	5	23		6			2	7		14			39		0	15			18		0	6		
Reduct Vol:	0	0		0			0	0		0			0		0	0			0		0	0		
FinalVolume:	5	23		6			2	7		14			39		0	15			18		0	6		
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:	21	xxxx	xxxxx				29	xxxx	xxxxx				58	58		14			63	62		26		
Potent Cap.:	1608	xxxx	xxxxx				1597	xxxx	xxxxx				943	836		1071			937	833		1055		
Move Cap.:	1608	xxxx	xxxxx				1597	xxxx	xxxxx				934	833		1071			921	829		1055		
Volume/Cap:	0.00	xxxx	xxxx				0.00	xxxx	xxxx				0.04	0.00		0.01			0.02	0.00		0.01		
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	7.2	xxxx	xxxxx				7.3	xxxx	xxxxx				9.0	xxxx	xxxxx				9.0	xxxx	xxxxx			
LOS by Move:	A	*		*			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	xxxx		1071			xxxx	xxxx		1055		
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		0.0			xxxxx	xxxx		0.0		
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		8.4			xxxxx	xxxx		8.4		
Shared LOS:	*	*		*			*	*		*			*	*		A			*	*		A		
ApproachDel:	xxxxxx						xxxxxx						8.9						8.8					
ApproachLOS:	*						*						A						A					

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

The Avenue
AM 2015 Without Project Conditions
JN 5279

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 75 Critical Vol./Cap.(X): 0.677
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	22	22		10	22	22		25	25	25		24	24	24	
Lanes:	1	0 2	1	0	1	0 1	1	0	0	1 0	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	194	1372	90		110	468	36		37	323	84		65	181	201	
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:	194	1372	90		110	468	36		37	323	84		65	181	201	
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:	0.82	0.82	0.82		0.75	0.75	0.75		0.75	0.75	0.75		0.75	0.75	0.75	
PHF Volume:	237	1673	110		147	624	48		49	431	112		87	241	268	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	237	1673	110		147	624	48		49	431	112		87	241	268	
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	1.10	1.10		1.00	1.05	1.05		1.05	1.05	1.05		1.00	1.05	1.05	
FinalVolume:	237	1840	121		147	655	50		52	452	118		87	253	281	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.82	0.18		1.00	1.86	0.14		0.17	1.45	0.38		1.00	1.00	1.00	
Final Sat.:	1700	5068	332		1700	3343	257		299	2606	678		1700	1800	1800	
Capacity Analysis Module:																
Vol/Sat:	0.14	0.36	0.36		0.09	0.20	0.20		0.17	0.17	0.17		0.05	0.14	0.16	
Crit Moves:		****			****					****						
Green/Cycle:	0.19	0.45	0.45		0.13	0.40	0.40		0.33	0.33	0.33		0.33	0.33	0.33	
Volume/Cap:	0.74	0.80	0.80		0.65	0.49	0.49		0.52	0.52	0.52		0.15	0.42	0.47	
Delay/Veh:	37.3	19.6	19.6		37.2	17.2	17.2		20.6	20.6	20.6		17.7	19.6	20.1	
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:	37.3	19.6	19.6		37.2	17.2	17.2		20.6	20.6	20.6		17.7	19.6	20.1	
LOS by Move:	D	B	B		D	B	B		C	C	C		B	B	C	
HCM2kAvgQ:	7	15	15		5	6	6		6	6	6		2	5	5	

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.563
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.5
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	17	17		10	17	17		10	23	23		10	23	23	
Lanes:	1	0 2	1	0	1	0 2	1	0	1	0 1	0	1	1	0 0	1	0
Volume Module:																
Base Vol:	206	1551	8		44	636	21		58	42	16		11	99	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:	206	1551	8		44	636	21		58	42	16		11	99	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:	0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95		0.95	0.95	0.95	
PHF Volume:	217	1633	8		46	669	22		61	44	17		12	104	116	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	217	1633	8		46	669	22		61	44	17		12	104	116	
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	1.10	1.10		1.00	1.10	1.10		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	217	1796	9		46	736	24		61	44	17		12	104	116	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.98	0.02		1.00	2.90	0.10		1.00	1.00	1.00		1.00	0.47	0.53	
Final Sat.:	1700	5372	28		1700	5227	173		1700	1800	1800		1700	853	947	
Capacity Analysis Module:																
Vol/Sat:	0.13	0.33	0.33		0.03	0.14	0.14		0.04	0.02	0.01		0.01	0.12	0.12	
Crit Moves:		****			****				****					****		
Green/Cycle:	0.27	0.51	0.51		0.10	0.34	0.34		0.10	0.22	0.22		0.10	0.22	0.22	
Volume/Cap:	0.47	0.65	0.65		0.29	0.41	0.41		0.38	0.11	0.04		0.07	0.56	0.56	
Delay/Veh:	33.0	19.2	19.2		45.2	26.7	26.7		46.1	33.0	32.4		43.5	38.3	38.3	
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:	33.0	19.2	19.2		45.2	26.7	26.7		46.1	33.0	32.4		43.5	38.3	38.3	
LOS by Move:	C	B	B		D	C	C		D	C	C		D	D	D	
HCM2kAvgQ:	6	15	15		2	6	6		2	1	0		0	7	7	

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.714
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 29.5
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	103	1555	27	50	524	89	140	50	39	42	38	70
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:	103	1555	27	50	524	89	140	50	39	42	38	70
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:	108	1637	28	53	552	94	147	53	41	44	40	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1637	28	53	552	94	147	53	41	44	40	74
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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1719	30	53	607	103	147	53	41	44	40	74
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	2.56	0.44	1.00	0.56	0.44	1.00	0.35	0.65
Final Sat.:	1700	3539	61	1700	4616	784	1700	1011	789	1700	633	1167
Capacity Analysis Module:												
Vol/Sat:	0.06	0.49	0.49	0.03	0.13	0.13	0.09	0.05	0.05	0.03	0.06	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.26	0.58	0.58	0.08	0.41	0.41	0.10	0.18	0.18	0.09	0.17	0.17
Volume/Cap:	0.25	0.84	0.84	0.37	0.32	0.32	0.84	0.29	0.29	0.29	0.38	0.38
Delay/Veh:	35.6	23.8	23.8	53.7	24.5	24.5	81.0	43.0	43.0	52.1	45.3	45.3
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:	35.6	23.8	23.8	53.7	24.5	24.5	81.0	43.0	43.0	52.1	45.3	45.3
LOS by Move:	D	C	C	D	C	C	F	D	D	D	D	D
HCM2kAvgQ:	3	28	28	2	6	6	8	3	3	2	4	4

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

The Avenue
AM 2015 Without Project Conditions
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	1.947
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	352.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	F

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1
Volume Module:												
Base Vol:	239	1480	353	49	453	103	128	789	313	178	1182	76
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:	239	1480	353	49	453	103	128	789	313	178	1182	76
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:	0.96	0.96	0.96	0.86	0.86	0.86	0.88	0.88	0.88	0.78	0.78	0.78
PHF Volume:	249	1542	368	57	527	120	145	897	356	228	1515	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	1542	368	57	527	120	145	897	356	228	1515	97
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:	249	1542	368	57	527	120	145	897	356	228	1515	97
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.86	0.20	0.03	0.29	0.07	0.09	0.50	0.20	0.13	0.84	0.05
Crit Moves:		****		****			****				****	
Green/Cycle:	0.16	0.39	0.39	0.08	0.31	0.31	0.08	0.36	0.36	0.10	0.38	0.38
Volume/Cap:	0.93	2.22	0.53	0.40	0.93	0.21	1.03	1.36	0.54	1.36	2.22	0.14
Delay/Veh:	87.7	588	29.1	54.0	62.9	30.5	137.9	212	31.1	251.7	589	24.5
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:	87.7	588	29.1	54.0	62.9	30.5	137.9	212	31.1	251.7	589	24.5
LOS by Move:	F	F	C	D	E	C	F	F	C	F	F	C
HCM2kAvgQ:	13	159	11	3	23	3	10	63	11	19	156	2

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.720
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	38.7
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0	1	1 0 3	1	0	1 0 2	0	1	1 0 2	1	0
Volume Module:												
Base Vol:	239	1480	353	49	453	103	128	789	313	178	1182	76
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:	239	1480	353	49	453	103	128	789	313	178	1182	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.86	0.86	0.86	0.88	0.88	0.00	0.78	0.78	0.78
PHF Volume:	249	1542	368	57	527	120	145	897	0	228	1515	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	1542	368	57	527	120	145	897	0	228	1515	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.05	0.00	1.00	1.10	1.10
FinalVolume:	249	1696	368	57	579	132	145	941	0	228	1667	107
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.26	0.74	1.00	2.00	1.00	1.00	2.82	0.18
Final Sat.:	1700	5400	1800	1700	5866	1334	1700	3600	1800	1700	5074	326
Capacity Analysis Module:												
Vol/Sat:	0.15	0.31	0.20	0.03	0.10	0.10	0.09	0.26	0.00	0.13	0.33	0.33
Crit Moves:	****				****		****					****
Green/Cycle:	0.17	0.33	0.33	0.11	0.27	0.27	0.11	0.33	0.00	0.15	0.37	0.37
Volume/Cap:	0.88	0.95	0.62	0.30	0.36	0.36	0.81	0.79	0.00	0.92	0.88	0.88
Delay/Veh:	65.3	43.5	28.9	39.8	27.9	27.9	65.4	32.4	0.0	76.9	33.1	33.1
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:	65.3	43.5	28.9	39.8	27.9	27.9	65.4	32.4	0.0	76.9	33.1	33.1
LOS by Move:	E	D	C	D	C	C	E	C	A	E	C	C
HCM2kAvgQ:	11	21	10	2	4	4	7	14	0	11	20	20

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

21:8:08 A St. at The Avenue IYWOP AM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	13	19	32	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	35	51	8	0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	69	51	50	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	3	71	58	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	64	94	170	132	AVEDEL s	2.9
CAPACITY	veh	1316	1340	1356	1340	LOS SIG	A
AVE DELAY	secs	2.8	2.8	3.0	2.9	LOS UNSIG	A
MAX DELAY	secs	3.6	3.6	3.8	3.7		
AVE QUEUE	veh	0	0	0	0	VEHIC HRS	0.4
MAX QUEUE	veh	0	0	0	0	COST $	6

The Avenue
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.588
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	23.8
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	20	20	10	20	20	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	81	8	134	33	8	53	28	1161	119	131	1382	11
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:	81	8	134	33	8	53	28	1161	119	131	1382	11
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:	85	8	141	35	8	56	29	1222	125	138	1455	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	8	141	35	8	56	29	1222	125	138	1455	12
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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	85	8	141	35	8	56	29	1283	132	138	1527	12
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.06	0.94	1.00	0.13	0.87	1.00	1.81	0.19	1.00	1.98	0.02
Final Sat.:	1700	101	1699	1700	236	1564	1700	3265	335	1700	3572	28
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.02	0.04	0.04	0.02	0.39	0.39	0.08	0.43	0.43
Crit Moves:		****		****			****				****	
Green/Cycle:	0.08	0.17	0.17	0.08	0.17	0.17	0.08	0.56	0.56	0.12	0.60	0.60
Volume/Cap:	0.60	0.50	0.50	0.25	0.21	0.21	0.21	0.70	0.70	0.68	0.71	0.71
Delay/Veh:	60.2	46.7	46.7	52.4	43.6	43.6	52.0	19.9	19.9	59.5	17.9	17.9
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:	60.2	46.7	46.7	52.4	43.6	43.6	52.0	19.9	19.9	59.5	17.9	17.9
LOS by Move:	E	D	D	D	D	D	D	B	B	E	B	B
HCM2kAvgQ:	4	5	5	1	2	2	1	19	19	6	20	20

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	70	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle: OPTIMIZED		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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	70	386	14	31	175	7	0	39	55	7	28	64
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:	70	386	14	31	175	7	0	39	55	7	28	64
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:	74	406	15	33	184	7	0	41	58	7	29	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	406	15	33	184	7	0	41	58	7	29	67
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:	74	406	15	33	184	7	0	41	58	7	29	67
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.97	0.03	1.00	0.96	0.04	1.00	0.41	0.59	1.00	0.30	0.70
Final Sat.:	1700	1737	63	1700	1731	69	1700	747	1053	1700	548	1252
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.02	0.11	0.11	0.00	0.05	0.05	0.00	0.05	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.23	0.40	0.40	0.14	0.32	0.32	0.00	0.20	0.20	0.14	0.34	0.34
Volume/Cap:	0.19	0.58	0.58	0.13	0.34	0.34	0.00	0.27	0.27	0.03	0.16	0.16
Delay/Veh:	22.2	17.7	17.7	26.5	18.6	18.6	0.0	24.1	24.1	25.9	16.1	16.1
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:	22.2	17.7	17.7	26.5	18.6	18.6	0.0	24.1	24.1	25.9	16.1	16.1
LOS by Move:	C	B	B	C	B	B	A	C	C	C	B	B
HCM2kAvgQ:	1	8	8	1	3	3	0	2	2	0	1	1

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

21:8:08 Turnr at The Avenue IYWOP AM Peak Hour 8

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	9	397	83	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	27	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	11	230	4	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	105	0	31	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	489	27	245	136	AVEDEL s	3.6
CAPACITY	veh	1382	1157	1347	1271	LOS SIG	A
AVE DELAY	secs	4.0	3.1	3.2	3.1	LOS UNSIG	A
MAX DELAY	secs	5.2	4.0	4.1	4.0		
AVE QUEUE	veh	1	0	0	0	VEHIC HRS	0.9
MAX QUEUE	veh	1	0	0	0	COST $	13

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.800
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	33.0
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	0	145	318	234	85	36	44	1151	0	140	1357	299
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	145	318	234	85	36	44	1151	0	140	1357	299
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	153	335	246	89	38	46	1212	0	147	1428	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	153	335	246	89	38	46	1212	0	147	1428	315
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.10
FinalVolume:	0	153	335	254	89	38	46	1333	0	152	1571	346
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	0.31	0.69	2.00	0.70	0.30	1.00	3.00	0.00	2.00	2.46	0.54
Final Sat.:	1700	564	1236	3200	1264	536	1700	5400	0	3200	4425	975
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.08	0.07	0.07	0.03	0.25	0.00	0.05	0.36	0.36
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.31	0.31	0.11	0.41	0.41	0.11	0.35	0.00	0.15	0.40	0.40
Volume/Cap:	0.00	0.89	0.89	0.75	0.17	0.17	0.26	0.70	0.00	0.31	0.89	0.89
Delay/Veh:	0.0	47.5	47.5	50.6	17.9	17.9	39.9	27.4	0.0	36.3	31.4	31.4
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	47.5	47.5	50.6	17.9	17.9	39.9	27.4	0.0	36.3	31.4	31.4
LOS by Move:	A	D	D	D	B	B	D	C	A	D	C	C
HCM2kAvgQ:	0	17	17	6	2	2	2	12	0	2	21	21

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.499
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.5
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	61	3	51	91	9	9	3	1665	23	22	1727	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:	61	3	51	91	9	9	3	1665	23	22	1727	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:	64	3	54	96	9	9	3	1753	24	23	1818	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	3	54	96	9	9	3	1753	24	23	1818	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	1.10	1.10	1.00	1.10	1.10
FinalVolume:	64	3	54	96	9	9	3	1928	27	23	2000	31
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.06	0.94	1.00	0.50	0.50	1.00	2.96	0.04	1.00	2.95	0.05
Final Sat.:	1700	100	1700	1700	900	900	1700	5326	74	1700	5317	83
Capacity Analysis Module:												
Vol/Sat:	0.04	0.03	0.03	0.06	0.01	0.01	0.00	0.36	0.36	0.01	0.38	0.38
Crit Moves:		****		****			****				****	
Green/Cycle:	0.08	0.22	0.22	0.08	0.22	0.22	0.08	0.51	0.51	0.12	0.55	0.55
Volume/Cap:	0.45	0.15	0.15	0.68	0.05	0.05	0.02	0.70	0.70	0.11	0.68	0.68
Delay/Veh:	54.7	38.2	38.2	65.7	37.3	37.3	50.6	23.0	23.0	47.5	20.1	20.1
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:	54.7	38.2	38.2	65.7	37.3	37.3	50.6	23.0	23.0	47.5	20.1	20.1
LOS by Move:	D	D	D	E	D	D	D	C	C	D	C	C
HCM2kAvgQ:	3	2	2	5	1	1	0	19	19	1	18	18

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.897
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 48.0
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	17	17	10	17	17	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	79	1095	77	216	678	9	2	336	191	48	211	150
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	1095	77	216	678	9	2	336	191	48	211	150
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	1153	81	227	714	9	2	354	201	51	222	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1153	81	227	714	9	2	354	201	51	222	158
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	1.05	1.05	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.05	1.05
FinalVolume:	83	1210	85	227	749	10	2	354	201	51	233	166
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.97	0.03	1.00	0.64	0.36	1.00	1.17	0.83
Final Sat.:	1700	3363	237	1700	3553	47	1700	1148	652	1700	2104	1496
Capacity Analysis Module:												
Vol/Sat:	0.05	0.36	0.36	0.13	0.21	0.21	0.00	0.31	0.31	0.03	0.11	0.11
Crit Moves:		****		****				****		****		
Green/Cycle:	0.16	0.38	0.38	0.14	0.36	0.36	0.14	0.32	0.32	0.09	0.27	0.27
Volume/Cap:	0.32	0.96	0.96	0.96	0.59	0.59	0.01	0.96	0.96	0.33	0.40	0.40
Delay/Veh:	42.0	49.2	49.2	93.8	29.3	29.3	41.0	63.9	63.9	48.1	32.8	32.8
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:	42.0	49.2	49.2	93.8	29.3	29.3	41.0	63.9	63.9	48.1	32.8	32.8
LOS by Move:	D	D	D	F	C	C	D	E	E	D	C	C
HCM2kAvgQ:	3	27	27	12	11	11	0	24	24	2	6	6

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.405
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 8.4
Optimal Cycle: OPTIMIZED Level Of Service: A

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				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	10	14	0		0	14	14		20	0	20		0	0	0	
Lanes:	1 0	2 0	0		0 0	1 1	0		1 0	0 0	1		0 0	0 0	0	
Volume Module:																
Base Vol:	14	1276	0		0	1004	6		106	0	26		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:	14	1276	0		0	1004	6		106	0	26		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:	15	1343	0		0	1057	6		112	0	27		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	15	1343	0		0	1057	6		112	0	27		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	1.05	1.00		1.00	1.05	1.05		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	15	1410	0		0	1110	7		112	0	27		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	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	0.00		0.00	1.99	0.01		1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1700	3600	0		0	3579	21		1700	0	1800		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.39	0.00		0.00	0.31	0.31		0.07	0.00	0.02		0.00	0.00	0.00	
Crit Moves:	****						****		****							
Green/Cycle:	0.08	0.78	0.00		0.00	0.70	0.70		0.17	0.00	0.17		0.00	0.00	0.00	
Volume/Cap:	0.10	0.50	0.00		0.00	0.44	0.44		0.39	0.00	0.09		0.00	0.00	0.00	
Delay/Veh:	51.2	4.8	0.0		0.0	8.0	8.0		45.5	0.0	42.4		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:	51.2	4.8	0.0		0.0	8.0	8.0		45.5	0.0	42.4		0.0	0.0	0.0	
LOS by Move:	D	A	A		A	A	A		D	A	D		A	A	A	
HCM2kAvgQ:	1	9	0		0	9	9		4	0	1		0	0	0	

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.825
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 43.4
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0 1	1 0		1 0 2	1 0		2 0 3	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	199	923	102	122	484	287	524	1162	122	16	1290	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:	199	923	102	122	484	287	524	1162	122	16	1290	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:	209	972	107	128	509	302	552	1223	128	17	1358	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	972	107	128	509	302	552	1223	128	17	1358	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	1.05	1.05	1.00	1.10	1.10	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	209	1020	113	128	560	332	568	1345	128	17	1494	25
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3242	358	1700	3600	1800	3200	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.12	0.31	0.31	0.08	0.16	0.18	0.18	0.25	0.07	0.01	0.28	0.01
Crit Moves:	****					****	****				****	
Green/Cycle:	0.13	0.34	0.34	0.10	0.30	0.30	0.19	0.35	0.35	0.13	0.30	0.30
Volume/Cap:	0.93	0.94	0.94	0.74	0.51	0.61	0.93	0.71	0.20	0.07	0.93	0.05
Delay/Veh:	86.8	47.5	47.5	61.9	30.3	31.8	63.2	30.6	23.9	39.8	46.3	26.4
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:	86.8	47.5	47.5	61.9	30.3	31.8	63.2	30.6	23.9	39.8	46.3	26.4
LOS by Move:	F	D	D	E	C	C	E	C	C	D	D	C
HCM2kAvgQ:	11	22	22	6	8	10	14	13	3	1	20	1

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.701
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 38.3
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	228	314	66	73	57	41	138	1355	62	246	1698	299
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:	228	314	66	73	57	41	138	1355	62	246	1698	299
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:	240	331	69	77	60	43	145	1426	65	259	1787	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	331	69	77	60	43	145	1426	65	259	1787	315
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	240	331	69	77	60	43	145	1569	65	259	1966	315
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	0.58	0.42	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	1487	313	1700	1047	753	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.22	0.05	0.06	0.06	0.09	0.29	0.04	0.15	0.36	0.17
Crit Moves:	****				****		****				****	
Green/Cycle:	0.16	0.30	0.30	0.11	0.25	0.25	0.10	0.34	0.34	0.18	0.42	0.42
Volume/Cap:	0.87	0.75	0.75	0.40	0.23	0.23	0.87	0.86	0.11	0.86	0.87	0.42
Delay/Veh:	68.0	39.5	39.5	44.5	31.8	31.8	83.1	36.9	24.0	63.4	32.2	22.0
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:	68.0	39.5	39.5	44.5	31.8	31.8	83.1	36.9	24.0	63.4	32.2	22.0
LOS by Move:	E	D	D	D	C	C	F	D	C	E	C	C
HCM2kAvgQ:	11	13	13	3	3	3	8	19	1	11	22	7

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

The Avenue
AM 2015 Without Project Conditions
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 2.866
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 782.4
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	167	1349	244	111	171	200	153	1419	100	71	2533	127
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:	167	1349	244	111	171	200	153	1419	100	71	2533	127
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	0.88	0.88	0.95	0.95	0.95	0.95	0.76	0.95	0.76
PHF Volume:	176	1420	257	126	194	211	161	1494	105	93	2666	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1420	257	126	194	211	161	1494	105	93	2666	167
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:	176	1420	257	126	194	211	161	1494	105	93	2666	167
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.85	0.15	1.00	0.48	0.52	1.00	0.93	0.07	1.00	0.94	0.06
Final Sat.:	1700	1524	276	1700	864	936	1700	1682	118	1700	1694	106
Capacity Analysis Module:												
Vol/Sat:	0.10	0.93	0.93	0.07	0.22	0.22	0.09	0.89	0.89	0.05	1.57	1.57
Crit Moves:		****		****			****				****	
Green/Cycle:	0.12	0.29	0.29	0.08	0.25	0.25	0.08	0.48	0.48	0.08	0.48	0.48
Volume/Cap:	0.89	3.27	3.27	0.89	0.89	0.89	1.14	1.84	1.84	0.66	3.27	3.27
Delay/Veh:	88.0	1069	1069	99.1	62.5	62.5	172.1	416	415.5	64.3	1055	1055
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:	88.0	1069	1069	99.1	62.5	62.5	172.1	416	415.5	64.3	1055	1055
LOS by Move:	F	F	F	F	E	E	F	F	F	E	F	F
HCM2kAvgQ:	10	203	203	8	18	18	12	147	147	5	342	342

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

The Avenue
AM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.937
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 45.2
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	33	33	10	33	33	10	26	26	10	26	26
Lanes:	1 0 2	1 0		1 0 3	1 0		2 0 4	0 1		2 0 4	0 1	
Volume Module:												
Base Vol:	167	1349	244	111	171	200	153	1419	100	71	2533	127
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:	167	1349	244	111	171	200	153	1419	100	71	2533	127
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	0.88	0.88	0.95	0.95	0.95	0.95	0.76	0.95	0.76
PHF Volume:	176	1420	257	126	194	211	161	1494	105	93	2666	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1420	257	126	194	211	161	1494	105	93	2666	167
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	1.10	1.10	1.00	1.10	1.10	1.03	1.10	1.00	1.03	1.10	1.00
FinalVolume:	176	1562	283	126	214	232	166	1643	105	96	2933	167
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	2.54	0.46	1.00	3.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	1700	4573	827	1700	5400	1800	3200	7200	1800	3200	7200	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.34	0.07	0.04	0.13	0.05	0.23	0.06	0.03	0.41	0.09
Crit Moves:		****		****			****				****	
Green/Cycle:	0.12	0.35	0.35	0.08	0.31	0.31	0.08	0.37	0.37	0.13	0.42	0.42
Volume/Cap:	0.87	0.98	0.98	0.89	0.13	0.41	0.62	0.62	0.16	0.22	0.98	0.22
Delay/Veh:	83.8	54.1	54.1	99.1	29.4	32.6	57.7	31.7	25.7	46.7	46.0	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:	83.8	54.1	54.1	99.1	29.4	32.6	57.7	31.7	25.7	46.7	46.0	22.6
LOS by Move:	F	D	D	F	C	C	E	C	C	D	D	C
HCM2kAvgQ:	10	28	28	8	2	7	4	13	3	2	33	4

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

The Avenue
PM 2015 Without Project Conditions
JN 5279

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

Intersection #1 Hellman/Ontario Ave, (NS) / PA 1 Access (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.2]

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	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	16	16	19	7	24	43	25	0	9	11	0	4
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:	16	16	19	7	24	43	25	0	9	11	0	4
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:	17	17	20	7	25	45	26	0	9	12	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	17	20	7	25	45	26	0	9	12	0	4
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:	71	xxxx	xxxxx	37	xxxx	xxxxx	125	133	48	128	146	27
Potent Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	853	761	1027	850	749	1054
Move Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	840	749	1027	832	738	1054
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	0.03	0.00	0.01	0.01	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	9.4	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	A	*	*	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	xxxx	1027	xxxx	xxxx	1054
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	0.0
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	8.4
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	A
ApproachDel:	xxxxxx			xxxxxx			9.2			9.1		
ApproachLOS:	*			*			A			A		

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

The Avenue
PM 2015 Without Project Conditions
JN 5279

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.935
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 37.3
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	22	22		10	22	22		25	25	25		24	24	24	
Lanes:	1	0 2	1	0	1	0 1	1	0	0	1 0	1	0	1	0 1	1	0
Volume Module:																
Base Vol:	71	1196	115		192	1765	50		57	451	236		93	392	233	
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:	71	1196	115		192	1765	50		57	451	236		93	392	233	
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:	0.85	0.85	0.85		0.97	0.97	0.97		0.76	0.76	0.76		0.95	0.95	0.95	
PHF Volume:	84	1407	135		198	1820	52		75	593	311		98	413	245	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	84	1407	135		198	1820	52		75	593	311		98	413	245	
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	1.10	1.10		1.00	1.05	1.05		1.05	1.05	1.05		1.00	1.05	1.05	
FinalVolume:	84	1548	149		198	1911	54		79	623	326		98	433	258	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.74	0.26		1.00	1.94	0.06		0.16	1.21	0.63		1.00	1.25	0.75	
Final Sat.:	1700	4926	474		1700	3501	99		275	2172	1137		1700	2258	1342	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.31	0.31		0.12	0.55	0.55		0.29	0.29	0.29		0.06	0.19	0.19	
Crit Moves:	****					****				****						
Green/Cycle:	0.10	0.47	0.47		0.18	0.56	0.56		0.29	0.29	0.29		0.29	0.29	0.29	
Volume/Cap:	0.52	0.66	0.66		0.66	0.98	0.98		0.98	0.98	0.98		0.20	0.66	0.66	
Delay/Veh:	48.1	21.8	21.8		45.8	38.9	38.9		60.4	60.4	60.4		28.1	34.1	34.1	
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:	48.1	21.8	21.8		45.8	38.9	38.9		60.4	60.4	60.4		28.1	34.1	34.1	
LOS by Move:	D	C	C		D	D	D		E	E	E		C	C	C	
HCM2kAvgQ:	3	14	14		7	38	38		22	22	22		3	11	11	

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.824
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 36.0
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10		17		17		10		17		17		10		23		23		10		23		23	
Lanes:	1	0	2	1	0		1	0	2	1	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	250	1316		7			99	1999		25			59	292		259			11	124		98		
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:	250	1316		7			99	1999		25			59	292		259			11	124		98		
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:	263	1385		7			104	2104		26			62	307		273			12	131		103		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	263	1385		7			104	2104		26			62	307		273			12	131		103		
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	1.10		1.10			1.00	1.10		1.10			1.00	1.00		1.00			1.00	1.00		1.00		
FinalVolume:	263	1524		8			104	2315		29			62	307		273			12	131		103		
Saturation Flow Module:																								
Sat/Lane:	1800	1800		1800			1800	1800		1800			1800	1800		1800			1800	1800		1800		
Adjustment:	0.94	1.00		1.00			0.94	1.00		1.00			0.94	1.00		1.00			0.94	1.00		1.00		
Lanes:	1.00	2.98		0.02			1.00	2.96		0.04			1.00	1.00		1.00			1.00	0.56		0.44		
Final Sat.:	1700	5371		29			1700	5333		67			1700	1800		1800			1700	1005		795		
Capacity Analysis Module:																								
Vol/Sat:	0.15	0.28		0.28			0.06	0.43		0.43			0.04	0.17		0.15			0.01	0.13		0.13		
Crit Moves:	****							****						****						****				
Green/Cycle:	0.17	0.49		0.49			0.15	0.47		0.47			0.09	0.20		0.20			0.09	0.20		0.20		
Volume/Cap:	0.92	0.58		0.58			0.41	0.92		0.92			0.42	0.85		0.76			0.08	0.65		0.65		
Delay/Veh:	78.8	21.0		21.0			45.2	33.8		33.8			51.7	62.0		52.3			48.5	46.4		46.4		
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:	78.8	21.0		21.0			45.2	33.8		33.8			51.7	62.0		52.3			48.5	46.4		46.4		
LOS by Move:	E		C		C		D		C		C		D		E		D		D		D		D	
HCM2kAvgQ:	13		13		13		4		30		30		3		13		11		0		9		9	

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.661
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.1
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	90	1461	18	69	2152	48	62	22	8	21	38	49
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:	90	1461	18	69	2152	48	62	22	8	21	38	49
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:	95	1538	19	73	2265	51	65	23	8	22	40	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	1538	19	73	2265	51	65	23	8	22	40	52
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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	1615	20	73	2492	56	65	23	8	22	40	52
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	2.93	0.07	1.00	0.73	0.27	1.00	0.44	0.56
Final Sat.:	1700	3556	44	1700	5282	118	1700	1320	480	1700	786	1014
Capacity Analysis Module:												
Vol/Sat:	0.06	0.45	0.45	0.04	0.47	0.47	0.04	0.02	0.02	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.58	0.58	0.11	0.60	0.60	0.08	0.17	0.17	0.08	0.17	0.17
Volume/Cap:	0.67	0.79	0.79	0.40	0.79	0.79	0.46	0.11	0.11	0.16	0.31	0.31
Delay/Veh:	65.1	21.7	21.7	51.6	19.5	19.5	54.8	42.6	42.6	51.6	44.5	44.5
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:	65.1	21.7	21.7	51.6	19.5	19.5	54.8	42.6	42.6	51.6	44.5	44.5
LOS by Move:	E	C	C	D	B	B	D	D	D	D	D	D
HCM2kAvgQ:	5	24	24	3	25	25	3	1	1	1	3	3

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

The Avenue
PM 2015 Without Project Conditions
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	2.226
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	554.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	F

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1
Volume Module:												
Base Vol:	77	1377	376	57	1926	197	167	1167	1192	140	1048	25
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:	77	1377	376	57	1926	197	167	1167	1192	140	1048	25
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:	0.96	0.96	0.96	0.87	0.87	0.87	0.94	0.94	0.94	0.86	0.86	0.86
PHF Volume:	80	1434	392	66	2214	226	178	1241	1268	163	1219	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1434	392	66	2214	226	178	1241	1268	163	1219	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:	80	1434	392	66	2214	226	178	1241	1268	163	1219	29
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.80	0.22	0.04	1.23	0.13	0.10	0.69	0.70	0.10	0.68	0.02
Crit Moves:	****				****				****	****		
Green/Cycle:	0.08	0.49	0.49	0.08	0.49	0.49	0.05	0.28	0.28	0.08	0.31	0.31
Volume/Cap:	0.57	1.63	0.45	0.46	2.52	0.26	2.16	2.47	2.52	1.15	2.16	0.05
Delay/Veh:	58.2	322	20.5	54.8	720	18.2	615.1	711	734.5	176.3	567	28.7
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:	58.2	322	20.5	54.8	720	18.2	615.1	711	734.5	176.3	567	28.7
LOS by Move:	E	F	C	D	F	B	F	F	F	F	F	C
HCM2kAvgQ:	4	120	9	3	242	5	21	135	140	12	124	1

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.947
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 46.5
Optimal Cycle: OPTIMIZED Level Of Service: D

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						Ignore						Include					
Min. Green:	10		26		26		10		26		26		10		29		29		10		29		29	
Lanes:	1	0	3	0	1		1	0	3	1	0		1	0	2	0	1		1	0	2	1	0	
Volume Module:																								
Base Vol:	77	1377		376			57	1926		197			167	1167		1192			140	1048		25		
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:	77	1377		376			57	1926		197			167	1167		1192			140	1048		25		
User Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		0.00			1.00	1.00		1.00		
PHF Adj:	0.96	0.96		0.96			0.87	0.87		0.87			0.94	0.94		0.00			0.86	0.86		0.86		
PHF Volume:	80	1434		392			66	2214		226			178	1241		0			163	1219		29		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	80	1434		392			66	2214		226			178	1241		0			163	1219		29		
PCE Adj:	1.00	1.00		1.00			1.00	1.00		1.00			1.00	1.00		0.00			1.00	1.00		1.00		
MLF Adj:	1.00	1.10		1.00			1.00	1.10		1.10			1.00	1.05		0.00			1.00	1.10		1.10		
FinalVolume:	80	1578		392			66	2435		249			178	1304		0			163	1340		32		
Saturation Flow Module:																								
Sat/Lane:	1800	1800		1800			1800	1800		1800			1800	1800		1800			1800	1800		1800		
Adjustment:	0.94	1.00		1.00			0.94	1.00		1.00			0.94	1.00		1.00			0.94	1.00		1.00		
Lanes:	1.00	3.00		1.00			1.00	3.63		0.37			1.00	2.00		1.00			1.00	2.93		0.07		
Final Sat.:	1700	5400		1800			1700	6532		668			1700	3600		1800			1700	5274		126		
Capacity Analysis Module:																								
Vol/Sat:	0.05	0.29		0.22			0.04	0.37		0.37			0.10	0.36		0.00			0.10	0.25		0.25		
Crit Moves:	****							****						****						****				
Green/Cycle:	0.09	0.36		0.36			0.11	0.38		0.38			0.13	0.36		0.00			0.10	0.33		0.33		
Volume/Cap:	0.52	0.82		0.61			0.35	0.99		0.99			0.80	0.99		0.00			0.99	0.77		0.77		
Delay/Veh:	50.8	35.2		30.9			46.4	49.9		49.9			64.5	58.0		0.0			117.8	35.2		35.2		
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:	50.8	35.2		30.9			46.4	49.9		49.9			64.5	58.0		0.0			117.8	35.2		35.2		
LOS by Move:	D		D		C		D		D		D		E		E		A		F		D		D	
HCM2kAvgQ:	3		18		11		2		29		29		8		29		0		10		15		15	

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

21:8:08 A St. at The Avenue IYWOP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	8	8	23	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	37	62	28	0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	28	8	25	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	10	66	16	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	39	127	61	92
CAPACITY	veh	1349	1368	1346	1362
AVE DELAY	secs	2.7	2.8	2.7	2.8
MAX DELAY	secs	3.4	3.6	3.5	3.5
AVE QUEUE	veh	0	0	0	0
MAX QUEUE	veh	0	0	0	0

AVEDEL s	2.8
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	0.2
COST $	4

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.653
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.8
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10		20		20		10		20		20		10		14		14		10		14		14	
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	45		5		73		21		7		30		38		1562		54		88		1184		37	
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:	45		5		73		21		7		30		38		1562		54		88		1184		37	
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:	47		5		77		22		7		32		40		1644		57		93		1246		39	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	47		5		77		22		7		32		40		1644		57		93		1246		39	
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		1.05		1.05		1.00		1.05		1.05	
FinalVolume:	47		5		77		22		7		32		40		1726		60		93		1309		41	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		0.06		0.94		1.00		0.19		0.81		1.00		1.93		0.07		1.00		1.94		0.06	
Final Sat.:	1700		115		1685		1700		341		1459		1700		3480		120		1700		3491		109	
Capacity Analysis Module:																								
Vol/Sat:	0.03		0.05		0.05		0.01		0.02		0.02		0.02		0.50		0.50		0.05		0.37		0.37	
Crit Moves:			****				****								****				****					
Green/Cycle:	0.08		0.17		0.17		0.08		0.17		0.17		0.12		0.60		0.60		0.08		0.56		0.56	
Volume/Cap:	0.33		0.27		0.27		0.16		0.13		0.13		0.19		0.83		0.83		0.65		0.67		0.67	
Delay/Veh:	53.3		44.2		44.2		51.6		42.8		42.8		47.6		21.8		21.8		63.8		19.6		19.6	
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:	53.3		44.2		44.2		51.6		42.8		42.8		47.6		21.8		21.8		63.8		19.6		19.6	
LOS by Move:	D		D		D		D		D		D		D		C		C		E		B		B	
HCM2kAvgQ:	2		3		3		1		1		1		1		28		28		5		18		18	

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.674
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	32.8
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	69	458	4	145	658	3	2	107	199	10	104	152
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	458	4	145	658	3	2	107	199	10	104	152
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	482	4	153	693	3	2	113	209	11	109	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	482	4	153	693	3	2	113	209	11	109	160
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	482	4	153	693	3	2	113	209	11	109	160
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	0.99	0.01	1.00	0.35	0.65	1.00	0.41	0.59
Final Sat.:	1700	1784	16	1700	1792	8	1700	629	1171	1700	731	1069
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.09	0.39	0.39	0.00	0.18	0.18	0.01	0.15	0.15
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.41	0.41	0.17	0.47	0.47	0.14	0.22	0.22	0.11	0.19	0.19
Volume/Cap:	0.38	0.66	0.66	0.53	0.82	0.82	0.01	0.82	0.82	0.06	0.78	0.78
Delay/Veh:	38.4	23.4	23.4	36.0	27.0	27.0	33.6	46.4	46.4	35.9	45.4	45.4
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:	38.4	23.4	23.4	36.0	27.0	27.0	33.6	46.4	46.4	35.9	45.4	45.4
LOS by Move:	D	C	C	D	C	C	C	D	D	D	D	D
HCM2kAvgQ:	2	12	12	5	19	19	0	11	11	0	9	9

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

21:8:08 Turnr at The Avenue IYWOP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50
L'	(m)	12.40	9.20	12.40	9.20
V	(m)	4.30	4.50	4.30	4.50
RAD	(m)	33.50	33.50	33.50	33.50
PHI	(d)	13.00	15.50	13.00	15.50
DIA	(m)	79.20	79.20	79.20	79.20
GRAD SEP		0	0	0	0

TIME PERIOD min	90
TIME SLICE min	15
RESULTS PERIOD min	15 75
TIME COST $/hr	15.00
FLOW PERIOD min	15 75
FLOW TYPE pcu/veh	VEH
FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	31	468	97	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	18	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	30	759	14	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	69	0	24	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	596	18	803	93
CAPACITY	veh	1380	1122	1345	1030
AVE DELAY	secs	4.5	3.2	6.6	3.8
MAX DELAY	secs	6.1	4.1	9.5	4.9
AVE QUEUE	veh	1	0	2	0
MAX QUEUE	veh	1	0	2	0

AVEDEL s	5.6
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	2.3
COST $	35

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	51.7
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	0	140	244	629	208	8	75	1508	0	344	1213	373
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	140	244	629	208	8	75	1508	0	344	1213	373
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	147	257	662	219	8	79	1587	0	362	1277	393
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	147	257	662	219	8	79	1587	0	362	1277	393
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.10
FinalVolume:	0	147	257	682	219	8	79	1746	0	373	1405	432
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	0.36	0.64	2.00	0.96	0.04	1.00	3.00	0.00	2.00	2.29	0.71
Final Sat.:	1700	656	1144	3200	1733	67	1700	5400	0	3200	4130	1270
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.21	0.13	0.13	0.05	0.32	0.00	0.12	0.34	0.34
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.24	0.24	0.23	0.47	0.47	0.09	0.34	0.00	0.12	0.37	0.37
Volume/Cap:	0.00	0.93	0.93	0.94	0.27	0.27	0.51	0.94	0.00	0.94	0.91	0.91
Delay/Veh:	0.0	70.9	70.9	66.6	19.7	19.7	54.6	48.9	0.0	83.4	42.1	42.1
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:	0.0	70.9	70.9	66.6	19.7	19.7	54.6	48.9	0.0	83.4	42.1	42.1
LOS by Move:	A	E	E	E	B	B	D	D	A	F	D	D
HCM2kAvgQ:	0	19	19	18	5	5	4	25	0	11	25	25

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

****

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

****

Cycle (sec): 120 Critical Vol./Cap.(X): 0.699
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 30.0
Optimal Cycle: OPTIMIZED Level Of Service: C

****

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:	10	26	26	10	26	26	10	14	14				10	14	14			
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 2	1 0				1	0 2	1 0			
Volume Module:																		
Base Vol:	124	11	105	60	6	6	11	2260	77				75	1801	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:	124	11	105	60	6	6	11	2260	77				75	1801	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:	131	12	111	63	6	6	12	2379	81				79	1896	95			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	131	12	111	63	6	6	12	2379	81				79	1896	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	1.10	1.10				1.00	1.10	1.10			
FinalVolume:	131	12	111	63	6	6	12	2617	89				79	2085	104			
Saturation Flow Module:																		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	0.09	0.91	1.00	0.50	0.50	1.00	2.90	0.10				1.00	2.86	0.14			
Final Sat.:	1700	171	1629	1700	900	900	1700	5222	178				1700	5143	257			
Capacity Analysis Module:																		
Vol/Sat:	0.08	0.07	0.07	0.04	0.01	0.01	0.01	0.50	0.50				0.05	0.41	0.41			
Crit Moves:		****		****				****					****					
Green/Cycle:	0.08	0.22	0.22	0.08	0.22	0.22	0.11	0.55	0.55				0.08	0.53	0.53			
Volume/Cap:	0.92	0.31	0.31	0.45	0.03	0.03	0.06	0.91	0.91				0.56	0.77	0.77			
Delay/Veh:	107.1	40.0	40.0	54.6	37.1	37.1	48.2	29.1	29.1				57.7	24.1	24.1			
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:	107.1	40.0	40.0	54.6	37.1	37.1	48.2	29.1	29.1				57.7	24.1	24.1			
LOS by Move:	F	D	D	D	D	D	D	C	C				E	C	C			
HCM2kAvgQ:	8	4	4	3	0	0	0	34	34				4	22	22			

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

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The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	39.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	17	17	10	17	17	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	163	946	67	172	1247	20	8	319	94	140	468	272
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:	163	946	67	172	1247	20	8	319	94	140	468	272
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:	172	996	71	181	1313	21	8	336	99	147	493	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	996	71	181	1313	21	8	336	99	147	493	286
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	1.05	1.05	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.05	1.05
FinalVolume:	172	1046	74	181	1378	22	8	336	99	147	517	301
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.97	0.03	1.00	0.77	0.23	1.00	1.26	0.74
Final Sat.:	1700	3362	238	1700	3543	57	1700	1390	410	1700	2277	1323
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.31	0.11	0.39	0.39	0.00	0.24	0.24	0.09	0.23	0.23
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.40	0.40	0.14	0.43	0.43	0.12	0.26	0.26	0.11	0.25	0.25
Volume/Cap:	0.91	0.79	0.79	0.75	0.92	0.92	0.04	0.92	0.92	0.78	0.90	0.90
Delay/Veh:	80.2	26.9	26.9	49.9	33.3	33.3	34.8	54.5	54.5	57.5	44.7	44.7
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:	80.2	26.9	26.9	49.9	33.3	33.3	34.8	54.5	54.5	57.5	44.7	44.7
LOS by Move:	F	C	C	D	C	C	C	D	D	E	D	D
HCM2kAvgQ:	8	15	15	7	23	23	0	16	16	6	15	15

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.799
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 13.7
Optimal Cycle: OPTIMIZED 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				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	10	14	0		0	14	14		20	0	20		0	0	0	
Lanes:	1 0	2 0	0		0 0	1 1	0		1 0	0 0	1		0 0	0 0	0	
Volume Module:																
Base Vol:	135	1288	0		0	1594	62		9	0	102		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:	135	1288	0		0	1594	62		9	0	102		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:	142	1356	0		0	1678	65		9	0	107		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	142	1356	0		0	1678	65		9	0	107		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	1.05	1.00		1.00	1.05	1.05		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	142	1424	0		0	1762	69		9	0	107		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	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	2.00	0.00		0.00	1.93	0.07		1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1700	3600	0		0	3465	135		1700	0	1800		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.40	0.00		0.00	0.51	0.51		0.01	0.00	0.06		0.00	0.00	0.00	
Crit Moves:	****					****			****							
Green/Cycle:	0.11	0.78	0.00		0.00	0.67	0.67		0.17	0.00	0.17		0.00	0.00	0.00	
Volume/Cap:	0.76	0.50	0.00		0.00	0.76	0.76		0.03	0.00	0.36		0.00	0.00	0.00	
Delay/Veh:	67.8	4.8	0.0		0.0	14.5	14.5		41.9	0.0	45.0		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:	67.8	4.8	0.0		0.0	14.5	14.5		41.9	0.0	45.0		0.0	0.0	0.0	
LOS by Move:	E	A	A		A	B	B		D	A	D		A	A	A	
HCM2kAvgQ:	7	10	0		0	23	23		0	0	4		0	0	0	

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.980
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	53.7
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0 1	1 0		1 0 2	1 0		2 0 3	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	231	675	35	269	1151	383	391	1675	359	120	1352	170
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:	231	675	35	269	1151	383	391	1675	359	120	1352	170
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:	243	711	37	283	1212	403	412	1763	378	126	1423	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	711	37	283	1212	403	412	1763	378	126	1423	179
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	1.05	1.05	1.00	1.10	1.10	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	243	746	39	283	1333	443	424	1939	378	126	1565	179
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.25	0.75	2.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3423	177	1700	4052	1348	3200	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.22	0.17	0.33	0.33	0.13	0.36	0.21	0.07	0.29	0.10
Crit Moves:	****				****			****			****	
Green/Cycle:	0.14	0.30	0.30	0.17	0.33	0.33	0.14	0.36	0.36	0.10	0.31	0.31
Volume/Cap:	1.00	0.72	0.72	1.00	1.00	1.00	0.93	1.00	0.59	0.78	0.93	0.32
Delay/Veh:	103.6	34.7	34.7	98.7	57.4	57.4	70.6	54.9	28.8	67.6	45.0	28.0
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:	103.6	34.7	34.7	98.7	57.4	57.4	70.6	54.9	28.8	67.6	45.0	28.0
LOS by Move:	F	C	C	F	E	E	E	D	C	E	D	C
HCM2kAvgQ:	13	12	12	15	26	26	11	28	10	6	21	4

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.871
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 46.5
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	162	189	32	233	133	76	181	2272	234	84	1929	177
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:	162	189	32	233	133	76	181	2272	234	84	1929	177
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:	171	199	34	245	140	80	191	2392	246	88	2031	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	199	34	245	140	80	191	2392	246	88	2031	186
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	171	199	34	245	140	80	191	2631	246	88	2234	186
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.86	0.14	1.00	0.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	1539	261	1700	1145	655	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.13	0.14	0.12	0.12	0.11	0.49	0.14	0.05	0.41	0.10
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.22	0.22	0.14	0.25	0.25	0.12	0.49	0.49	0.08	0.45	0.45
Volume/Cap:	0.88	0.60	0.60	1.00	0.49	0.49	0.92	1.00	0.28	0.62	0.92	0.23
Delay/Veh:	85.5	44.8	44.8	107.8	39.6	39.6	92.7	47.4	18.4	61.6	37.2	20.4
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:	85.5	44.8	44.8	107.8	39.6	39.6	92.7	47.4	18.4	61.6	37.2	20.4
LOS by Move:	F	D	D	F	D	D	F	D	B	E	D	C
HCM2kAvgQ:	9	8	8	14	7	7	11	39	5	4	30	4

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

The Avenue
PM 2015 Without Project Conditions
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 3.341
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 1045.7
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	125	766	170	166	1480	208	233	2563	422	367	2254	164
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:	125	766	170	166	1480	208	233	2563	422	367	2254	164
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	0.95	0.95	0.95	0.79	0.79	0.79
PHF Volume:	136	833	185	180	1609	226	245	2698	444	465	2853	208
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	833	185	180	1609	226	245	2698	444	465	2853	208
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:	136	833	185	180	1609	226	245	2698	444	465	2853	208
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	0.88	0.12	1.00	0.86	0.14	1.00	0.93	0.07
Final Sat.:	1700	1473	327	1700	1578	222	1700	1546	254	1700	1678	122
Capacity Analysis Module:												
Vol/Sat:	0.08	0.57	0.57	0.11	1.02	1.02	0.14	1.75	1.75	0.27	1.70	1.70
Crit Moves:	****				****			****		****		
Green/Cycle:	0.08	0.31	0.31	0.06	0.28	0.28	0.04	0.48	0.48	0.08	0.52	0.52
Volume/Cap:	0.96	1.83	1.83	1.83	3.61	3.61	3.25	3.61	3.61	3.28	3.25	3.25
Delay/Veh:	117.8	424	424.0	468.7	1221	1221	1104	1207	1207	1099	1044	1044
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:	117.8	424	424.0	468.7	1221	1221	1104	1207	1207	1099	1044	1044
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	F
HCM2kAvgQ:	9	94	94	19	228	228	32	390	390	61	368	368

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

The Avenue
PM 2015 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.938
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 50.7
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	33	33	10	33	33	10	26	26	10	26	26
Lanes:	1 0	2 1	0	1 0	3 1	0	2 0	4 0	1	2 0	4 0	1
Volume Module:												
Base Vol:	125	766	170	166	1480	208	233	2563	422	367	2254	164
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:	125	766	170	166	1480	208	233	2563	422	367	2254	164
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	0.95	0.95	0.95	0.79	0.79	0.79
PHF Volume:	136	833	185	180	1609	226	245	2698	444	465	2853	208
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	833	185	180	1609	226	245	2698	444	465	2853	208
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	1.10	1.10	1.00	1.10	1.10	1.03	1.10	1.00	1.03	1.10	1.00
FinalVolume:	136	916	203	180	1770	249	253	2968	444	478	3138	208
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	2.46	0.54	1.00	3.51	0.49	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	1700	4419	981	1700	6313	887	3200	7200	1800	3200	7200	1800
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.11	0.28	0.28	0.08	0.41	0.25	0.15	0.44	0.12
Crit Moves:		****		****				****		****		
Green/Cycle:	0.09	0.28	0.28	0.10	0.29	0.29	0.09	0.41	0.41	0.15	0.46	0.46
Volume/Cap:	0.92	0.75	0.75	1.01	0.96	0.96	0.89	1.01	0.61	1.01	0.94	0.25
Delay/Veh:	104.7	42.0	42.0	125.0	53.1	53.1	81.0	55.9	29.6	96.3	36.5	19.6
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:	104.7	42.0	42.0	125.0	53.1	53.1	81.0	55.9	29.6	96.3	36.5	19.6
LOS by Move:	F	D	D	F	D	D	F	E	C	F	D	B
HCM2kAvgQ:	8	14	14	11	23	23	8	35	13	15	32	5

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

APPENDIX I

2015 With Project
HCM Intersection Analysis Worksheets

The Avenue
AM 2015 With Project Conditions
JN 5279

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

Intersection #1 Hellman/Ontario Ave, (NS) / PA 1 Access (EW)

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: A[8.9]

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		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	5	22		6			2	7		13			37		0	14			17		0	6		
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:	5	22		6			2	7		13			37		0	14			17		0	6		
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:	5	23		6			2	7		14			39		0	15			18		0	6		
Reduct Vol:	0	0		0			0	0		0			0		0	0			0		0	0		
FinalVolume:	5	23		6			2	7		14			39		0	15			18		0	6		
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:	21	xxxx	xxxxx				29	xxxx	xxxxx				58	58		14			63	62		26		
Potent Cap.:	1608	xxxx	xxxxx				1597	xxxx	xxxxx				943	836		1071			937	833		1055		
Move Cap.:	1608	xxxx	xxxxx				1597	xxxx	xxxxx				934	833		1071			921	829		1055		
Volume/Cap:	0.00	xxxx	xxxx				0.00	xxxx	xxxx				0.04	0.00		0.01			0.02	0.00		0.01		
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Control Del:	7.2	xxxx	xxxxx				7.3	xxxx	xxxxx				9.0	xxxx	xxxxx				9.0	xxxx	xxxxx			
LOS by Move:	A	*		*			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	xxxx		1071			xxxx	xxxx		1055		
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		0.0			xxxxx	xxxx		0.0		
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		8.4			xxxxx	xxxx		8.4		
Shared LOS:	*	*		*			*	*		*			*	*		A			*	*		A		
ApproachDel:	xxxxxx						xxxxxx						8.9						8.8					
ApproachLOS:	*						*						A						A					

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

The Avenue
AM 2015 With Project Conditions
JN 5279

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 76 Critical Vol./Cap.(X): 0.679
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10		22	22	10		22	22	25		25	25	24		24	24
Lanes:	1	0	2	1 0	1	0	1	1 0	0	1	0	1 0	1	0	1	1 0
Volume Module:																
Base Vol:	194	1381		90	110	468		36	37	323		84	65	181		201
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:	194	1381		90	110	468		36	37	323		84	65	181		201
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:	0.82	0.82		0.82	0.75	0.75		0.75	0.75	0.75		0.75	0.75	0.75		0.75
PHF Volume:	237	1684		110	147	624		48	49	431		112	87	241		268
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	237	1684		110	147	624		48	49	431		112	87	241		268
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	1.10		1.10	1.00	1.05		1.05	1.05	1.05		1.05	1.00	1.05		1.05
FinalVolume:	237	1853		121	147	655		50	52	452		118	87	253		281
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	2.82		0.18	1.00	1.86		0.14	0.17	1.45		0.38	1.00	1.00		1.00
Final Sat.:	1700	5070		330	1700	3343		257	299	2606		678	1700	1800		1800
Capacity Analysis Module:																
Vol/Sat:	0.14	0.37		0.37	0.09	0.20		0.20	0.17	0.17		0.17	0.05	0.14		0.16
Crit Moves:		****			****					****						
Green/Cycle:	0.19	0.46		0.46	0.13	0.40		0.40	0.33	0.33		0.33	0.33	0.33		0.33
Volume/Cap:	0.72	0.79		0.79	0.66	0.49		0.49	0.53	0.53		0.53	0.15	0.43		0.48
Delay/Veh:	36.6	19.3		19.3	38.2	17.3		17.3	21.2	21.2		21.2	18.2	20.2		20.6
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:	36.6	19.3		19.3	38.2	17.3		17.3	21.2	21.2		21.2	18.2	20.2		20.6
LOS by Move:	D	B		B	D	B		B	C	C		C	B	C		C
HCM2kAvgQ:	7	15		15	5	7		7	6	6		6	2	5		6

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	17	17	10	17	17	10	23	23	10	23	23
Lanes:	1 0	2 1	0	1 0	2 1	0	1 0	1 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	206	1559	8	41	638	21	58	44	16	11	100	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:	206	1559	8	41	638	21	58	44	16	11	100	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:	217	1641	8	43	672	22	61	46	17	12	105	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1641	8	43	672	22	61	46	17	12	105	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	1.10	1.10	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1805	9	43	739	24	61	46	17	12	105	118
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.90	0.10	1.00	1.00	1.00	1.00	0.47	0.53
Final Sat.:	1700	5372	28	1700	5228	172	1700	1800	1800	1700	849	951
Capacity Analysis Module:												
Vol/Sat:	0.13	0.34	0.34	0.03	0.14	0.14	0.04	0.03	0.01	0.01	0.12	0.12
Crit Moves:		****		****			****				****	
Green/Cycle:	0.27	0.51	0.51	0.10	0.34	0.34	0.10	0.22	0.22	0.10	0.22	0.22
Volume/Cap:	0.47	0.65	0.65	0.27	0.41	0.41	0.38	0.12	0.04	0.07	0.57	0.57
Delay/Veh:	33.0	19.2	19.2	45.0	26.7	26.7	46.1	33.0	32.4	43.5	38.5	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:	33.0	19.2	19.2	45.0	26.7	26.7	46.1	33.0	32.4	43.5	38.5	38.5
LOS by Move:	C	B	B	D	C	C	D	C	C	D	D	D
HCM2kAvgQ:	6	15	15	2	6	6	2	1	0	0	7	7

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.720
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 29.6
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10		14	14	10		14	14	10		20	20	10		20	20
Lanes:	1	0	1	1 0	1	0	2	1 0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	103	1555		27	52	524		89	140	50		39	42	38		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:	103	1555		27	52	524		89	140	50		39	42	38		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:	108	1637		28	55	552		94	147	53		41	44	40		82
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	108	1637		28	55	552		94	147	53		41	44	40		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	1.05		1.05	1.00	1.10		1.10	1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	108	1719		30	55	607		103	147	53		41	44	40		82
Saturation Flow Module:																
Sat/Lane:	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800		1800
Adjustment:	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00	0.94	1.00		1.00
Lanes:	1.00	1.97		0.03	1.00	2.56		0.44	1.00	0.56		0.44	1.00	0.33		0.67
Final Sat.:	1700	3539		61	1700	4616		784	1700	1011		789	1700	590		1210
Capacity Analysis Module:																
Vol/Sat:	0.06	0.49		0.49	0.03	0.13		0.13	0.09	0.05		0.05	0.03	0.07		0.07
Crit Moves:		****			****				****					****		
Green/Cycle:	0.26	0.58		0.58	0.08	0.41		0.41	0.10	0.18		0.18	0.09	0.17		0.17
Volume/Cap:	0.25	0.84		0.84	0.39	0.32		0.32	0.84	0.29		0.29	0.29	0.41		0.41
Delay/Veh:	35.6	23.8		23.8	53.8	24.5		24.5	81.0	43.0		43.0	52.1	45.6		45.6
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:	35.6	23.8		23.8	53.8	24.5		24.5	81.0	43.0		43.0	52.1	45.6		45.6
LOS by Move:	D	C		C	D	C		C	F	D		D	D	D		D
HCM2kAvgQ:	3	28		28	2	6		6	8	3		3	2	4		4

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

The Avenue
AM 2015 With Project Conditions
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.812
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	34.6
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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			Ignore			Include		
Min. Green:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0 3	0	1	1 0 3	0	1	1 0 3	0	1	1 0 3	0	1
Volume Module:												
Base Vol:	239	1480	353	49	453	103	128	790	313	182	1190	76
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:	239	1480	353	49	453	103	128	790	313	182	1190	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.86	0.86	0.86	0.88	0.88	0.00	0.78	0.78	0.78
PHF Volume:	249	1542	368	57	527	120	145	898	0	233	1526	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	1542	368	57	527	120	145	898	0	233	1526	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	0.00	1.00	1.10	1.00
FinalVolume:	249	1696	368	57	579	120	145	988	0	233	1678	97
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	5400	1800	1700	5400	1800	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.31	0.20	0.03	0.11	0.07	0.09	0.18	0.00	0.14	0.31	0.05
Crit Moves:		****		****			****				****	
Green/Cycle:	0.20	0.35	0.35	0.11	0.26	0.26	0.11	0.30	0.00	0.16	0.35	0.35
Volume/Cap:	0.73	0.89	0.58	0.32	0.41	0.26	0.81	0.61	0.00	0.88	0.89	0.15
Delay/Veh:	43.4	34.3	26.2	40.4	29.4	28.2	65.4	29.2	0.0	65.7	34.5	21.3
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:	43.4	34.3	26.2	40.4	29.4	28.2	65.4	29.2	0.0	65.7	34.5	21.3
LOS by Move:	D	C	C	D	C	C	E	C	A	E	C	C
HCM2kAvgQ:	9	19	9	2	5	3	7	9	0	10	19	2

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	39.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0	1	1 0 3	1	0	1 0 2	0	1	1 0 2	1	0
Volume Module:												
Base Vol:	239	1480	353	49	453	103	128	790	313	182	1190	76
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:	239	1480	353	49	453	103	128	790	313	182	1190	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.86	0.86	0.86	0.88	0.88	0.00	0.78	0.78	0.78
PHF Volume:	249	1542	368	57	527	120	145	898	0	233	1526	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	1542	368	57	527	120	145	898	0	233	1526	97
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.10	1.00	1.05	0.00	1.00	1.10	1.10
FinalVolume:	249	1696	368	57	579	132	145	943	0	233	1678	107
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.26	0.74	1.00	2.00	1.00	1.00	2.82	0.18
Final Sat.:	1700	5400	1800	1700	5866	1334	1700	3600	1800	1700	5076	324
Capacity Analysis Module:												
Vol/Sat:	0.15	0.31	0.20	0.03	0.10	0.10	0.09	0.26	0.00	0.14	0.33	0.33
Crit Moves:	****				****			****			****	
Green/Cycle:	0.17	0.33	0.33	0.11	0.27	0.27	0.11	0.31	0.00	0.16	0.36	0.36
Volume/Cap:	0.85	0.94	0.61	0.30	0.36	0.36	0.75	0.85	0.00	0.85	0.93	0.93
Delay/Veh:	58.4	41.0	28.3	39.6	27.9	27.9	56.3	37.2	0.0	60.1	37.9	37.9
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:	58.4	41.0	28.3	39.6	27.9	27.9	56.3	37.2	0.0	60.1	37.9	37.9
LOS by Move:	E	D	C	D	C	C	E	D	A	E	D	D
HCM2kAvgQ:	10	21	10	2	4	4	6	16	0	10	21	21

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

21:8:08 A St. at The Avenue IYWP AM Peak Hour 9

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)	FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	13 19 39 0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	35 52 8 0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	69 51 50 0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	4 73 58 0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	71	95	170	135	AVEDEL s	2.9
CAPACITY	veh	1315	1337	1352	1340	LOS SIG	A
AVE DELAY	secs	2.8	2.8	3.0	2.9	LOS UNSIG	A
MAX DELAY	secs	3.6	3.6	3.8	3.7		
AVE QUEUE	veh	0	0	0	0	VEHIC HRS	0.4
MAX QUEUE	veh	0	0	0	0	COST $	6

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.592
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	20	20	10	20	20	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	81	8	134	34	8	59	30	1161	119	131	1389	11
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:	81	8	134	34	8	59	30	1161	119	131	1389	11
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:	85	8	141	36	8	62	32	1222	125	138	1462	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	8	141	36	8	62	32	1222	125	138	1462	12
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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	85	8	141	36	8	62	32	1283	132	138	1535	12
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.06	0.94	1.00	0.12	0.88	1.00	1.81	0.19	1.00	1.98	0.02
Final Sat.:	1700	101	1699	1700	215	1585	1700	3265	335	1700	3572	28
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.02	0.04	0.04	0.02	0.39	0.39	0.08	0.43	0.43
Crit Moves:		****		****			****				****	
Green/Cycle:	0.08	0.17	0.17	0.08	0.17	0.17	0.08	0.56	0.56	0.12	0.60	0.60
Volume/Cap:	0.60	0.50	0.50	0.25	0.24	0.24	0.22	0.70	0.70	0.68	0.72	0.72
Delay/Veh:	60.2	46.7	46.7	52.4	43.8	43.8	52.2	19.9	19.9	59.5	18.0	18.0
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:	60.2	46.7	46.7	52.4	43.8	43.8	52.2	19.9	19.9	59.5	18.0	18.0
LOS by Move:	E	D	D	D	D	D	D	B	B	E	B	B
HCM2kAvgQ:	4	5	5	2	2	2	1	19	19	6	20	20

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

I-10

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	19.2
Optimal Cycle: OPTIMIZED		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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 0	1 0		1 0 0	1 0	
Volume Module:												
Base Vol:	71	391	14	32	173	7	0	41	52	7	29	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:	71	391	14	32	173	7	0	41	52	7	29	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:	75	412	15	34	182	7	0	43	55	7	31	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	412	15	34	182	7	0	43	55	7	31	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:	75	412	15	34	182	7	0	43	55	7	31	68
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.97	0.03	1.00	0.96	0.04	1.00	0.44	0.56	1.00	0.31	0.69
Final Sat.:	1700	1738	62	1700	1730	70	1700	794	1006	1700	555	1245
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.24	0.02	0.11	0.11	0.00	0.05	0.05	0.00	0.05	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.24	0.44	0.44	0.13	0.33	0.33	0.00	0.19	0.19	0.13	0.32	0.32
Volume/Cap:	0.18	0.54	0.54	0.15	0.31	0.31	0.00	0.29	0.29	0.03	0.17	0.17
Delay/Veh:	22.9	16.2	16.2	29.0	18.9	18.9	0.0	26.7	26.7	28.3	18.5	18.5
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:	22.9	16.2	16.2	29.0	18.9	18.9	0.0	26.7	26.7	28.3	18.5	18.5
LOS by Move:	C	B	B	C	B	B	A	C	C	C	B	B
HCM2kAvgQ:	2	8	8	1	3	3	0	2	2	0	2	2

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

21:8:08 Turnr at The Avenue IYWP AM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	16	398	83	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	32	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	13	226	7	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	105	0	34	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	497	32	246	139	AVEDEL s	3.6
CAPACITY	veh	1379	1156	1345	1269	LOS SIG	A
AVE DELAY	secs	4.0	3.1	3.2	3.1	LOS UNSIG	A
MAX DELAY	secs	5.3	4.0	4.1	4.0		
AVE QUEUE	veh	1	0	0	0	VEHIC HRS	0.9
MAX QUEUE	veh	1	0	0	0	COST $	14

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	32.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0 0	1	0	2 0 0	1	0	1 0	2	1 0	2 0	2	1 0
Volume Module:												
Base Vol:	0	146	311	234	87	42	51	1144	0	139	1358	300
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	146	311	234	87	42	51	1144	0	139	1358	300
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	154	327	246	92	44	54	1204	0	146	1429	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	154	327	246	92	44	54	1204	0	146	1429	316
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.10
FinalVolume:	0	154	327	254	92	44	54	1325	0	151	1572	347
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	0.32	0.68	2.00	0.67	0.33	1.00	3.00	0.00	2.00	2.46	0.54
Final Sat.:	1700	575	1225	3200	1214	586	1700	5400	0	3200	4423	977
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.08	0.08	0.08	0.03	0.25	0.00	0.05	0.36	0.36
Crit Moves:		****		****			****				****	
Green/Cycle:	0.00	0.31	0.31	0.11	0.41	0.41	0.11	0.35	0.00	0.15	0.40	0.40
Volume/Cap:	0.00	0.88	0.88	0.75	0.18	0.18	0.30	0.69	0.00	0.31	0.89	0.89
Delay/Veh:	0.0	45.9	45.9	50.6	18.0	18.0	40.2	27.4	0.0	36.2	31.5	31.5
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:	0.0	45.9	45.9	50.6	18.0	18.0	40.2	27.4	0.0	36.2	31.5	31.5
LOS by Move:	A	D	D	D	B	B	D	C	A	D	C	C
HCM2kAvgQ:	0	17	17	6	3	3	2	12	0	2	21	21

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.516
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 24.6
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	26	26	10	26	26	10	14	14		10	14	14	
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	2 1	0		1 0	2 1	0	
Volume Module:														
Base Vol:	57	5	48	108	11	11	5	1675	9		8	1730	46	
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:	57	5	48	108	11	11	5	1675	9		8	1730	46	
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:	60	5	51	114	12	12	5	1763	9		8	1821	48	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	60	5	51	114	12	12	5	1763	9		8	1821	48	
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	1.10	1.10		1.00	1.10	1.10	
FinalVolume:	60	5	51	114	12	12	5	1939	10		8	2003	53	
Saturation Flow Module:														
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	0.09	0.91	1.00	0.50	0.50	1.00	2.98	0.02		1.00	2.92	0.08	
Final Sat.:	1700	170	1630	1700	900	900	1700	5371	29		1700	5260	140	
Capacity Analysis Module:														
Vol/Sat:	0.04	0.03	0.03	0.07	0.01	0.01	0.00	0.36	0.36		0.00	0.38	0.38	
Crit Moves:		****		****			****					****		
Green/Cycle:	0.09	0.22	0.22	0.09	0.22	0.22	0.08	0.51	0.51		0.12	0.54	0.54	
Volume/Cap:	0.41	0.14	0.14	0.71	0.06	0.06	0.04	0.71	0.71		0.04	0.71	0.71	
Delay/Veh:	53.8	38.2	38.2	66.2	36.6	36.6	50.7	23.9	23.9		47.1	21.4	21.4	
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:	53.8	38.2	38.2	66.2	36.6	36.6	50.7	23.9	23.9		47.1	21.4	21.4	
LOS by Move:	D	D	D	E	D	D	D	C	C		D	C	C	
HCM2kAvgQ:	3	2	2	6	1	1	0	19	19		0	19	19	

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.906
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	49.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	17	17	10	17	17	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	79	1118	79	216	704	10	5	336	191	50	211	150
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	1118	79	216	704	10	5	336	191	50	211	150
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	1177	83	227	741	11	5	354	201	53	222	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1177	83	227	741	11	5	354	201	53	222	158
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	1.05	1.05	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.05	1.05
FinalVolume:	83	1236	87	227	778	11	5	354	201	53	233	166
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.97	0.03	1.00	0.64	0.36	1.00	1.17	0.83
Final Sat.:	1700	3362	238	1700	3550	50	1700	1148	652	1700	2104	1496
Capacity Analysis Module:												
Vol/Sat:	0.05	0.37	0.37	0.13	0.22	0.22	0.00	0.31	0.31	0.03	0.11	0.11
Crit Moves:		****		****				****		****		
Green/Cycle:	0.15	0.38	0.38	0.14	0.37	0.37	0.14	0.32	0.32	0.09	0.27	0.27
Volume/Cap:	0.32	0.97	0.97	0.97	0.60	0.60	0.02	0.97	0.97	0.34	0.41	0.41
Delay/Veh:	42.3	50.6	50.6	96.6	29.1	29.1	41.2	66.4	66.4	48.2	33.0	33.0
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:	42.3	50.6	50.6	96.6	29.1	29.1	41.2	66.4	66.4	48.2	33.0	33.0
LOS by Move:	D	D	D	F	C	C	D	E	E	D	C	C
HCM2kAvgQ:	3	28	28	12	11	11	0	24	24	2	6	6

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.430
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.0
Optimal Cycle: OPTIMIZED Level Of Service: A

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	0	0	14	14	20	0	20	0	0	0
Lanes:	1 0 2 0 0			0 0 1 1 0			1 0 0 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	14	1277	0	0	1000	38	130	0	27	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:	14	1277	0	0	1000	38	130	0	27	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:	15	1344	0	0	1053	40	137	0	28	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	1344	0	0	1053	40	137	0	28	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	1.05	1.00	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	1411	0	0	1105	42	137	0	28	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	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.93	0.07	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	3600	0	0	3468	132	1700	0	1800	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.39	0.00	0.00	0.32	0.32	0.08	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.09	0.77	0.00	0.00	0.69	0.69	0.17	0.00	0.17	0.00	0.00	0.00
Volume/Cap:	0.10	0.51	0.00	0.00	0.46	0.46	0.46	0.00	0.09	0.00	0.00	0.00
Delay/Veh:	48.7	5.0	0.0	0.0	8.4	8.4	43.8	0.0	40.0	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:	48.7	5.0	0.0	0.0	8.4	8.4	43.8	0.0	40.0	0.0	0.0	0.0
LOS by Move:	D	A	A	A	A	A	D	A	D	A	A	A
HCM2kAvgQ:	1	9	0	0	9	9	5	0	1	0	0	0

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.925
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	42.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	26	26	10	26	26	10	23	23	10	23	23
Lanes:	1 0 1	1 0		1 0 2	1 0		2 0 3	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	203	923	102	123	481	284	525	1181	125	12	1297	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:	203	923	102	123	481	284	525	1181	125	12	1297	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:	214	972	107	129	506	299	553	1243	132	13	1365	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	972	107	129	506	299	553	1243	132	13	1365	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	1.05	1.05	1.00	1.10	1.10	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	214	1020	113	129	557	329	569	1367	132	13	1502	25
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	2.00	1.00	2.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3242	358	1700	3600	1800	3200	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.13	0.31	0.31	0.08	0.15	0.18	0.18	0.25	0.07	0.01	0.28	0.01
Crit Moves:		****		****			****				****	
Green/Cycle:	0.14	0.33	0.33	0.11	0.30	0.30	0.19	0.34	0.34	0.14	0.29	0.29
Volume/Cap:	0.92	0.95	0.95	0.72	0.52	0.61	0.95	0.75	0.22	0.05	0.95	0.05
Delay/Veh:	77.2	46.8	46.8	54.8	27.9	29.3	63.3	29.6	22.6	35.4	45.8	24.2
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:	77.2	46.8	46.8	54.8	27.9	29.3	63.3	29.6	22.6	35.4	45.8	24.2
LOS by Move:	E	D	D	D	C	C	E	C	C	D	D	C
HCM2kAvgQ:	10	21	21	6	7	9	14	13	3	0	19	1

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.700
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	38.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	228	314	66	73	57	41	138	1374	62	246	1702	299
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:	228	314	66	73	57	41	138	1374	62	246	1702	299
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:	240	331	69	77	60	43	145	1446	65	259	1792	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	331	69	77	60	43	145	1446	65	259	1792	315
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	240	331	69	77	60	43	145	1591	65	259	1971	315
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	0.58	0.42	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	1487	313	1700	1047	753	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.22	0.05	0.06	0.06	0.09	0.29	0.04	0.15	0.36	0.17
Crit Moves:	****				****		****				****	
Green/Cycle:	0.16	0.29	0.29	0.11	0.24	0.24	0.10	0.35	0.35	0.18	0.43	0.43
Volume/Cap:	0.86	0.77	0.77	0.41	0.24	0.24	0.86	0.85	0.10	0.85	0.86	0.41
Delay/Veh:	66.6	42.4	42.4	46.9	34.3	34.3	81.2	37.2	24.4	63.4	31.9	22.3
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:	66.6	42.4	42.4	46.9	34.3	34.3	81.2	37.2	24.4	63.4	31.9	22.3
LOS by Move:	E	D	D	D	C	C	F	D	C	E	C	C
HCM2kAvgQ:	11	14	14	3	3	3	8	19	1	12	23	7

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

The Avenue
AM 2015 With Project Conditions
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.943
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	38.7
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0 3	0	1	1 0 4	0	1	1 0 4	0	1	2 0 4	0	1
Volume Module:												
Base Vol:	167	1349	244	111	171	201	155	1436	100	71	2536	127
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:	167	1349	244	111	171	201	155	1436	100	71	2536	127
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	0.88	0.88	0.95	0.95	0.95	0.95	0.76	0.95	0.76
PHF Volume:	176	1420	257	126	194	212	163	1512	105	93	2669	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1420	257	126	194	212	163	1512	105	93	2669	167
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	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.03	1.10	1.00
FinalVolume:	176	1562	257	126	214	212	163	1663	105	96	2936	167
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	4.00	1.00	1.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	1700	5400	1800	1700	7200	1800	1700	7200	1800	3200	7200	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.29	0.14	0.07	0.03	0.12	0.10	0.23	0.06	0.03	0.41	0.09
Crit Moves:		****		****			****				****	
Green/Cycle:	0.17	0.30	0.30	0.10	0.23	0.23	0.10	0.36	0.36	0.16	0.42	0.42
Volume/Cap:	0.61	0.97	0.48	0.74	0.13	0.51	0.96	0.63	0.16	0.19	0.97	0.22
Delay/Veh:	42.3	50.1	29.4	59.8	30.6	34.7	101.8	26.8	21.6	36.8	38.3	18.6
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:	42.3	50.1	29.4	59.8	30.6	34.7	101.8	26.8	21.6	36.8	38.3	18.6
LOS by Move:	D	D	C	E	C	C	F	C	C	D	D	B
HCM2kAvgQ:	6	21	7	6	1	6	9	11	2	2	28	3

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

The Avenue
AM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.939
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 45.3
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10		33		33		10		33		33		10		26		26		10		26		26	
Lanes:	1	0	2	1	0		1	0	3	1	0		2	0	4	0	1		2	0	4	0	1	
Volume Module:																								
Base Vol:	167		1349		244		111		171		201		155		1436		100		71		2536		127	
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:	167		1349		244		111		171		201		155		1436		100		71		2536		127	
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		0.88		0.88		0.95		0.95		0.95		0.95		0.76		0.95		0.76	
PHF Volume:	176		1420		257		126		194		212		163		1512		105		93		2669		167	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	176		1420		257		126		194		212		163		1512		105		93		2669		167	
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		1.10		1.10		1.00		1.10		1.10		1.03		1.10		1.00		1.03		1.10		1.00	
FinalVolume:	176		1562		283		126		214		233		168		1663		105		96		2936		167	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.89		1.00		1.00		0.89		1.00		1.00	
Lanes:	1.00		2.54		0.46		1.00		3.00		1.00		2.00		4.00		1.00		2.00		4.00		1.00	
Final Sat.:	1700		4573		827		1700		5400		1800		3200		7200		1800		3200		7200		1800	
Capacity Analysis Module:																								
Vol/Sat:	0.10		0.34		0.34		0.07		0.04		0.13		0.05		0.23		0.06		0.03		0.41		0.09	
Crit Moves:			****				****						****								****			
Green/Cycle:	0.12		0.35		0.35		0.08		0.31		0.31		0.08		0.37		0.37		0.13		0.42		0.42	
Volume/Cap:	0.87		0.98		0.98		0.89		0.13		0.41		0.63		0.63		0.16		0.23		0.98		0.22	
Delay/Veh:	83.9		54.2		54.2		99.1		29.4		32.6		58.0		31.7		25.6		46.8		46.1		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:	83.9		54.2		54.2		99.1		29.4		32.6		58.0		31.7		25.6		46.8		46.1		22.6	
LOS by Move:	F		D		D		F		C		C		E		C		C		D		D		C	
HCM2kAvgQ:	10		28		28		8		2		7		4		13		3		2		33		4	

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

The Avenue
PM 2015 With Project Conditions
JN 5279

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

Intersection #1 Hellman/Ontario Ave, (NS) / PA 1 Access (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.2]

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	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	16	16	19	7	24	43	25	0	9	11	0	4
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:	16	16	19	7	24	43	25	0	9	11	0	4
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:	17	17	20	7	25	45	26	0	9	12	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	17	20	7	25	45	26	0	9	12	0	4
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:	71	xxxx	xxxxx	37	xxxx	xxxxx	125	133	48	128	146	27
Potent Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	853	761	1027	850	749	1054
Move Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	840	749	1027	832	738	1054
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	0.03	0.00	0.01	0.01	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	9.4	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	A	*	*	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	xxxx	1027	xxxx	xxxx	1054
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	0.0
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	8.4
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	A
ApproachDel:	xxxxxx			xxxxxx			9.2			9.1		
ApproachLOS:	*			*			A			A		

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

The Avenue
PM 2015 With Project Conditions
JN 5279

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec):	106	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	6 (Y+R=2.0 sec)	Average Delay (sec/veh):	37.4
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	22	22	10	22	22	25	25	25	24	24	24
Lanes:	1 0	2	1 0	1 0	1	1 0	0 1	0	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	71	1192	115	192	1768	50	57	451	236	93	392	233
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:	71	1192	115	192	1768	50	57	451	236	93	392	233
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:	0.85	0.85	0.85	0.97	0.97	0.97	0.76	0.76	0.76	0.95	0.95	0.95
PHF Volume:	84	1402	135	198	1823	52	75	593	311	98	413	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	1402	135	198	1823	52	75	593	311	98	413	245
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	1.10	1.10	1.00	1.05	1.05	1.05	1.05	1.05	1.00	1.05	1.05
FinalVolume:	84	1543	149	198	1914	54	79	623	326	98	433	258
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.74	0.26	1.00	1.94	0.06	0.16	1.21	0.63	1.00	1.25	0.75
Final Sat.:	1700	4925	475	1700	3501	99	275	2172	1137	1700	2258	1342
Capacity Analysis Module:												
Vol/Sat:	0.05	0.31	0.31	0.12	0.55	0.55	0.29	0.29	0.29	0.06	0.19	0.19
Crit Moves:	****				****			****				
Green/Cycle:	0.09	0.47	0.47	0.18	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.52	0.66	0.66	0.66	0.98	0.98	0.98	0.98	0.98	0.20	0.66	0.66
Delay/Veh:	48.8	21.9	21.9	46.0	38.9	38.9	60.6	60.6	60.6	28.4	34.4	34.4
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:	48.8	21.9	21.9	46.0	38.9	38.9	60.6	60.6	60.6	28.4	34.4	34.4
LOS by Move:	D	C	C	D	D	D	E	E	E	C	C	C
HCM2kAvgQ:	3	15	15	7	38	38	23	23	23	3	11	11

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	36.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	17	17	10	17	17	10	23	23				10	23	23			
Lanes:	1	0 2	1 0	1	0 2	1 0	1	0 1	0 1				1	0 0	1 0			
Volume Module:																		
Base Vol:	250	1321	7	93	2008	25	59	298	259				11	131	89			
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:	250	1321	7	93	2008	25	59	298	259				11	131	89			
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:	263	1391	7	98	2114	26	62	314	273				12	138	94			
Reduct Vol:	0	0	0	0	0	0	0	0	0				0	0	0			
Reduced Vol:	263	1391	7	98	2114	26	62	314	273				12	138	94			
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	1.10	1.10	1.00	1.10	1.10	1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	263	1530	8	98	2325	29	62	314	273				12	138	94			
Saturation Flow Module:																		
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800				1800	1800	1800			
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00				0.94	1.00	1.00			
Lanes:	1.00	2.98	0.02	1.00	2.96	0.04	1.00	1.00	1.00				1.00	0.60	0.40			
Final Sat.:	1700	5372	28	1700	5334	66	1700	1800	1800				1700	1072	728			
Capacity Analysis Module:																		
Vol/Sat:	0.15	0.28	0.28	0.06	0.44	0.44	0.04	0.17	0.15				0.01	0.13	0.13			
Crit Moves:	****				****			****					****					
Green/Cycle:	0.17	0.49	0.49	0.15	0.47	0.47	0.09	0.20	0.20				0.09	0.20	0.20			
Volume/Cap:	0.92	0.58	0.58	0.38	0.92	0.92	0.42	0.87	0.76				0.08	0.64	0.64			
Delay/Veh:	79.5	21.0	21.0	45.0	34.0	34.0	51.7	64.6	52.3				48.5	46.2	46.2			
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:	79.5	21.0	21.0	45.0	34.0	34.0	51.7	64.6	52.3				48.5	46.2	46.2			
LOS by Move:	E	C	C	D	C	C	D	E	D				D	D	D			
HCM2kAvgQ:	13	13	13	4	30	30	3	14	11				0	8	8			

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.664
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.2
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0 1	1 0		1 0 2	1 0		1 0 0	1 0		1 0 0	1 0	
Volume Module:												
Base Vol:	90	1461	19	78	2152	48	62	22	8	21	38	54
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:	90	1461	19	78	2152	48	62	22	8	21	38	54
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:	95	1538	20	82	2265	51	65	23	8	22	40	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	1538	20	82	2265	51	65	23	8	22	40	57
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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	1615	21	82	2492	56	65	23	8	22	40	57
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	2.93	0.07	1.00	0.73	0.27	1.00	0.41	0.59
Final Sat.:	1700	3554	46	1700	5282	118	1700	1320	480	1700	743	1057
Capacity Analysis Module:												
Vol/Sat:	0.06	0.45	0.45	0.05	0.47	0.47	0.04	0.02	0.02	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.58	0.58	0.11	0.60	0.60	0.08	0.17	0.17	0.08	0.17	0.17
Volume/Cap:	0.67	0.79	0.79	0.46	0.79	0.79	0.46	0.11	0.11	0.16	0.32	0.32
Delay/Veh:	65.1	21.7	21.7	52.2	19.5	19.5	54.8	42.6	42.6	51.6	44.7	44.7
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:	65.1	21.7	21.7	52.2	19.5	19.5	54.8	42.6	42.6	51.6	44.7	44.7
LOS by Move:	E	C	C	D	B	B	D	D	D	D	D	D
HCM2kAvgQ:	5	24	24	4	25	25	3	1	1	1	3	3

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

The Avenue
PM 2015 With Project Conditions
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.916
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	43.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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			Ignore			Include		
Min. Green:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0 3	0	1	1 0 3	0	1	1 0 3	0	1	1 0 3	0	1
Volume Module:												
Base Vol:	77	1378	379	57	1926	197	167	1177	1192	141	1054	25
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:	77	1378	379	57	1926	197	167	1177	1192	141	1054	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.87	0.87	0.87	0.94	0.94	0.00	0.86	0.86	0.86
PHF Volume:	80	1435	395	66	2214	226	178	1252	0	164	1226	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1435	395	66	2214	226	178	1252	0	164	1226	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	0.00	1.00	1.10	1.00
FinalVolume:	80	1579	395	66	2435	226	178	1377	0	164	1348	29
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	5400	1800	1700	5400	1800	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.22	0.04	0.45	0.13	0.10	0.26	0.00	0.10	0.25	0.02
Crit Moves:	****				****			****			****	
Green/Cycle:	0.09	0.43	0.43	0.13	0.47	0.47	0.11	0.27	0.00	0.10	0.26	0.26
Volume/Cap:	0.52	0.68	0.51	0.29	0.96	0.27	0.97	0.96	0.00	0.96	0.97	0.06
Delay/Veh:	50.8	26.3	23.6	43.7	38.2	17.8	105.3	55.0	0.0	106.0	57.1	30.8
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:	50.8	26.3	23.6	43.7	38.2	17.8	105.3	55.0	0.0	106.0	57.1	30.8
LOS by Move:	D	C	C	D	D	B	F	D	A	F	E	C
HCM2kAvgQ:	3	15	10	2	32	5	10	20	0	10	20	1

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.951
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 47.2
Optimal Cycle: OPTIMIZED Level Of Service: D

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				Ignore				Include			
Min. Green:	10	26	26		10	26	26		10	29	29		10	29	29	
Lanes:	1	0 3	0	1	1	0 3	1	0	1	0 2	0	1	1	0 2	1	0
Volume Module:																
Base Vol:	77	1378	379		57	1926	197		167	1177	1192		141	1054	25	
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:	77	1378	379		57	1926	197		167	1177	1192		141	1054	25	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
PHF Adj:	0.96	0.96	0.96		0.87	0.87	0.87		0.94	0.94	0.00		0.86	0.86	0.86	
PHF Volume:	80	1435	395		66	2214	226		178	1252	0		164	1226	29	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	80	1435	395		66	2214	226		178	1252	0		164	1226	29	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.10	1.00		1.00	1.10	1.10		1.00	1.05	0.00		1.00	1.10	1.10	
FinalVolume:	80	1579	395		66	2435	249		178	1315	0		164	1348	32	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	3.00	1.00		1.00	3.63	0.37		1.00	2.00	1.00		1.00	2.93	0.07	
Final Sat.:	1700	5400	1800		1700	6532	668		1700	3600	1800		1700	5275	125	
Capacity Analysis Module:																
Vol/Sat:	0.05	0.29	0.22		0.04	0.37	0.37		0.10	0.37	0.00		0.10	0.26	0.26	
Crit Moves:	****					****				****			****			
Green/Cycle:	0.09	0.35	0.35		0.11	0.37	0.37		0.13	0.37	0.00		0.10	0.33	0.33	
Volume/Cap:	0.52	0.83	0.62		0.35	1.00	1.00		0.80	1.00	0.00		1.00	0.77	0.77	
Delay/Veh:	50.8	35.5	31.2		46.4	51.2	51.2		64.1	59.0	0.0		119.2	35.2	35.2	
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:	50.8	35.5	31.2		46.4	51.2	51.2		64.1	59.0	0.0		119.2	35.2	35.2	
LOS by Move:	D	D	C		D	D	D		E	E	A		F	D	D	
HCM2kAvgQ:	3	18	12		2	30	30		8	29	0		10	16	16	

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

21:8:08 A St. at The Avenue IYWP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)	FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	8 8 28 0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	37 63 29 0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	28 8 25 0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	14 72 16 0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	44	129	61	102	AVEDEL s	2.8
CAPACITY	veh	1346	1366	1343	1361	LOS SIG	A
AVE DELAY	secs	2.7	2.8	2.8	2.8	LOS UNSIG	A
MAX DELAY	secs	3.4	3.6	3.5	3.5		
AVE QUEUE	veh	0	0	0	0	VEHIC HRS	0.3
MAX QUEUE	veh	0	0	0	0	COST $	4

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.655
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10		20		20		10		20		20		10		14		14		10		14		14	
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	45		5		73		22		7		34		44		1568		54		88		1187		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:	45		5		73		22		7		34		44		1568		54		88		1187		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:	47		5		77		23		7		36		46		1651		57		93		1249		40	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	47		5		77		23		7		36		46		1651		57		93		1249		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		1.05		1.05		1.00		1.05		1.05	
FinalVolume:	47		5		77		23		7		36		46		1733		60		93		1312		42	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00		0.94		1.00		1.00	
Lanes:	1.00		0.06		0.94		1.00		0.17		0.83		1.00		1.93		0.07		1.00		1.94		0.06	
Final Sat.:	1700		115		1685		1700		307		1493		1700		3480		120		1700		3488		112	
Capacity Analysis Module:																								
Vol/Sat:	0.03		0.05		0.05		0.01		0.02		0.02		0.03		0.50		0.50		0.05		0.38		0.38	
Crit Moves:			****				****								****				****					
Green/Cycle:	0.08		0.17		0.17		0.08		0.17		0.17		0.12		0.60		0.60		0.08		0.56		0.56	
Volume/Cap:	0.33		0.27		0.27		0.16		0.14		0.14		0.22		0.83		0.83		0.65		0.67		0.67	
Delay/Veh:	53.3		44.2		44.2		51.7		42.9		42.9		47.9		22.0		22.0		63.8		19.6		19.6	
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:	53.3		44.2		44.2		51.7		42.9		42.9		47.9		22.0		22.0		63.8		19.6		19.6	
LOS by Move:	D		D		D		D		D		D		D		C		C		E		B		B	
HCM2kAvgQ:	2		3		3		1		1		1		2		28		28		5		18		18	

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	33.3
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	59	451	4	151	656	3	2	113	193	10	111	158
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	451	4	151	656	3	2	113	193	10	111	158
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	475	4	159	691	3	2	119	203	11	117	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	475	4	159	691	3	2	119	203	11	117	166
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	475	4	159	691	3	2	119	203	11	117	166
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	0.99	0.01	1.00	0.37	0.63	1.00	0.41	0.59
Final Sat.:	1700	1784	16	1700	1792	8	1700	665	1135	1700	743	1057
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.09	0.39	0.39	0.00	0.18	0.18	0.01	0.16	0.16
Crit Moves:	****				****			****			****	
Green/Cycle:	0.11	0.42	0.42	0.17	0.48	0.48	0.13	0.22	0.22	0.11	0.20	0.20
Volume/Cap:	0.35	0.63	0.63	0.56	0.80	0.80	0.01	0.80	0.80	0.06	0.80	0.80
Delay/Veh:	40.6	23.5	23.5	39.0	26.1	26.1	35.9	45.7	45.7	38.4	48.4	48.4
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:	40.6	23.5	23.5	39.0	26.1	26.1	35.9	45.7	45.7	38.4	48.4	48.4
LOS by Move:	D	C	C	D	C	C	D	D	D	D	D	D
HCM2kAvgQ:	2	12	12	5	19	19	0	11	11	0	10	10

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

21:8:08 Turnr at The Avenue IYWP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50
L'	(m)	12.40	9.20	12.40	9.20
V	(m)	4.30	4.50	4.30	4.50
RAD	(m)	33.50	33.50	33.50	33.50
PHI	(d)	13.00	15.50	13.00	15.50
DIA	(m)	79.20	79.20	79.20	79.20
GRAD SEP		0	0	0	0

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	56	442	97	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	46	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	32	738	25	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	69	0	27	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	595	46	795	96
CAPACITY	veh	1374	1132	1332	1022
AVE DELAY	secs	4.5	3.2	6.7	3.8
MAX DELAY	secs	6.1	4.2	9.6	5.0
AVE QUEUE	veh	1	0	2	0
MAX QUEUE	veh	1	0	2	0

AVEDEL s	5.6
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	2.4
COST $	36

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.908
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 48.2
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10		29		29		10		29		29		10		17		17		10		17		17	
Lanes:	1	0	0	1	0		2	0	0	1	0		1	0	2	1	0		2	0	2	1	0	
Volume Module:																								
Base Vol:	0		142		224		608		209		36		102		1488		0		320		1189		351	
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		142		224		608		209		36		102		1488		0		320		1189		351	
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		149		236		640		220		38		107		1566		0		337		1252		369	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	0		149		236		640		220		38		107		1566		0		337		1252		369	
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		1.03		1.00		1.00		1.00		1.10		1.10		1.03		1.10		1.10	
FinalVolume:	0		149		236		659		220		38		107		1723		0		347		1377		406	
Saturation Flow Module:																								
Sat/Lane:	1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800		1800	
Adjustment:	0.94		1.00		1.00		0.89		1.00		1.00		0.94		1.00		1.00		0.89		1.00		1.00	
Lanes:	1.00		0.39		0.61		2.00		0.85		0.15		1.00		3.00		0.00		2.00		2.32		0.68	
Final Sat.:	1700		698		1102		3200		1536		264		1700		5400		0		3200		4169		1231	
Capacity Analysis Module:																								
Vol/Sat:	0.00		0.21		0.21		0.21		0.14		0.14		0.06		0.32		0.00		0.11		0.33		0.33	
Crit Moves:			****				****								****				****					
Green/Cycle:	0.00		0.24		0.24		0.22		0.47		0.47		0.09		0.35		0.00		0.12		0.37		0.37	
Volume/Cap:	0.00		0.89		0.89		0.92		0.31		0.31		0.67		0.92		0.00		0.92		0.89		0.89	
Delay/Veh:	0.0		63.0		63.0		61.8		20.1		20.1		63.2		44.9		0.0		78.7		40.4		40.4	
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		63.0		63.0		61.8		20.1		20.1		63.2		44.9		0.0		78.7		40.4		40.4	
LOS by Move:	A		E		E		E		C		C		E		D		A		E		D		D	
HCM2kAvgQ:	0		17		17		17		6		6		5		24		0		10		24		24	

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	32.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	2 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	33	19	28	152	15	15	19	2267	34	33	1813	162
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	19	28	152	15	15	19	2267	34	33	1813	162
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	20	29	160	16	16	20	2386	36	35	1908	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	20	29	160	16	16	20	2386	36	35	1908	171
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	1.10	1.10	1.00	1.10	1.10
FinalVolume:	35	20	29	160	16	16	20	2625	39	35	2099	188
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.40	0.60	1.00	0.50	0.50	1.00	2.96	0.04	1.00	2.75	0.25
Final Sat.:	1700	728	1072	1700	900	900	1700	5320	80	1700	4957	443
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.09	0.02	0.02	0.01	0.49	0.49	0.02	0.42	0.42
Crit Moves:		****		****				****			****	
Green/Cycle:	0.09	0.22	0.22	0.10	0.23	0.23	0.10	0.53	0.53	0.08	0.51	0.51
Volume/Cap:	0.23	0.13	0.13	0.93	0.08	0.08	0.12	0.93	0.93	0.25	0.82	0.82
Delay/Veh:	51.7	38.0	38.0	101.4	36.3	36.3	49.4	32.0	32.0	52.4	26.7	26.7
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:	51.7	38.0	38.0	101.4	36.3	36.3	49.4	32.0	32.0	52.4	26.7	26.7
LOS by Move:	D	D	D	F	D	D	D	C	C	D	C	C
HCM2kAvgQ:	1	1	1	9	1	1	1	34	34	1	25	25

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec): 95 Critical Vol./Cap.(X): 0.935
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 43.4
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	17	17		10	17	17		10	20	20		10	20	20	
Lanes:	1 0	1	1	0	1 0	1	1	0	1 0	0	1	0	1 0	1	1	0
Volume Module:																
Base Vol:	164	1056	75		172	1348	23		10	319	95		148	468	272	
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:	164	1056	75		172	1348	23		10	319	95		148	468	272	
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:	173	1112	79		181	1419	24		11	336	100		156	493	286	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	173	1112	79		181	1419	24		11	336	100		156	493	286	
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	1.05	1.05		1.00	1.05	1.05		1.00	1.00	1.00		1.00	1.05	1.05	
FinalVolume:	173	1167	83		181	1490	25		11	336	100		156	517	301	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00		0.94	1.00	1.00	
Lanes:	1.00	1.87	0.13		1.00	1.97	0.03		1.00	0.77	0.23		1.00	1.26	0.74	
Final Sat.:	1700	3361	239		1700	3540	60		1700	1387	413		1700	2277	1323	
Capacity Analysis Module:																
Vol/Sat:	0.10	0.35	0.35		0.11	0.42	0.42		0.01	0.24	0.24		0.09	0.23	0.23	
Crit Moves:	****					****				****				****		
Green/Cycle:	0.11	0.42	0.42		0.13	0.45	0.45		0.11	0.26	0.26		0.11	0.25	0.25	
Volume/Cap:	0.94	0.82	0.82		0.82	0.94	0.94		0.05	0.94	0.94		0.87	0.92	0.92	
Delay/Veh:	92.3	27.8	27.8		61.1	36.8	36.8		37.6	62.7	62.7		75.8	49.1	49.1	
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:	92.3	27.8	27.8		61.1	36.8	36.8		37.6	62.7	62.7		75.8	49.1	49.1	
LOS by Move:	F	C	C		E	D	D		D	E	E		E	D	D	
HCM2kAvgQ:	9	18	18		8	26	26		0	17	17		8	16	16	

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.752
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: OPTIMIZED 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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	0	0	14	14	20	0	20	0	0	0
Lanes:	1 0 2 0 0			0 0 1 1 0			1 0 0 0 1			0 0 0 0 0		
Volume Module:												
Base Vol:	136	1276	0	0	1585	182	141	0	102	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:	136	1276	0	0	1585	182	141	0	102	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:	143	1343	0	0	1668	192	148	0	107	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	1343	0	0	1668	192	148	0	107	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	1.05	1.00	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	1410	0	0	1752	201	148	0	107	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	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.79	0.21	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	3600	0	0	3229	371	1700	0	1800	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	0.00	0.00	0.54	0.54	0.09	0.00	0.06	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.11	0.78	0.00	0.00	0.68	0.68	0.17	0.00	0.17	0.00	0.00	0.00
Volume/Cap:	0.80	0.50	0.00	0.00	0.80	0.80	0.52	0.00	0.36	0.00	0.00	0.00
Delay/Veh:	74.4	4.8	0.0	0.0	15.6	15.6	47.4	0.0	45.0	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:	74.4	4.8	0.0	0.0	15.6	15.6	47.4	0.0	45.0	0.0	0.0	0.0
LOS by Move:	E	A	A	A	B	B	D	A	D	A	A	A
HCM2kAvgQ:	8	9	0	0	26	26	6	0	4	0	0	0

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.983
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	54.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	26	26	10	26	26	10	23	23	10	23	23
Lanes:	1 0 1	1 0		1 0 2	1 0		2 0 3	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	248	675	35	269	1141	373	379	1691	377	108	1387	171
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:	248	675	35	269	1141	373	379	1691	377	108	1387	171
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:	261	711	37	283	1201	393	399	1780	397	114	1460	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	711	37	283	1201	393	399	1780	397	114	1460	180
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	1.05	1.05	1.00	1.10	1.10	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	261	746	39	283	1321	432	411	1958	397	114	1606	180
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.26	0.74	2.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	3423	177	1700	4070	1330	3200	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.22	0.17	0.32	0.32	0.13	0.36	0.22	0.07	0.30	0.10
Crit Moves:	****				****			****			****	
Green/Cycle:	0.15	0.28	0.28	0.19	0.32	0.32	0.14	0.36	0.36	0.10	0.32	0.32
Volume/Cap:	1.01	0.77	0.77	0.88	1.01	1.01	0.94	1.01	0.62	0.70	0.94	0.32
Delay/Veh:	104.5	38.4	38.4	64.4	61.1	61.1	73.5	58.0	29.6	59.0	45.8	27.6
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:	104.5	38.4	38.4	64.4	61.1	61.1	73.5	58.0	29.6	59.0	45.8	27.6
LOS by Move:	F	D	D	E	E	E	E	E	C	E	D	C
HCM2kAvgQ:	14	13	13	13	26	26	11	29	11	5	22	4

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.875
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 47.2
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	163	189	32	233	133	75	179	2289	235	84	1953	177
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:	163	189	32	233	133	75	179	2289	235	84	1953	177
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:	172	199	34	245	140	79	188	2409	247	88	2056	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	199	34	245	140	79	188	2409	247	88	2056	186
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	172	199	34	245	140	79	188	2650	247	88	2261	186
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	1.00	0.86	0.14	1.00	0.64	0.36	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1700	1539	261	1700	1151	649	1700	5400	1800	1700	5400	1800
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.13	0.14	0.12	0.12	0.11	0.49	0.14	0.05	0.42	0.10
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.22	0.22	0.14	0.25	0.25	0.12	0.49	0.49	0.08	0.45	0.45
Volume/Cap:	0.88	0.60	0.60	1.00	0.49	0.49	0.92	1.00	0.28	0.62	0.92	0.23
Delay/Veh:	86.2	44.8	44.8	109.6	39.7	39.7	94.6	48.8	18.3	61.6	37.5	20.2
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:	86.2	44.8	44.8	109.6	39.7	39.7	94.6	48.8	18.3	61.6	37.5	20.2
LOS by Move:	F	D	D	F	D	D	F	D	B	E	D	C
HCM2kAvgQ:	9	8	8	14	7	7	11	40	5	4	30	4

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

The Avenue
PM 2015 With Project Conditions
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.983
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 47.9
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0 3	0	1	1 0 4	0	1	1 0 4	0	1	2 0 4	0	1
Volume Module:												
Base Vol:	125	766	170	166	1480	210	235	2577	422	367	2275	164
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:	125	766	170	166	1480	210	235	2577	422	367	2275	164
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	0.95	0.95	0.95	0.79	0.79	0.79
PHF Volume:	136	833	185	180	1609	228	247	2713	444	465	2880	208
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	833	185	180	1609	228	247	2713	444	465	2880	208
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	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.03	1.10	1.00
FinalVolume:	136	916	185	180	1770	228	247	2984	444	478	3168	208
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.89	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	4.00	1.00	1.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	1700	5400	1800	1700	7200	1800	1700	7200	1800	3200	7200	1800
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.10	0.11	0.25	0.13	0.15	0.41	0.25	0.15	0.44	0.12
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.21	0.21	0.13	0.25	0.25	0.15	0.43	0.43	0.16	0.44	0.44
Volume/Cap:	0.88	0.82	0.49	0.82	0.99	0.51	0.99	0.96	0.57	0.96	0.99	0.26
Delay/Veh:	89.0	46.3	39.5	66.9	61.1	36.7	102.1	38.6	24.5	75.7	45.0	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:	89.0	46.3	39.5	66.9	61.1	36.7	102.1	38.6	24.5	75.7	45.0	19.5
LOS by Move:	F	D	D	E	E	D	F	D	C	E	D	B
HCM2kAvgQ:	8	12	6	9	21	7	14	30	12	13	34	4

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

The Avenue
PM 2015 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.940
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 51.3
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	33	33		10	33	33		10	26	26		10	26	26	
Lanes:	1 0	2	1	0	1 0	3	1	0	2 0	4	0	1	2 0	4	0	1
Volume Module:																
Base Vol:	125	766	170		166	1480	210		235	2577	422		367	2275	164	
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:	125	766	170		166	1480	210		235	2577	422		367	2275	164	
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		0.95	0.95	0.95		0.79	0.79	0.79	
PHF Volume:	136	833	185		180	1609	228		247	2713	444		465	2880	208	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	136	833	185		180	1609	228		247	2713	444		465	2880	208	
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	1.10	1.10		1.00	1.10	1.10		1.03	1.10	1.00		1.03	1.10	1.00	
FinalVolume:	136	916	203		180	1770	251		255	2984	444		478	3168	208	
Saturation Flow Module:																
Sat/Lane:	1800	1800	1800		1800	1800	1800		1800	1800	1800		1800	1800	1800	
Adjustment:	0.94	1.00	1.00		0.94	1.00	1.00		0.89	1.00	1.00		0.89	1.00	1.00	
Lanes:	1.00	2.46	0.54		1.00	3.50	0.50		2.00	4.00	1.00		2.00	4.00	1.00	
Final Sat.:	1700	4419	981		1700	6305	895		3200	7200	1800		3200	7200	1800	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.21	0.21		0.11	0.28	0.28		0.08	0.41	0.25		0.15	0.44	0.12	
Crit Moves:		****			****					****			****			
Green/Cycle:	0.09	0.28	0.28		0.10	0.29	0.29		0.09	0.41	0.41		0.15	0.47	0.47	
Volume/Cap:	0.92	0.75	0.75		1.02	0.96	0.96		0.90	1.02	0.61		1.02	0.94	0.25	
Delay/Veh:	105.2	42.0	42.0		126.1	53.4	53.4		83.9	56.8	29.5		97.3	37.2	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:	105.2	42.0	42.0		126.1	53.4	53.4		83.9	56.8	29.5		97.3	37.2	19.5	
LOS by Move:	F	D	D		F	D	D		F	E	C		F	D	B	
HCM2kAvgQ:	8	14	14		11	23	23		8	35	13		15	33	5	

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

APPENDIX J

2030 Without Project
HCM Intersection Analysis Worksheets

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Condtions
AM Peak Hour

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

Intersection #1 Hellman/Ontario Ave, (NS) / The Avenue (EW)

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: A[8.9]

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	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	5	22		6	2	7		13	37		0	14	17		0	6
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:	5	22		6	2	7		13	37		0	14	17		0	6
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:	5	23		6	2	7		14	39		0	15	18		0	6
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
FinalVolume:	5	23		6	2	7		14	39		0	15	18		0	6
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:	21	xxxx	xxxxx		29	xxxx	xxxxx		58	58		14	63	62		26
Potent Cap.:	1608	xxxx	xxxxx		1597	xxxx	xxxxx		943	836		1071	937	833		1055
Move Cap.:	1608	xxxx	xxxxx		1597	xxxx	xxxxx		934	833		1071	921	829		1055
Volume/Cap:	0.00	xxxx	xxxx		0.00	xxxx	xxxx		0.04	0.00		0.01	0.02	0.00		0.01
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx		0.0	xxxx	xxxxx		0.1	xxxx	xxxxx		0.1	xxxx	xxxxx	
Control Del:	7.2	xxxx	xxxxx		7.3	xxxx	xxxxx		9.0	xxxx	xxxxx		9.0	xxxx	xxxxx	
LOS by Move:	A	*	*		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	xxxx	1071		xxxx	xxxx	1055	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	0.0		xxxxx	xxxx	0.0	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	8.4		xxxxx	xxxx	8.4	
Shared LOS:	*	*	*		*	*	*		*	*	A		*	*	A	
ApproachDel:	xxxxxx				xxxxxx				8.9				8.8			
ApproachLOS:	*				*				A				A			

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Condtions
AM Peak Hour

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 74 Critical Vol./Cap.(X): 0.631
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 19.3
Optimal Cycle: OPTIMIZED 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:	10	22	22	10	22	22	25	25	25	24	24	24
Lanes:	1 0	2 1	0	1 0	1 1	0	0 1	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	212	1472	90	110	812	36	68	526	84	73	342	201
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:	212	1472	90	110	812	36	68	526	84	73	342	201
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:	223	1549	95	116	855	38	72	554	88	77	360	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	223	1549	95	116	855	38	72	554	88	77	360	212
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	1.10	1.10	1.00	1.05	1.05	1.05	1.05	1.05	1.00	1.05	1.05
FinalVolume:	223	1704	104	116	897	40	75	581	93	77	378	222
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	2.83	0.17	1.00	1.92	0.08	0.21	1.54	0.25	1.00	1.26	0.74
Final Sat.:	1800	5372	328	1800	3639	161	379	2932	468	1800	2393	1407
Capacity Analysis Module:												
Vol/Sat:	0.12	0.32	0.32	0.06	0.25	0.25	0.20	0.20	0.20	0.04	0.16	0.16
Crit Moves:		****		****				****				
Green/Cycle:	0.18	0.45	0.45	0.14	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Volume/Cap:	0.68	0.71	0.71	0.48	0.62	0.62	0.59	0.59	0.59	0.13	0.47	0.47
Delay/Veh:	39.3	15.7	15.7	36.1	17.7	17.7	21.3	21.3	21.3	16.6	19.6	19.6
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:	39.3	15.7	15.7	36.1	17.7	17.7	21.3	21.3	21.3	16.6	19.6	19.6
LOS by Move:	D	B	B	D	B	B	C	C	C	B	B	B
HCM2kAvgQ:	6	11	11	3	8	8	7	7	7	1	5	5

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

****

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

****

Cycle (sec): 95 Critical Vol./Cap.(X): 0.614
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: OPTIMIZED Level Of Service: C

****

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:	10		17		17		10		17		17		10		23		23		10		23		23	
Lanes:	1	0	2	1	0		1	0	3	1	0		1	0	1	0	1		1	0	0	1	0	
Volume Module:																								
Base Vol:	206	1683		8			109	992		21			58	114		16			11	99		120		
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:	206	1683		8			109	992		21			58	114		16			11	99		120		
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:	217	1772		8			115	1044		22			61	120		17			12	104		126		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	217	1772		8			115	1044		22			61	120		17			12	104		126		
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	1.10		1.10			1.00	1.10		1.10			1.00	1.00		1.00			1.00	1.00		1.00		
FinalVolume:	217	1949		9			115	1149		24			61	120		17			12	104		126		
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	2.99		0.01			1.00	3.92		0.08			1.00	1.00		1.00			1.00	0.45		0.55		
Final Sat.:	1800	5673		27			1800	7442		158			1800	1900		1900			1800	859		1041		
Capacity Analysis Module:																								
Vol/Sat:	0.12	0.34		0.34			0.06	0.15		0.15			0.03	0.06		0.01			0.01	0.12		0.12		
Crit Moves:		****						****						****						****				
Green/Cycle:	0.23	0.46		0.46			0.11	0.34		0.34			0.11	0.24		0.24			0.11	0.24		0.24		
Volume/Cap:	0.53	0.74		0.74			0.61	0.45		0.45			0.32	0.26		0.04			0.06	0.50		0.50		
Delay/Veh:	33.4	22.0		22.0			46.1	24.6		24.6			40.4	29.4		27.6			38.4	31.9		31.9		
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:	33.4	22.0		22.0			46.1	24.6		24.6			40.4	29.4		27.6			38.4	31.9		31.9		
LOS by Move:	C		C		C		D		C		C		D		C		C		D		C		C	
HCM2kAvgQ:	6		17		17		4		7		7		2		3		0		0		6		6	

****

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

****

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.717
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 27.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	103	1687	27	50	880	89	140	50	39	42	38	70
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:	103	1687	27	50	880	89	140	50	39	42	38	70
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:	108	1776	28	53	926	94	147	53	41	44	40	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1776	28	53	926	94	147	53	41	44	40	74
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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1865	30	53	1019	103	147	53	41	44	40	74
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	1.97	0.03	1.00	2.72	0.28	1.00	0.56	0.44	1.00	0.35	0.65
Final Sat.:	1800	3740	60	1800	5176	524	1800	1067	833	1800	669	1231
Capacity Analysis Module:												
Vol/Sat:	0.06	0.50	0.50	0.03	0.20	0.20	0.08	0.05	0.05	0.02	0.06	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.20	0.59	0.59	0.08	0.47	0.47	0.10	0.18	0.18	0.09	0.17	0.17
Volume/Cap:	0.30	0.85	0.85	0.35	0.42	0.42	0.85	0.28	0.28	0.28	0.36	0.36
Delay/Veh:	41.4	23.7	23.7	53.4	21.0	21.0	84.0	43.4	43.4	52.2	45.0	45.0
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:	41.4	23.7	23.7	53.4	21.0	21.0	84.0	43.4	43.4	52.2	45.0	45.0
LOS by Move:	D	C	C	D	C	C	F	D	D	D	D	D
HCM2kAvgQ:	4	31	31	2	9	9	8	3	3	2	4	4

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Condtions
AM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 2.072
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 393.7
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	239	1612	1015	49	809	103	128	940	564	188	1692	76
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:	239	1612	1015	49	809	103	128	940	564	188	1692	76
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:	252	1697	1068	52	852	108	135	989	594	198	1781	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1697	1068	52	852	108	135	989	594	198	1781	80
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:	252	1697	1068	52	852	108	135	989	594	198	1781	80
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.14	0.89	0.56	0.03	0.45	0.06	0.07	0.52	0.31	0.11	0.94	0.04
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.37	0.37	0.08	0.35	0.35	0.08	0.39	0.39	0.08	0.39	0.39
Volume/Cap:	1.29	2.39	1.50	0.34	1.29	0.16	0.90	1.33	0.80	1.33	2.39	0.11
Delay/Veh:	214.9	663	268.4	58.1	177	26.0	104.9	188	37.6	240.2	661	21.1
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:	214.9	663	268.4	58.1	177	26.0	104.9	188	37.6	240.2	661	21.1
LOS by Move:	F	F	F	E	F	C	F	F	D	F	F	C
HCM2kAvgQ:	19	182	83	2	56	2	8	67	19	16	190	1

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.812
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 34.4
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	Ignore			Include			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0	1	1 0 3	1	0	1 0 2	0	1	1 0 3	1	0
Volume Module:												
Base Vol:	239	1612	1015	49	809	103	128	940	564	188	1692	76
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:	239	1612	1015	49	809	103	128	940	564	188	1692	76
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	252	1697	0	52	852	108	135	989	0	198	1781	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1697	0	52	852	108	135	989	0	198	1781	80
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	0.00	1.00	1.10	1.10	1.00	1.05	0.00	1.00	1.10	1.10
FinalVolume:	252	1867	0	52	937	119	135	1039	0	198	1959	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	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.55	0.45	1.00	2.00	1.00	1.00	3.83	0.17
Final Sat.:	1800	5700	1900	1800	6742	858	1800	3800	1900	1800	7273	327
Capacity Analysis Module:												
Vol/Sat:	0.14	0.33	0.00	0.03	0.14	0.14	0.07	0.27	0.00	0.11	0.27	0.27
Crit Moves:		****		****				****		****		
Green/Cycle:	0.15	0.36	0.00	0.11	0.32	0.32	0.11	0.32	0.00	0.12	0.33	0.33
Volume/Cap:	0.91	0.92	0.00	0.26	0.44	0.44	0.66	0.85	0.00	0.92	0.82	0.82
Delay/Veh:	70.2	34.6	0.0	37.3	24.6	24.6	46.0	34.2	0.0	77.8	30.0	30.0
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:	70.2	34.6	0.0	37.3	24.6	24.6	46.0	34.2	0.0	77.8	30.0	30.0
LOS by Move:	E	C	A	D	C	C	D	C	A	E	C	C
HCM2kAvgQ:	11	21	0	2	6	6	5	16	0	9	15	15

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

21:8:08 A St. at The Avenue BOWOP AM Peak Hour 6

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)	FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	13 19 32 0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	35 51 8 0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	69 51 50 0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	3 71 58 0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	64	94	170	132	AVEDEL s	2.9
CAPACITY	veh	1316	1340	1356	1340	LOS SIG	A
AVE DELAY	secs	2.8	2.8	3.0	2.9	LOS UNSIG	A
MAX DELAY	secs	3.6	3.6	3.8	3.7		
AVE QUEUE	veh	0	0	0	0	VEHIC HRS	0.4
MAX QUEUE	veh	0	0	0	0	COST $	6

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.839
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	25.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	10	10	10	10	10	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	81	8	134	33	8	53	28	1974	119	131	1902	11
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:	81	8	134	33	8	53	28	1974	119	131	1902	11
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:	85	8	141	35	8	56	29	2078	125	138	2002	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	8	141	35	8	56	29	2078	125	138	2002	12
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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	85	8	141	35	8	56	29	2182	132	138	2102	12
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	0.06	0.94	1.00	0.13	0.87	1.00	1.89	0.11	1.00	1.99	0.01
Final Sat.:	1800	107	1793	1800	249	1651	1800	3584	216	1800	3778	22
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.02	0.03	0.03	0.02	0.61	0.61	0.08	0.56	0.56
Crit Moves:		****		****				****		****		
Green/Cycle:	0.09	0.09	0.09	0.08	0.09	0.09	0.10	0.68	0.68	0.09	0.66	0.66
Volume/Cap:	0.55	0.90	0.90	0.23	0.40	0.40	0.16	0.90	0.90	0.90	0.84	0.84
Delay/Veh:	57.1	96.2	96.2	52.2	53.5	53.5	49.9	20.7	20.7	98.7	18.0	18.0
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:	57.1	96.2	96.2	52.2	53.5	53.5	49.9	20.7	20.7	98.7	18.0	18.0
LOS by Move:	E	F	F	D	D	D	D	C	C	F	B	B
HCM2kAvgQ:	4	8	8	1	3	3	1	38	38	8	31	31

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	20.5
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	70	386	14	51	175	7	1	136	55	7	28	64
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:	70	386	14	51	175	7	1	136	55	7	28	64
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:	74	406	15	54	184	7	1	143	58	7	29	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	406	15	54	184	7	1	143	58	7	29	67
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:	74	406	15	54	184	7	1	143	58	7	29	67
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	0.97	0.03	1.00	0.96	0.04	1.00	0.71	0.29	1.00	0.30	0.70
Final Sat.:	1800	1834	66	1800	1827	73	1800	1353	547	1800	578	1322
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.03	0.10	0.10	0.00	0.11	0.11	0.00	0.05	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.21	0.35	0.35	0.15	0.30	0.30	0.15	0.22	0.22	0.15	0.22	0.22
Volume/Cap:	0.19	0.63	0.63	0.19	0.34	0.34	0.00	0.49	0.49	0.03	0.24	0.24
Delay/Veh:	21.3	19.3	19.3	24.3	18.3	18.3	23.3	23.3	23.3	23.4	21.4	21.4
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:	21.3	19.3	19.3	24.3	18.3	18.3	23.3	23.3	23.3	23.4	21.4	21.4
LOS by Move:	C	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	8	8	1	3	3	0	4	4	0	2	2

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

21:8:08 Turnr at The Avenue BOWOP AM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	9	397	83	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	27	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	11	230	4	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	105	0	31	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	489	27	245	136
CAPACITY	veh	1382	1157	1347	1271
AVE DELAY	secs	4.0	3.1	3.2	3.1
MAX DELAY	secs	5.2	4.0	4.1	4.0
AVE QUEUE	veh	1	0	0	0
MAX QUEUE	veh	1	0	0	0

AVEDEL s	3.6
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	0.9
COST $	13

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	29.2
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	0	145	318	234	85	86	80	1928	0	140	1827	299
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	145	318	234	85	86	80	1928	0	140	1827	299
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	153	335	246	89	91	84	2029	0	147	1923	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	153	335	246	89	91	84	2029	0	147	1923	315
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.00
FinalVolume:	0	153	335	254	89	91	84	2232	0	152	2115	315
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	1.00	0.89	1.00	1.00
Lanes:	1.00	0.31	0.69	2.00	0.50	0.50	1.00	4.00	0.00	2.00	4.00	1.00
Final Sat.:	1800	595	1305	3400	944	956	1800	7600	0	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.07	0.09	0.09	0.05	0.29	0.00	0.04	0.28	0.17
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.32	0.32	0.11	0.43	0.43	0.14	0.37	0.00	0.11	0.34	0.34
Volume/Cap:	0.00	0.80	0.80	0.67	0.22	0.22	0.34	0.80	0.00	0.40	0.82	0.49
Delay/Veh:	0.0	35.0	35.0	43.1	16.1	16.1	36.1	27.3	0.0	37.9	29.1	24.0
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	35.0	35.0	43.1	16.1	16.1	36.1	27.3	0.0	37.9	29.1	24.0
LOS by Move:	A	C	C	D	B	B	D	C	A	D	C	C
HCM2kAvgQ:	0	14	14	5	3	3	3	16	0	3	16	7

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.575
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 24.8
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	26	26	10	26	26	10	14	14		10	14	14	
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	3	1 0		1 0	2	1 0	
Volume Module:														
Base Vol:	61	3	51	91	9	9	3	2443	23		22	2197	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:	61	3	51	91	9	9	3	2443	23		22	2197	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:	64	3	54	96	9	9	3	2572	24		23	2313	28	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	64	3	54	96	9	9	3	2572	24		23	2313	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	1.10	1.10		1.00	1.10	1.10	
FinalVolume:	64	3	54	96	9	9	3	2829	27		23	2544	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	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Lanes:	1.00	0.06	0.94	1.00	0.50	0.50	1.00	3.96	0.04		1.00	2.96	0.04	
Final Sat.:	1800	106	1794	1800	950	950	1800	7529	71		1800	5631	69	
Capacity Analysis Module:														
Vol/Sat:	0.04	0.03	0.03	0.05	0.01	0.01	0.00	0.38	0.38		0.01	0.45	0.45	
Crit Moves:		****		****			****					****		
Green/Cycle:	0.08	0.22	0.22	0.08	0.22	0.22	0.08	0.52	0.52		0.11	0.55	0.55	
Volume/Cap:	0.43	0.14	0.14	0.64	0.05	0.05	0.02	0.72	0.72		0.11	0.82	0.82	
Delay/Veh:	54.2	38.1	38.1	62.1	37.2	37.2	50.6	23.0	23.0		47.8	24.0	24.0	
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:	54.2	38.1	38.1	62.1	37.2	37.2	50.6	23.0	23.0		47.8	24.0	24.0	
LOS by Move:	D	D	D	E	D	D	D	C	C		D	C	C	
HCM2kAvgQ:	3	2	2	5	1	1	0	21	21		1	27	27	

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.7
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	17	17	10	17	17	10	20	20	10	20	20
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:	109	1095	77	226	678	22	31	500	191	48	391	154
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	1095	77	226	678	22	31	500	191	48	391	154
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	1153	81	238	714	23	33	526	201	51	412	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1153	81	238	714	23	33	526	201	51	412	162
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05
FinalVolume:	115	1210	85	238	749	24	33	553	211	51	432	170
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	1.87	0.13	1.00	1.94	0.06	1.00	1.45	0.55	1.00	1.43	0.57
Final Sat.:	1800	3550	250	1800	3681	119	1800	2750	1050	1800	2726	1074
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.34	0.13	0.20	0.20	0.02	0.20	0.20	0.03	0.16	0.16
Crit Moves:		****		****				****		****		
Green/Cycle:	0.19	0.38	0.38	0.15	0.33	0.33	0.13	0.25	0.25	0.13	0.25	0.25
Volume/Cap:	0.33	0.90	0.90	0.90	0.62	0.62	0.15	0.80	0.80	0.22	0.63	0.63
Delay/Veh:	28.3	31.6	31.6	64.4	23.4	23.4	31.5	33.2	33.2	32.0	28.2	28.2
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:	28.3	31.6	31.6	64.4	23.4	23.4	31.5	33.2	33.2	32.0	28.2	28.2
LOS by Move:	C	C	C	E	C	C	C	C	C	C	C	C
HCM2kAvgQ:	3	19	19	10	9	9	1	11	11	1	8	8

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 80 Critical Vol./Cap.(X): 0.598
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 10.9
Optimal Cycle: OPTIMIZED 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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	0	0	14	14	20	0	20	0	0	0
Lanes:	1 0 2	0 0		0 0 1	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	16	1460	0	0	1004	6	106	0	140	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:	16	1460	0	0	1004	6	106	0	140	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:	17	1537	0	0	1057	6	112	0	147	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	1537	0	0	1057	6	112	0	147	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	1.05	1.00	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	1614	0	0	1110	7	112	0	147	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	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.99	0.01	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	3777	23	1800	0	1900	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.00	0.00	0.29	0.29	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****					****	****					
Green/Cycle:	0.13	0.68	0.00	0.00	0.55	0.55	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.07	0.63	0.00	0.00	0.53	0.53	0.25	0.00	0.31	0.00	0.00	0.00
Delay/Veh:	31.1	7.8	0.0	0.0	11.7	11.7	24.3	0.0	24.8	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:	31.1	7.8	0.0	0.0	11.7	11.7	24.3	0.0	24.8	0.0	0.0	0.0
LOS by Move:	C	A	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	0	12	0	0	9	9	2	0	3	0	0	0

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.888
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	45.9
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0	1	1 0	1 0	3	0 1	2 0	4	0 1	1 0	4	0 1
Volume Module:												
Base Vol:	199	923	102	122	508	377	764	1683	139	16	1670	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:	199	923	102	122	508	377	764	1683	139	16	1670	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:	209	972	107	128	535	397	804	1772	146	17	1758	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	972	107	128	535	397	804	1772	146	17	1758	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	1.05	1.05	1.00	1.10	1.00	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	209	1020	113	128	588	397	828	1949	146	17	1934	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	1.00	1.00	0.89	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	3.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	3422	378	1800	5700	1900	3400	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.30	0.07	0.10	0.21	0.24	0.26	0.08	0.01	0.25	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.12	0.32	0.32	0.10	0.29	0.29	0.25	0.38	0.38	0.14	0.26	0.26
Volume/Cap:	0.97	0.95	0.95	0.74	0.35	0.72	0.97	0.67	0.20	0.07	0.97	0.06
Delay/Veh:	99.3	51.6	51.6	64.2	31.0	39.5	63.3	29.0	23.0	41.7	53.0	30.4
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:	99.3	51.6	51.6	64.2	31.0	39.5	63.3	29.0	23.0	41.7	53.0	30.4
LOS by Move:	F	D	D	E	C	D	E	C	C	D	D	C
HCM2kAvgQ:	12	24	24	6	5	13	21	14	3	1	21	1

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.687
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	34.3
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	4 0	1	1 0	4 0	1
Volume Module:												
Base Vol:	228	391	79	96	114	48	165	1625	62	271	1962	299
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:	228	391	79	96	114	48	165	1625	62	271	1962	299
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:	240	412	83	101	120	51	174	1711	65	285	2065	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	412	83	101	120	51	174	1711	65	285	2065	315
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	240	412	83	101	120	51	174	1882	65	285	2272	315
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	1.00	1.00	1.00	0.70	0.30	1.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	1900	1900	1800	1337	563	1800	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.04	0.06	0.09	0.09	0.10	0.25	0.03	0.16	0.30	0.17
Crit Moves:	****				****			****			****	
Green/Cycle:	0.16	0.31	0.31	0.12	0.27	0.27	0.13	0.29	0.29	0.19	0.36	0.36
Volume/Cap:	0.84	0.69	0.14	0.47	0.33	0.33	0.77	0.84	0.12	0.84	0.84	0.46
Delay/Veh:	58.2	32.2	23.6	40.6	27.9	27.9	54.7	34.4	24.6	53.9	30.4	24.0
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:	58.2	32.2	23.6	40.6	27.9	27.9	54.7	34.4	24.6	53.9	30.4	24.0
LOS by Move:	E	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	10	12	2	3	4	4	7	16	1	11	18	7

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Condtions
AM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	3.348
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	906.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	F

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	167	1789	347	249	280	200	306	1419	100	169	2533	385
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:	167	1789	347	249	280	200	306	1419	100	169	2533	385
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:	176	1883	365	262	295	211	322	1494	105	178	2666	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1883	365	262	295	211	322	1494	105	178	2666	405
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:	176	1883	365	262	295	211	322	1494	105	178	2666	405
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	0.84	0.16	1.00	0.58	0.42	1.00	0.93	0.07	1.00	0.87	0.13
Final Sat.:	1800	1591	309	1800	1108	792	1800	1775	125	1800	1649	251
Capacity Analysis Module:												
Vol/Sat:	0.10	1.18	1.18	0.15	0.27	0.27	0.18	0.84	0.84	0.10	1.62	1.62
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.08	0.30	0.30	0.08	0.47	0.47	0.06	0.44	0.44
Volume/Cap:	0.89	3.65	3.65	1.75	0.89	0.89	2.15	1.79	1.79	1.79	3.65	3.65
Delay/Veh:	93.8	1237	1237	417.3	58.7	58.7	592.8	385	384.7	448.4	1225	1225
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:	93.8	1237	1237	417.3	58.7	58.7	592.8	385	384.7	448.4	1225	1225
LOS by Move:	F	F	F	F	E	E	F	F	F	F	F	F
HCM2kAvgQ:	10	280	280	26	21	21	36	144	144	19	383	383

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

The Avenue
AM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.704
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	33.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	10	29	29	10	29	29	10	29	29
Lanes:	2 0 4	0	1	2 0 4	0	1	2 0 4	0	1	2 0 4	0	1
Volume Module:												
Base Vol:	167	1789	347	249	280	200	306	1419	100	169	2533	385
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:	167	1789	347	249	280	200	306	1419	100	169	2533	385
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:	176	1883	365	262	295	211	322	1494	105	178	2666	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1883	365	262	295	211	322	1494	105	178	2666	405
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:	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00
FinalVolume:	181	2071	365	270	324	211	332	1643	105	183	2933	405
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	0.89	1.00	1.00	0.89	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	7600	1900	3400	7600	1900	3400	7600	1900	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.19	0.08	0.04	0.11	0.10	0.22	0.06	0.05	0.39	0.21
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.42	0.10	0.29	0.29	0.11	0.39	0.39	0.14	0.42	0.42
Volume/Cap:	0.53	0.96	0.46	0.76	0.15	0.38	0.91	0.55	0.14	0.40	0.91	0.50
Delay/Veh:	48.6	46.3	19.9	57.6	26.3	30.2	73.7	21.8	17.9	42.0	28.7	20.6
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:	48.6	46.3	19.9	57.6	26.3	30.2	73.7	21.8	17.9	42.0	28.7	20.6
LOS by Move:	D	D	B	E	C	C	E	C	B	D	C	C
HCM2kAvgQ:	4	21	7	6	2	5	9	9	2	3	24	8

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Conditions
PM Peak Hour

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

Intersection #1 Hellman/Ontario Ave, (NS) / The Avenue (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.2]

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		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	16		16		19		7		24		43		25		0		9		11		0		4	
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:	16		16		19		7		24		43		25		0		9		11		0		4	
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:	17		17		20		7		25		45		26		0		9		12		0		4	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	17		17		20		7		25		45		26		0		9		12		0		4	
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:	71	xxxx	xxxxx				37	xxxx	xxxxx				125	133		48			128	146		27		
Potent Cap.:	1543	xxxx	xxxxx				1587	xxxx	xxxxx				853	761		1027			850	749		1054		
Move Cap.:	1543	xxxx	xxxxx				1587	xxxx	xxxxx				840	749		1027			832	738		1054		
Volume/Cap:	0.01	xxxx	xxxx				0.00	xxxx	xxxx				0.03	0.00		0.01			0.01	0.00		0.00		
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx				0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				0.0	xxxx	xxxxx			
Control Del:	7.4	xxxx	xxxxx				7.3	xxxx	xxxxx				9.4	xxxx	xxxxx				9.4	xxxx	xxxxx			
LOS by Move:	A	*	*				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	xxxx	1027				xxxx	xxxx	1054			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	0.0				xxxxx	xxxx	0.0			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	8.5				xxxxx	xxxx	8.4			
Shared LOS:	*	*	*				*	*	*				*	*	A				*	*	A			
ApproachDel:	xxxxxx						xxxxxx						9.2						9.1					
ApproachLOS:	*						*						A						A					

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Conditions
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 104 Critical Vol./Cap.(X): 0.921
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 34.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	22	22	10	22	22	25	25	25	24	24	24
Lanes:	1 0	2 1	0	1 0	1 1	0	0 1	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	71	1346	115	192	1765	102	57	678	236	93	659	233
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:	71	1346	115	192	1765	102	57	678	236	93	659	233
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:	75	1417	121	202	1858	107	60	714	248	98	694	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1417	121	202	1858	107	60	714	248	98	694	245
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	1.10	1.10	1.00	1.05	1.05	1.05	1.05	1.05	1.00	1.05	1.05
FinalVolume:	75	1559	133	202	1951	113	63	749	261	98	728	258
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	2.76	0.24	1.00	1.89	0.11	0.12	1.40	0.48	1.00	1.48	0.52
Final Sat.:	1800	5251	449	1800	3592	208	222	2645	921	1800	2807	993
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.11	0.54	0.54	0.28	0.28	0.28	0.05	0.26	0.26
Crit Moves:	****				****			****				
Green/Cycle:	0.10	0.47	0.47	0.18	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.43	0.63	0.63	0.63	0.98	0.98	0.98	0.98	0.98	0.19	0.89	0.89
Delay/Veh:	52.0	17.7	17.7	48.4	29.8	29.8	58.4	58.4	58.4	28.3	46.3	46.3
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:	52.0	17.7	17.7	48.4	29.8	29.8	58.4	58.4	58.4	28.3	46.3	46.3
LOS by Move:	D	B	B	D	C	C	E	E	E	C	D	D
HCM2kAvgQ:	3	12	12	7	38	38	23	23	23	2	18	18

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.885
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.2
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	17	17	10	17	17	10	23	23	10	23	23
Lanes:	1 0	2	1 0	1 0	3	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	421	1507	7	119	1999	25	59	386	259	53	302	104
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:	421	1507	7	119	1999	25	59	386	259	53	302	104
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:	443	1586	7	125	2104	26	62	406	273	56	318	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	443	1586	7	125	2104	26	62	406	273	56	318	109
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	1.10	1.10	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	443	1745	8	125	2315	29	62	406	273	56	318	109
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	2.99	0.01	1.00	3.95	0.05	1.00	1.00	1.00	1.00	0.74	0.26
Final Sat.:	1800	5674	26	1800	7506	94	1800	1900	1900	1800	1413	487
Capacity Analysis Module:												
Vol/Sat:	0.25	0.31	0.31	0.07	0.31	0.31	0.03	0.21	0.14	0.03	0.22	0.22
Crit Moves:	****				****		****				****	
Green/Cycle:	0.26	0.44	0.44	0.14	0.32	0.32	0.10	0.23	0.23	0.10	0.24	0.24
Volume/Cap:	0.95	0.70	0.70	0.49	0.95	0.95	0.35	0.91	0.61	0.30	0.95	0.95
Delay/Veh:	65.9	23.5	23.5	40.9	42.2	42.2	43.1	60.0	36.7	42.5	67.7	67.7
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:	65.9	23.5	23.5	40.9	42.2	42.2	43.1	60.0	36.7	42.5	67.7	67.7
LOS by Move:	E	C	C	D	D	D	D	E	D	D	E	E
HCM2kAvgQ:	19	15	15	4	23	23	2	16	8	2	18	18

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.707
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 25.1
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10		14	14	10		14	14	10		20	20	10		20	20
Lanes:	1	0	1	1 0	1	0	2	1 0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	90	1823		18	69	2194		48	62		22	8	21		38	49
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:	90	1823		18	69	2194		48	62		22	8	21		38	49
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:	95	1919		19	73	2309		51	65		23	8	22		40	52
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	95	1919		19	73	2309		51	65		23	8	22		40	52
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	1.05		1.05	1.00	1.10		1.10	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	95	2015		20	73	2540		56	65		23	8	22		40	52
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	1.98		0.02	1.00	2.94		0.06	1.00		0.73	0.27	1.00		0.44	0.56
Final Sat.:	1800	3763		37	1800	5578		122	1800		1393	507	1800		830	1070
Capacity Analysis Module:																
Vol/Sat:	0.05	0.54		0.54	0.04	0.46		0.46	0.04		0.02	0.02	0.01		0.05	0.05
Crit Moves:		****			****				****						****	
Green/Cycle:	0.11	0.60		0.60	0.08	0.58		0.58	0.08		0.17	0.17	0.08		0.17	0.17
Volume/Cap:	0.50	0.89		0.89	0.48	0.79		0.79	0.44		0.10	0.10	0.15		0.29	0.29
Delay/Veh:	52.7	25.6		25.6	55.0	21.0		21.0	54.3		42.5	42.5	51.5		44.3	44.3
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:	52.7	25.6		25.6	55.0	21.0		21.0	54.3		42.5	42.5	51.5		44.3	44.3
LOS by Move:	D	C		C	D	C		C	D		D	D	D		D	D
HCM2kAvgQ:	4	35		35	3	26		26	3		1	1	1		3	3

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Conditions
PM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 2.353
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 581.5
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1	1 0 1	0	1
Volume Module:												
Base Vol:	87	1739	1131	57	1968	197	167	1167	1739	156	1750	25
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:	87	1739	1131	57	1968	197	167	1167	1739	156	1750	25
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:	92	1831	1191	60	2072	207	176	1228	1831	164	1842	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	1831	1191	60	2072	207	176	1228	1831	164	1842	26
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:	92	1831	1191	60	2072	207	176	1228	1831	164	1842	26
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.96	0.63	0.03	1.09	0.11	0.10	0.65	0.96	0.09	0.97	0.01
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.42	0.42	0.08	0.42	0.42	0.08	0.41	0.41	0.04	0.37	0.37
Volume/Cap:	0.66	2.32	1.51	0.43	2.63	0.26	1.27	1.59	2.36	2.36	2.63	0.04
Delay/Veh:	80.5	631	268.9	66.9	768	22.7	226.0	304	651.7	718.1	773	24.4
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:	80.5	631	268.9	66.9	768	22.7	226.0	304	651.7	718.1	773	24.4
LOS by Move:	F	F	F	E	F	C	F	F	F	F	F	C
HCM2kAvgQ:	5	198	96	3	237	4	15	104	200	20	211	1

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.888
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	40.5
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	Ignore			Include			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0	1	1 0	3	1 0	1 0	2	0 1	1 0	3	1 0
Volume Module:												
Base Vol:	87	1739	1131	57	1968	197	167	1167	1739	156	1750	25
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:	87	1739	1131	57	1968	197	167	1167	1739	156	1750	25
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	92	1831	0	60	2072	207	176	1228	0	164	1842	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	1831	0	60	2072	207	176	1228	0	164	1842	26
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	0.00	1.00	1.10	1.10	1.00	1.05	0.00	1.00	1.10	1.10
FinalVolume:	92	2014	0	60	2279	228	176	1290	0	164	2026	29
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	1.00	1.00	3.64	0.36	1.00	2.00	1.00	1.00	3.94	0.06
Final Sat.:	1800	5700	1900	1800	6908	692	1800	3800	1900	1800	7493	107
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.00	0.03	0.33	0.33	0.10	0.34	0.00	0.09	0.27	0.27
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.37	0.00	0.10	0.36	0.36	0.12	0.35	0.00	0.10	0.34	0.34
Volume/Cap:	0.47	0.96	0.00	0.33	0.92	0.92	0.84	0.96	0.00	0.91	0.80	0.80
Delay/Veh:	43.6	43.0	0.0	43.0	36.4	36.4	68.4	48.0	0.0	87.4	32.1	32.1
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:	43.6	43.0	0.0	43.0	36.4	36.4	68.4	48.0	0.0	87.4	32.1	32.1
LOS by Move:	D	D	A	D	D	D	E	D	A	F	C	C
HCM2kAvgQ:	3	26	0	2	23	23	8	25	0	8	16	16

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

21:8:08 A St. at The Avenue BOWOP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	8	8	23	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	37	62	28	0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	28	8	25	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	10	66	16	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	39	127	61	92
CAPACITY	veh	1349	1368	1346	1362
AVE DELAY	secs	2.7	2.8	2.7	2.8
MAX DELAY	secs	3.4	3.6	3.5	3.5
AVE QUEUE	veh	0	0	0	0
MAX QUEUE	veh	0	0	0	0

AVEDEL s	2.8
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	0.2
COST $	4

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.844
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 31.2
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	10	10	10	10	10	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	45	5	73	21	7	30	38	2318	54	88	1900	37
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:	45	5	73	21	7	30	38	2318	54	88	1900	37
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:	47	5	77	22	7	32	40	2440	57	93	2000	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	5	77	22	7	32	40	2440	57	93	2000	39
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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	47	5	77	22	7	32	40	2562	60	93	2100	41
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	0.06	0.94	1.00	0.19	0.81	1.00	1.95	0.05	1.00	1.96	0.04
Final Sat.:	1800	122	1778	1800	359	1541	1800	3713	87	1800	3727	73
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.04	0.01	0.02	0.02	0.02	0.69	0.69	0.05	0.56	0.56
Crit Moves:	****				****			****		****		
Green/Cycle:	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.68	0.68	0.08	0.67	0.67
Volume/Cap:	0.32	0.52	0.52	0.15	0.25	0.25	0.22	1.01	1.01	0.62	0.84	0.84
Delay/Veh:	53.0	55.7	55.7	51.5	52.3	52.3	50.5	39.0	39.0	60.7	17.9	17.9
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:	53.0	55.7	55.7	51.5	52.3	52.3	50.5	39.0	39.0	60.7	17.9	17.9
LOS by Move:	D	E	E	D	D	D	D	D	D	E	B	B
HCM2kAvgQ:	2	4	4	1	2	2	2	57	57	5	32	32

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	44.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	81	458	4	233	658	51	2	140	242	10	246	249
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:	81	458	4	233	658	51	2	140	242	10	246	249
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:	85	482	4	245	693	54	2	147	255	11	259	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	482	4	245	693	54	2	147	255	11	259	262
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:	85	482	4	245	693	54	2	147	255	11	259	262
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	0.99	0.01	1.00	0.93	0.07	1.00	0.37	0.63	1.00	0.50	0.50
Final Sat.:	1800	1884	16	1800	1763	137	1800	696	1204	1800	944	956
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.26	0.14	0.39	0.39	0.00	0.21	0.21	0.01	0.27	0.27
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.35	0.35	0.18	0.44	0.44	0.09	0.28	0.28	0.12	0.31	0.31
Volume/Cap:	0.52	0.74	0.74	0.74	0.89	0.89	0.01	0.76	0.76	0.05	0.89	0.89
Delay/Veh:	50.7	36.1	36.1	51.0	40.7	40.7	45.5	42.8	42.8	43.0	52.7	52.7
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:	50.7	36.1	36.1	51.0	40.7	40.7	45.5	42.8	42.8	43.0	52.7	52.7
LOS by Move:	D	D	D	D	D	D	D	D	D	D	D	D
HCM2kAvgQ:	4	16	16	10	27	27	0	14	14	0	20	20

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

21:8:08 Turnr at The Avenue BOWOP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	31	589	97	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	18	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	30	798	14	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	69	0	24	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	717	18	842	93	AVEDEL s	6.2
CAPACITY	veh	1380	1067	1345	1013	LOS SIG	A
AVE DELAY	secs	5.4	3.4	7.2	3.8	LOS UNSIG	A
MAX DELAY	secs	7.4	4.3	10.5	5.0		
AVE QUEUE	veh	1	0	2	0	VEHIC HRS	2.9
MAX QUEUE	veh	1	0	2	0	COST $	43

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	46.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	0	140	244	629	208	47	196	2143	0	344	1890	373
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	140	244	629	208	47	196	2143	0	344	1890	373
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	147	257	662	219	49	206	2256	0	362	1989	393
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	147	257	662	219	49	206	2256	0	362	1989	393
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.00
FinalVolume:	0	147	257	682	219	49	206	2481	0	373	2188	393
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	1.00	0.89	1.00	1.00
Lanes:	1.00	0.36	0.64	2.00	0.82	0.18	1.00	4.00	0.00	2.00	4.00	1.00
Final Sat.:	1800	693	1207	3400	1550	350	1800	7600	0	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.20	0.14	0.14	0.11	0.33	0.00	0.11	0.29	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.24	0.24	0.22	0.46	0.46	0.13	0.35	0.00	0.12	0.34	0.34
Volume/Cap:	0.00	0.88	0.88	0.92	0.31	0.31	0.85	0.92	0.00	0.92	0.85	0.61
Delay/Veh:	0.0	61.4	61.4	62.7	20.6	20.6	74.3	42.9	0.0	78.3	39.7	34.8
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	61.4	61.4	62.7	20.6	20.6	74.3	42.9	0.0	78.3	39.7	34.8
LOS by Move:	A	E	E	E	C	C	E	D	A	E	D	C
HCM2kAvgQ:	0	17	17	18	6	6	10	26	0	11	21	12

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.672
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	26	26	10	26	26	10	14	14		10	14	14	
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	3	1 0		1 0	2	1 0	
Volume Module:														
Base Vol:	124	11	105	60	6	6	11	2895	77		75	2478	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:	124	11	105	60	6	6	11	2895	77		75	2478	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:	131	12	111	63	6	6	12	3047	81		79	2608	95	
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0	0	
Reduced Vol:	131	12	111	63	6	6	12	3047	81		79	2608	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	1.10	1.10		1.00	1.10	1.10	
FinalVolume:	131	12	111	63	6	6	12	3352	89		79	2869	104	
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	0.09	0.91	1.00	0.50	0.50	1.00	3.90	0.10		1.00	2.89	0.11	
Final Sat.:	1800	180	1720	1800	950	950	1800	7403	197		1800	5500	200	
Capacity Analysis Module:														
Vol/Sat:	0.07	0.06	0.06	0.04	0.01	0.01	0.01	0.45	0.45		0.04	0.52	0.52	
Crit Moves:		****		****			****					****		
Green/Cycle:	0.08	0.22	0.22	0.08	0.22	0.22	0.08	0.53	0.53		0.10	0.55	0.55	
Volume/Cap:	0.87	0.30	0.30	0.42	0.03	0.03	0.08	0.85	0.85		0.45	0.95	0.95	
Delay/Veh:	92.8	39.8	39.8	54.2	37.1	37.1	51.0	25.5	25.5		52.8	32.8	32.8	
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:	92.8	39.8	39.8	54.2	37.1	37.1	51.0	25.5	25.5		52.8	32.8	32.8	
LOS by Move:	F	D	D	D	D	D	D	C	C		D	C	C	
HCM2kAvgQ:	8	4	4	3	0	0	0	29	29		3	39	39	

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	38.9
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	17	17	10	17	17	10	20	20	10	20	20
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:	163	946	67	211	1247	21	32	615	94	140	675	272
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:	163	946	67	211	1247	21	32	615	94	140	675	272
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:	172	996	71	222	1313	22	34	647	99	147	711	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	996	71	222	1313	22	34	647	99	147	711	286
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05
FinalVolume:	172	1046	74	222	1378	23	34	680	104	147	746	301
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	1.87	0.13	1.00	1.97	0.03	1.00	1.73	0.27	1.00	1.43	0.57
Final Sat.:	1800	3549	251	1800	3737	63	1800	3296	504	1800	2709	1091
Capacity Analysis Module:												
Vol/Sat:	0.10	0.29	0.29	0.12	0.37	0.37	0.02	0.21	0.21	0.08	0.28	0.28
Crit Moves:	****				****		****				****	
Green/Cycle:	0.11	0.36	0.36	0.15	0.39	0.39	0.11	0.27	0.27	0.14	0.29	0.29
Volume/Cap:	0.86	0.83	0.83	0.83	0.94	0.94	0.17	0.76	0.76	0.61	0.94	0.94
Delay/Veh:	68.2	30.8	30.8	55.8	37.4	37.4	36.6	33.6	33.6	41.0	45.0	45.0
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:	68.2	30.8	30.8	55.8	37.4	37.4	36.6	33.6	33.6	41.0	45.0	45.0
LOS by Move:	E	C	C	E	D	D	D	C	C	D	D	D
HCM2kAvgQ:	8	17	17	9	24	24	1	12	12	5	19	19

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.924
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.1
Optimal Cycle: OPTIMIZED Level Of Service: C

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				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	10	14		0	0	14		14	20		0	20	0		0	0
Lanes:	1 0	2	0	0	0	0	1	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	377	1325		0	0	1594		62	9		0	234	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:	377	1325		0	0	1594		62	9		0	234	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:	397	1395		0	0	1678		65	9		0	246	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	397	1395		0	0	1678		65	9		0	246	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	1.05		1.00	1.00	1.05		1.05	1.00		1.00	1.00	1.00		1.00	1.00
FinalVolume:	397	1464		0	0	1762		69	9		0	246	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		1.00	1.00	0.95		1.00	1.00
Lanes:	1.00	2.00		0.00	0.00	1.93		0.07	1.00		0.00	1.00	0.00		0.00	0.00
Final Sat.:	1800	3800		0	0	3658		142	1800		0	1900	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.22	0.39		0.00	0.00	0.48		0.48	0.01		0.00	0.13	0.00		0.00	0.00
Crit Moves:	****					****			****							
Green/Cycle:	0.24	0.77		0.00	0.00	0.53		0.53	0.17		0.00	0.17	0.00		0.00	0.00
Volume/Cap:	0.91	0.50		0.00	0.00	0.91		0.91	0.03		0.00	0.75	0.00		0.00	0.00
Delay/Veh:	64.6	4.9		0.0	0.0	30.8		30.8	39.5		0.0	54.0	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:	64.6	4.9		0.0	0.0	30.8		30.8	39.5		0.0	54.0	0.0		0.0	0.0
LOS by Move:	E	A		A	A	C		C	D		A	D	A		A	A
HCM2kAvgQ:	18	10		0	0	33		33	0		0	10	0		0	0

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	45.9
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0	1	1 0	1 0	3	0 1	2 0	4	0 1	1 0	4	0 1
Volume Module:												
Base Vol:	231	717	35	269	1151	481	517	2183	359	145	1932	208
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:	231	717	35	269	1151	481	517	2183	359	145	1932	208
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:	243	755	37	283	1212	506	544	2298	378	153	2034	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	755	37	283	1212	506	544	2298	378	153	2034	219
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	1.05	1.05	1.00	1.10	1.00	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	243	792	39	283	1333	506	561	2528	378	153	2237	219
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	0.89	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	3.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	3623	177	1800	5700	1900	3400	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.22	0.16	0.23	0.27	0.16	0.33	0.20	0.08	0.29	0.12
Crit Moves:		****		****			****				****	
Green/Cycle:	0.15	0.28	0.28	0.17	0.30	0.30	0.17	0.39	0.39	0.10	0.31	0.31
Volume/Cap:	0.93	0.79	0.79	0.95	0.78	0.89	0.95	0.86	0.52	0.84	0.95	0.37
Delay/Veh:	85.7	42.3	42.3	85.0	39.2	54.5	71.1	35.5	27.8	79.1	47.5	31.2
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:	85.7	42.3	42.3	85.0	39.2	54.5	71.1	35.5	27.8	79.1	47.5	31.2
LOS by Move:	F	D	D	F	D	D	E	D	C	E	D	C
HCM2kAvgQ:	13	15	15	15	16	20	15	23	10	8	24	6

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 110 Critical Vol./Cap.(X): 0.858
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.8
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	4 0	1	1 0	4 0	1
Volume Module:												
Base Vol:	162	246	262	292	382	95	181	2313	234	218	2247	177
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:	162	246	262	292	382	95	181	2313	234	218	2247	177
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:	171	259	276	307	402	100	191	2435	246	229	2365	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	259	276	307	402	100	191	2435	246	229	2365	186
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	171	259	276	307	402	100	191	2678	246	229	2602	186
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	1.00	1.00	1.00	0.80	0.20	1.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	1900	1900	1800	1522	378	1800	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.15	0.17	0.26	0.26	0.11	0.35	0.13	0.13	0.34	0.10
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.24	0.24	0.18	0.31	0.31	0.12	0.37	0.37	0.14	0.39	0.39
Volume/Cap:	0.86	0.58	0.61	0.94	0.86	0.86	0.88	0.94	0.35	0.94	0.88	0.25
Delay/Veh:	77.5	39.0	40.0	79.2	48.1	48.1	78.7	40.5	25.0	88.9	34.6	22.9
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:	77.5	39.0	40.0	79.2	48.1	48.1	78.7	40.5	25.0	88.9	34.6	22.9
LOS by Move:	E	D	D	E	D	D	E	D	C	F	C	C
HCM2kAvgQ:	9	8	9	15	19	19	10	27	6	12	23	4

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

JN:5279 The Avenue Specific Plan Amendment
2030 Without Project Conditions
PM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 3.437
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 1084.3
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10		14		14		10		14		14		10		21		21		10		21		21	
Lanes:	1	0	0	1	0		1	0	0	1	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	129	1061		397			563	2014		294			252	2563		422			372	2254		407		
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:	129	1061		397			563	2014		294			252	2563		422			372	2254		407		
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:	136	1117		418			593	2120		309			265	2698		444			392	2373		428		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	136	1117		418			593	2120		309			265	2698		444			392	2373		428		
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:	136	1117		418			593	2120		309			265	2698		444			392	2373		428		
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	0.73		0.27			1.00	0.87		0.13			1.00	0.86		0.14			1.00	0.85		0.15		
Final Sat.:	1800	1383		517			1800	1658		242			1800	1631		269			1800	1609		291		
Capacity Analysis Module:																								
Vol/Sat:	0.08	0.81		0.81			0.33	1.28		1.28			0.15	1.65		1.65			0.22	1.47		1.47		
Crit Moves:	****							****						****						****				
Green/Cycle:	0.08	0.30		0.30			0.12	0.34		0.34			0.05	0.44		0.44			0.08	0.47		0.47		
Volume/Cap:	0.98	2.71		2.71			2.71	3.74		3.74			3.12	3.74		3.74			2.83	3.12		3.12		
Delay/Veh:	131.4	821		821.0			840.9	1276		1276			1047	1265		1265			902.2	986		985.5		
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:	131.4	821		821.0			840.9	1276		1276			1047	1265		1265			902.2	986		985.5		
LOS by Move:	F	F		F			F	F		F			F	F		F			F	F		F		
HCM2kAvgQ:	9	178		178			73	312		312			35	402		402			50	341		341		

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

The Avenue
PM 2030 Without Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	105	Critical Vol./Cap.(X):	0.928
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	41.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	10	29	29	10	29	29	10	29	29
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	4 0	1	2 0	4 0	1
Volume Module:												
Base Vol:	129	1061	397	563	2014	294	252	2563	422	372	2254	407
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:	129	1061	397	563	2014	294	252	2563	422	372	2254	407
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:	136	1117	418	593	2120	309	265	2698	444	392	2373	428
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1117	418	593	2120	309	265	2698	444	392	2373	428
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:	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00
FinalVolume:	140	1229	418	610	2332	309	273	2968	444	403	2610	428
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	0.89	1.00	1.00	0.89	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	7600	1900	3400	7600	1900	3400	7600	1900	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.22	0.18	0.31	0.16	0.08	0.39	0.23	0.12	0.34	0.23
Crit Moves:	****				****			****			****	
Green/Cycle:	0.10	0.19	0.31	0.21	0.31	0.31	0.11	0.40	0.40	0.12	0.40	0.40
Volume/Cap:	0.43	0.84	0.70	0.84	0.98	0.52	0.72	0.98	0.59	0.98	0.85	0.56
Delay/Veh:	49.0	46.7	37.7	50.7	50.3	32.3	55.9	41.4	25.8	86.9	28.3	24.3
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:	49.0	46.7	37.7	50.7	50.3	32.3	55.9	41.4	25.8	86.9	28.3	24.3
LOS by Move:	D	D	D	D	D	C	E	D	C	F	C	C
HCM2kAvgQ:	3	12	12	13	25	8	6	30	10	12	20	9

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

APPENDIX K

2030 With Project
HCM Intersection Analysis Worksheets

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Condtions
AM Peak Hour

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

Intersection #1 Hellman/Ontario Ave, (NS) / The Avenue (EW)

Average Delay (sec/veh): 5.5 Worst Case Level Of Service: A[8.9]

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	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	5	22	6	2	7	13	37	0	14	17	0	6
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:	5	22	6	2	7	13	37	0	14	17	0	6
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:	5	23	6	2	7	14	39	0	15	18	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	5	23	6	2	7	14	39	0	15	18	0	6
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:	21	xxxx	xxxxx	29	xxxx	xxxxx	58	58	14	63	62	26
Potent Cap.:	1608	xxxx	xxxxx	1597	xxxx	xxxxx	943	836	1071	937	833	1055
Move Cap.:	1608	xxxx	xxxxx	1597	xxxx	xxxxx	934	833	1071	921	829	1055
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.04	0.00	0.01	0.02	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.3	xxxx	xxxxx	9.0	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	A	*	*	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	xxxx	1071	xxxx	xxxx	1055
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	0.0
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.4	xxxxx	xxxx	8.4
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	A
ApproachDel:	xxxxxx			xxxxxx			8.9			8.8		
ApproachLOS:	*			*			A			A		

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Condtions
AM Peak Hour

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec): 74 Critical Vol./Cap.(X): 0.633
Loss Time (sec): 6 (Y+R=2.0 sec) Average Delay (sec/veh): 19.3
Optimal Cycle: OPTIMIZED 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:	10		22		22		10		22		22		25		25		25		24		24		24	
Lanes:	1	0	2	1	0		1	0	1	1	0		0	1	0	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	212	1481		90			110	812		36			68	526		84			73	342		201		
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:	212	1481		90			110	812		36			68	526		84			73	342		201		
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:	223	1559		95			116	855		38			72	554		88			77	360		212		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Reduced Vol:	223	1559		95			116	855		38			72	554		88			77	360		212		
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	1.10		1.10			1.00	1.05		1.05			1.05	1.05		1.05			1.00	1.05		1.05		
FinalVolume:	223	1715		104			116	897		40			75	581		93			77	378		222		
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	2.83		0.17			1.00	1.92		0.08			0.21	1.54		0.25			1.00	1.26		0.74		
Final Sat.:	1800	5373		327			1800	3639		161			379	2932		468			1800	2393		1407		
Capacity Analysis Module:																								
Vol/Sat:	0.12	0.32		0.32			0.06	0.25		0.25			0.20	0.20		0.20			0.04	0.16		0.16		
Crit Moves:		****					****							****										
Green/Cycle:	0.18	0.45		0.45			0.14	0.40		0.40			0.34	0.34		0.34			0.34	0.34		0.34		
Volume/Cap:	0.68	0.72		0.72			0.48	0.62		0.62			0.59	0.59		0.59			0.13	0.47		0.47		
Delay/Veh:	39.3	15.8		15.8			36.1	17.7		17.7			21.3	21.3		21.3			16.6	19.6		19.6		
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:	39.3	15.8		15.8			36.1	17.7		17.7			21.3	21.3		21.3			16.6	19.6		19.6		
LOS by Move:	D		B		B		D		B		B		C		C		C		B		B		B	
HCM2kAvgQ:	6		11		11		3		8		8		7		7		7		1		5		5	

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	25.3
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	17	17	10	17	17	10	23	23	10	23	23
Lanes:	1 0	2	1 0	1 0	3	1 0	1 0	1	0 1	1 0	0	1 0
Volume Module:												
Base Vol:	206	1691	8	106	994	21	58	116	16	11	100	122
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:	206	1691	8	106	994	21	58	116	16	11	100	122
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:	217	1780	8	112	1046	22	61	122	17	12	105	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1780	8	112	1046	22	61	122	17	12	105	128
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	1.10	1.10	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	217	1958	9	112	1151	24	61	122	17	12	105	128
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	2.99	0.01	1.00	3.92	0.08	1.00	1.00	1.00	1.00	0.45	0.55
Final Sat.:	1800	5673	27	1800	7443	157	1800	1900	1900	1800	856	1044
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.35	0.06	0.15	0.15	0.03	0.06	0.01	0.01	0.12	0.12
Crit Moves:		****		****			****				****	
Green/Cycle:	0.24	0.49	0.49	0.10	0.35	0.35	0.10	0.23	0.23	0.10	0.23	0.23
Volume/Cap:	0.49	0.70	0.70	0.62	0.45	0.45	0.34	0.28	0.04	0.06	0.53	0.53
Delay/Veh:	33.3	20.7	20.7	49.6	25.5	25.5	43.0	32.0	29.9	40.9	35.1	35.1
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:	33.3	20.7	20.7	49.6	25.5	25.5	43.0	32.0	29.9	40.9	35.1	35.1
LOS by Move:	C	C	C	D	C	C	D	C	C	D	D	D
HCM2kAvgQ:	6	16	16	5	7	7	2	3	0	0	7	7

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.723
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	27.9
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	103	1687	27	52	880	89	140	50	39	42	38	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:	103	1687	27	52	880	89	140	50	39	42	38	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:	108	1776	28	55	926	94	147	53	41	44	40	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	1776	28	55	926	94	147	53	41	44	40	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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	1865	30	55	1019	103	147	53	41	44	40	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	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	2.72	0.28	1.00	0.56	0.44	1.00	0.33	0.67
Final Sat.:	1800	3740	60	1800	5176	524	1800	1067	833	1800	622	1278
Capacity Analysis Module:												
Vol/Sat:	0.06	0.50	0.50	0.03	0.20	0.20	0.08	0.05	0.05	0.02	0.06	0.06
Crit Moves:		****		****			****				****	
Green/Cycle:	0.20	0.59	0.59	0.08	0.47	0.47	0.10	0.18	0.18	0.09	0.17	0.17
Volume/Cap:	0.30	0.85	0.85	0.36	0.42	0.42	0.85	0.28	0.28	0.28	0.39	0.39
Delay/Veh:	41.4	23.7	23.7	53.5	21.0	21.0	84.0	43.4	43.4	52.2	45.3	45.3
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:	41.4	23.7	23.7	53.5	21.0	21.0	84.0	43.4	43.4	52.2	45.3	45.3
LOS by Move:	D	C	C	D	C	C	F	D	D	D	D	D
HCM2kAvgQ:	4	31	31	2	9	9	8	3	3	2	4	4

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Condtions
AM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 2.077
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 395.6
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10		20		20		10		18		18		10		25		25		10		25		25	
Lanes:	1	0	1	0	1		1	0	1	0	1		1	0	1	0	1		1	0	1	0	1	
Volume Module:																								
Base Vol:	239		1612		1015		49		809		103		128		941		564		192		1700		76	
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:	239		1612		1015		49		809		103		128		941		564		192		1700		76	
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:	252		1697		1068		52		852		108		135		991		594		202		1789		80	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	252		1697		1068		52		852		108		135		991		594		202		1789		80	
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:	252		1697		1068		52		852		108		135		991		594		202		1789		80	
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		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Final Sat.:	1800		1900		1900		1800		1900		1900		1800		1900		1900		1800		1900		1900	
Capacity Analysis Module:																								
Vol/Sat:	0.14		0.89		0.56		0.03		0.45		0.06		0.07		0.52		0.31		0.11		0.94		0.04	
Crit Moves:			****				****						****								****			
Green/Cycle:	0.11		0.37		0.37		0.08		0.35		0.35		0.08		0.39		0.39		0.08		0.39		0.39	
Volume/Cap:	1.29		2.39		1.51		0.34		1.29		0.16		0.90		1.33		0.80		1.33		2.39		0.11	
Delay/Veh:	216.0		666		270.1		58.1		178		26.1		104.9		190		37.7		240.9		664		21.1	
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:	216.0		666		270.1		58.1		178		26.1		104.9		190		37.7		240.9		664		21.1	
LOS by Move:	F		F		F		E		F		C		F		F		D		F		F		C	
HCM2kAvgQ:	19		182		83		2		56		2		8		67		20		17		192		1	

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.814
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	34.6
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	Ignore			Include			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0	1	1 0	3	1 0	1 0	2	0 1	1 0	3	1 0
Volume Module:												
Base Vol:	239	1612	1015	49	809	103	128	941	564	192	1700	76
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:	239	1612	1015	49	809	103	128	941	564	192	1700	76
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	252	1697	0	52	852	108	135	991	0	202	1789	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	1697	0	52	852	108	135	991	0	202	1789	80
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.10	0.00	1.00	1.10	1.10	1.00	1.05	0.00	1.00	1.10	1.10
FinalVolume:	252	1867	0	52	937	119	135	1040	0	202	1968	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	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.55	0.45	1.00	2.00	1.00	1.00	3.83	0.17
Final Sat.:	1800	5700	1900	1800	6742	858	1800	3800	1900	1800	7275	325
Capacity Analysis Module:												
Vol/Sat:	0.14	0.33	0.00	0.03	0.14	0.14	0.07	0.27	0.00	0.11	0.27	0.27
Crit Moves:		****		****				****		****		
Green/Cycle:	0.15	0.36	0.00	0.11	0.31	0.31	0.11	0.32	0.00	0.12	0.33	0.33
Volume/Cap:	0.92	0.92	0.00	0.26	0.44	0.44	0.66	0.85	0.00	0.92	0.82	0.82
Delay/Veh:	71.1	35.2	0.0	37.3	24.7	24.7	45.8	34.3	0.0	78.5	29.9	29.9
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:	71.1	35.2	0.0	37.3	24.7	24.7	45.8	34.3	0.0	78.5	29.9	29.9
LOS by Move:	E	D	A	D	C	C	D	C	A	E	C	C
HCM2kAvgQ:	11	21	0	2	6	6	5	16	0	9	15	15

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

21:8:08 A St. at The Avenue BOWP AM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	TIME PERIOD min	90
L'	(m)	12.40	9.20	12.40	9.20	TIME SLICE min	15
V	(m)	4.30	4.50	4.30	4.50	RESULTS PERIOD min	15 75
RAD	(m)	33.50	33.50	33.50	33.50	TIME COST $/hr	15.00
PHI	(d)	13.00	15.50	13.00	15.50	FLOW PERIOD min	15 75
DIA	(m)	79.20	79.20	79.20	79.20	FLOW TYPE pcu/veh	VEH
GRAD SEP		0	0	0	0	FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)	FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	13 19 39 0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	35 52 8 0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	69 51 50 0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	4 73 58 0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	71	95	170	135	AVEDEL s	2.9
CAPACITY	veh	1315	1337	1352	1340	LOS SIG	A
AVE DELAY	secs	2.8	2.8	3.0	2.9	LOS UNSIG	A
MAX DELAY	secs	3.6	3.6	3.8	3.7		
AVE QUEUE	veh	0	0	0	0	VEHIC HRS	0.4
MAX QUEUE	veh	0	0	0	0	COST $	6

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
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Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 0.840
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 25.6
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	10	10	10	10	10	10	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	81	8	134	34	8	59	30	1974	119	131	1909	11
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:	81	8	134	34	8	59	30	1974	119	131	1909	11
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:	85	8	141	36	8	62	32	2078	125	138	2009	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	8	141	36	8	62	32	2078	125	138	2009	12
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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	85	8	141	36	8	62	32	2182	132	138	2110	12
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	0.06	0.94	1.00	0.12	0.88	1.00	1.89	0.11	1.00	1.99	0.01
Final Sat.:	1800	107	1793	1800	227	1673	1800	3584	216	1800	3778	22
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.02	0.04	0.04	0.02	0.61	0.61	0.08	0.56	0.56
Crit Moves:		****		****				****		****		
Green/Cycle:	0.09	0.09	0.09	0.08	0.09	0.09	0.10	0.68	0.68	0.09	0.66	0.66
Volume/Cap:	0.55	0.90	0.90	0.24	0.43	0.43	0.18	0.90	0.90	0.90	0.84	0.84
Delay/Veh:	57.1	96.2	96.2	52.3	54.0	54.0	50.1	20.7	20.7	98.7	18.1	18.1
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:	57.1	96.2	96.2	52.3	54.0	54.0	50.1	20.7	20.7	98.7	18.1	18.1
LOS by Move:	E	F	F	D	D	D	D	C	C	F	B	B
HCM2kAvgQ:	4	8	8	1	3	3	1	38	38	8	31	31

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

K-10

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	65	Critical Vol./Cap.(X):	0.415
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	20.6
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	71	391	14	52	173	7	1	138	52	7	29	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:	71	391	14	52	173	7	1	138	52	7	29	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:	75	412	15	55	182	7	1	145	55	7	31	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	412	15	55	182	7	1	145	55	7	31	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:	75	412	15	55	182	7	1	145	55	7	31	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	0.97	0.03	1.00	0.96	0.04	1.00	0.73	0.27	1.00	0.31	0.69
Final Sat.:	1800	1834	66	1800	1826	74	1800	1380	520	1800	586	1314
Capacity Analysis Module:												
Vol/Sat:	0.04	0.22	0.22	0.03	0.10	0.10	0.00	0.11	0.11	0.00	0.05	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.21	0.35	0.35	0.15	0.30	0.30	0.15	0.22	0.22	0.15	0.22	0.22
Volume/Cap:	0.20	0.63	0.63	0.20	0.34	0.34	0.00	0.49	0.49	0.03	0.24	0.24
Delay/Veh:	21.3	19.5	19.5	24.4	18.2	18.2	23.3	23.3	23.3	23.4	21.4	21.4
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:	21.3	19.5	19.5	24.4	18.2	18.2	23.3	23.3	23.3	23.4	21.4	21.4
LOS by Move:	C	B	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	8	8	1	3	3	0	4	4	0	2	2

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

21:8:08 Turnr at The Avenue BOWP AM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	16	398	83	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	32	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	13	226	7	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	105	0	34	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	497	32	246	139
CAPACITY	veh	1379	1156	1345	1269
AVE DELAY	secs	4.0	3.1	3.2	3.1
MAX DELAY	secs	5.3	4.0	4.1	4.0
AVE QUEUE	veh	1	0	0	0
MAX QUEUE	veh	1	0	0	0

AVEDEL s	3.6
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	0.9
COST $	14

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	29.1
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	0	146	311	234	87	92	87	1921	0	139	1828	300
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	146	311	234	87	92	87	1921	0	139	1828	300
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	154	327	246	92	97	92	2022	0	146	1924	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	154	327	246	92	97	92	2022	0	146	1924	316
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.00
FinalVolume:	0	154	327	254	92	97	92	2224	0	151	2117	316
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	1.00	0.89	1.00	1.00
Lanes:	1.00	0.32	0.68	2.00	0.49	0.51	1.00	4.00	0.00	2.00	4.00	1.00
Final Sat.:	1800	607	1293	3400	923	977	1800	7600	0	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.07	0.10	0.10	0.05	0.29	0.00	0.04	0.28	0.17
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.32	0.32	0.11	0.43	0.43	0.14	0.37	0.00	0.11	0.34	0.34
Volume/Cap:	0.00	0.79	0.79	0.67	0.23	0.23	0.37	0.80	0.00	0.40	0.82	0.49
Delay/Veh:	0.0	34.3	34.3	43.1	16.2	16.2	36.3	27.2	0.0	37.9	29.1	24.0
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	34.3	34.3	43.1	16.2	16.2	36.3	27.2	0.0	37.9	29.1	24.0
LOS by Move:	A	C	C	D	B	B	D	C	A	D	C	C
HCM2kAvgQ:	0	14	14	5	3	3	3	16	0	3	16	7

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.591
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	25.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	57	5	48	108	11	11	5	2453	9	8	2200	46
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:	57	5	48	108	11	11	5	2453	9	8	2200	46
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:	60	5	51	114	12	12	5	2582	9	8	2316	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	5	51	114	12	12	5	2582	9	8	2316	48
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	1.10	1.10	1.00	1.10	1.10
FinalVolume:	60	5	51	114	12	12	5	2840	10	8	2547	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	1.00	1.00
Lanes:	1.00	0.09	0.91	1.00	0.50	0.50	1.00	3.99	0.01	1.00	2.94	0.06
Final Sat.:	1800	179	1721	1800	950	950	1800	7572	28	1800	5583	117
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.06	0.01	0.01	0.00	0.38	0.38	0.00	0.46	0.46
Crit Moves:		****		****			****				****	
Green/Cycle:	0.08	0.22	0.22	0.08	0.22	0.22	0.08	0.52	0.52	0.12	0.55	0.55
Volume/Cap:	0.40	0.14	0.14	0.76	0.06	0.06	0.04	0.72	0.72	0.04	0.83	0.83
Delay/Veh:	53.9	38.1	38.1	73.6	37.3	37.3	50.7	23.0	23.0	47.3	24.3	24.3
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:	53.9	38.1	38.1	73.6	37.3	37.3	50.7	23.0	23.0	47.3	24.3	24.3
LOS by Move:	D	D	D	E	D	D	D	C	C	D	C	C
HCM2kAvgQ:	3	2	2	6	1	1	0	21	21	0	28	28

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	32.2
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	17	17	10	17	17	10	20	20	10	20	20
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:	109	1118	79	226	704	23	34	500	191	50	391	154
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	1118	79	226	704	23	34	500	191	50	391	154
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	1177	83	238	741	24	36	526	201	53	412	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1177	83	238	741	24	36	526	201	53	412	162
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05
FinalVolume:	115	1236	87	238	778	25	36	553	211	53	432	170
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	1.87	0.13	1.00	1.94	0.06	1.00	1.45	0.55	1.00	1.43	0.57
Final Sat.:	1800	3549	251	1800	3680	120	1800	2750	1050	1800	2726	1074
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.35	0.13	0.21	0.21	0.02	0.20	0.20	0.03	0.16	0.16
Crit Moves:		****		****				****		****		
Green/Cycle:	0.20	0.40	0.40	0.15	0.36	0.36	0.12	0.24	0.24	0.12	0.24	0.24
Volume/Cap:	0.32	0.87	0.87	0.87	0.60	0.60	0.17	0.85	0.85	0.25	0.67	0.67
Delay/Veh:	29.8	29.0	29.0	59.5	23.1	23.1	34.1	39.2	39.2	34.7	31.6	31.6
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:	29.8	29.0	29.0	59.5	23.1	23.1	34.1	39.2	39.2	34.7	31.6	31.6
LOS by Move:	C	C	C	E	C	C	C	D	D	C	C	C
HCM2kAvgQ:	3	19	19	10	9	9	1	13	13	2	8	8

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	85	Critical Vol./Cap.(X):	0.417
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	10.8
Optimal Cycle: OPTIMIZED		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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	0	0	14	14	20	0	20	0	0	0
Lanes:	1 0	2 0	0	0 0	1	1 0	1 0	0	1	0 0	0	0 0
Volume Module:												
Base Vol:	16	1461	0	0	1000	38	130	0	141	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:	16	1461	0	0	1000	38	130	0	141	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:	17	1538	0	0	1053	40	137	0	148	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	1538	0	0	1053	40	137	0	148	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	1.05	1.00	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	1615	0	0	1105	42	137	0	148	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	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.93	0.07	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	3661	139	1800	0	1900	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.00	0.00	0.30	0.30	0.08	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****					****	****					
Green/Cycle:	0.12	0.69	0.00	0.00	0.58	0.58	0.24	0.00	0.24	0.00	0.00	0.00
Volume/Cap:	0.08	0.61	0.00	0.00	0.52	0.52	0.32	0.00	0.33	0.00	0.00	0.00
Delay/Veh:	33.6	7.3	0.0	0.0	11.2	11.2	27.3	0.0	27.4	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:	33.6	7.3	0.0	0.0	11.2	11.2	27.3	0.0	27.4	0.0	0.0	0.0
LOS by Move:	C	A	A	A	B	B	C	A	C	A	A	A
HCM2kAvgQ:	0	12	0	0	9	9	3	0	3	0	0	0

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.887
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	46.2
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0	1 1	0	1 0	3 0	1	2 0	4 0	1	1 0	4 0	1
Volume Module:												
Base Vol:	203	923	102	123	505	374	765	1702	142	12	1677	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:	203	923	102	123	505	374	765	1702	142	12	1677	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:	214	972	107	129	532	394	805	1792	149	13	1765	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	972	107	129	532	394	805	1792	149	13	1765	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	1.05	1.05	1.00	1.10	1.00	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	214	1020	113	129	585	394	829	1971	149	13	1942	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	1.00	1.00	0.89	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	3.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	3422	378	1800	5700	1900	3400	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.12	0.30	0.30	0.07	0.10	0.21	0.24	0.26	0.08	0.01	0.26	0.02
Crit Moves:	****					****	****				****	
Green/Cycle:	0.13	0.31	0.31	0.09	0.28	0.28	0.26	0.39	0.39	0.13	0.27	0.27
Volume/Cap:	0.95	0.95	0.95	0.79	0.37	0.74	0.95	0.66	0.20	0.05	0.95	0.06
Delay/Veh:	95.3	55.1	55.1	73.4	33.5	43.5	60.9	29.0	23.0	43.7	51.4	31.2
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:	95.3	55.1	55.1	73.4	33.5	43.5	60.9	29.0	23.0	43.7	51.4	31.2
LOS by Move:	F	E	E	E	C	D	E	C	C	D	D	C
HCM2kAvgQ:	12	25	25	7	6	14	21	15	3	0	22	1

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	95	Critical Vol./Cap.(X):	0.690
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	34.4
Optimal Cycle: OPTIMIZED		Level Of Service:	C

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0 1	0	1	1 0	0 1	0	1 0	4 0	1	1 0	4 0	1
Volume Module:												
Base Vol:	228	391	79	96	114	48	165	1644	62	271	1966	299
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:	228	391	79	96	114	48	165	1644	62	271	1966	299
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:	240	412	83	101	120	51	174	1731	65	285	2069	315
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	412	83	101	120	51	174	1731	65	285	2069	315
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	240	412	83	101	120	51	174	1904	65	285	2276	315
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	1.00	1.00	1.00	0.70	0.30	1.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	1900	1900	1800	1337	563	1800	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.13	0.22	0.04	0.06	0.09	0.09	0.10	0.25	0.03	0.16	0.30	0.17
Crit Moves:	****				****			****			****	
Green/Cycle:	0.16	0.31	0.31	0.12	0.27	0.27	0.13	0.30	0.30	0.19	0.36	0.36
Volume/Cap:	0.84	0.70	0.14	0.47	0.33	0.33	0.77	0.84	0.12	0.84	0.84	0.46
Delay/Veh:	59.0	32.3	23.6	40.6	27.9	27.9	54.6	34.5	24.4	54.7	30.3	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:	59.0	32.3	23.6	40.6	27.9	27.9	54.6	34.5	24.4	54.7	30.3	23.9
LOS by Move:	E	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	10	12	2	3	4	4	7	16	1	11	18	7

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Condtions
AM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	3.351
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	908.3
Optimal Cycle: OPTIMIZED		Level Of Service:	F

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:	10	14	14	10	14	14	10	21	21	10	21	21
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	167	1789	347	249	280	201	308	1436	100	169	2536	385
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:	167	1789	347	249	280	201	308	1436	100	169	2536	385
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:	176	1883	365	262	295	212	324	1512	105	178	2669	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1883	365	262	295	212	324	1512	105	178	2669	405
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:	176	1883	365	262	295	212	324	1512	105	178	2669	405
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	0.84	0.16	1.00	0.58	0.42	1.00	0.93	0.07	1.00	0.87	0.13
Final Sat.:	1800	1591	309	1800	1106	794	1800	1776	124	1800	1650	250
Capacity Analysis Module:												
Vol/Sat:	0.10	1.18	1.18	0.15	0.27	0.27	0.18	0.85	0.85	0.10	1.62	1.62
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.32	0.32	0.08	0.30	0.30	0.08	0.47	0.47	0.05	0.44	0.44
Volume/Cap:	0.89	3.65	3.65	1.75	0.89	0.89	2.16	1.81	1.81	1.81	3.65	3.65
Delay/Veh:	94.2	1238	1238	417.3	59.0	59.0	599.1	392	392.4	456.2	1226	1226
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:	94.2	1238	1238	417.3	59.0	59.0	599.1	392	392.4	456.2	1226	1226
LOS by Move:	F	F	F	F	E	E	F	F	F	F	F	F
HCM2kAvgQ:	10	280	280	26	21	21	36	146	146	19	383	383

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

The Avenue
AM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap.(X): 0.706
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 33.9
Optimal Cycle: OPTIMIZED Level Of Service: C

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:	Ovl			Include			Include			Include		
Min. Green:	10	10	10	10	29	29	10	29	29	10	29	29
Lanes:	2 0	4 0	1	2 0	4 0	1	2 0	4 0	1	2 0	4 0	1
Volume Module:												
Base Vol:	167	1789	347	249	280	201	308	1436	100	169	2536	385
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:	167	1789	347	249	280	201	308	1436	100	169	2536	385
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:	176	1883	365	262	295	212	324	1512	105	178	2669	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1883	365	262	295	212	324	1512	105	178	2669	405
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:	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00	1.03	1.10	1.00
FinalVolume:	181	2071	365	270	324	212	334	1663	105	183	2936	405
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	0.89	1.00	1.00	0.89	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00	2.00	4.00	1.00
Final Sat.:	3400	7600	1900	3400	7600	1900	3400	7600	1900	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.19	0.08	0.04	0.11	0.10	0.22	0.06	0.05	0.39	0.21
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.42	0.10	0.29	0.29	0.11	0.39	0.39	0.14	0.42	0.42
Volume/Cap:	0.53	0.96	0.46	0.76	0.15	0.38	0.91	0.56	0.14	0.40	0.91	0.50
Delay/Veh:	48.6	46.3	19.9	57.6	26.3	30.2	73.9	21.9	17.9	42.0	28.9	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:	48.6	46.3	19.9	57.6	26.3	30.2	73.9	21.9	17.9	42.0	28.9	20.7
LOS by Move:	D	D	B	E	C	C	E	C	B	D	C	C
HCM2kAvgQ:	4	21	7	6	2	5	9	9	2	3	25	8

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Conditions
PM Peak Hour

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

Intersection #1 Hellman/Ontario Ave, (NS) / The Avenue (EW)

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: A[9.2]

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	1 0	0	1 0	1 0	0	1 0
Volume Module:												
Base Vol:	16	16	19	7	24	43	25	0	9	11	0	4
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:	16	16	19	7	24	43	25	0	9	11	0	4
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:	17	17	20	7	25	45	26	0	9	12	0	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	17	17	20	7	25	45	26	0	9	12	0	4
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:	71	xxxx	xxxxx	37	xxxx	xxxxx	125	133	48	128	146	27
Potent Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	853	761	1027	850	749	1054
Move Cap.:	1543	xxxx	xxxxx	1587	xxxx	xxxxx	840	749	1027	832	738	1054
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	0.03	0.00	0.01	0.01	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.3	xxxx	xxxxx	9.4	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	A	*	*	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	xxxx	1027	xxxx	xxxx	1054
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	xxxx	0.0
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	xxxxx	xxxx	8.4
Shared LOS:	*	*	*	*	*	*	*	*	A	*	*	A
ApproachDel:	xxxxxx			xxxxxx			9.2			9.1		
ApproachLOS:	*			*			A			A		

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Conditions
PM Peak Hour

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

Intersection #2 Archibald Ave. (NS) / Chino Ave.(EW)

Cycle (sec):	109	Critical Vol./Cap.(X):	0.919
Loss Time (sec):	6 (Y+R=2.0 sec)	Average Delay (sec/veh):	35.0
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	22	22	10	22	22	25	25	25	24	24	24
Lanes:	1 0	2 1	0	1 0	1 1	0	0 1	0 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	71	1342	115	192	1768	102	57	678	236	93	659	233
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:	71	1342	115	192	1768	102	57	678	236	93	659	233
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:	75	1413	121	202	1861	107	60	714	248	98	694	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1413	121	202	1861	107	60	714	248	98	694	245
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	1.10	1.10	1.00	1.05	1.05	1.05	1.05	1.05	1.00	1.05	1.05
FinalVolume:	75	1554	133	202	1954	113	63	749	261	98	728	258
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	2.76	0.24	1.00	1.89	0.11	0.12	1.40	0.48	1.00	1.48	0.52
Final Sat.:	1800	5250	450	1800	3593	207	222	2645	921	1800	2807	993
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.11	0.54	0.54	0.28	0.28	0.28	0.05	0.26	0.26
Crit Moves:	****				****			****				
Green/Cycle:	0.09	0.47	0.47	0.18	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Volume/Cap:	0.45	0.63	0.63	0.63	0.97	0.97	0.97	0.97	0.97	0.19	0.89	0.89
Delay/Veh:	55.6	18.4	18.4	50.2	28.7	28.7	58.4	58.4	58.4	29.4	47.2	47.2
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:	55.6	18.4	18.4	50.2	28.7	28.7	58.4	58.4	58.4	29.4	47.2	47.2
LOS by Move:	E	B	B	D	C	C	E	E	E	C	D	D
HCM2kAvgQ:	3	12	12	7	38	38	23	23	23	2	19	19

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #3 Archibald Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.885
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	41.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	17	17	10	17	17	10	23	23	10	23	23
Lanes:	1 0 2	1	0	1 0 3	1	0	1 0 1	0	1	1 0 0	1	0
Volume Module:												
Base Vol:	421	1512	7	113	2008	25	59	392	259	53	309	95
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:	421	1512	7	113	2008	25	59	392	259	53	309	95
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:	443	1592	7	119	2114	26	62	413	273	56	325	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	443	1592	7	119	2114	26	62	413	273	56	325	100
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	1.10	1.10	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	443	1751	8	119	2325	29	62	413	273	56	325	100
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	2.99	0.01	1.00	3.95	0.05	1.00	1.00	1.00	1.00	0.76	0.24
Final Sat.:	1800	5674	26	1800	7507	93	1800	1900	1900	1800	1453	447
Capacity Analysis Module:												
Vol/Sat:	0.25	0.31	0.31	0.07	0.31	0.31	0.03	0.22	0.14	0.03	0.22	0.22
Crit Moves:	****				****		****				****	
Green/Cycle:	0.26	0.44	0.44	0.14	0.33	0.33	0.10	0.23	0.23	0.10	0.24	0.24
Volume/Cap:	0.95	0.70	0.70	0.46	0.95	0.95	0.35	0.93	0.61	0.30	0.95	0.95
Delay/Veh:	65.9	23.4	23.4	40.6	42.1	42.1	43.1	63.5	36.8	42.6	68.0	68.0
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:	65.9	23.4	23.4	40.6	42.1	42.1	43.1	63.5	36.8	42.6	68.0	68.0
LOS by Move:	E	C	C	D	D	D	D	E	D	D	E	E
HCM2kAvgQ:	19	15	15	4	23	23	2	17	8	2	18	18

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

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The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #4 Archibald Ave. (NS) / The "Avenue" (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	25.2
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	14	14	10	14	14	10	20	20	10	20	20
Lanes:	1 0	1 1	0	1 0	2 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	90	1823	19	78	2194	48	62	22	8	21	38	54
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:	90	1823	19	78	2194	48	62	22	8	21	38	54
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:	95	1919	20	82	2309	51	65	23	8	22	40	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	1919	20	82	2309	51	65	23	8	22	40	57
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	1.05	1.05	1.00	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	95	2015	21	82	2540	56	65	23	8	22	40	57
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	1.98	0.02	1.00	2.94	0.06	1.00	0.73	0.27	1.00	0.41	0.59
Final Sat.:	1800	3761	39	1800	5578	122	1800	1393	507	1800	785	1115
Capacity Analysis Module:												
Vol/Sat:	0.05	0.54	0.54	0.05	0.46	0.46	0.04	0.02	0.02	0.01	0.05	0.05
Crit Moves:		****		****			****				****	
Green/Cycle:	0.11	0.60	0.60	0.08	0.58	0.58	0.08	0.17	0.17	0.08	0.17	0.17
Volume/Cap:	0.50	0.89	0.89	0.55	0.79	0.79	0.44	0.10	0.10	0.15	0.31	0.31
Delay/Veh:	52.7	25.6	25.6	57.0	21.0	21.0	54.3	42.5	42.5	51.5	44.5	44.5
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:	52.7	25.6	25.6	57.0	21.0	21.0	54.3	42.5	42.5	51.5	44.5	44.5
LOS by Move:	D	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	4	35	35	4	26	26	3	1	1	1	3	3

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Conditions
PM Peak Hour

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 2.370
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 597.6
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10	20	20	10	18	18	10	25	25	10	25	25
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	87	1740	1134	57	1968	197	167	1177	1739	157	1756	25
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:	87	1740	1134	57	1968	197	167	1177	1739	157	1756	25
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:	92	1832	1194	60	2072	207	176	1239	1831	165	1848	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	1832	1194	60	2072	207	176	1239	1831	165	1848	26
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:	92	1832	1194	60	2072	207	176	1239	1831	165	1848	26
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Capacity Analysis Module:												
Vol/Sat:	0.05	0.96	0.63	0.03	1.09	0.11	0.10	0.65	0.96	0.09	0.97	0.01
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.41	0.41	0.08	0.41	0.41	0.08	0.41	0.41	0.04	0.36	0.36
Volume/Cap:	0.61	2.38	1.55	0.40	2.69	0.27	1.17	1.61	2.37	2.37	2.69	0.04
Delay/Veh:	70.3	656	285.9	59.9	796	22.0	182.1	310	653.1	717.0	801	23.2
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:	70.3	656	285.9	59.9	796	22.0	182.1	310	653.1	717.0	801	23.2
LOS by Move:	E	F	F	E	F	C	F	F	F	F	F	C
HCM2kAvgQ:	4	195	95	3	233	4	13	102	195	20	208	1

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #5 Archibald Ave. (NS) / Edison Ave.(EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.892
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	41.0
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	Ignore			Include			Ignore			Include		
Min. Green:	10	26	26	10	26	26	10	29	29	10	29	29
Lanes:	1 0 3	0 1		1 0 3	1 0		1 0 2	0 1		1 0 3	1 0	
Volume Module:												
Base Vol:	87 1740	1134		57 1968	197		167 1177	1739		157 1756	25	
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:	87 1740	1134		57 1968	197		167 1177	1739		157 1756	25	
User Adj:	1.00 1.00	0.00		1.00 1.00	1.00		1.00 1.00	0.00		1.00 1.00	1.00	
PHF Adj:	0.95 0.95	0.00		0.95 0.95	0.95		0.95 0.95	0.00		0.95 0.95	0.95	
PHF Volume:	92 1832	0		60 2072	207		176 1239	0		165 1848	26	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	92 1832	0		60 2072	207		176 1239	0		165 1848	26	
PCE Adj:	1.00 1.00	0.00		1.00 1.00	1.00		1.00 1.00	0.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.10	0.00		1.00 1.10	1.10		1.00 1.05	0.00		1.00 1.10	1.10	
FinalVolume:	92 2015	0		60 2279	228		176 1301	0		165 2033	29	
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	1.00		1.00 3.64	0.36		1.00 2.00	1.00		1.00 3.94	0.06	
Final Sat.:	1800 5700	1900		1800 6908	692		1800 3800	1900		1800 7493	107	
Capacity Analysis Module:												
Vol/Sat:	0.05 0.35	0.00		0.03 0.33	0.33		0.10 0.34	0.00		0.09 0.27	0.27	
Crit Moves:	****			****			****			****		
Green/Cycle:	0.11 0.37	0.00		0.10 0.36	0.36		0.12 0.35	0.00		0.10 0.34	0.34	
Volume/Cap:	0.47 0.97	0.00		0.33 0.92	0.92		0.84 0.97	0.00		0.92 0.80	0.80	
Delay/Veh:	43.7 43.9	0.0		43.0 36.7	36.7		67.9 48.8	0.0		88.9 32.0	32.0	
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:	43.7 43.9	0.0		43.0 36.7	36.7		67.9 48.8	0.0		88.9 32.0	32.0	
LOS by Move:	D D	A		D D	D		E D	A		F C	C	
HCM2kAvgQ:	3 26	0		2 23	23		8 25	0		9 16	16	

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

21:8:08 A St. at The Avenue BOWP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD min	90
TIME SLICE min	15
RESULTS PERIOD min	15 75
TIME COST $/hr	15.00
FLOW PERIOD min	15 75
FLOW TYPE pcu/veh	VEH
FLOW PEAK am/op/pm	PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)	FLOF	CL	FLOW RATIO	FLOW TIME
S. A St	1.05	8 8 28 0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	37 63 29 0	1.00	50	0.75 1.125 0.75	15 45 75
N. A St	1.05	28 8 25 0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	14 72 16 0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	44	129	61	102	
CAPACITY	veh	1346	1366	1343	1361	
AVE DELAY	secs	2.7	2.8	2.8	2.8	
MAX DELAY	secs	3.4	3.6	3.5	3.5	
AVE QUEUE	veh	0	0	0	0	
MAX QUEUE	veh	0	0	0	0	

AVEDEL s	2.8
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	0.3
COST $	4

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #7 "A" Street (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.849
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	31.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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:	10	10	10	10	10	10	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	45	5	73	22	7	34	44	2324	54	88	1903	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:	45	5	73	22	7	34	44	2324	54	88	1903	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:	47	5	77	23	7	36	46	2446	57	93	2003	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	5	77	23	7	36	46	2446	57	93	2003	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	1.05	1.05	1.00	1.05	1.05
FinalVolume:	47	5	77	23	7	36	46	2569	60	93	2103	42
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	0.06	0.94	1.00	0.17	0.83	1.00	1.95	0.05	1.00	1.96	0.04
Final Sat.:	1800	122	1778	1800	324	1576	1800	3714	86	1800	3726	74
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.04	0.01	0.02	0.02	0.03	0.69	0.69	0.05	0.56	0.56
Crit Moves:	****				****			****			****	
Green/Cycle:	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.68	0.68	0.08	0.67	0.67
Volume/Cap:	0.32	0.52	0.52	0.15	0.27	0.27	0.26	1.01	1.01	0.62	0.85	0.85
Delay/Veh:	53.0	55.7	55.7	51.6	52.5	52.5	50.8	39.7	39.7	60.7	18.0	18.0
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:	53.0	55.7	55.7	51.6	52.5	52.5	50.8	39.7	39.7	60.7	18.0	18.0
LOS by Move:	D	E	E	D	D	D	D	D	D	E	B	B
HCM2kAvgQ:	2	4	4	1	2	2	2	58	58	5	32	32

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #8 Turner Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	44.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	14	14	10	14	14	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	71	451	4	239	656	51	2	146	236	10	253	255
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:	71	451	4	239	656	51	2	146	236	10	253	255
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:	75	475	4	252	691	54	2	154	248	11	266	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	475	4	252	691	54	2	154	248	11	266	268
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:	75	475	4	252	691	54	2	154	248	11	266	268
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	0.99	0.01	1.00	0.93	0.07	1.00	0.38	0.62	1.00	0.50	0.50
Final Sat.:	1800	1883	17	1800	1763	137	1800	726	1174	1800	946	954
Capacity Analysis Module:												
Vol/Sat:	0.04	0.25	0.25	0.14	0.39	0.39	0.00	0.21	0.21	0.01	0.28	0.28
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.34	0.34	0.19	0.43	0.43	0.09	0.28	0.28	0.12	0.31	0.31
Volume/Cap:	0.46	0.75	0.75	0.75	0.90	0.90	0.01	0.75	0.75	0.05	0.90	0.90
Delay/Veh:	49.4	37.1	37.1	51.1	42.2	42.2	45.5	41.9	41.9	42.8	53.4	53.4
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:	49.4	37.1	37.1	51.1	42.2	42.2	45.5	41.9	41.9	42.8	53.4	53.4
LOS by Move:	D	D	D	D	D	D	D	D	D	D	D	D
HCM2kAvgQ:	3	16	16	10	27	27	0	14	14	0	21	21

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

21:8:08 Turnr at The Avenue BOWP PM Peak Hour 7

E	(m)	4.50	4.50	4.50	4.50	
L'	(m)	12.40	9.20	12.40	9.20	
V	(m)	4.30	4.50	4.30	4.50	
RAD	(m)	33.50	33.50	33.50	33.50	
PHI	(d)	13.00	15.50	13.00	15.50	
DIA	(m)	79.20	79.20	79.20	79.20	
GRAD SEP		0	0	0	0	

TIME PERIOD	min 90
TIME SLICE	min 15
RESULTS PERIOD	min 15 75
TIME COST	$/hr 15.00
FLOW PERIOD	min 15 75
FLOW TYPE	pcu/veh VEH
FLOW PEAK	am/op/pm PM

LEG NAME	PCU	TURNS (1st exit, 2nd..U)				FLOF	CL	FLOW RATIO	FLOW TIME
S. Turnr	1.05	56	563	97	0	1.00	50	0.75 1.125 0.75	15 45 75
E. Conn	1.05	0	0	46	0	1.00	50	0.75 1.125 0.75	15 45 75
N. Turnr	1.05	32	777	25	0	1.00	50	0.75 1.125 0.75	15 45 75
W. Conn	1.05	69	0	27	0	1.00	50	0.75 1.125 0.75	15 45 75

FLOW	veh	716	46	834	96
CAPACITY	veh	1374	1078	1332	1005
AVE DELAY	secs	5.4	3.4	7.3	3.9
MAX DELAY	secs	7.5	4.4	10.6	5.1
AVE QUEUE	veh	1	0	2	0
MAX QUEUE	veh	1	0	2	0

AVEDEL s	6.2
LOS SIG	A
LOS UNSIG	A
VEHIC HRS	2.9
COST $	44

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #10 Turner Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	115	Critical Vol./Cap.(X):	0.884
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	45.2
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	29	29	10	29	29	10	17	17	10	17	17
Lanes:	1 0	0 1	0	2 0	0 1	0	1 0	3 1	0	2 0	4 0	1
Volume Module:												
Base Vol:	0	142	224	608	209	75	223	2123	0	320	1866	351
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	142	224	608	209	75	223	2123	0	320	1866	351
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	149	236	640	220	79	235	2235	0	337	1964	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	149	236	640	220	79	235	2235	0	337	1964	369
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	1.03	1.00	1.00	1.00	1.10	1.10	1.03	1.10	1.00
FinalVolume:	0	149	236	659	220	79	235	2458	0	347	2161	369
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	1.00	0.89	1.00	1.00
Lanes:	1.00	0.39	0.61	2.00	0.74	0.26	1.00	4.00	0.00	2.00	4.00	1.00
Final Sat.:	1800	737	1163	3400	1398	502	1800	7600	0	3400	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.19	0.16	0.16	0.13	0.32	0.00	0.10	0.28	0.19
Crit Moves:		****		****				****		****		
Green/Cycle:	0.00	0.25	0.25	0.21	0.46	0.46	0.15	0.35	0.00	0.11	0.32	0.32
Volume/Cap:	0.00	0.80	0.80	0.91	0.34	0.34	0.89	0.91	0.00	0.91	0.89	0.61
Delay/Veh:	0.0	49.9	49.9	60.3	19.8	19.8	76.9	40.8	0.0	76.4	41.7	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:	0.0	49.9	49.9	60.3	19.8	19.8	76.9	40.8	0.0	76.4	41.7	34.9
LOS by Move:	A	D	D	E	B	B	E	D	A	E	D	C
HCM2kAvgQ:	0	15	15	16	7	7	12	25	0	10	21	11

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #11 PA 10 and 11 Driveways (NS) / Edison Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.712
Loss Time (sec):	8 (Y+R=2.0 sec)	Average Delay (sec/veh):	35.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	3 1	0	1 0	2 1	0
Volume Module:												
Base Vol:	33	19	28	152	15	15	19	2902	34	33	2490	162
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	19	28	152	15	15	19	2902	34	33	2490	162
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	20	29	160	16	16	20	3055	36	35	2621	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	20	29	160	16	16	20	3055	36	35	2621	171
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	1.10	1.10	1.00	1.10	1.10
FinalVolume:	35	20	29	160	16	16	20	3360	39	35	2883	188
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	0.40	0.60	1.00	0.50	0.50	1.00	3.95	0.05	1.00	2.82	0.18
Final Sat.:	1800	768	1132	1800	950	950	1800	7512	88	1800	5352	348
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.03	0.09	0.02	0.02	0.01	0.45	0.45	0.02	0.54	0.54
Crit Moves:		****		****			****				****	
Green/Cycle:	0.09	0.22	0.22	0.09	0.22	0.22	0.08	0.53	0.53	0.10	0.54	0.54
Volume/Cap:	0.23	0.12	0.12	0.99	0.08	0.08	0.13	0.85	0.85	0.20	0.99	0.99
Delay/Veh:	52.0	37.9	37.9	122.6	37.1	37.1	51.4	25.9	25.9	50.3	41.2	41.2
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:	52.0	37.9	37.9	122.6	37.1	37.1	51.4	25.9	25.9	50.3	41.2	41.2
LOS by Move:	D	D	D	F	D	D	D	C	C	D	D	D
HCM2kAvgQ:	1	1	1	10	1	1	1	29	29	1	44	44

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #12 Haven Ave. (NS) / Chino Ave. (EW)

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	42.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

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:	10	17	17	10	17	17	10	20	20	10	20	20
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:	164	1056	75	211	1348	24	34	615	95	148	675	272
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:	164	1056	75	211	1348	24	34	615	95	148	675	272
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:	173	1112	79	222	1419	25	36	647	100	156	711	286
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	1112	79	222	1419	25	36	647	100	156	711	286
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	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05	1.00	1.05	1.05
FinalVolume:	173	1167	83	222	1490	27	36	680	105	156	746	301
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	1.87	0.13	1.00	1.97	0.03	1.00	1.73	0.27	1.00	1.43	0.57
Final Sat.:	1800	3548	252	1800	3734	66	1800	3292	508	1800	2709	1091
Capacity Analysis Module:												
Vol/Sat:	0.10	0.33	0.33	0.12	0.40	0.40	0.02	0.21	0.21	0.09	0.28	0.28
Crit Moves:	****				****		****				****	
Green/Cycle:	0.10	0.38	0.38	0.14	0.42	0.42	0.10	0.26	0.26	0.13	0.29	0.29
Volume/Cap:	0.94	0.86	0.86	0.86	0.94	0.94	0.20	0.78	0.78	0.67	0.94	0.94
Delay/Veh:	93.6	33.7	33.7	65.6	38.6	38.6	41.9	38.0	38.0	49.3	49.2	49.2
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:	93.6	33.7	33.7	65.6	38.6	38.6	41.9	38.0	38.0	49.3	49.2	49.2
LOS by Move:	F	C	C	E	D	D	D	D	D	D	D	D
HCM2kAvgQ:	9	20	20	10	27	27	1	13	13	6	20	20

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #13 Haven Ave. (NS) / Schaefer Ave. (EW)

Cycle (sec):	120	Critical Vol./Cap.(X):	0.949
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	29.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	10	14	0	0	14	14	20	0	20	0	0	0
Lanes:	1 0 2	0 0		0 0 1	1 0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	378	1313	0	0	1585	182	141	0	234	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:	378	1313	0	0	1585	182	141	0	234	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:	398	1382	0	0	1668	192	148	0	246	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	398	1382	0	0	1668	192	148	0	246	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	1.05	1.00	1.00	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	398	1451	0	0	1752	201	148	0	246	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	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.79	0.21	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1800	3800	0	0	3409	391	1800	0	1900	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.38	0.00	0.00	0.51	0.51	0.08	0.00	0.13	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.24	0.78	0.00	0.00	0.55	0.55	0.17	0.00	0.17	0.00	0.00	0.00
Volume/Cap:	0.94	0.49	0.00	0.00	0.94	0.94	0.49	0.00	0.78	0.00	0.00	0.00
Delay/Veh:	73.6	4.7	0.0	0.0	34.2	34.2	46.7	0.0	59.4	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:	73.6	4.7	0.0	0.0	34.2	34.2	46.7	0.0	59.4	0.0	0.0	0.0
LOS by Move:	E	A	A	A	C	C	D	A	E	A	A	A
HCM2kAvgQ:	19	9	0	0	38	38	6	0	11	0	0	0

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #14 Haven Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 115 Critical Vol./Cap.(X): 0.899
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 46.1
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	10	32	32	10	32	32	10	23	23	10	23	23
Lanes:	1 0 1	1 0		1 0 3	0 1		2 0 4	0 1		1 0 4	0 1	
Volume Module:												
Base Vol:	248	717	35	269	1141	471	505	2199	377	133	1967	209
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:	248	717	35	269	1141	471	505	2199	377	133	1967	209
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:	261	755	37	283	1201	496	532	2315	397	140	2071	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	755	37	283	1201	496	532	2315	397	140	2071	220
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	1.05	1.05	1.00	1.10	1.00	1.03	1.10	1.00	1.00	1.10	1.00
FinalVolume:	261	792	39	283	1321	496	548	2546	397	140	2278	220
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	0.89	1.00	1.00	0.95	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	3.00	1.00	2.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	3623	177	1800	5700	1900	3400	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.22	0.16	0.23	0.26	0.16	0.34	0.21	0.08	0.30	0.12
Crit Moves:		****		****			****				****	
Green/Cycle:	0.15	0.28	0.28	0.17	0.29	0.29	0.17	0.39	0.39	0.10	0.32	0.32
Volume/Cap:	0.95	0.79	0.79	0.95	0.79	0.89	0.95	0.87	0.54	0.78	0.95	0.37
Delay/Veh:	89.8	42.3	42.3	85.6	40.2	55.7	72.3	35.6	28.2	69.4	47.4	30.8
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:	89.8	42.3	42.3	85.6	40.2	55.7	72.3	35.6	28.2	69.4	47.4	30.8
LOS by Move:	F	D	D	F	D	E	E	D	C	E	D	C
HCM2kAvgQ:	14	15	15	15	16	20	15	24	11	7	24	6

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #15 Mill Creek Ave. (NS) / Edison Ave. (EW)

Cycle (sec):	110	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	43.0
Optimal Cycle: OPTIMIZED		Level Of Service:	D

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:	10	26	26	10	26	26	10	14	14	10	14	14
Lanes:	1 0	1 0	1	1 0	0 1	0	1 0	4 0	1	1 0	4 0	1
Volume Module:												
Base Vol:	163	246	262	292	382	94	179	2330	235	218	2271	177
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:	163	246	262	292	382	94	179	2330	235	218	2271	177
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:	172	259	276	307	402	99	188	2453	247	229	2391	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	259	276	307	402	99	188	2453	247	229	2391	186
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	1.10	1.00	1.00	1.10	1.00
FinalVolume:	172	259	276	307	402	99	188	2698	247	229	2630	186
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	1.00	1.00	1.00	0.80	0.20	1.00	4.00	1.00	1.00	4.00	1.00
Final Sat.:	1800	1900	1900	1800	1525	375	1800	7600	1900	1800	7600	1900
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.15	0.17	0.26	0.26	0.10	0.35	0.13	0.13	0.35	0.10
Crit Moves:			****	****				****		****		
Green/Cycle:	0.11	0.24	0.24	0.18	0.31	0.31	0.12	0.38	0.38	0.13	0.39	0.39
Volume/Cap:	0.86	0.58	0.61	0.95	0.86	0.86	0.88	0.95	0.35	0.95	0.88	0.25
Delay/Veh:	77.6	39.0	40.0	80.2	48.4	48.4	79.9	40.9	25.0	90.0	34.6	22.7
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:	77.6	39.0	40.0	80.2	48.4	48.4	79.9	40.9	25.0	90.0	34.6	22.7
LOS by Move:	E	D	D	F	D	D	E	D	C	F	C	C
HCM2kAvgQ:	9	8	9	15	19	19	10	27	6	12	24	4

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

JN:5279 The Avenue Specific Plan Amendment
2030 With Project Conditions
PM Peak Hour

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 120 Critical Vol./Cap.(X): 3.465
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 1106.7
Optimal Cycle: OPTIMIZED Level Of Service: F

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:	10		14	14	10		14	14	10		21	21	10		21	21
Lanes:	1	0	0	1 0	1	0	0	1 0	1	0	0	1 0	1	0	0	1 0
Volume Module:																
Base Vol:	129	1061		397	563	2014		296	254	2577		422	372	2275		407
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:	129	1061		397	563	2014		296	254	2577		422	372	2275		407
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:	136	1117		418	593	2120		312	267	2713		444	392	2395		428
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Reduced Vol:	136	1117		418	593	2120		312	267	2713		444	392	2395		428
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:	136	1117		418	593	2120		312	267	2713		444	392	2395		428
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	0.73		0.27	1.00	0.87		0.13	1.00	0.86		0.14	1.00	0.85		0.15
Final Sat.:	1800	1383		517	1800	1657		243	1800	1633		267	1800	1612		288
Capacity Analysis Module:																
Vol/Sat:	0.08	0.81		0.81	0.33	1.28		1.28	0.15	1.66		1.66	0.22	1.49		1.49
Crit Moves:	****					****				****				****		
Green/Cycle:	0.08	0.30		0.30	0.12	0.33		0.33	0.05	0.43		0.43	0.08	0.47		0.47
Volume/Cap:	0.91	2.73		2.73	2.73	3.84		3.84	3.16	3.84		3.84	2.61	3.16		3.16
Delay/Veh:	106.3	824		824.0	842.8	1319		1319	1062	1309		1309	798.7	1003		1003
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:	106.3	824		824.0	842.8	1319		1319	1062	1309		1309	798.7	1003		1003
LOS by Move:	F	F		F	F	F		F	F	F		F	F	F		F
HCM2kAvgQ:	8	174		174	72	307		307	35	398		398	47	337		337

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

The Avenue
PM 2030 With Project Conditions WITH IMPROVEMENTS
JN 5279

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

Intersection #16 Milliken Ave./Hamner Ave. (NS) / Edison Ave. (EW)

Cycle (sec): 105 Critical Vol./Cap.(X): 0.930
Loss Time (sec): 8 (Y+R=2.0 sec) Average Delay (sec/veh): 42.0
Optimal Cycle: OPTIMIZED Level Of Service: D

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:	Ovl						Include						Include						Include					
Min. Green:	10	10			10		10	29			29		10	29			29		10	29			29	
Lanes:	2	0	4	0	1		2	0	4	0	1		2	0	4	0	1		2	0	4	0	1	
Volume Module:																								
Base Vol:	129	1061			397		563	2014			296		254	2577			422		372	2275			407	
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:	129	1061			397		563	2014			296		254	2577			422		372	2275			407	
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:	136	1117			418		593	2120			312		267	2713			444		392	2395			428	
Reduct Vol:	0	0			0		0	0			0		0	0			0		0	0			0	
Reduced Vol:	136	1117			418		593	2120			312		267	2713			444		392	2395			428	
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:	1.03	1.10			1.00		1.03	1.10			1.00		1.03	1.10			1.00		1.03	1.10			1.00	
FinalVolume:	140	1229			418		610	2332			312		275	2984			444		403	2634			428	
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		0.89	1.00			1.00		0.89	1.00			1.00	
Lanes:	2.00	4.00			1.00		2.00	4.00			1.00		2.00	4.00			1.00		2.00	4.00			1.00	
Final Sat.:	3400	7600			1900		3400	7600			1900		3400	7600			1900		3400	7600			1900	
Capacity Analysis Module:																								
Vol/Sat:	0.04	0.16			0.22		0.18	0.31			0.16		0.08	0.39			0.23		0.12	0.35			0.23	
Crit Moves:	****							****						****						****				
Green/Cycle:	0.10	0.19			0.31		0.21	0.31			0.31		0.11	0.40			0.40		0.12	0.41			0.41	
Volume/Cap:	0.43	0.84			0.70		0.84	0.99			0.53		0.73	0.99			0.59		0.99	0.85			0.56	
Delay/Veh:	49.0	46.8			37.9		50.8	50.9			32.5		56.6	41.8			25.6		87.6	28.4			24.1	
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:	49.0	46.8			37.9		50.8	50.9			32.5		56.6	41.8			25.6		87.6	28.4			24.1	
LOS by Move:	D		D		D		D	D			C		E	D			C		F	C			C	
HCM2kAvgQ:	3		12		12		13	25			8		6	31			10		12	21			9	

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

APPENDIX L

County of San Bernardino
Preliminary Construction Cost Estimates

APPENDIX G

PRELIMINARY CONSTRUCTION COST ESTIMATES FOR CONGESTION MANAGEMENT PLAN

PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN

Add One Lane Each Direction on Freeway	
Asphalt Concrete Pavement	$2,300,000 Per Mile
Portland Cement Concrete Pavement	$2,800,000 Per Mile
Includes: Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls

Widen Existing UC Structures	
Total Cost =	$160 Per Square Foot
Includes: Structure Mobilization @10% Design @11% Construction Mgt. @12.5%	**Excludes:** Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls

Diamond Interchanges			
→ $10,000,000	EACH	NEW IC	Minimal Row/Environmental
$15,000,000	EACH	NEW IC	Includes Row/Environmental
$20,000,000	EACH	EXISTING	Minimal Row/Environmental
$25,000,000	EACH	EXISTING	Includes Row/ Environmental

Includes: Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%	**Excludes:** As listed

Retaining Walls

Height Feet	Structure Cost $/LF	Mobilization Design Constr. Mgt. $/LF	Total $/LF
4	$190	$70	$260
6	$260	$90	$350
8	$380	$140	$520
10	$430	$150	$580
12	$480	$170	$650
14	$590	$210	$800
16	$660	$240	$900

Excludes: Environmental Costs
Right of Way

12' High Sound Walls (Masonry Block on Footing)

Structure Cost $/Mile	Mobilization Design Constr. Mgt. $/Mile	Total $/Mile
$800,000	$300,000	$1,100,000

Widen Conventional Highway

1. Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section. Asphalt Concrete Pavement	$1,000,000/Mile
2. Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section) Asphalt Concrete Pavement	
With Median Concrete Barrier	$2,000,000/Mile
With Median Double Thrie Beam Barrier	$2,200,000/Mile $2,300,000/Mile

Local Interchange Improvements

1. New Interchange Urban Interchange	$10,000,000 to $17,000,000
Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal)	$6,000,000
Diamond Interchange (Work includes new OC structure, earthwork, signal)	$5,000,000

Local Interchange Improvements CONT...		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	$350,000/Each Ramp
	Widen existing OC structure	$110/Sq. Ft.
	Signalize ramp intersection	$90,000/Location
	Upgrade existing signal at ramp terminal	$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	$25,000/Each
4.	Ramp Metering System	$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	~~$250,000~~ → $400,000 per County staff direction.
2.	Upgrade existing intersection signalization	$75,000
3.	Upgrade existing Traffic Controller/Assembles	$40,000/Each
4.	Install new signal	$90,000/location
5.	Add signal heads	$25,000/Intersection
6.	Construct left – turn lane (240' long)	$50,000/Each Location
7.	Street widening (12' wide) (Pavement only)	$180,000/Mile
8.	Curb and gutter (Type A2-8)	$15/LF

Construct through lane at intersection $289,720 per County staff direction

Other Improvements		
1.	Construct new OC structure (Does not include roadway work)	$100/Sq. Ft.
2.	Construct Retaining Walls (Type 1)	$285/LF (H=8') $360/LF (H=10') $460/LF (H=12') $560/LF (H=14')
3.	Construct Soundwall	$1,000,000/Mile (H=12')
4.	Traffic Management Plan	10% of total construction costs

NOTE: This cost estimate does not include the following items:

1. R/W engineering, appraisal, acquisition and utilities relocation costs.
2. Minor items and supplemental work (10%).
3. Mobilization (10%).
4. Contingencies (25%).
5. Landscaping costs.

General Note: **When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.**