

**Table 2-9. Intersections Currently Operating at LOS E or F (2010)**

Intersection	Jurisdiction	Control Type
Glenwood Avenue/Route 66	Glendora	2-Way Stop
Monte Vista Avenue/Bonita Avenue	San Dimas	2-Way Stop
A Street/Arrow Highway	La Verne	2-Way Stop
White Avenue/Third Street	La Verne	2-Way Stop
La Verne Avenue/Arrow Highway	La Verne	2-Way Stop
Fulton Road/Bonita Avenue	Pomona	2-Way Stop

Source: Intueor, 2011

**Table 2-10. Existing Intersection LOS Analysis (2010)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>2</sup>	LOS	Delay <sup>2</sup>
1	Barranca Avenue/Bennett Avenue	Glendora	1-Way Stop	C	16.5	B	11.6
				A <sup>1</sup>	5.8 <sup>1</sup>	A <sup>1</sup>	1.7 <sup>1</sup>
2	Barranca Avenue/Foothill Boulevard	Glendora	Signalized	A	9.7	A	7.5
3	Grand Avenue/Foothill Boulevard	Glendora	Signalized	C	27.3	C	23.9
4	Vermont Avenue East/Ada Avenue	Glendora	1-Way Stop	B	11.0	B	12.3
				A <sup>1</sup>	4.2 <sup>1</sup>	A <sup>1</sup>	4.7 <sup>1</sup>
5	Vermont Avenue/Route 66	Glendora	Signalized	A	6.6	A	7.8
6	Vermont Avenue/Foothill Boulevard	Glendora	Signalized	A	6.8	A	6.2
7	Vermont Avenue West/Ada Avenue	Glendora	1-Way Stop	B	10.6	B	11.3
				A <sup>1</sup>	2.5 <sup>1</sup>	A <sup>1</sup>	2.1 <sup>1</sup>
8	Glendora Avenue/Foothill Boulevard	Glendora	Signalized	C	20.1	C	22.3
9	Glendora Avenue/Ada Avenue	Glendora	All-Way Stop	B	10.6	B	12.1
10	Glendora Avenue/Route 66	Glendora	Signalized	B	17.9	C	21.2
11	Pasadena Avenue/Lemon Avenue	Glendora	All-Way Stop	A	7.7	A	7.6
12	Pasadena Avenue/Route 66	Glendora	Signalized	A	9.4	A	8.7
13	Glenwood Avenue/Lemon Avenue	Glendora	2-Way Stop	A	9.8	B	10.7
				A <sup>1</sup>	2.3 <sup>1</sup>	A <sup>1</sup>	2.5 <sup>1</sup>
14	Glenwood Avenue/Route 66	Glendora	2-Way Stop	F	487.7	F	304.7
				D <sup>1</sup>	25.3 <sup>1</sup>	B <sup>1</sup>	14.8 <sup>1</sup>
15	Elwood Avenue/Lemon Avenue	Glendora	2-Way Stop	B	10.4	B	10.5
				A <sup>1</sup>	2.2 <sup>1</sup>	A <sup>1</sup>	2.1 <sup>1</sup>
16	Elwood Avenue/Route 66	Glendora	Signalized	B	16.7	B	14.3
17	Lorraine Avenue/Lemon Avenue	Glendora	2-Way Stop	C	16.7	B	12.4
				A <sup>1</sup>	1.6 <sup>1</sup>	A <sup>1</sup>	1.1 <sup>1</sup>
18	Lorraine Avenue/Route 66	Glendora	Signalized	B	13.9	B	10.5
19	Lone Hill Avenue/Auto Centre Drive	Glendora	Signalized	B	13.7	B	16.7
20	Barranca Avenue/Sierra Madre Avenue	Glendora	1-Way Stop	C	15.7	B	13.7
				A <sup>1</sup>	3.6 <sup>1</sup>	A <sup>1</sup>	2.8 <sup>1</sup>
21	Glendora Avenue/Sierra Madre Avenue	Glendora	All-Way Stop	C	23.8	B	12.0
22	Lone Hill Avenue/Glendora Marketplace	Glendora	Signalized	B	15.1	B	19.5
23	Lone Hill Avenue/Gladstone Street	San Dimas	Signalized	B	16.9	C	21.7

**Table 2-10. Existing Intersection LOS Analysis (2010) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>2</sup>	LOS	Delay <sup>2</sup>
24	SR-57 (southbound)/Arrow Highway	San Dimas	Signalized	A	5.3	A	9.5
25	SR-57 (northbound)/Arrow Highway & Bonita Avenue	San Dimas	Signalized	B	17.6	B	19.9
26	Eucla Avenue/Fifth Street	San Dimas	All-Way Stop	A	7.2	A	7.2
27	Eucla Avenue/Second Street	San Dimas	1-Way Stop	A	9.4	B	10.0
				A <sup>1</sup>	0.7 <sup>1</sup>	A <sup>1</sup>	0.9 <sup>1</sup>
28	Eucla Avenue/Bonita Avenue	San Dimas	Signalized	A	4.7	A	6.0
29	Eucla Avenue/Arrow Highway	San Dimas	Signalized	A	7.4	A	9.8
30	Acacia Street/Fifth Street	San Dimas	1-Way Stop	A	9.1	A	9.1
				A <sup>1</sup>	1.4 <sup>1</sup>	A <sup>1</sup>	1.0 <sup>1</sup>
31	Acacia Street/Second Street	San Dimas	2-Way Stop	A	9.0	A	9.1
				A <sup>1</sup>	7.3 <sup>1</sup>	A <sup>1</sup>	6.4 <sup>1</sup>
32	Acacia Street/Bonita Avenue	San Dimas	2-Way Stop	B	10.4	C	18.2
				A <sup>1</sup>	0.6 <sup>1</sup>	A <sup>1</sup>	1.1 <sup>1</sup>
33	Cataract Avenue/Second Street	San Dimas	2-Way Stop	A	9.7	A	9.8
				A <sup>1</sup>	8.3 <sup>1</sup>	A <sup>1</sup>	7.9 <sup>1</sup>
34	Cataract Avenue/Bonita Avenue	San Dimas	All-Way Stop	B	10.3	C	15.0
35	Monte Vista Avenue/Second Street	San Dimas	2-Way Stop	A	9.2	A	9.7
				A <sup>1</sup>	4.8 <sup>1</sup>	A <sup>1</sup>	3.7 <sup>1</sup>
36	Monte Vista Avenue/Bonita Avenue	San Dimas	2-Way Stop	C	15.4	E	39.7
				A <sup>1</sup>	1.0 <sup>1</sup>	A <sup>1</sup>	2.9 <sup>1</sup>
37	San Dimas Avenue/Second Street	San Dimas	2-Way Stop	C	16.8	C	22.3
				A <sup>1</sup>	0.9 <sup>1</sup>	A <sup>1</sup>	1.5 <sup>1</sup>
38	San Dimas Avenue/Bonita Avenue	San Dimas	Signalized	B	10.2	B	13.0
39	San Dimas Avenue/Arrow Highway	San Dimas	Signalized	C	23.0	C	29.4
40	Walnut Avenue/Bonita Avenue	San Dimas	Signalized	A	5.9	B	10.7
41	Walnut Avenue/Arrow Highway	San Dimas	Signalized	B	10.8	B	10.4
42	San Dimas Canyon Road/Bonita Avenue	San Dimas	Signalized	A	6.3	A	7.3
43	San Dimas Canyon Road/Arrow Highway	San Dimas	Signalized	B	11.4	B	10.1
44	Wheeler Avenue/Third Street	La Verne	2-Way Stop	B	14.4	B	13.8
				A <sup>1</sup>	2.6 <sup>1</sup>	A <sup>1</sup>	2.4 <sup>1</sup>
45	Wheeler Avenue/Arrow Highway	La Verne	Signalized	B	13.3	B	11.6
46	A Street/Third Street	La Verne	2-Way Stop	B	10.1	B	10.3
				A <sup>1</sup>	5.3 <sup>1</sup>	A <sup>1</sup>	4.7 <sup>1</sup>
47	A Street/First Street	La Verne	2-Way Stop	A	9.2	A	9.8
				A <sup>1</sup>	1.6 <sup>1</sup>	A <sup>1</sup>	2.3 <sup>1</sup>
48	A Street/Arrow Highway	La Verne	2-Way Stop	F	77.2	E	40.0
				A <sup>1</sup>	2.6 <sup>1</sup>	A <sup>1</sup>	1.1 <sup>1</sup>
49	D Street/Third Street	La Verne	All-Way Stop	A	9.1	B	11.5
50	D Street/First Street	La Verne	1-Way Stop	A	9.5	B	10.9
				A <sup>1</sup>	1.0 <sup>1</sup>	A <sup>1</sup>	1.9 <sup>1</sup>

**Table 2-10. Existing Intersection LOS Analysis (2010) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>2</sup>	LOS	Delay <sup>2</sup>
51	D Street/Arrow Highway	La Verne	All-Way Stop	A	4.7	A	4.9
52	E Street/Third Street	La Verne	All-Way Stop	A	9.2	B	11.0
53	E Street/Second Street	La Verne	2-Way Stop	B	13.2	B	13.5
				A <sup>1</sup>	2.6 <sup>1</sup>	A <sup>1</sup>	2.8 <sup>1</sup>
54	E Street/First Street	La Verne	1-Way Stop	B	10.9	B	11.7
				A <sup>1</sup>	0.9 <sup>1</sup>	A <sup>1</sup>	0.9 <sup>1</sup>
55	E Street/Arrow Highway	La Verne	Signalized	B	18.6	C	23.5
56	White Avenue/Third Street	La Verne	2-Way Stop	C	19.6	E	41.8
				A <sup>1</sup>	1.4 <sup>1</sup>	A <sup>1</sup>	1.9 <sup>1</sup>
57	White Avenue/Second Street	La Verne	2-Way Stop	C	18.5	D	32.5
				A <sup>1</sup>	1.1 <sup>1</sup>	A <sup>1</sup>	1.2 <sup>1</sup>
58	White Avenue/First Street	La Verne	2-Way Stop	C	20.0	D	29.7
				A <sup>1</sup>	1.6 <sup>1</sup>	A <sup>1</sup>	1.8 <sup>1</sup>
59	White Avenue/Sierra Way	La Verne	1-Way Stop	B	10.7	C	15.3
				A <sup>1</sup>	0.4 <sup>1</sup>	A <sup>1</sup>	0.5 <sup>1</sup>
60	White Avenue/Arrow Highway	La Verne	Signalized	C	21.5	C	24.7
61	D Street/Bonita Avenue	La Verne	Signalized	A	7.6	A	8.0
62	White Avenue/Foothill Boulevard	La Verne	Signalized	C	23.8	C	34.2
63	White Avenue/Bonita Avenue	La Verne	Signalized	B	12.2	B	13.9
64	White Avenue/McKinley Avenue	La Verne	Signalized	B	10.5	B	12.0
65	La Verne Avenue/Arrow Highway	La Verne	2-Way Stop	D	28.6	F	196.9
				A <sup>1</sup>	6.2 <sup>1</sup>	C <sup>1</sup>	22.8 <sup>1</sup>
66	Fulton Road/Bonita Avenue	Pomona	2-Way Stop	C	17.2	E	30.8
				A <sup>1</sup>	3.0 <sup>1</sup>	A <sup>1</sup>	4.2 <sup>1</sup>
67	Fulton Road/Arrow Highway	Pomona	2-Way Stop	C	17.9	C	24.2
				A <sup>1</sup>	1.8 <sup>1</sup>	A <sup>1</sup>	1.6 <sup>1</sup>
68	Garey Avenue/Bonita Avenue	Pomona	Signalized	B	13.2	B	13.3
69	Garey Avenue/Santa Fe Street	Pomona	1-Way Stop	B	11.8	B	11.5
				A <sup>1</sup>	0.3 <sup>1</sup>	A <sup>1</sup>	0.4 <sup>1</sup>
70	Garey Avenue/Arrow Highway	Pomona	Signalized	C	21.5	C	25.8
71	Towne Avenue/Bonita Avenue	Pomona	Signalized	A	7.3	A	9.5
72	Towne Avenue/Towne Center Drive	Pomona	1-Way Stop	C	18.4	D	27.9
				A <sup>1</sup>	0.3 <sup>1</sup>	A <sup>1</sup>	0.9 <sup>1</sup>
73	Towne Avenue/Arrow Highway	Pomona	Signalized	C	34.9	D	37.0
74	Garey Avenue/Harrison Avenue	Pomona	Signalized	A	6.7	A	4.7
75	Indian Hill Boulevard/Bonita Avenue	Claremont	Signalized	A	7.3	A	8.5
76	Indian Hill Boulevard/First Street	Claremont	Signalized	A	9.3	B	12.4
77	Indian Hill Boulevard/Santa Fe Street	Claremont	2-Way Stop	B	10.7	B	12.0
				A <sup>1</sup>	0.4 <sup>1</sup>	A <sup>1</sup>	0.8 <sup>1</sup>
78	Indian Hill Boulevard/Arrow Highway	Claremont	Signalized	B	18.8	C	27.4
79	College Avenue/Bonita Avenue	Claremont	All-Way Stop	A	9.1	B	10.8
80	College Avenue/First Street	Claremont	All-Way Stop	A	9.6	B	10.7

**Table 2-10. Existing Intersection LOS Analysis (2010) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>2</sup>	LOS	Delay <sup>2</sup>
81	College Avenue/Arrow Highway	Claremont	Signalized	A	5.2	A	6.5
82	Claremont Boulevard/First Street	Claremont	Signalized	A	3.4	A	5.9
83	Mills/Claremont/Arrow Highway	Claremont	Signalized	B	14.6	B	16.3
84	Monte Vista Avenue/Arrow Route	Montclair	Signalized	B	11.9	B	12.8
85	Monte Vista Avenue/Richton Street	Montclair	Signalized	A	3.2	A	6.4
86	Monte Vista Avenue/Arrow Highway	Montclair	Signalized	B	16.8	C	21.3
87	Fremont Avenue/Arrow Highway	Montclair	Signalized	A	1.8	A	4.0
88	Central Avenue/Arrow Route	Montclair	Signalized	B	10.9	B	17.4
89	Central Avenue/Richton Street/West 9th Street	Montclair	Signalized	A	7.6	A	9.1
90	Central Avenue/Arrow Highway	Montclair	Signalized	B	14.3	C	21.6

Source: Intueor, 2011

<sup>1</sup> Overall intersection LOS and delay at unsignalized (1-way and 2-way stop) intersections is reported to support the air quality analysis.

<sup>2</sup> Average vehicle delay in seconds

### 2.5.5 At-Grade Railroad Crossings

Among the existing railroad crossings, two of the crossings, historic Highway 66 in the City of Glendora and Monte Vista Avenue in the City of Montclair, are currently grade separated. The proposed LRT alignment would maintain these grade separations. Twenty-six crossings were evaluated using the Metropolitan Transportation Authority's (Metro) *Policy for Grade Crossing for Light Rail Transit* (December 4, 2003). This evaluation shows how highway traffic would be affected by proposed train headway operations. It was also used to determine whether an at-grade crossing is feasible or a grade separation should be studied in more detail. Table 2-11 provides the list of analyzed crossings. The results of the analysis are provided in Table 2-32.

**Table 2-11. List of Analyzed Railroad Crossing Locations**

City	Crossing Intersections	
Glendora	Barranca Avenue Grand Avenue/Foothill Boulevard Vermont Avenue/Ada Avenue Glendora Avenue Pasadena Avenue	Glenwood Avenue Elwood Avenue Loraine Avenue Lone Hill Avenue/Auto Center Drive
San Dimas	Gladstone Street Eucla Street Cataract Avenue/Bonita Avenue Monte Vista Avenue	San Dimas Avenue Walnut Avenue San Dimas Canyon Road
La Verne	Wheeler Avenue A Street D Street	E Street White Avenue
Pomona	Fulton Road Garey Avenue	Towne Avenue
Claremont	Cambridge Avenue Indian Hill Boulevard	College Avenue Claremont Boulevard/South Mill Road
Montclair	Monte Vista Avenue	

Source: Intueor, 2011

## 2.6 ENVIRONMENTAL IMPACTS

### 2.6.1 No Build Alternative

The No Build Alternative represents the baseline case consisting of existing and committed elements of the region's transportation plan, excluding the proposed project. Consequently, the No Build Alternative is focused on the preservation of existing services and projects.

#### 2.6.1.1 Public Transit

As the population grows, the demand for adequate and reliable transit service will also increase. Existing bus transit service performance will likely worsen because of the projected increase in traffic congestion. This is likely to make travel via bus transit a less attractive option for San Gabriel Valley patrons. For those patrons who have no other travel options, travel times will increase and bus transit usage will be less convenient.

The No Build Alternative would provide no significant improvement in transit services in the Study Area. The plans of local fixed-route bus services are presented below:

- Currently, Foothill Transit does not have any specific plans to implement major changes to the transit services provided.
- Omnitrans has developed a Financially Constrained Service Plan to be implemented over the course of fiscal years 2010 through 2014. This plan takes into account the limited available funding. The plan includes the following changes:
  - Route 65: Reduce weekday evening service from 30 minutes to 60 minutes frequency; restructure Los Seranos loop.

- Route 66: Reduce mid-weekday service from 15-minutes to 30-minutes frequency.
- Route 67: Eliminate weekend service or hire a contractor that operates smaller vehicles.
- Route 68: Eliminate weekend service or hire a contractor that operates smaller vehicles.

With the recent economic downturn, transit operators in the area have experienced a system-wide ridership decrease. Other than the short-term planned changes identified above, respective transit operators will determine future bus routes and frequencies by demand and operating costs. No other significant transit additions are projected for the No Build Alternative.

### 2.6.1.2 Streets and Highways

#### *Intersection Traffic Conditions*

No Build traffic forecasts for 2035 were developed to provide a description of the Study Area and to establish a basis of comparison with the TSM and Build Alternative. The information includes anticipated changes to intersection operations, growth factors, and the resulting traffic operations for the No Build Alternative.

The 2035 No Build Alternative was analyzed based on historical traffic data, potential population and employment growth, and the long-range traffic projections from this study's modeling efforts. Traffic projections for the No Build Alternative were developed by applying growth factors to the existing peak-hour traffic data for each city.

SCAG models were used to forecast future traffic growth factors applicable for each city. The model growth was interpolated using a linear method to calculate a 2010 annual growth rate for each of the corridor cities. Table 2-12 provides the total growth factor and the annual growth rates. These growth factors were applied to each of the 90 study intersections according to their jurisdiction.

**Table 2-12. No Build Alternative—Growth Factors (2035)**

City	Annual Growth Rate	Accumulated Growth Factor (2010 to 2035)
Glendora	0.7%	16.6%
San Dimas	0.9%	21.9%
La Verne	0.6%	14.3%
Pomona	0.7%	17.5%
Claremont	0.7%	17.0%
Montclair	0.7%	18.0%
Upland	0.9%	21.7%

Source: Fehr & Peers, 2010

The growth factors were applied to each of the 90 study intersections according to their jurisdiction. Figure 2-14 to Figure 2-19 show the No Build peak-hour traffic volumes during the AM and PM peak hours. The future No Build Alternative was analyzed; the resulting traffic operating conditions and corresponding LOS are provided in Table 2-13. As noted earlier, no significant highway and transit projects or operations currently exist within the region that SCAG and Metro expect to be in place by 2035.

Under the No Build Alternative, four intersections would operate at LOS E or F in the AM peak hour, and ten intersections would operate at LOS E or F in the PM peak hour. The others would continue to operate at LOS D or better. All the highlighted intersections would be unsignalized one-way or two-way stop-controlled intersections. Vehicles approaching these intersections from minor streets would not find adequate gaps to perform their maneuvers in a timely manner.

### *Roadway Segment Traffic Operations*

The same growth factors were also applied to each of the 35 study roadway segments. Table 2-14 presents the results of the analysis. All roadway segments would operate at LOS D or better, except North Towne Avenue between Arrow Highway and Bonita Avenue, which would operate at LOS E.

#### 2.6.1.3 Parking

The No Build Alternative would have no impact on the number of on-street parking and loading spaces for the project.

#### 2.6.1.4 Pedestrian and Bicycle Facilities

The No Build Alternative would have no impacts on bicycle or pedestrian facilities for the project; however, increased traffic congestion and deterioration of LOS for roadway segments and intersections would result in deterioration of performance of bicycle and pedestrians movements along the project corridor.

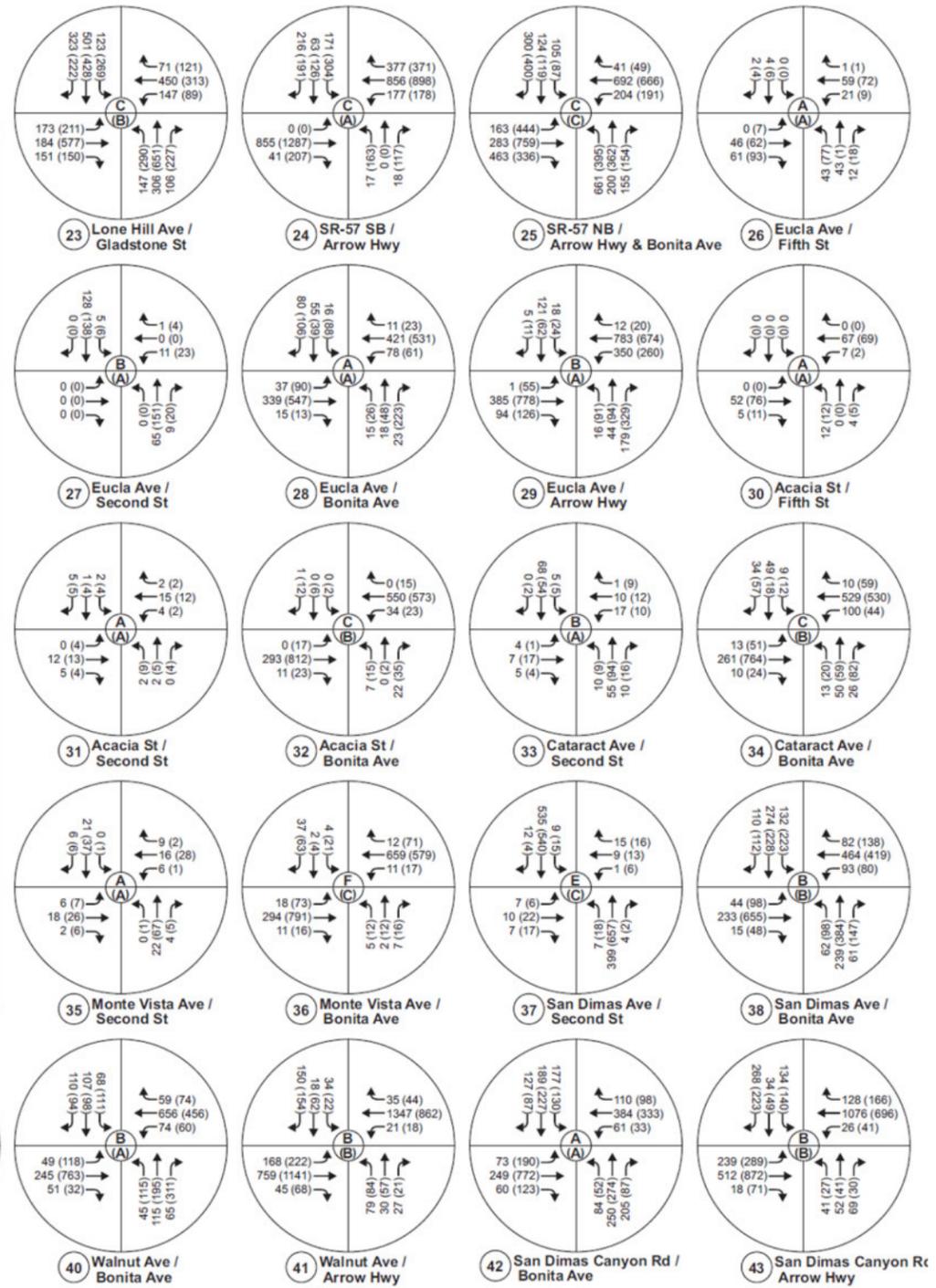
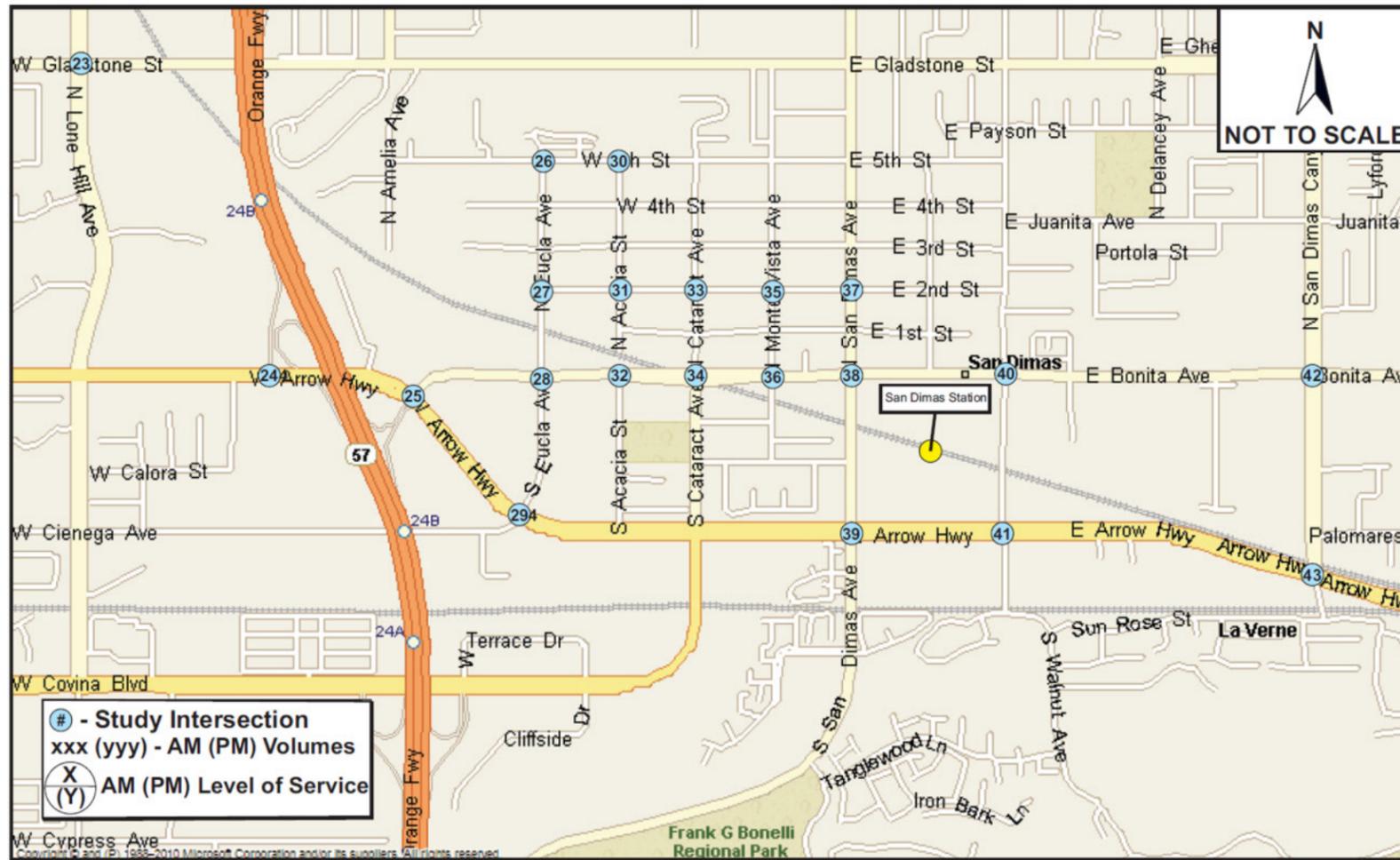
According to the General Plan for each city, the following changes are planned:

- City of Glendora—Construct Class I (off-road facility) along Foothill Boulevard to provide access to Citrus Community College, Azusa Pacific University, and the proposed station.
- City of San Dimas—Incorporate bike amenities, such as long-term bicycle storage and a bike station, into the San Dimas Station. Provide safe cyclist connections.
- City of Claremont—Construct Citrus Regional Bikeway utilizing Bonita Avenue and First Street as primary route to Claremont Boulevard. Connect bikeway to Upland/Montclair trail at county line.
- City of Montclair—Develop a complete bicycle trail system throughout the city, including a regional Class I Bicycle Trail along Metro railroad tracks, connecting Claremont, Pomona, La Verne, and San Dimas.



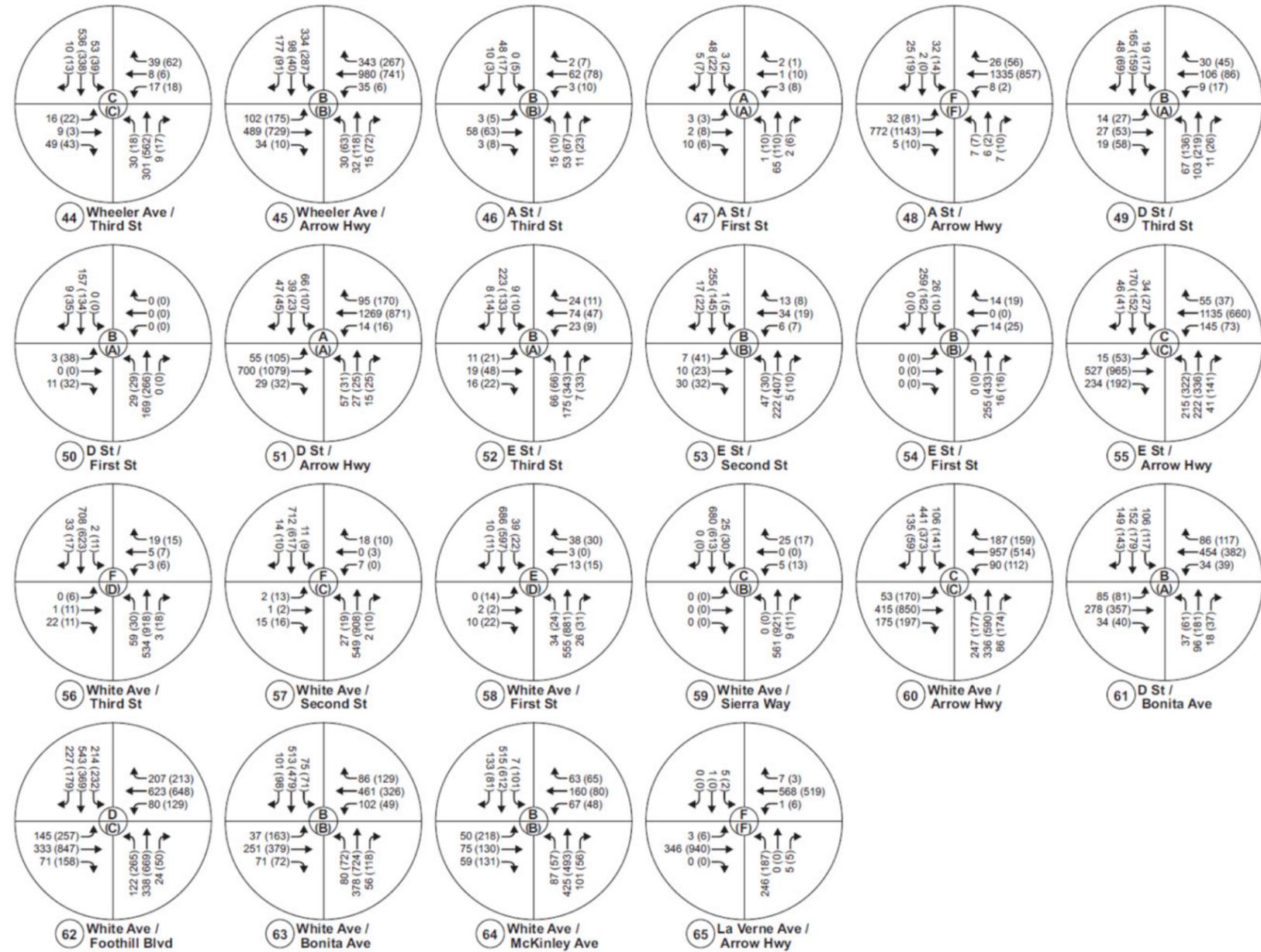
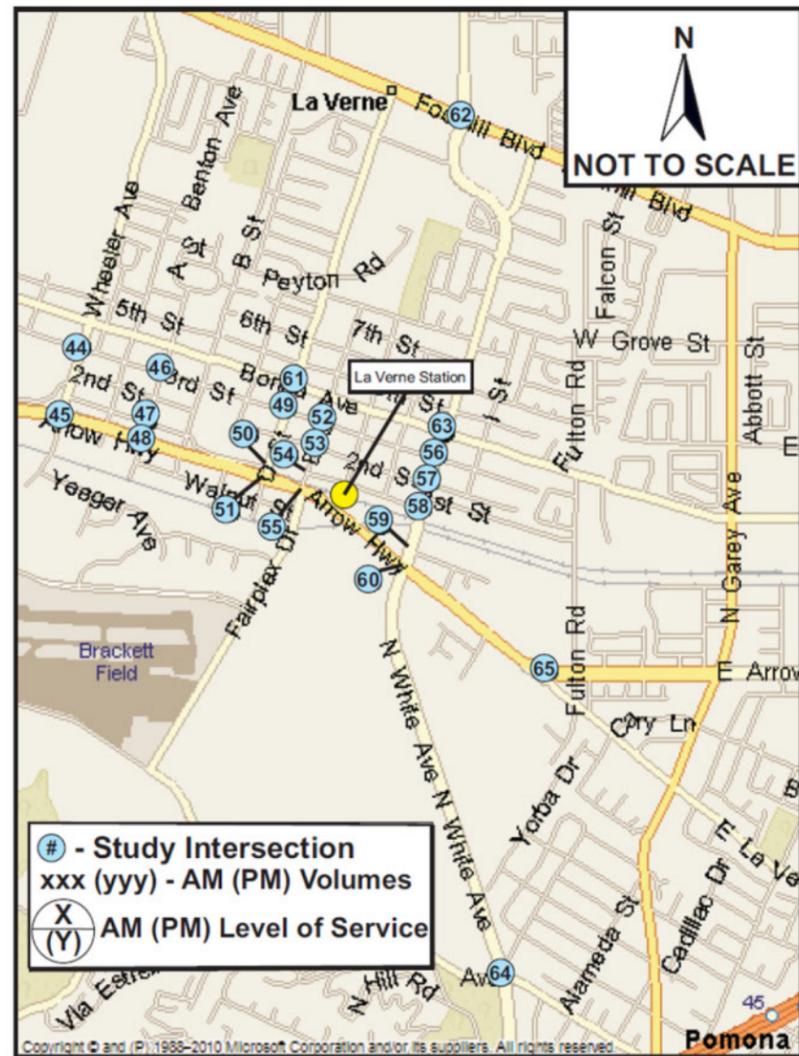
Source: Intueor, 2011

Figure 2-14. No Build (2035) AM/PM Peak Hour Volumes: Glendora



Source: Intueor, 2011

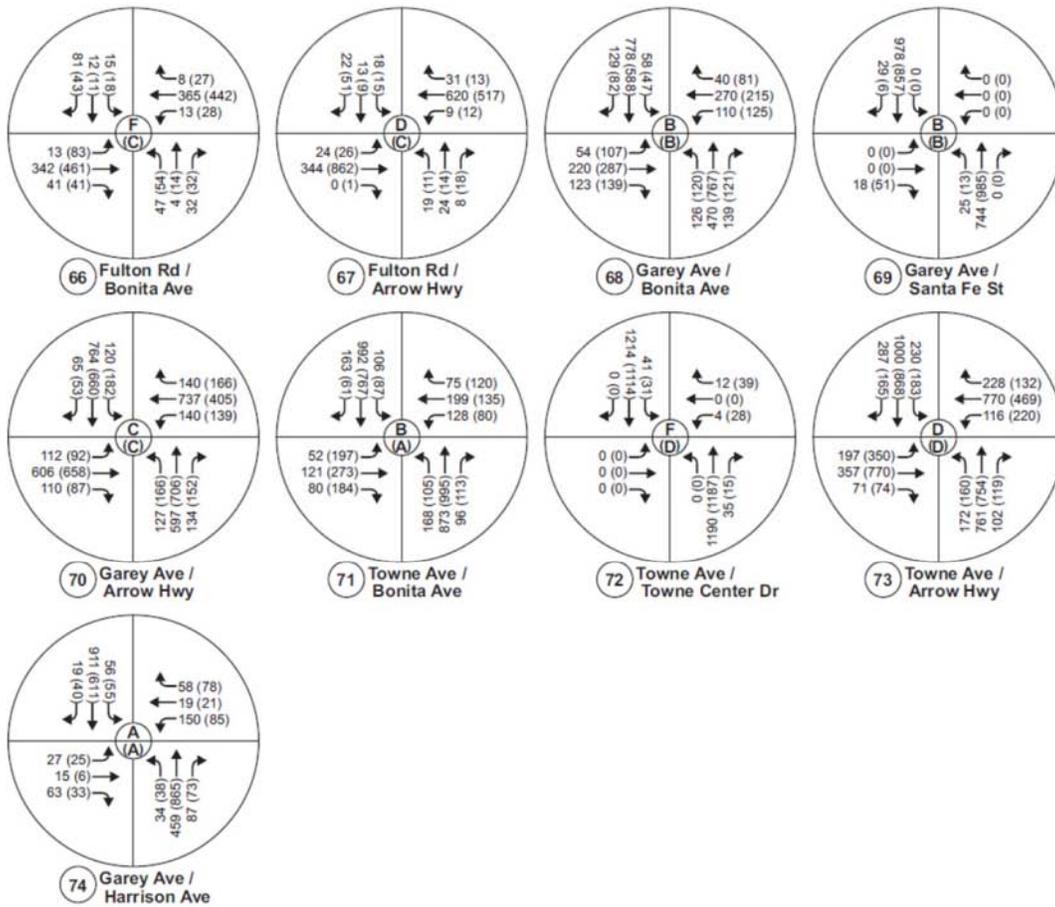
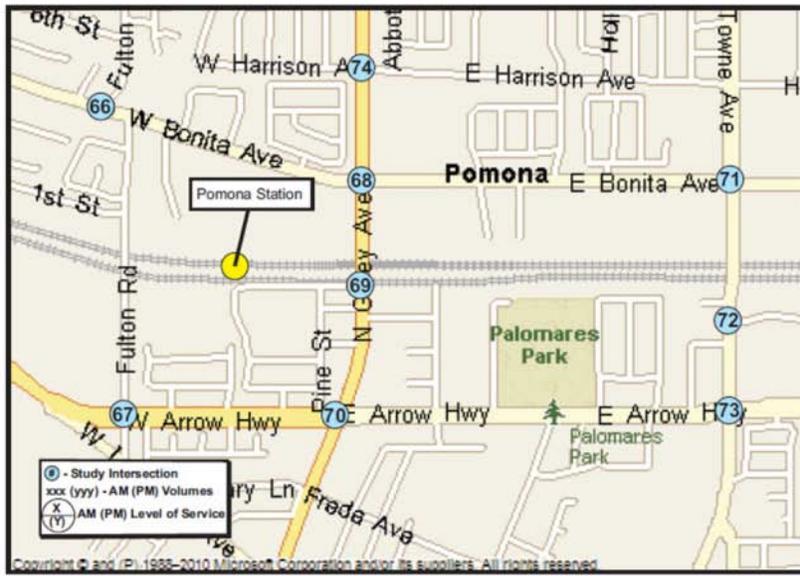
Figure 2-15. No Build (2035) AM/PM Peak Hour Volumes: San Dimas



Source: Intueor, 2011

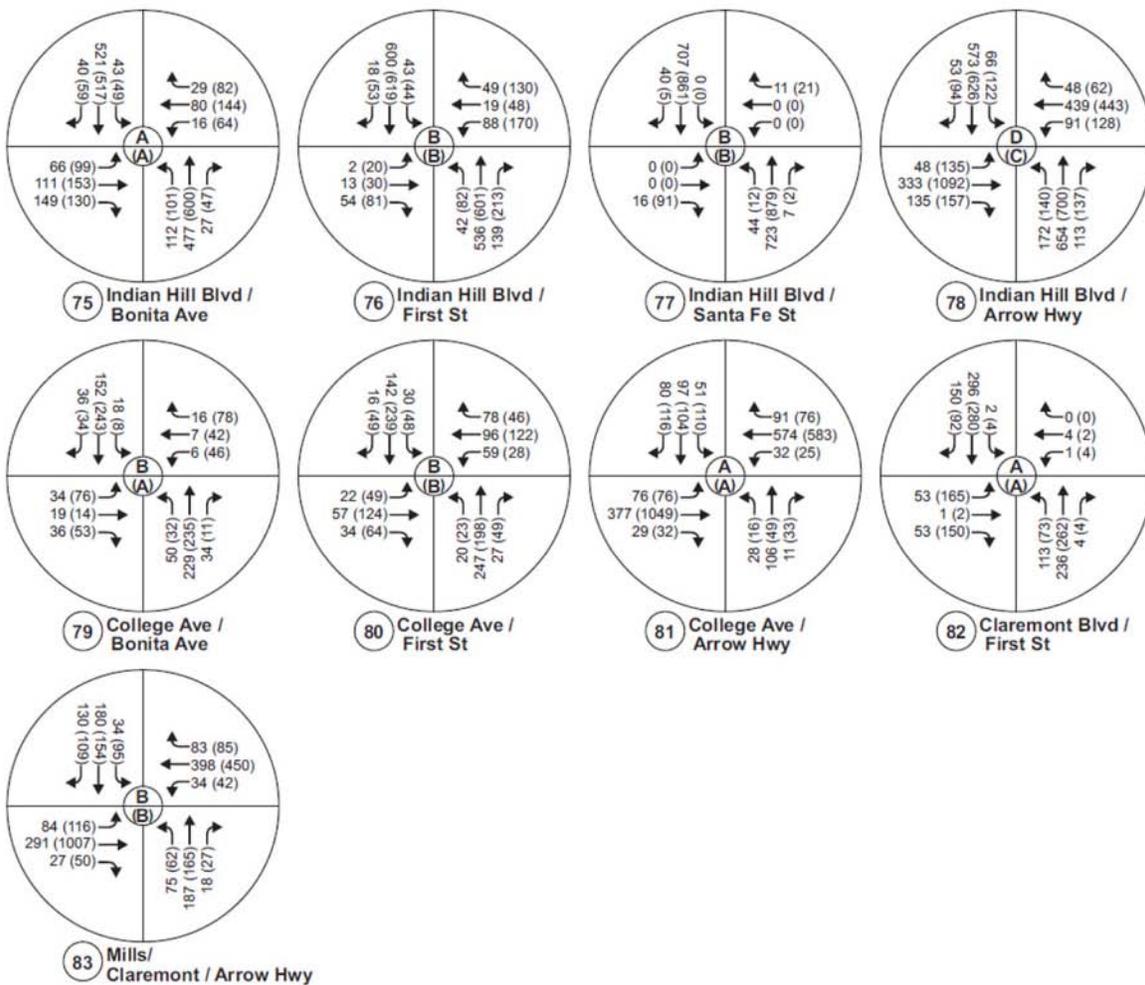
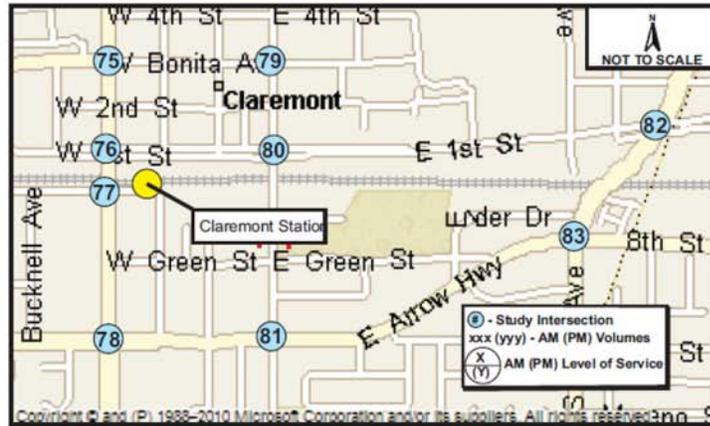
Figure 2-16. No Build (2035) AM/PM Peak Hour Volumes: La Verne

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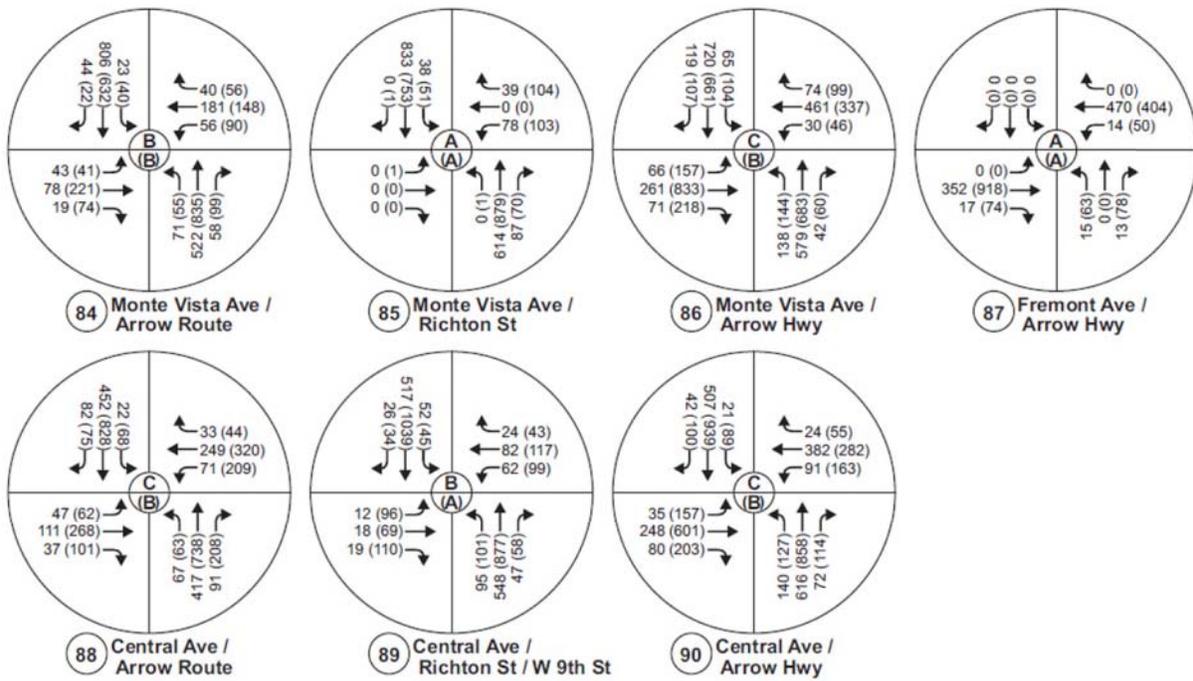
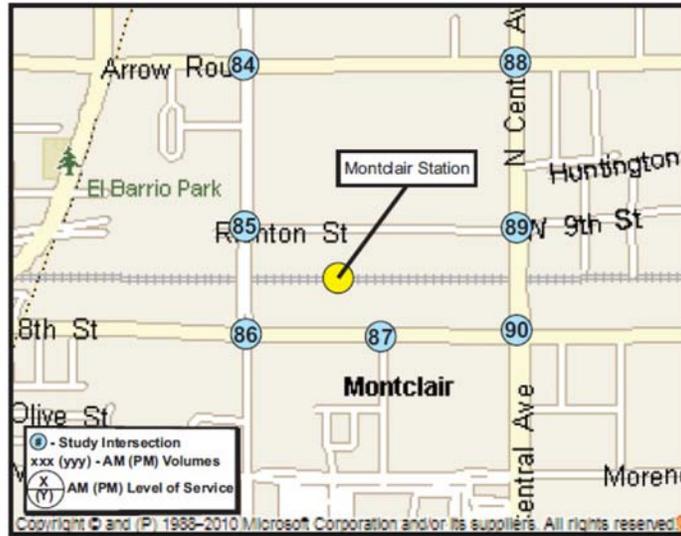
Source: Intueor, 2011

**Figure 2-17. No Build (2035) AM/PM Peak Hour Volumes: Pomona**



Source: Intueor, 2011

**Figure 2-18. No Build (2035) AM/PM Peak Hour Volumes: Claremont**



Source: Intueor, 2011

**Figure 2-19. No Build (2035) AM/PM Peak Hour Volumes: Montclair**

**Table 2-13. No Build Alternative—Intersection Level of Service (2035)<sup>2</sup>**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>1</sup>	LOS	Delay <sup>1</sup>
1	Barranca Avenue/Bennett Avenue	Glendora	1-Way Stop	C	21.1	B	12.4
				A	7.3	A	1.8
2	Barranca Avenue/Foothill Boulevard	Glendora	Signalized	B	12.1	A	8.4
3	Grand Avenue/Foothill Boulevard	Glendora	Signalized	C	29.5	C	34.3
4	Vermont Avenue E/Ada Avenue	Glendora	1-Way Stop	B	11.8	B	13.7
				A	4.4	A	5.2
5	Vermont Avenue/Route 66	Glendora	Signalized	A	7.5	A	8.4
6	Vermont Avenue/Foothill Boulevard	Glendora	Signalized	A	7.7	A	7.0
7	Vermont Avenue West/Ada Avenue	Glendora	1-Way Stop	B	11.1	B	12.0
				A	2.6	A	2.2
8	Glendora Avenue/Foothill Boulevard	Glendora	Signalized	C	25.0	C	30.2
9	Glendora Avenue/Ada Avenue	Glendora	All-Way Stop	B	12.2	B	14.9
10	Glendora Avenue/Route 66	Glendora	Signalized	C	24.4	C	29.5
11	Pasadena Avenue/Lemon Avenue	Glendora	All-Way Stop	A	7.9	A	7.8
12	Pasadena Avenue/Route 66	Glendora	Signalized	B	11.8	B	10.7
13	Glenwood Avenue/Lemon Avenue	Glendora	2-Way Stop	A	9.9	B	11.2
				A	2.3	A	2.6
14	Glenwood Avenue/Route 66	Glendora	2-Way Stop	F	OFL <sup>3</sup>	F	1097.3
				F	502.5	F	51.6
15	Elwood Avenue/Lemon Avenue	Glendora	2-Way Stop	B	10.7	B	10.9
				A	2.2	A	2.1
16	Elwood Avenue/Route 66	Glendora	Signalized	B	15.4	B	16.2
17	Lorraine Avenue/Lemon Avenue	Glendora	2-Way Stop	C	20.0	B	13.7
				A	1.8	A	1.2
18	Lorraine Avenue/Route 66	Glendora	Signalized	B	19.3	B	11.8
19	Lone Hill Avenue/Auto Centre Drive	Glendora	Signalized	B	15.6	C	24.1
20	Barranca Avenue/Sierra Madre Avenue	Glendora	1-Way Stop	C	20.5	C	15.8
				A	4.3	A	3.1
21	Glendora Avenue/Sierra Madre Avenue	Glendora	All-Way Stop	E	47.0	B	14.5
22	Lone Hill Avenue/Glendora Marketplace	Glendora	Signalized	B	15.4	C	23.1
23	Lone Hill Avenue/Gladstone Street	San Dimas	Signalized	B	18.8	C	25.5
24	SR-57 (southbound)/Arrow Highway	San Dimas	Signalized	A	7.5	C	20.2
25	SR-57 (northbound)/Arrow Highway & Bonita Avenue	San Dimas	Signalized	C	26.2	C	29.2
26	Eucla Avenue/Fifth Street	San Dimas	All-Way Stop	A	7.4	A	7.4
27	Eucla Avenue/Second Street	San Dimas	1-Way Stop	A	9.7	B	10.5
				A	0.7	A	1.0
28	Eucla Avenue/Bonita Avenue	San Dimas	Signalized	A	4.7	A	8.1
29	Eucla Avenue/Arrow Highway	San Dimas	Signalized	A	8.4	B	11.8
30	Acacia Street/Fifth Street	San Dimas	1-Way Stop	A	9.2	A	9.3
				A	1.4	A	1.0

**Table 2-13. No Build Alternative—Intersection Level of Service (2035) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>1</sup>	LOS	Delay <sup>1</sup>
31	Acacia Street/Second Street	San Dimas	2-Way Stop	A	9.1	A	9.2
				A	7.4	A	6.4
32	Acacia Street/Bonita Avenue	San Dimas	2-Way Stop	B	11.1	C	24.4
				A	0.7	A	1.4
33	Cataract Avenue/Second Street	San Dimas	2-Way Stop	A	9.9	B	10.0
				A	8.4	A	8.0
34	Cataract Avenue/Bonita Avenue	San Dimas	All-Way Stop	B	12.5	C	25.0
35	Monte Vista Avenue/Second Street	San Dimas	2-Way Stop	A	9.3	A	9.9
				A	4.8	A	3.7
36	Monte Vista Avenue/Bonita Avenue	San Dimas	2-Way Stop	C	20.2	F	119.5
				A	1.2	A	9.2
37	San Dimas Avenue/Second Street	San Dimas	2-Way Stop	C	21.2	E	36.2
				A	1.0	A	2.3
38	San Dimas Avenue/Bonita Avenue	San Dimas	Signalized	B	12.2	B	19.6
39	San Dimas Avenue/Arrow Highway	San Dimas	Signalized	C	28.9	D	48.9
40	Walnut Avenue/Bonita Avenue	San Dimas	Signalized	A	6.7	B	13.9
41	Walnut Avenue/Arrow Highway	San Dimas	Signalized	B	12.0	B	11.8
42	San Dimas Canyon Road/Bonita Avenue	San Dimas	Signalized	A	7.3	A	9.0
43	San Dimas Canyon Road/Arrow Highway	San Dimas	Signalized	B	13.8	B	12.1
44	Wheeler Avenue/Third Street	La Verne	2-Way Stop	C	16.5	C	15.6
				A	2.9	A	2.6
45	Wheeler Avenue/Arrow Highway	La Verne	Signalized	B	14.8	B	12.9
46	A Street/Third Street	La Verne	2-Way Stop	B	10.3	B	10.6
				A	5.4	A	4.9
47	A Street/First Street	La Verne	2-Way Stop	A	9.3	A	10.0
				A	1.5	A	2.3
48	A Street/Arrow Highway	La Verne	2-Way Stop	F	198.6	F	62.6
				A	6.1	A	1.6
49	D Street/Third Street	La Verne	All-Way Stop	A	9.6	B	13.5
50	D Street/First Street	La Verne	1-Way Stop	A	9.7	B	11.5
				A	1.0	A	2.0
51	D Street/Arrow Highway	La Verne	All-Way Stop	A	5.9	A	6.2
52	E Street/Third Street	La Verne	All-Way Stop	A	9.9	B	12.9
53	E Street/Second Street	La Verne	2-Way Stop	B	14.3	B	14.8
				A	2.8	A	3.1
54	E Street/First Street	La Verne	1-Way Stop	B	11.4	B	12.6
				A	0.9	A	1.0
55	E Street/Arrow Highway	La Verne	Signalized	C	22.5	C	27.6
56	White Avenue/Third Street	La Verne	2-Way Stop	D	26.5	F	78.9
				A	1.8	A	3.2

**Table 2-13. No Build Alternative—Intersection Level of Service (2035) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>1</sup>	LOS	Delay <sup>1</sup>
57	White Avenue/Second Street	La Verne	2-Way Stop	C	24.8	F	56.4
				A	1.3	A	1.8
58	White Avenue/First Street	La Verne	2-Way Stop	D	28.4	E	49.5
				A	2.1	A	2.8
59	White Avenue/Sierra Way	La Verne	1-Way Stop	B	11.2	C	18.0
				A	0.4	A	0.5
60	White Avenue/Arrow Highway	La Verne	Signalized	C	26.3	C	30.6
61	D Street/Bonita Avenue	La Verne	Signalized	A	8.1	B	10.2
62	White Avenue/Foothill Boulevard	La Verne	Signalized	C	29.6	D	39.9
63	White Avenue/Bonita Avenue	La Verne	Signalized	B	14.0	B	17.3
64	White Avenue/McKinley Avenue	La Verne	Signalized	B	11.0	B	14.1
65	La Verne Avenue/Arrow Highway	La Verne	2-Way Stop	F	50.6	F	471.1
				B	10.9	F	54.3
66	Fulton Road/Bonita Avenue	Pomona	2-Way Stop	C	22.1	F	58.1
				A	3.6	A	6.8
67	Fulton Road/Arrow Highway	Pomona	2-Way Stop	C	22.4	D	33.9
				A	2.2	A	2.1
68	Garey Avenue/Bonita Avenue	Pomona	Signalized	B	16.0	B	15.8
69	Garey Avenue/Santa Fe Street	Pomona	1-Way Stop	B	10.8	B	12.4
				A	0.3	A	0.4
70	Garey Avenue/Arrow Highway	Pomona	Signalized	C	28.3	C	30.9
71	Towne Avenue/Bonita Avenue	Pomona	Signalized	A	9.9	B	11.2
72	Towne Avenue/Towne Center Drive	Pomona	1-Way Stop	D	27.1	F	50.9
				A	0.4	A	1.6
73	Towne Avenue/Arrow Highway	Pomona	Signalized	D	44.5	D	45.1
74	Garey Avenue/Harrison Avenue	Pomona	Signalized	A	7.5	A	6.0
75	Indian Hill Boulevard/Bonita Avenue	Claremont	Signalized	A	8.1	A	9.1
76	Indian Hill Boulevard/First Street	Claremont	Signalized	B	10.9	B	15.5
77	Indian Hill Boulevard/Santa Fe Street	Claremont	2-Way Stop	B	11.2	B	13.2
				A	0.5	A	0.8
78	Indian Hill Boulevard/Arrow Highway	Claremont	Signalized	C	21.2	D	37.3
79	College Avenue/Bonita Avenue	Claremont	All-Way Stop	A	9.9	B	12.5
80	College Avenue/First Street	Claremont	All-Way Stop	B	10.8	B	12.6
81	College Avenue/Arrow Highway	Claremont	Signalized	A	6.3	A	7.3
82	Claremont Boulevard/First Street	Claremont	Signalized	A	3.3	A	5.9
83	Mills/Claremont/Arrow Highway	Claremont	Signalized	B	14.9	B	19.8
84	Monte Vista Avenue/Arrow Route	Montclair	Signalized	B	13.1	B	14.6
85	Monte Vista Avenue/Richton Street	Montclair	Signalized	A	3.3	A	6.3
86	Monte Vista Avenue/Arrow Highway	Montclair	Signalized	B	18.7	C	31.0
87	Fremont Avenue/Arrow Highway	Montclair	Signalized	A	1.8	A	4.1
88	Central Avenue/Arrow Route	Montclair	Signalized	B	12.1	C	20.5

**Table 2-13. No Build Alternative—Intersection Level of Service (2035) (continued)**

#	Intersection	Jurisdiction	Control Type	AM		PM	
				LOS	Delay <sup>1</sup>	LOS	Delay <sup>1</sup>
89	Central Avenue/Richton Street/W 9th Street	Montclair	Signalized	A	8.4	B	10.4
90	Central Avenue/Arrow Highway	Montclair	Signalized	B	15.9	C	29.6

Source: Intueor, 2011

<sup>1</sup> Average vehicle delay in seconds

<sup>2</sup> Shading shows intersections that, in 2035, would operate at LOS E or F under the No Build Alternative.

<sup>3</sup> Overflow

**Table 2-14. No Build Alternative—Roadway Segment Average Daily Traffic Analysis (2035)**

Roadway Segment	From	To	Number of Lanes	Capacity (Vehicles/Day)	Volume (Vehicles/Day)	V/C	LOS
<b>Glendora</b>							
South Lone Hill Avenue	West Gladstone Street	Auto Centre Drive	4	32,000 <sup>1</sup>	28,179	0.88	D
South Loraine Avenue	Route 66	East Lemon Avenue	4	32,000	10,733	0.34	A
South Elwood Avenue	Route 66	East Lemon Avenue	2	12,000 <sup>4</sup>	2,753	0.23	A
South Glenwood Avenue	Route 66	East Lemon Avenue	2	12,000	2,842	0.24	A
South Pasadena Avenue	Route 66	East Lemon Avenue	2	12,000	2,690	0.22	A
South Glendora Avenue	Route 66	Foothill Boulevard	4	32,000	18,620	0.58	A
South Vermont Avenue	Route 66	West Foothill Boulevard	2	12,000	4,332	0.36	A
Grand Avenue	Route 66	West Leadora Avenue	4	32,000	14,439	0.45	A
Foothill Boulevard	Barranca Avenue	Glendora Avenue	4	32,000	12,323	0.39	A
North Barranca Avenue	West Foothill Boulevard	West Leadora Avenue	4	24,000 <sup>2</sup>	8,436	0.36	A
<b>San Dimas</b>							
San Dimas Canyon Rd	Arrow Highway	Bonita Avenue	4	32,000	9,328	0.29	A
Walnut Avenue	East Arrow Highway	East Bonita Avenue	2	16,000 <sup>3</sup>	7,535	0.47	A
San Dimas Avenue	Arrow Highway	Bonita Avenue	4	32,000	12,339	0.39	A
Monte Vista Avenue	Commercial Street	Bonita Avenue	2	12,000	546	0.05	A
Cataract Avenue	Arrow Highway	First Street	2	12,000	3,084	0.26	A
Bonita Avenue	Eucla Avenue	San Dimas Avenue	4	32,000	15,893	0.50	A
Eucla Avenue	Bonita Avenue	Third Street	2	12,000	3,813	0.32	A
West Gladstone Street	Lone Hill Avenue	Amelia Avenue	4	32,000	15,846	0.50	A
<b>La Verne</b>							
White Avenue	Arrow Highway	Third Street	4	32,000	18,821	0.59	A
E Street	Arrow Highway	Third Street	2	16,000	6,931	0.43	A
D Street	Arrow Highway	Third Street	2	12,000	5,709	0.48	A
A Street	Arrow Highway	Third Street	2	12,000	1,342	0.11	A
Wheeler Avenue	Arrow Highway	Third Street	4	32,000	10,364	0.32	A

**Table 2-14. No Build Alternative—Roadway Segment Average Daily Traffic Analysis (2035) (continued)**

Roadway Segment	From	To	Number of Lanes	Capacity (Vehicles/Day)	Volume (Vehicles/Day)	V/C	LOS
<b>Pomona</b>							
North Towne Avenue	Arrow Highway	Bonita Avenue	4	32,000	29,725	0.93	E
North Garey Avenue	Arrow Highway	Bonita Avenue	4	32,000	24,579	0.77	C
Fulton Road	Metrolink Driveway	Bonita Avenue	2	16,000	1,580	0.10	A
Fulton Road	Arrow Highway	Metrolink Driveway	2	16,000	1,921	0.12	A
<b>Claremont</b>							
South Mills Avenue/Claremont Boulevard	Arrow Highway	East First Street	4	32,000	8,865	0.28	A
Indian Hill Boulevard	Arrow Highway	East First Street	4	32,000	22,100	0.69	B
College Avenue	East Arrow Highway	East First Street	2	12,000	5,930	0.49	A
College Avenue	East First Street	Bonita Avenue	2	12,000	6,497	0.54	A
Cambridge Avenue	West Arrow Highway	Bonita Avenue	2	12,000	5,359	0.45	A
First Street	Indian Hill Boulevard	College Avenue	2	12,000	8,615	0.72	C
<b>Montclair</b>							
Monte Vista Avenue	Richton Street	Arrow Highway	4	32,000	22,228	0.69	B
Central Avenue	Richton Street	Arrow Highway	4	32,000	27,239	0.85	D

Source: Intueor, 2011

<sup>1</sup> Capacity of 32,000 assumes 800 vehicles per hour per lane multiplied by number of lanes, divided by a k-factor of 0.1.<sup>2</sup> Capacity of 24,000 assumes 600 vehicles per hour per lane multiplied by number of lanes, divided by a k-factor of 0.1.<sup>3</sup> Capacity of 16,000 assumes 800 vehicles per hour per lane multiplied by number of lanes, divided by a k-factor of 0.1.<sup>4</sup> Capacity of 12,000 assumes 600 vehicles per hour per lane multiplied by number of lanes, divided by a k-factor of 0.1.

k-factor= The ratio of design hour traffic to average annual daily traffic.

## 2.6.2 Transportation Systems Management (TSM) Alternative

This alternative proposes a bus rapid transit (BRT) route instead of LRT as a link between the Azusa-Citrus Station and the Montclair Transcenter. The roadway conditions would be the same as those in the No Build Alternative.

Under the same roadway conditions as the No Build Alternative, four intersections would operate at LOS E or F in the AM peak hour, and ten intersections would operate at LOS E or F in the PM peak hour. The others would continue to operate at LOS D or better. All the highlighted intersections would be unsignalized one-way or two-way stop-controlled intersections (Table 2-17). Vehicles approaching these intersections from minor streets would not find adequate gaps to perform their maneuvers in a timely manner.

### 2.6.2.1 Construction Phase

Minor construction with no significant impacts is anticipated; consequently, no significant construction-period impacts would occur.

### 2.6.2.2 Public Transit

This alternative proposes a BRT route instead of LRT as a link between the Azusa-Citrus Station and the Montclair Transcenter. Buses would be powered by diesel, hybrid/electric, compressed natural gas, or fuel cell; and the designed capacity would accommodate 60 to 65 passengers per vehicle. Operational strategies would include transit signal priority and signal synchronization. As a result, this alternative would benefit and help improve the east-west connection between the cities in the Study Area. As detailed in Table 2-15, the total daily ridership (boardings) for the TSM Alternative is projected to be 7,260 passengers per day. The peak headway is anticipated to be 10 minutes.

**Table 2-15. TSM Alternative—System Performance**

Direction	Running Time (minutes)	Headway (minutes)		Boardings		Daily Boardings
		Peak	Off-Peak	Peak	Off-Peak	
Citrus to Montclair	36	10	20	2,160	530	2,690
Montclair to Citrus	33	10	20	3,530	1,040	4,570
<b>Total</b>				<b>5,690</b>	<b>1,570</b>	<b>7,260</b>

Source: Intueor, 2011

### 2.6.2.3 Streets and Highways

#### *Intersection Traffic Conditions*

Adjustments to traffic flow patterns caused by the BRT line were determined by using projections from the transportation model developed for this study. The peak period link data from the No Build and TSM travel demand model outputs were used in this analysis. Table 2-16 presents the percentage change comparison between 2035 TSM Alternative traffic forecasts and the 2035 No Build traffic forecasts. The table shows the percentage change in traffic volume caused by the change in circulation patterns.

**Table 2-16. TSM Alternative—Percentage Change in Traffic Volumes from the No Build (2035)**

City	Percentage Change
Glendora	-0.241%
San Dimas	-0.389%
La Verne	-0.212%
Pomona	-0.380%
Claremont	-0.483%
Montclair	-0.258%

Source: Intueor, 2011  
Average AM and PM peak hours

The overall percentage changes in traffic were applied to the 2035 No Build Alternative AM and PM peak-hour turning movement volumes to develop the future AM and PM peak-hour projections for the TSM Alternative at each of the 90 study intersections. In addition, the number of buses operating during the peak hour was added to peak-hour turning movements of the affected intersections to yield a set of 2035 forecasts. Intersection lane configurations were assumed to be the same as the No Build Alternative. Figure 2-20 through Figure 2-25 shows the TSM peak-hour traffic volumes during the AM and PM peak hours.

The results of the traffic analysis for the TSM Alternative and corresponding AM and PM peak-hour LOS, presented in Table 2-17, are similar to the No Build Alternative. Under the TSM Alternative, four intersections would operate at LOS E or F in the AM peak hour, and 10 intersections would operate at LOS E or F in the PM peak hour (shown shaded). The others would continue to operate at LOS D or better.

### *Summary of Intersection Impacts*

Using the threshold criteria presented in Table 2-5, intersection operating conditions under the TSM Alternative were compared with the No Build Alternative to identify significantly affected locations. Table 2-18 and Table 2-19 summarize intersection impacts for the AM and PM peak hours, respectively. The intersections that are projected to be adversely affected under either alternative are shaded.

As shown in Table 2-20 and Table 2-21, four intersections are anticipated to be significantly affected prior to any mitigation. These are:

- Glenwood Avenue at Route 66 (AM and PM)—Glendora
- Monte Vista Avenue at Bonita Avenue (PM)—San Dimas
- A Street at Arrow Highway (AM)—La Verne
- La Verne Avenue at Arrow Highway (PM)—Pomona

### *Roadway Segment Traffic Operations*

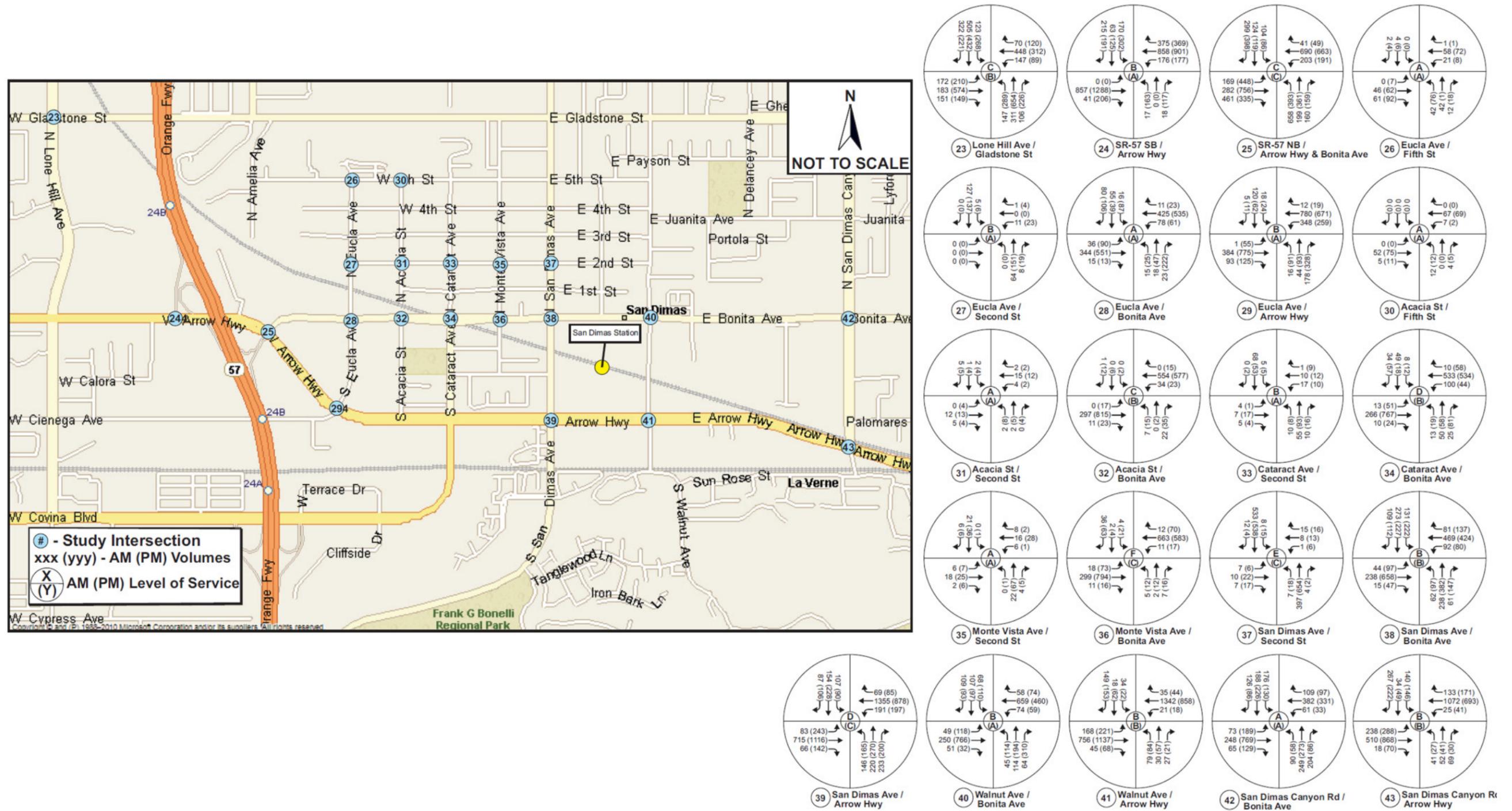
The percentage changes that were shown in Table 2-16 were applied to the study roadway segments. The results of the analysis are shown in Table 2-20. Similar to the No Build Alternative, all roadway segments would operate at LOS D or better, except North Towne Avenue between Arrow Highway and Bonita Avenue, which would operate at LOS E.

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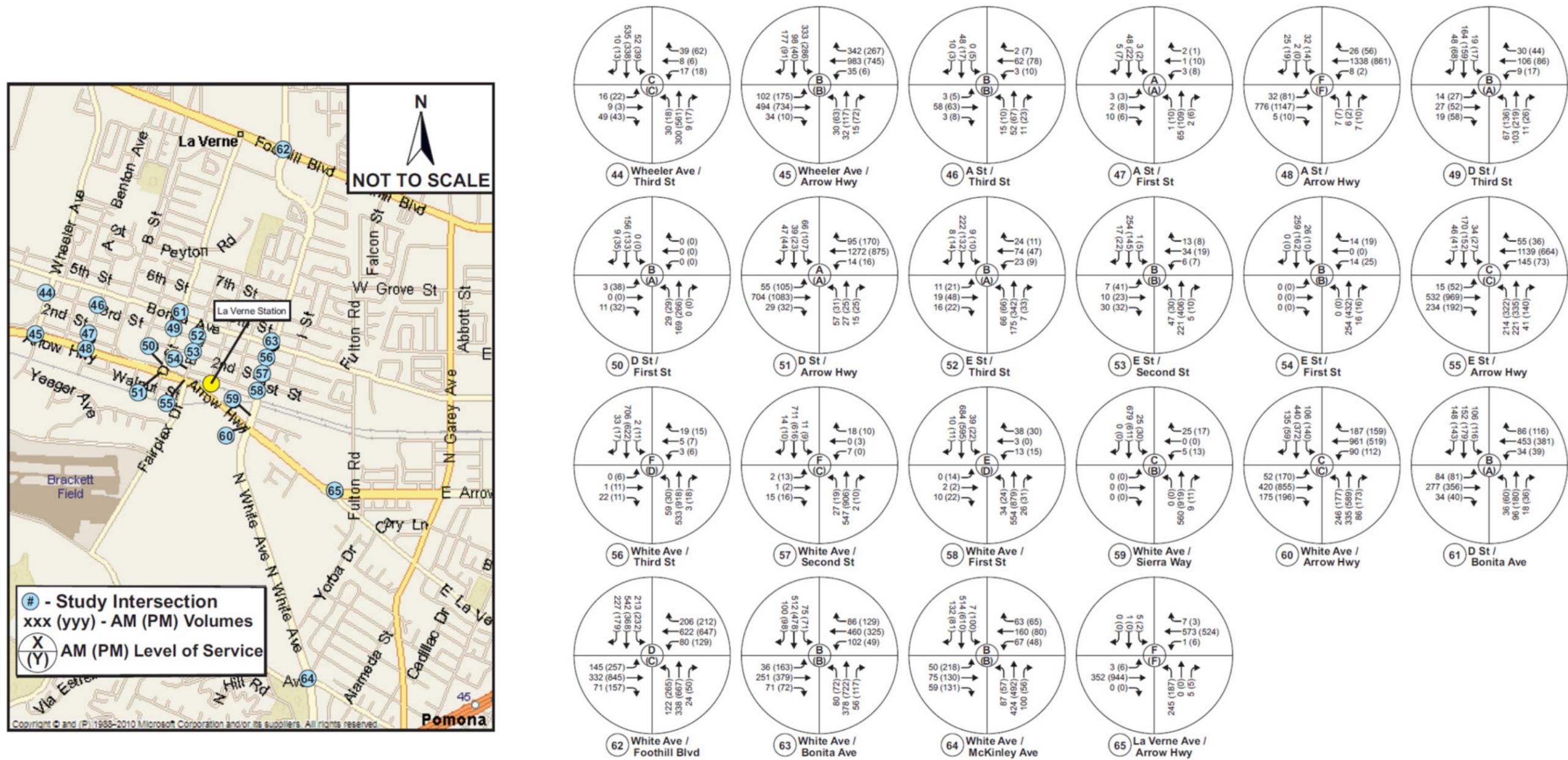
Source: Intueor, 2011

Figure 2-20. TSM (2035) AM/PM Peak Hour Volumes: Glendora



Source: Intueor, 2011

Figure 2-21. TSM (2035) AM/PM Peak Hour Volumes: San Dimas



Source: Intueor, 2011

Figure 2-22. TSM (2035) AM/PM Peak Hour Volumes: La Verne

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