Traffic Impact Analysis Report

for

The World Logistics Center

Moreno Valley Case #P12-016

Prepared for

The City of Moreno Valley
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World Logistics Center

TRAFFIC IMPACT ANALYSIS

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1. INTRODUCTION

A. PURPOSE OF THE TRAFFIC IMPACT ANALYSIS

The purpose of this Traffic Impact Analysis (TIA) is to fully analyze the local and regional traffic impacts of the proposed World Logistics Center (WLC) located in Moreno Valley, California. The TIA identifies the specific near-term and longer-term circulation improvements that would be required to mitigate project impacts and maintain acceptable peak hour and daily levels of service (LOS) on surface streets and freeways affected by the project. As part of this comprehensive analysis special attention was paid to analyzing truck access routes, safety issues relating to trucks, and the effects of truck traffic on traffic operations.

B. SCOPE OF STUDY

The study considers seven development scenarios, namely:

1) Existing baseline conditions (2012) without the WLC project
2) Existing baseline conditions plus Phase 1 (only) of the WLC project
3) Existing baseline conditions plus the Full Build-out of the WLC project
4) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2022, without the WLC project
5) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2022, plus Phase 1 (only) of the WLC project
6) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2035, including full build-out of the City of Moreno Valley General Plan, except that existing conditions remain on the site of the WLC project. The horizon year 2035 corresponds with the long-term planning horizon in the Southern California Association of Governments (SCAG) regional forecasts.
7) Existing baseline conditions plus other past, present, and reasonably foreseeable projects expected to be constructed by 2035, including full build-out of the City of Moreno Valley General Plan except for the WLC site, where full build-out of the WLC project was assumed.

Most of the LOS analyses focused on the morning and evening peak hours because that is when capacity problems most frequently occur. The project includes a general plan amendment that will change the configuration of some roads in and adjacent to the project site. An analysis was performed using daily

traffic volumes to determine if the proposed circulation element amendment would achieve City LOS goals.

The study area for surface streets covered all intersections in Moreno Valley of collector or higher functional classification with another collector or higher classification street, at which the proposed project would add 50 or more peak hour trips. The study area also included the main routes between the project and the neighboring communities of Riverside, Perris, Beaumont, San Jacinto, and Redlands. The study area also extended west to the nearest ramps to SR-91 and as far south as the I-215 ramps at Redlands Ave. in Perris. These limits represent the extreme range of the RivTAM model's capacity to accurately predict real differences between the No-Project and Plus-Project scenarios. Figure 1 shows the study area for surface street intersections.

The study area for freeways was selected to encompass the freeway routes extending from the project site to the north, south, east, and west. The analysis covered SR-60 from I-10 in the east to SR-71 in the west, SR-91/I-215 from I-210 in the east to I-15 in the west, I-215 from Redlands Ave. in the north to the Scott Rd. interchange in the south, and I-10 from SR-62 in the east to SR-60 in the west. (see Figure 2). These limits represent the extreme range of the RivTAM model's capacity to accurately predict differences between No-Project and Plus-Project scenarios. In addition, the two main routes to the ports of Los Angeles and Long Beach were studied (see Figure 3). For these corridors, trips from the WLC were manually added to forecasts for the No-Project condition taken from the SCAG model[1].

Any freeway ramp where the project added 100 or more peak-hour trips was also studied. These included:

- All ramps of the SR-60/Theodore Interchange
- All ramps of the SR-60/Gilman Springs Rd. Interchange
- All ramps of the SR-60/Redlands Blvd. Interchange
- Westbound off- and eastbound on-ramps to the SR-60/Central Ave. Interchange, and
- Westbound off- and eastbound on-ramps to the SR-60/Martin Luther King Blvd. interchange.

[1] The modeling data in the SCAG model is based upon modeling information originally developed by the Southern California Association of Governments (SCAG), which has been modified by Parsons Brinckerhoff. The modeling data used in this study does not necessarily reflect the official views or policies of SCAG. Parsons Brinckerhoff is wholly responsible for the modeling results and the content of the documentation.

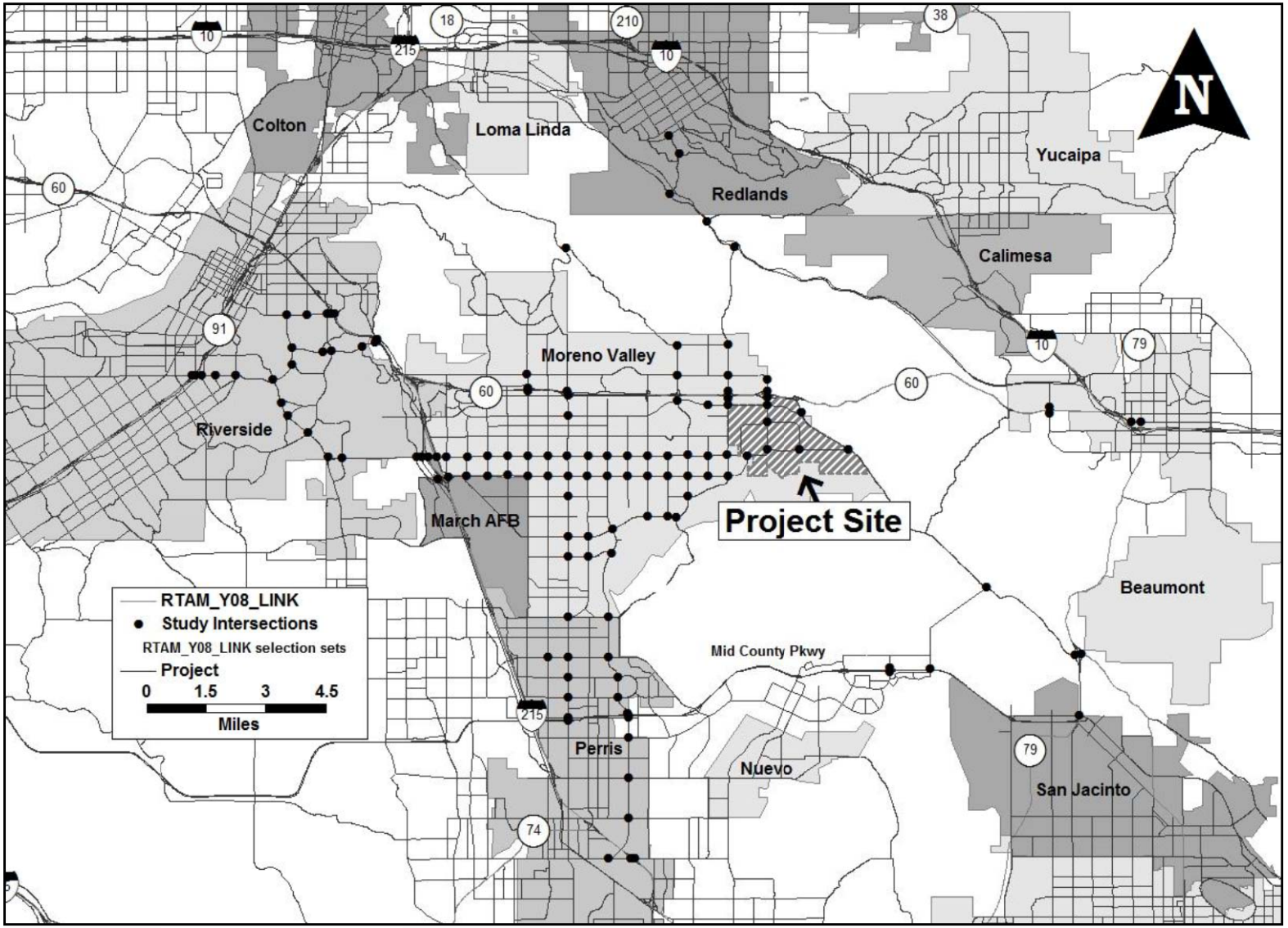

Figure 1: Study Intersections for Surface Streets

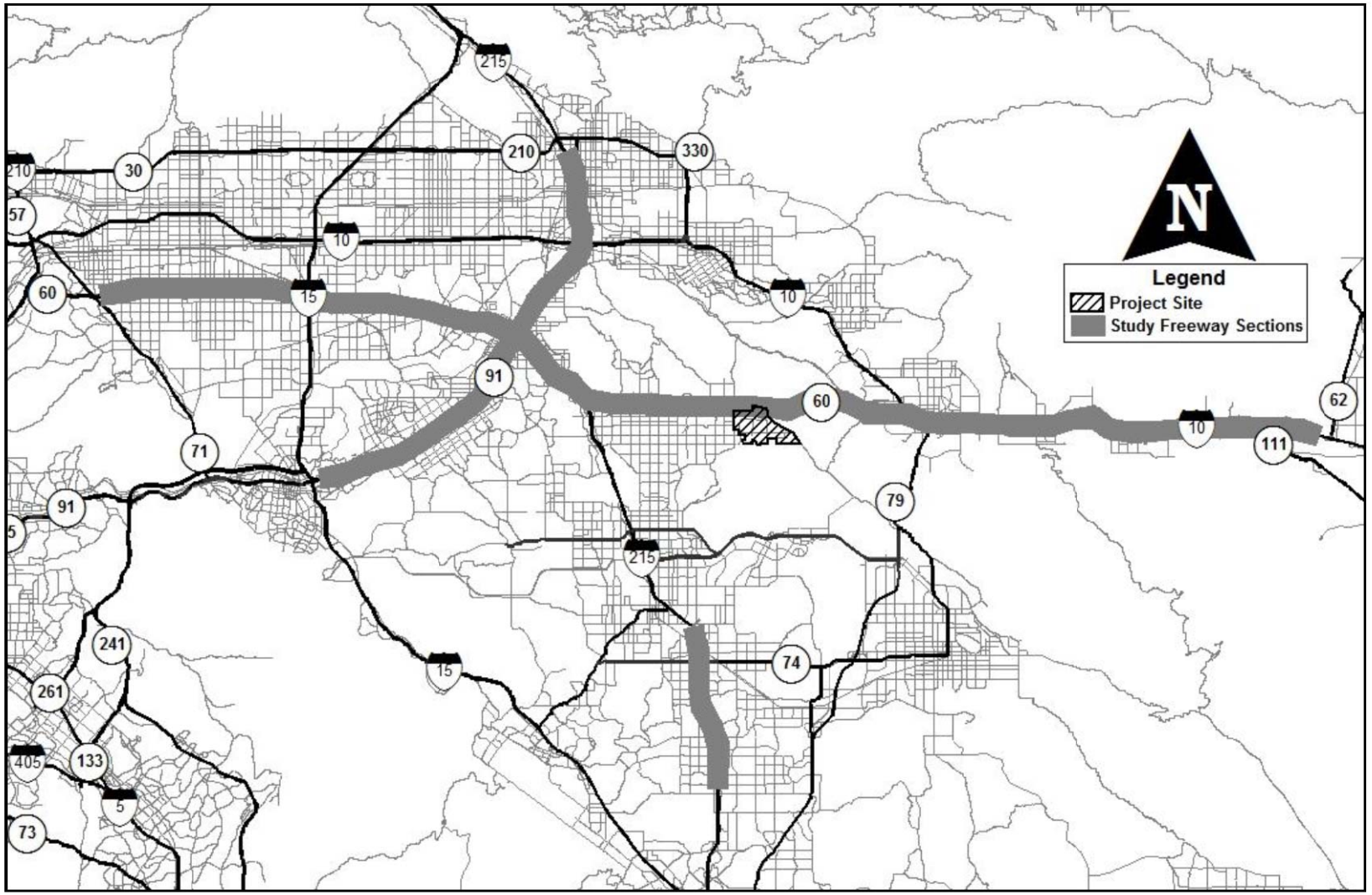

Figure 2: Study Freeway Sections

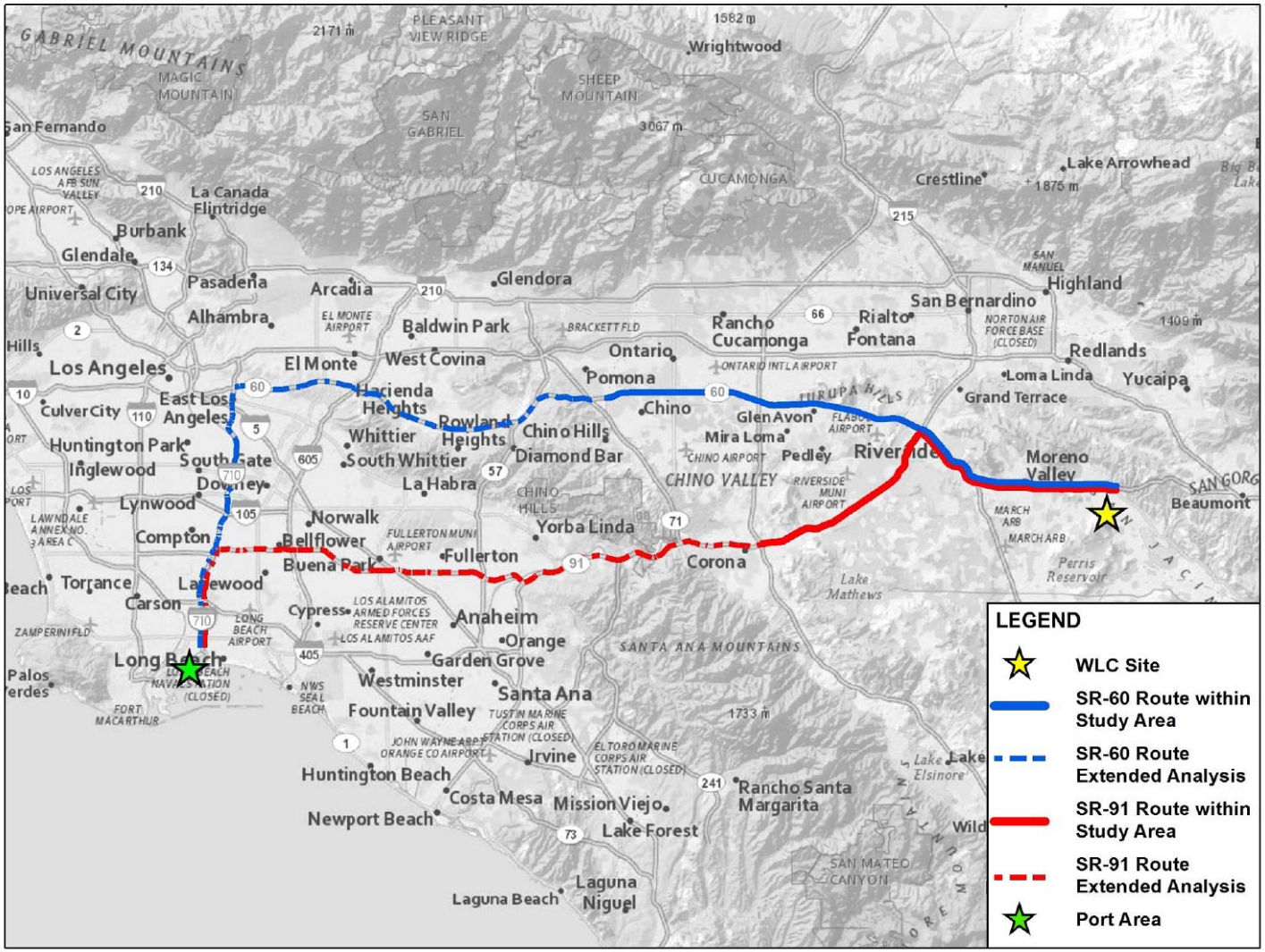

Figure 3: Routes to the Port

C. CHANGES SINCE THE DRAFT TIA

Since the draft Traffic Impact Analysis (TIA) that was issued in February 2013, comments were received from various public and private groups and individuals. The report has been modified in response to these comments and to clarify the description of the analysis. In addition, some modifications were also made to the project. Readers of the draft report will find that a number of updates and clarifications have been made, the most important of which are:

- In response to comments, the analysis of freeway impacts from WLC trucks was extended to the Ports of Los Angeles and Long Beach. The extended analysis, covering more than 60 additional centerline miles of freeway, did not find any new impacts that were not already identified in the Draft TIA. See Chapter 12 Section F of this report.

- In response to comments, an analysis was performed of the feasibility of shipping cargos between the WLC and the Ports of Los Angeles and Long Beach by rail instead of by truck. The analysis found that this was not feasible for a variety of reasons, including the cost and environmental impacts of a new rail alignment, the high fixed handling costs for rail cargo that makes short hauls uneconomical, and system constraints with the rail system itself. See Chapter 4 Section F of this report.

- In response to comments, an analysis was performed of the potential safety impacts of WLC traffic on local schools. The analysis found that the project would pose little safety risk and that appropriate safety features were already present on roads near local schools. See Chapter 12 Section B of this report.

- In response to comments, a figure was added showing the designated Truck Routes in the vicinity of the WLC. See Figure 14.

- The WLC implementation schedule was revised so that Phase 1 is scheduled for completion in 2022 rather than in 2017, as was assumed in the draft report. The scenarios for 2017 were therefore dropped and the scenario for 2022 was revised to analyze Phase 1 only, not full build-out of the WLC. See Chapter 8 of this report.

- A new chapter was added to analyze Existing Plus Phase 1 (only) conditions. See Chapter 5 of this report.

- An area of land in the southwest corner of the WLC site (as described in the draft TIA) is no longer part of the WLC project and instead will maintain its current zoning for residential

development. This update reduces the planned amount of high-cube warehouse development in the WLC by one million square feet and increases the amount of background (i.e. non-project-related) development in 2035 by 220 dwelling units.

- Some internal roads were re-aligned, and a fire station has been added.
- Various grammatical and reference corrections were made, and in places the text and tables were revised to provide greater clarity to readers.
- A list of references has been added.
- Alessandro Boulevard will retain its name, ROW width, and current alignment as an undivided roadway running east-west through the World Logistics Center, intersecting with Gilman Springs Rd. on the east and the Cactus Avenue Extension on the west. An existing section of Alessandro Blvd. between Merwin Street and the Cactus Avenue Extension would be closed to vehicular traffic, except for emergency vehicles and bicycles and pedestrians access. This is to prevent project traffic from traveling through existing residential neighborhoods.

In addition to the changes listed above, a *Responses to Comments* section has been added to the FEIR that responds to traffic-related public comments and provides clarification on how the technical documents, including this traffic report, provide the information needed to enable the City to make an informed decision regarding this project.

2. METHODOLOGY

This chapter describes the methodology used in the traffic impact analysis.

A. ASSUMPTIONS

Land Use Assumptions

The Existing Conditions scenario was based on the land uses as they existed when the Notice of Preparation was issued (February 2012). The Existing Plus Build-out scenarios were also based on the land uses as they existed at that time and with either Phase 1 or the full build-out of the WLC.

The scenarios analyzing future conditions required the use of forecasts for land use in the Inland Empire. The most well-researched and officially accepted source of longer-term land use forecasts is the Southern California Association of Governments (SCAG), which is the designated Regional Transportation Planning Agency under state law. In April 2012, SCAG adopted its 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for use in regional planning. The RTP/SCS was the result of a multi-year effort involving consultation with numerous agencies including work through the Transportation Conformity Working Group (a forum for implementing the interagency consultation requirements) as well as input from members of the public. The RTP/SCS forecasts include an update of existing land uses based on the 2010 U.S. Census and address the effects of the recent recession on employment and residential uses. The forecasts reflect regional birth, death, and migration rates, household formation, and expected changes in employment by economic sector.

The land use assumptions for the WLC 2022 scenarios were derived through interpolation of the 2020 and 2035 RTP/SCS regional population and employment forecasts. In addition, other past, present, and reasonably foreseeable projects in the study area were added to the 2022 scenario based on their likely timeline for development. These projects are listed in Table 1 with their locations shown in Figure 4 (the numbers on the figure corresponds with the identifying numbers in the table).

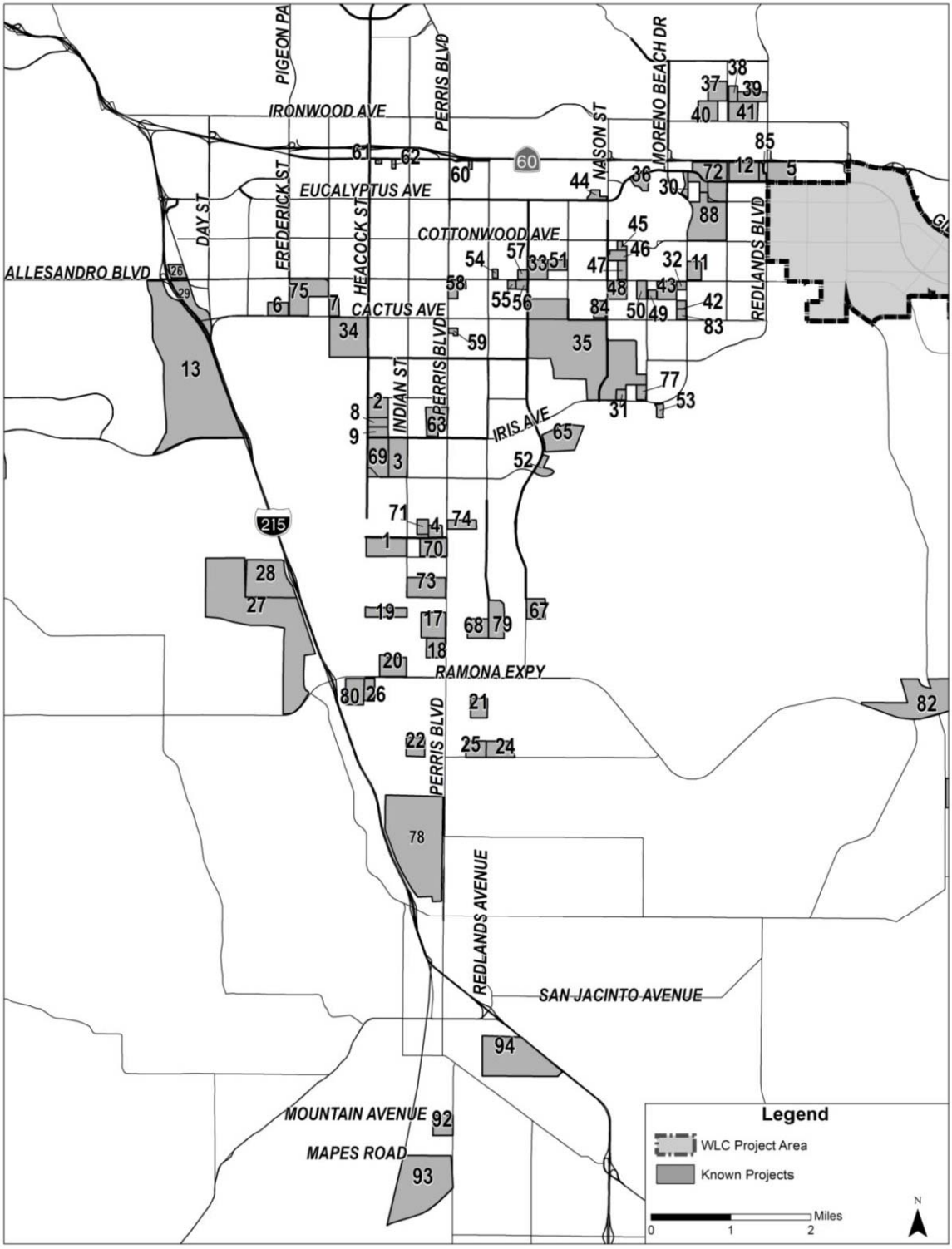

Figure 4: Locations of Other Past, Present, and Reasonably Foreseeable Projects in the Study Area

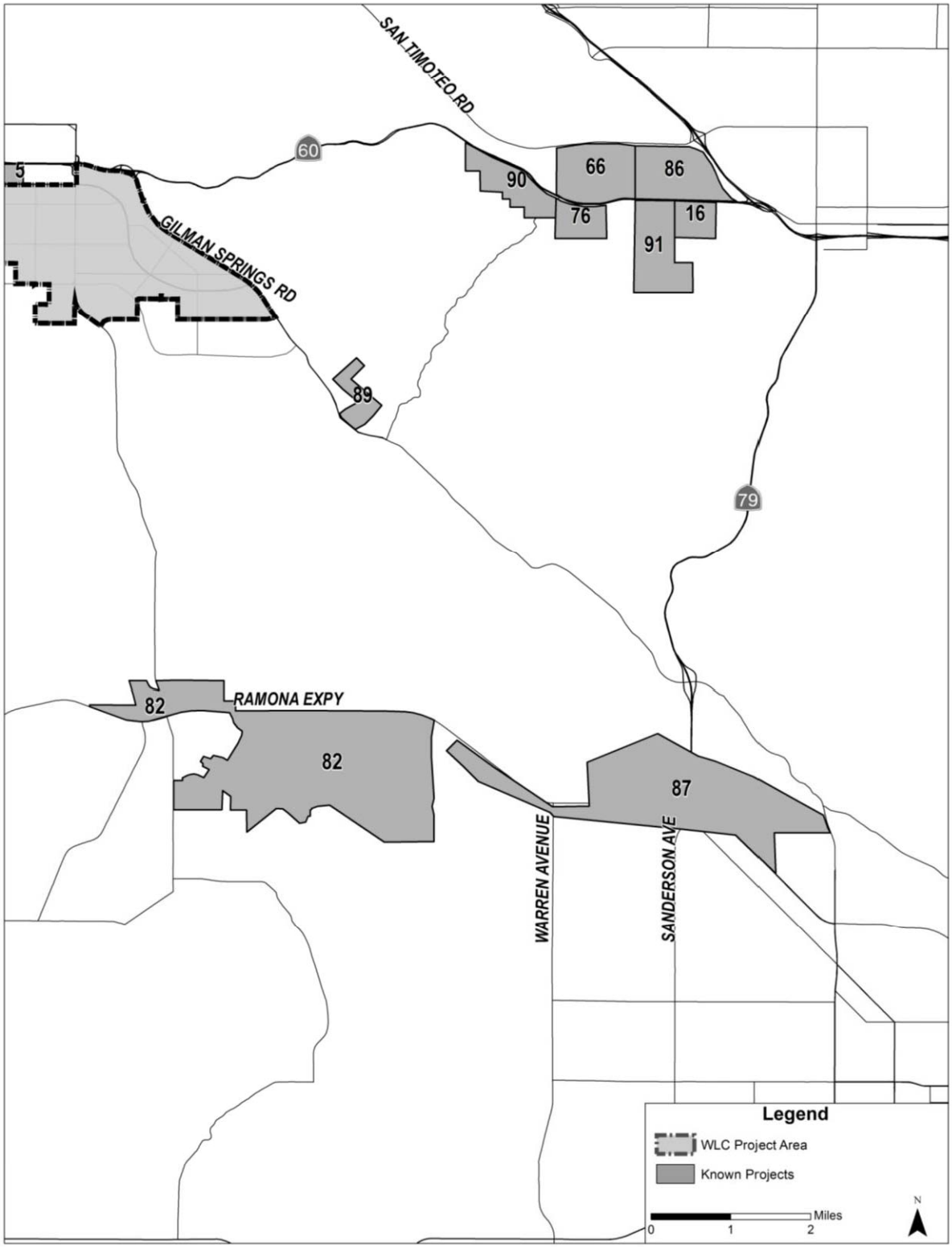

Figure 4: Locations of Other Past, Present, and Reasonably Foreseeable Projects in the Study Area (continued)

Table 1: Other Development Projects Assumed to be Completed by 2022

Project		Land Use Type	Square Feet (Non Residential)	Dwelling Units
1	First Industrial I & II (Industrial Area SP)	Light Industrial	865,960	0
2	Moreno Valley Industrial Park, (Industrial Area SP)	Light Industrial	619,127	0
3	Indian Business Park, (Industrial Area SP)	Business Park	1,560,046	0
4	Moreno Valley Industrial Center (Industrial Area SP)	Light Industrial	354,810	0
5	Highland Fairview, Corporate Park, (Phases 2 and 3)	Commercial	200,000	0
		Logistics	600,000	0
6	Overton Moore Properties PA08-0072	Light Industrial	520,000	0
7	Centerpointe Business Park	Light Industrial	356,000	0
8	PA07-0035	Heavy Industrial	207,086	0
9	PA07-0039, (Industrial Area SP)	Heavy Industrial	409,598	0
11	Moreno Beach Marketplace / Lowes	Commercial	175,000	0
12	Westridge Commerce Center	Light Industrial	937,260	0
13	Meridian Business Park	Business Park	5,985,000	0
16	ProLogis/Rolling Hills Ranch Industrial	Heavy Industrial	2,565,684	0
17	P05-0113	Logistics	1,743,000	0
18	P05-0192	Logistics	697,600	0
19	P07-09-0018	Heavy Industrial	170,000	0
20	P07-07-0029	Logistics	3,008,000	0
21	P05-0493	Logistics	597,370	0
22	Ridge II	Heavy Industrial	2,000,000	0
24	Jordan Distribution	Heavy Industrial	378,000	0
25	Aiere	Heavy Industrial	642,000	0
26	P07-1028, -0102; and P09-0416, -0418, -0419	Light Industrial	652,018	0
27	Majestic Freeway Business Center, SP 341	Light Industrial	6,200,000	0
28	Oleander Business Park, PP20699	Heavy Industrial	1,172,710	0
		Office	34,000	0
29	Amstar/Kaliber Development, PP22925	Light Industrial	42,222	0
		Heavy Industrial	409,312	0
		Commercial	10,000	0
		Office	258,102	0
30	Auto Mall Specific Plan Planning Area C	Commercial	304,500	0
31	Moreno Medical Campus	Medical Office	80,000	0
32	Convenience Store / Fueling Station	Commercial	30,750	0
33	Retail Center / Winco Foods	Commercial	140,000	0
34	March LifeCare Campus Specific Plan	Commercial	315,000	0
		Medical Office	1,990,000	0
		Institutional	940,000	0
		Mixed Use	310,000	0
35	Aqua Bella Specific Plan	Residential	0	2,922
36	TR36340	Residential	0	275
37	TR32460 / Sussex Capital	Residential	0	58
38	TR32459 / Sussex Capital	Residential	0	11
39	TR30411 / Pacific Communities	Residential	0	24

Table 1: Other Development Projects Assumed to be Completed by 2022 (continued)

Project		Land Use Type	Square Feet (Non Residential)	Dwelling Units
40	TR33962 / Pacific Scene Homes	Residential	0	31
41	TR30998 / Pacific Communities	Residential	0	47
42	Senior Assisted Living	Residential	0	139
43	TR31590 / Winchester Associates	Residential	0	96
44	TR31305 / Richmond American	Residential	0	87
45	TR31771 / Sanchez	Residential	0	25
46	TR34397 / Winchester Associates	Residential	0	52
47	TR32645 / Winchester Associates	Residential	0	54
48	TR32548 / Gabel, Cook & Associates	Residential	0	107
49	26th Corporation & Granite Capitol	Residential	0	32
50	TR32218 / Whitney	Residential	0	63
51	TR32505 / DR Horton	Residential	0	71
52	TR32917 / Empire land	Residential	0	54
53	TR34329 / Granite Capitol	Residential	0	90
54	TR34216 / Creative Design Associates	Residential	0	189
55	TR32756 / CTK, Inc.	Residential	0	241
56	TR34681 / Perris Pacific Co.	Residential	0	49
57	Alessandro Village Plaza LLC	Residential	0	96
58	TR34988 / Stratus Properties	Residential	0	251
59	TR33607 / TL Group	Residential	0	52
60	TR31814 / Moreno Valley Investors	Residential	0	60
61	TR33771 / Creative Design Associates	Residential	0	12
62	TR35663 / Kha	Residential	0	12
63	TR22180 / Young Homes	Residential	0	87
64	TR32515	Residential	0	161
65	TR32142	Residential	0	81
66	Heartland	Residential	0	922
67	TR32707	Residential	0	137
68	TR34716	Residential	0	318
69	March Business Center (Industrial Area SP)	Business Park	1,484,497	0
70	First Industrial III & IV, (Industrial Area SP)	Light Industrial	1,182,918	0
71	San Michele Industrial Center, (Industrial Area SP)	Light Industrial	865,960	0
72	ProLogis	Light Industrial	367,000	0
		Logistics	1,901,000	0
73	Vogel /PA09-004	Heavy Industrial	1,616,133	0
74	Ivan Devries / PA06-0017	Heavy Industrial	529,200	0
75	Ridge Property Trust, PA07-0147 & PA 07-0157	Heavy Industrial	353,849	0
76	Hidden Canyon	Light Industrial	2,890,000	0
77	Cresta Bella	Office	30,000	0
78	Harvest Landing Specific Plan	Business Park	1,306,582	1,860
Total			50,007,294	8,766

The land use assumptions for the cumulative (2035) scenarios were taken from the RTP/SCS 2035 regional population and employment forecasts for all areas outside of the City of Moreno Valley. Within Moreno Valley, the cumulative-year analysis assumed build-out of the City's General Plan, as required by the City's TIA guidelines[2]. As with the other scenarios, other past, present, and reasonably foreseeable projects in the study area (see Table 2) were added to this scenario. Because it is unlikely that the city will fully build out by 2035, the cumulative impact analysis set forth in this TIA assumes worse background traffic than is likely to occur and is therefore conservative in the sense that it would tend to over-state project impacts.

Table 2: Other Development Projects Assumed to be Completed by 2035

	Project	Land Use Type	Square Feet (Non Residential)	Dwelling Units
79	P05-0477	Logistics	1,725,411	0
80	Starcrest, P011-0005; 08-11-0006	Light Industrial	454,088	0
82	Moreno Marketplace	Commercial	93,788	0
83	Commercial Medical Plaza	Commercial	311,633	0
84	P06-158 / Gascon	Commercial	116,360	0
85	Mountain Bridge Regional Commercial Community	Commercial	1,853,251	0
86	Gateway Area Specific Plan	Commercial	1,144,600	0
		Mixed Use	3,051,012	0
87	TR35823 / Stowe Passco Development		0	478
88	TR35530 / Quail Ranch Specific Plan		20,000	1,251
89	Jack Rabbit Trail		0	2,000
90	The Preserve / Legacy Highlands SP		595,901	3,412
91	Villages of Lakeview		500,000	11,350
92	South Perris Industrial Phase 1	Logistics	787,700	
93	South Perris Industrial Phase 2	Logistics	3,448,734	
94	South Perris Industrial Phase 3	Logistics	3,166,857	
Total			17,269,335	18,491

Network Assumptions

The scenarios analyzing future conditions required the use of assumptions regarding changes in the road network that may occur between now and the study year. The most well-researched and officially accepted source of longer-term land use forecasts is the SCAG 2012-2035 Regional Transportation Plan (RTP), which was adopted in April 2012 along with the SCS land use forecasts. The RTP was developed through a bottom-up process where agency projects were reviewed, prioritized, and matched against federal, state, and local funding sources. The result was three lists of approved projects, namely:

- The Federal Transportation Improvement Program, which covers the first four years of the program including projects that are already funded and are either already under construction or are in an advanced stage of development.

[2] *Traffic Impact Analysis Preparation Guide*, City of Moreno Valley, August 2007

- A second project list for 2016-2035, the financially constrained project list, that includes only transportation projects that have committed, available, or reasonably available revenue sources, and thus are probable for implementation.
- The Strategic Plan, which is an illustrative list of additional transportation investments that the region would pursue if additional funding and regional commitment were secured. Such investments are potential candidates for inclusion in the constrained RTP/SCS through future amendments or updates.

For this study, only the projects in the Federal Transportation Improvement Program and the financially constrained[3] project list were assumed to be completed (see Figure 5). The projects in the Strategic Plan were not assumed completed because funding for them was considered to be too uncertain. Also, the proposed East-West Freight Corridor that was included in the financially constrained plan was not assumed to be implemented. This is because unlike the other projects which are based on funding mechanisms with a clear track record, the freight corridor is expected to be funded through tolls to be collected by a process that has not yet been established and whose future efficacy is unknown. If it is constructed, then traffic impacts would be less than those described herein.

The network for the 2035 study year was also based on the RTP. However, within the City of Moreno Valley the General Plan road network was incorporated into the study (see Figure 6). The General Plan network includes future planned improvements that are funded through the City's Development Impact Fee (DIF), Western Riverside Council of Governments' Transportation Uniform Mitigation Fee (TUMF), and improvements made directly by developers. The expectation that these improvements will be in place is therefore consistent with and based upon the assumption of build-out of the General Plan land uses, since most of the improvements will be funded through fees on the new developments. If other sites do not fully build out per the General Plan, then the LOS on the study streets and intersection would likely be better than shown in this report.

The truck routes assumed for roads in Moreno Valley were based on the current Municipal Code. They included the City's recent decision to allow truck traffic on Redlands Blvd. only on the portion north of Fir (future Eucalyptus) Ave.[4]. Within the project site all roads would be truck routes, but trucks would not be permitted to enter or leave the site through the Cactus Ave. Extension.

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[3] These are the projects for which funds are committed or reasonably available.

[4] City Council Ordinance 836, dated January 2012, rescinded the designation of Redlands Blvd. as a truck route south of Fir Avenue.Blvd..

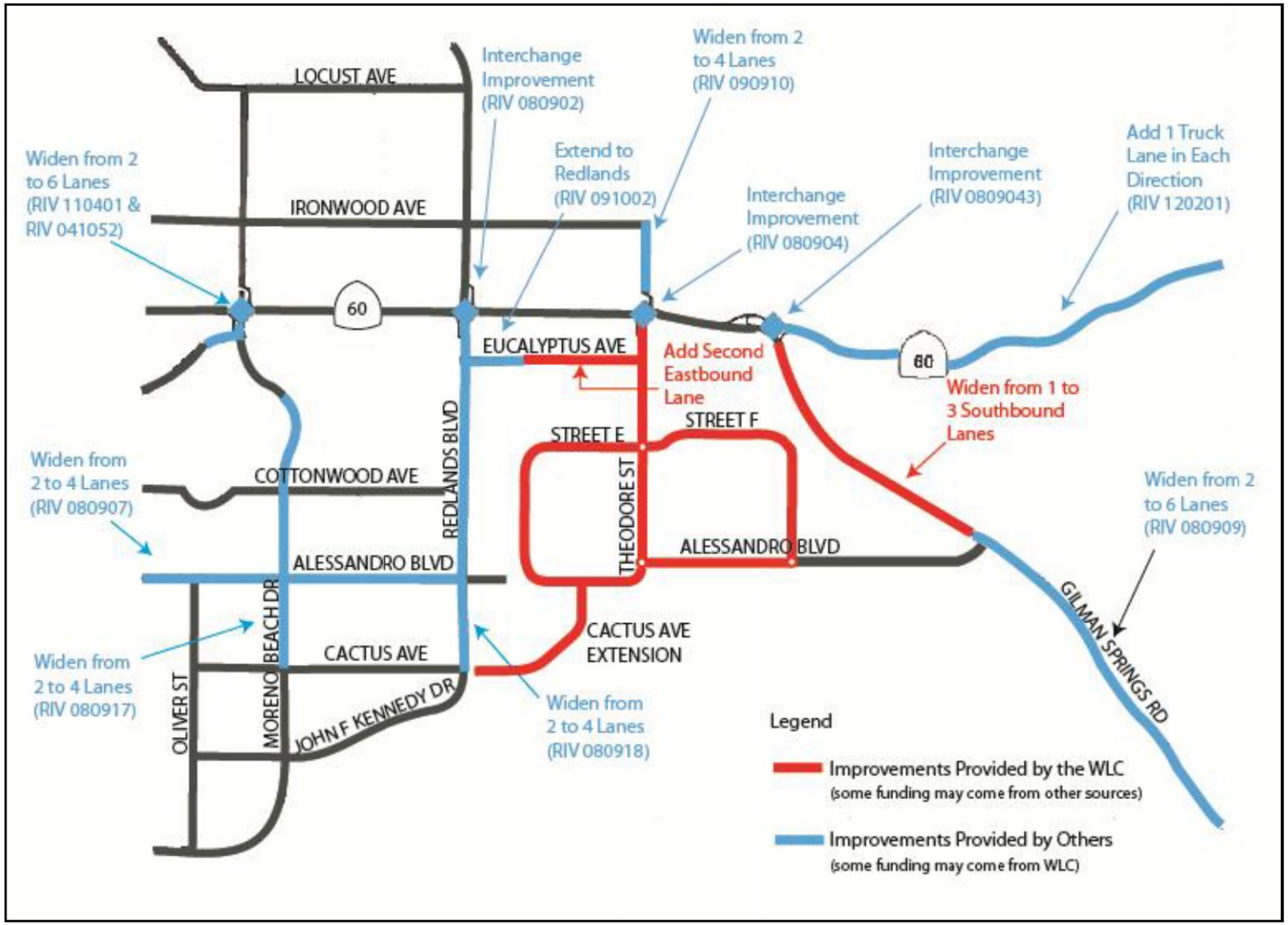

Figure 5: Roadway Improvements Assumed for 2022

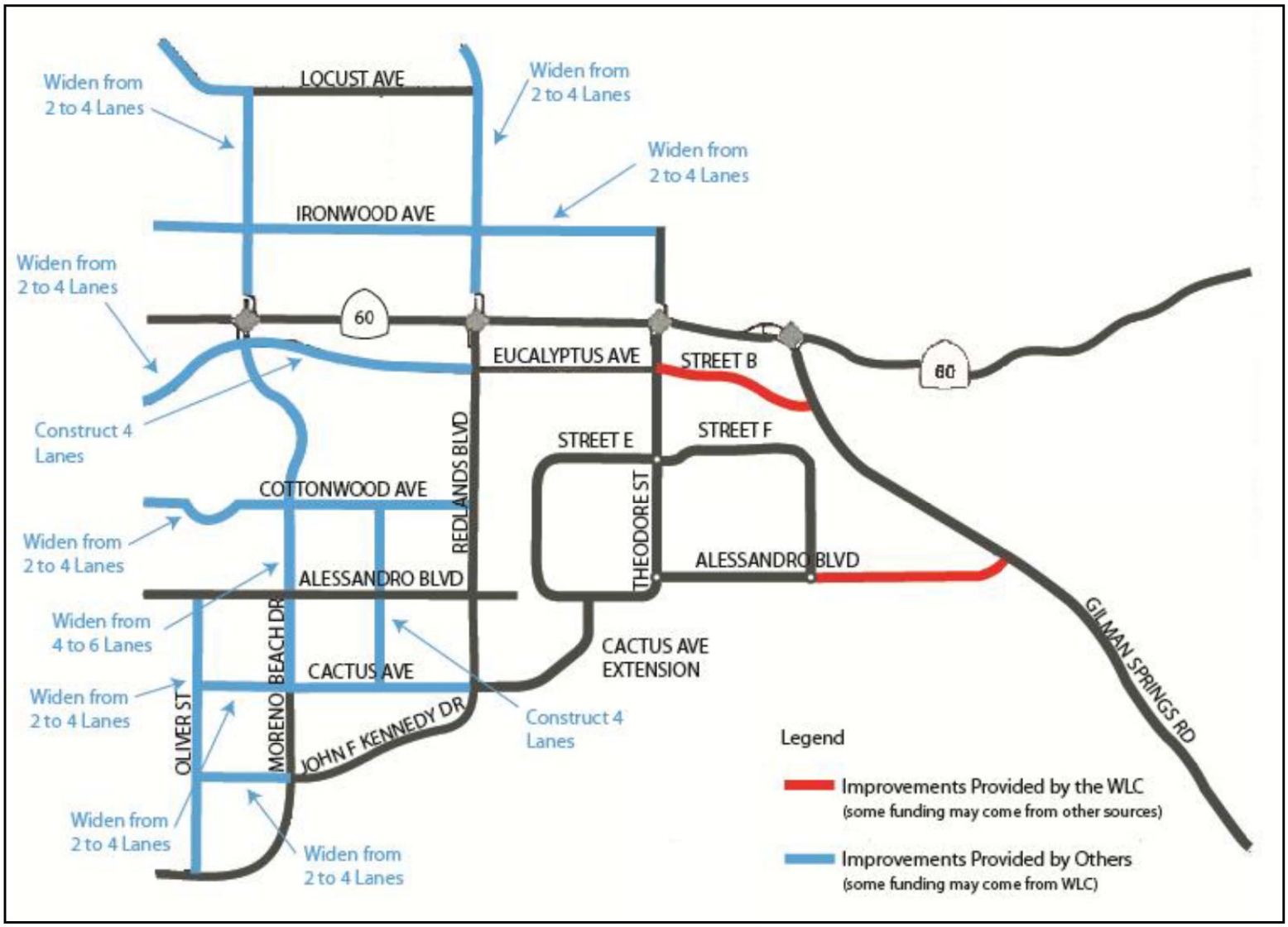

Figure 6: Roadway Improvements Assumed for 2035

Trip Generation Assumptions for High-Cube Warehouses

Based on the proposed WLC Specific Plan, high-cube logistics warehousing would comprise 99.4% of the floor space of the WLC, so a considerable amount of deliberation and study went into the selection of the most appropriate trip generation rate for this particular type of building. Four possible sources of trip generation rates were identified and evaluated, as described below. The City's TIA guidelines specify that a combination of the first two sources be used, with the Institute of Transportation Engineers (ITE) *Trip Generation Manual* being the source of the overall trip generation rate and the City of Fontana *Truck Trip Generation Study* being the source of the vehicle mix percentages.

1. ITE Trip Generation Manual

The most widely-recognized source for data on how much traffic various types of land uses generate is the ITE *Trip Generation Manual*. The report is a compilation of results from surveys performed at sites across the country representing different land use types. The *Trip Generation Manual* is periodically updated to include new building types as they enter the market and subdividing previous categories as the accumulated data allows for greater specificity of definition.

The 5th edition of Trip Generation, published in 1991, introduced High-Cube Warehouse (category 152) as a new land use category distinct from Warehousing (category 150). The new category was described as,

> "*High-cube warehouses are a new type of warehouse used for the storage of manufactured goods prior to their distribution to retail outlets. These facilities consist of large shells of steel buildings and large halls, often sub-divided for individual tenants, with a typical ceiling height of 24 to 26 feet; they are also characterized by a small employment count due to a high level of mechanization, truck activities frequently outside the peak hour of the adjacent street system, and good freeway access. A related land use is warehousing (land use 150).*"

The most recent, 9th, edition of the Trip Generation Manual was released in September 2012. The average trip generation rate for high-cube warehouses was estimated to be 1.680 vehicle-trips/day per 1,000 square feet of floor space (VT/KSF), 0.110 VT/KSF for the AM peak hour, and 0.120 VT/KSF for the PM peak hour.

The ITE trip generation rates are intended to represent a national average and thus do not account for regional and local variations in building age, degree of automation, and the specific operational aspects taking place in high-cube warehouses. Three studies conducted to provide guidance on local trip generation rates, described below, indicate that high-cube warehouses in the Inland Empire have significantly lower trip generation rates than those found in the ITE *Trip Generation Manual*.

2. Fontana Truck Trip Generation Study

In 2003, the City of Fontana commissioned a study of trip generation at warehouses and industrial sites with the stated purpose that, "*This study will be a primary tool in the preparation of Traffic Impact Analysis (TIA's) for Congestion Management Plan (CMP) compliance in southern California, since it reflects trip making with local characteristics*." (City of Fontana, page 1) This study is widely used in transportation impact studies in the Inland Empire and is cited in the City of Moreno Valley's traffic impact guidelines as a data source (City of Moreno Valley, page 10). The peak hour trip generation rates measured for large warehouses in the study are shown in Table 3 along with the ITE rates.

Table 3: Comparison of ITE and Fontana Trip Generation Rates (per KSF)

Source of Trip Generation Rates	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
ITE *Trip Generation Manual*	0.0759	0.0341	0.1100	0.0372	0.0828	0.1200	1.6800
Fontana *Truck Trip Generation Study*	0.0357	0.0343	0.0700	0.0224	0.0506	0.0730	1.9700
Fontana Rate as a Percent of ITE Rate	47%	101%	64%	60%	61%	61%	117%

This source found that the overall amount of peak-hour trips generated by large warehouses in Fontana is about 36%-39% less than the ITE rates.

The Fontana study involved relatively few survey sites (five). However, this study's conclusions were later found to be supported by a much larger study, as described below.

3. The 2011 NAIOP Trip Generation Study of High-Cube Warehouses

The Commercial Real Estate Development Association, also known by its former acronym NAIOP, commissioned a study of high-cube warehouses in the Inland Empire focused on the type of large highly-automated warehouses that are being proposed for the WLC. The NAIOP study is particularly relevant to the WLC because it is:

- Specific – The study was focused on a narrowly-defined type of warehouse development. Like the proposed WLC buildings, the sampled buildings were at least 500,000 square feet each, had no non-warehouse tenants, did not share driveways with other buildings, had been occupied for at least a year, and had no rail access.
- Local – The NAIOP study restricted its sample sites to the Inland Empire, which strengthens the relevance to the WLC. In contrast, the studies used in ITE's general high-cube category relied on data from other parts of the country where port operations, the labor market, and the industrial base may differ markedly from those in the Inland Empire.
- Recent – Many of the studies used in the general ITE high-cube rate were based on relatively old data that do not reflect current operating practices. In contrast, the NAIOP study is based on data

collected in 2008.

- Large –The NAIOP 2011 study covered 31 sites with a very specific type of warehouse building resulting in greater statistical validity for that building type.
- Objective and Comprehensive –The greater Inland Empire region was scanned for large buildings and their locations were annotated using Google Earth. All buildings meeting the specifications described above were considered (i.e. a 100% sample), which eliminated the possibility that the sample was biased ("cherry picked") to support a pre-determined result.
- Overseen by Experts – The NAIOP study was overseen by a Technical Advisory Group with representatives from the City of Moreno Valley, the Western Riverside Council of Governments, the Riverside County Transportation Commission (RCTC), the San Bernardino (County) Associated Governments, and UC Riverside.
- Peer-Reviewed – In 2012 the consulting company Urban Crossroads (UC) was contracted to perform a peer review of the 2011 NAIOP study. Their conclusions were summarized as follows,

  "SUMMARY OF CONCLUSIONS

  Based on our review of a number of trip generation rate sources used by engineers and planners throughout the Inland Empire to analyze the impacts of warehouse and light industrial type of projects, it is clear that no single trip generation rate is uniformly applicable to all warehouse projects. A number of variables affect the applicability of any particular recommended trip generation rate to any particular project. Based on our review, it appears that warehouse size and type are both important variables. The Inland Empire area also provides a unique staging opportunity for goods being shipped into, out of, and through Southern California.

  In this specific instance, it is our recommendation that for new high-cube warehouse distribution buildings of at least 500,000 square feet in size in the Inland Empire, the 2011 NAIOP Study provides the most comprehensive collection of survey data compiled to date, and its recommended trip generation rates can be used with confidence to analyze the transportation impacts of modern, high-cube warehouse facilities greater than 500,000 square feet. Our recommendation is based on the fact that this study was broad-based, professionally conducted, validated by an independent Technical Advisory Group (TAG) and followed the trip generation rate methodologies of the Institute of Transportation Engineers (ITE). Based on our assessment of other trip rate studies and the underlying data sources, UC also finds that none of the other trip rate studies that are either currently used by public agencies, or (at times) sought to be imposed by third parties, are appropriate with respect to providing trip generation rates for modern high-cube distribution warehouse projects greater

than 500,000 square feet in the Inland Empire. The data supporting these rates include numerous smaller (less than 500,000 square feet) warehouses that are not of the modern high-cube design and are also not located in the Inland Empire area." (Urban Crossroads, page 1)

Table 4 compares the ITE trip generation rates and the rates from the NAIOP study. This large and focused study found that the trips generated by large warehouses in the Inland Empire are less than half (43%) of the national average rate in the AM peak hour, and 42% less than the ITE rates in the PM peak hour.

Table 4: Comparison of ITE and NAIOP Trip Generation Rates (per KSF)

Source of Trip Generation Rates	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
ITE *Trip Generation Manual*	0.076	0.034	0.110	0.037	0.083	0.120	1.680
NAIOP 2011 *Trip Generation Study*	0.030	0.017	0.047	0.022	0.048	0.070	0.990
NAIOP Rate as a Percent of ITE Rate	40%	50%	43%	58%	58%	58%	59%

4. Skechers Trip Generation

The best match to the proposed WLC buildings is the existing Skechers building, a very large (1.8 million square-foot) logistics center and factory outlet store built by Highland Fairview and located directly adjacent to the WLC site. It can be considered the prototype for the type of buildings planned for the WLC, except that the WLC buildings will be prohibited from having factory outlet stores[5]. Traffic counts were conducted in November 2012 after the building had been in full operation for over a year. The counts showed that for all time periods the traffic generated by the Skechers building was only about one-third of what the ITE trip generation rates would have predicted (see Table 5)[6]. The actual truck traffic was less than half (41%) of what the methodology mandated in the City of Moreno Valley's traffic impact guidelines (ITE trip generation rates with the vehicle mix from the Fontana truck study) would have predicted (see Table 6).

Table 5: Comparison of ITE and Skechers Trip Generation Rates (per KSF)

Source of Trip Generation Rates	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
ITE *Trip Generation Manual*	0.076	0.034	0.110	0.037	0.083	0.120	1.680
Skechers Traffic Counts	0.022	0.013	0.035	0.004	0.033	0.037	0.567
Skechers Rate as a Percent of ITE Rate	29%	38%	32%	11%	40%	31%	34%

[5] Skechers is located directly along the freeway and so was considered an appropriate location for retail sales.

[6] The counts were performed in a way that allowed the traffic to and from the warehouse portion of the site to be distinguished from traffic to and from the outlet store. The rates shown in the tables are for the warehouse portion only.

Table 6: Comparison of ITE/Fontana Trip Generation Rates to Skechers Rates (per KSF)

Vehicle Type	ITE Trip-Gen + Fontana Vehicle Mix (City TIA Methodology)		Skechers Warehouse Trip-Gen Rates		Skechers Trip-Gen Rate as a % of City TIA Methodology
	Trip-Gen Rate	% of Vehicles	Trip-Gen Rate	% of Vehicles	
Passenger Vehicles	1.337	79.6%	0.449	79.2%	34%
Light Trucks	0.058	3.5%	0.019	3.3%	32%
Medium Trucks	0.078	4.6%	0.014	2.4%	17%
Heavy Trucks	0.207	12.3%	0.086	15.1%	41%
Total	1.68	100.0%	0.567	100.0%	34%

Some DEIR commenters noted the fact that the Fontana study found 12.3% of trips entering or leaving high-cube warehouses were heavy trucks, while some other sources have a higher percentage of heavy trucks (the NAIOP study, for example, had 20.8% heavy trucks). They wrongly concluded that this meant that the WLC analysis forecasted too few trucks. In fact, because the WLC analysis utilized a very high overall trip generation rate the number of truck trips assumed is actually slightly higher than in the NAIOP survey and much higher than the Skechers data indicates would be appropriate (see Table 7 and Figure 7). The figures used in this analysis can therefore be considered a high estimate of truck traffic and a very high estimate of car traffic compared to conditions actually found at the most comparable sites.

Table 7: Comparison of Truck Trip Generation from Southern California Sources

Source	Total Vehicle Trips /Day/KSF	% trucks	Heavy Truck Trips/Day /KSF	Other Trips/Day /KSF
WLC	1.68	12.3%	0.207	1.473
NAIOP	0.99	20.8%	0.206	0.784
Skechers	0.57	15.2%	0.086	0.481

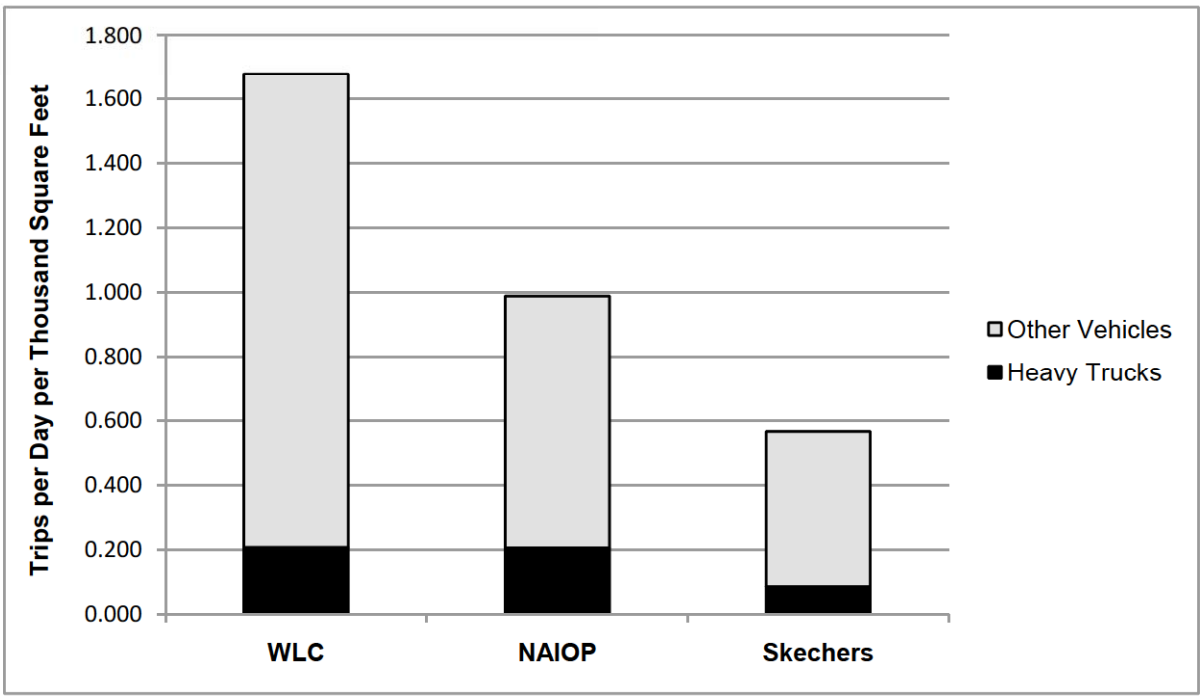

Figure 7: Comparison of Trip Generation from Southern California Sources

Some DEIR commenters suggested that this analysis should use a combination of a very high overall trip generation rate with a high heavy truck percentage to estimate the number of project truck trips. The problem with this approach is that the City has used it before in previous analyses and found that it produced results that were unreasonable when compared to actual field conditions. For example, this approach was used in the EIR for the Skechers high-cube warehouse building and resulted in forecasts that were three times the actual post-construction trip generation for car trips and nearly eight times the actual trip generation for trucks[7]. This approach is misleading to decision makers and could result in oversized infrastructure which itself would have environmental consequences, creates an undue burden on development, and could ultimately discredit the City's project review process in the eyes of the business community and members of the public. For these reasons it was not used in the current analysis and the formula in the City's Traffic Impact Guidelines was used instead. The results, which are quite high compared to survey data (as shown in Figure 7), thus meet CEQA's standard of substantial evidence.

[7] These figures are based on traffic counts taken at the Skechers building after it had been fully operational for over a year. See Technical Memorandum *Traffic Generated by the Skechers Warehouse*, Parsons Brinckerhoff to the City of Moreno Valley, November 14, 2012.

City of Moreno Valley Survey of Trip Generation from High-Cube Warehouses

Concerns over unrealistically high trip generation forecasts prompted the City of Moreno Valley Transportation Engineering Division to perform their own survey of trip generation at six warehouses in the city. This study[8] used counts collected in Fall 2013, i.e. well after the WLC DEIR had been sent out for public review. The City study confirmed that the vehicle mix for the Heavy Warehouse category in the Fontana *Truck Trip Generation Study* (i.e. the data used for the WLC TIA) produces a good, but conservative (i.e. somewhat high), estimate of truck trips percentages for high-cube warehouses while the Fontana the Truck Terminal category produces an obvious over-estimate of truck traffic (see Figure 8).

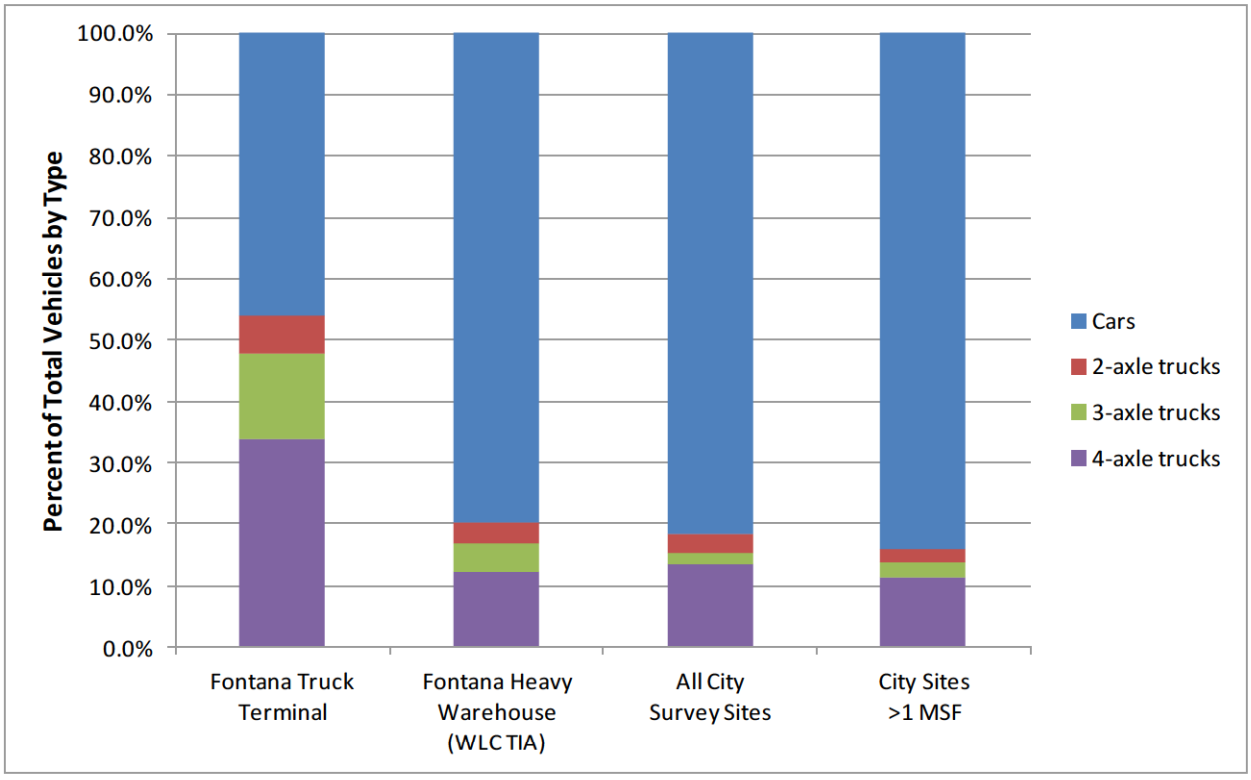

Figure 8: Comparison of Vehicle Mixes from the City Survey and the Fontana Study

Besides vehicle mixes, the City study data was also used to calculate the overall trip generation rates for different categories of vehicles. Figure 9 compares the assumed trip generation using the ITE trip-generation rates in combination with the Fontana vehicle mixes to the measured rates in the City survey. Figure 9 presents the same information with the heavy vehicles converted into passenger car equivalents. Figure 8 and Figure 9show the data for peak-hour conditions, which is used in the LOS analysis to identify potential traffic impacts. The data from the City's surveys confirm that the trip generation rates

[8] *Vehicle Mix Assumption for High-Cube Warehouse*, memorandum from Michael Lloyd to Eric Lewis, September 27, 2013.

used in the WLC TIA are high compared to the measured rates at existing high-cube warehouses in Moreno Valley.

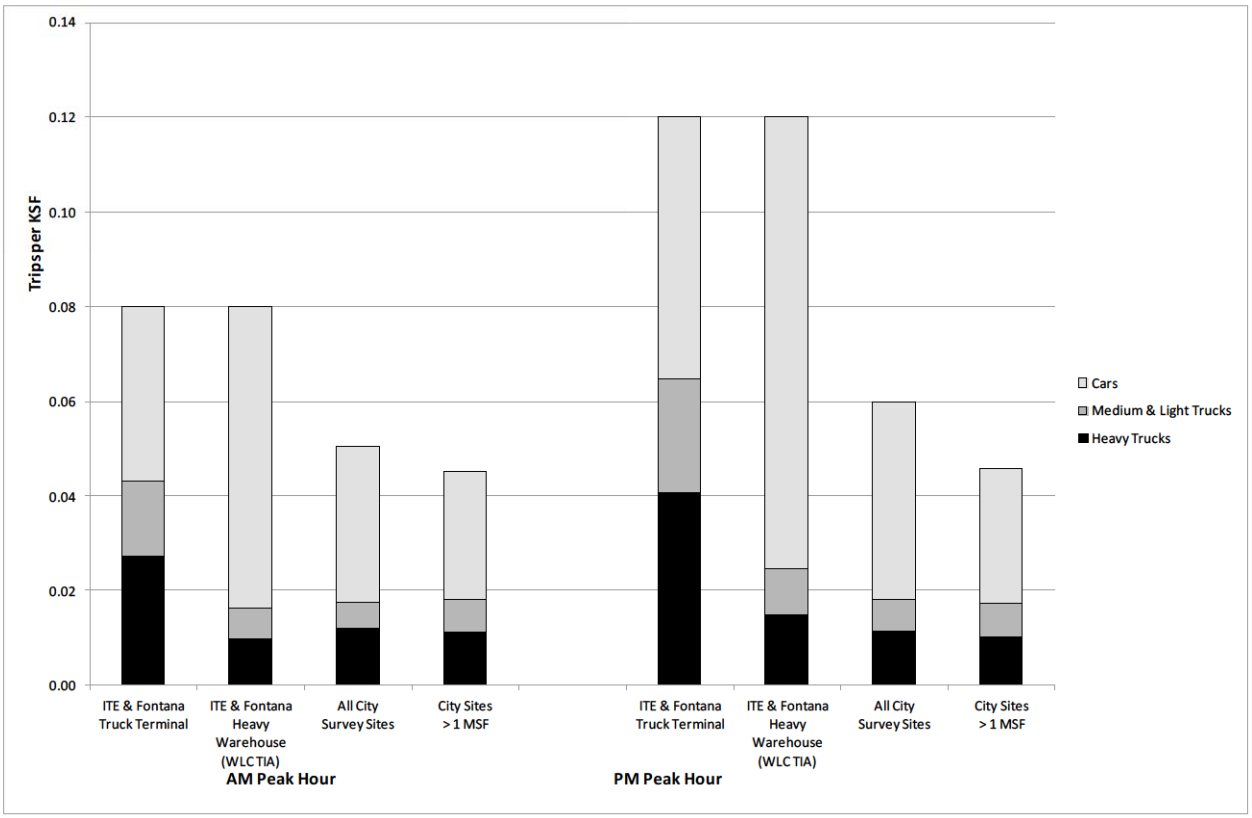

Figure 9: Peak-Hour Trip Generation from ITE compared to City Surveys (Trips)

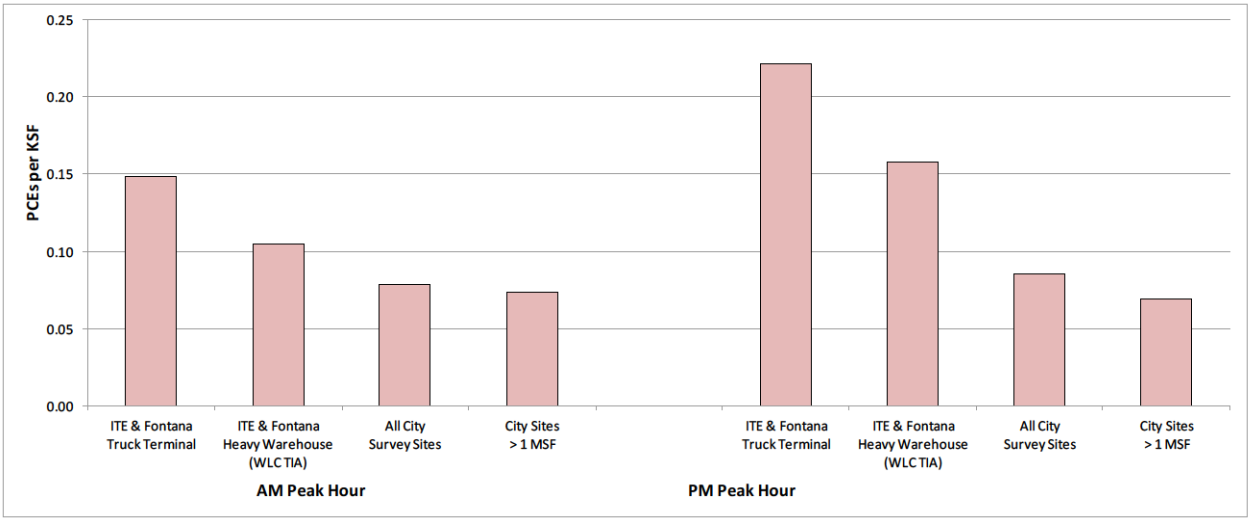

Figure 10: Peak-Hour Trip Generation from ITE compared to City Surveys (PCEs)

The City study data was also used to calculate the overall trip generation rates for different categories of vehicles on a daily basis (see Figure 11). This is the time period of most interest for the air quality analysis. The data from the City's surveys confirm that the overall daily trip generation rates used in the WLC TIA are accurate compared to the measured rates at existing high-cube warehouses in Moreno Valley, while the percentage of trucks used in the WLC TIA are high compared to the locally-measured rates.

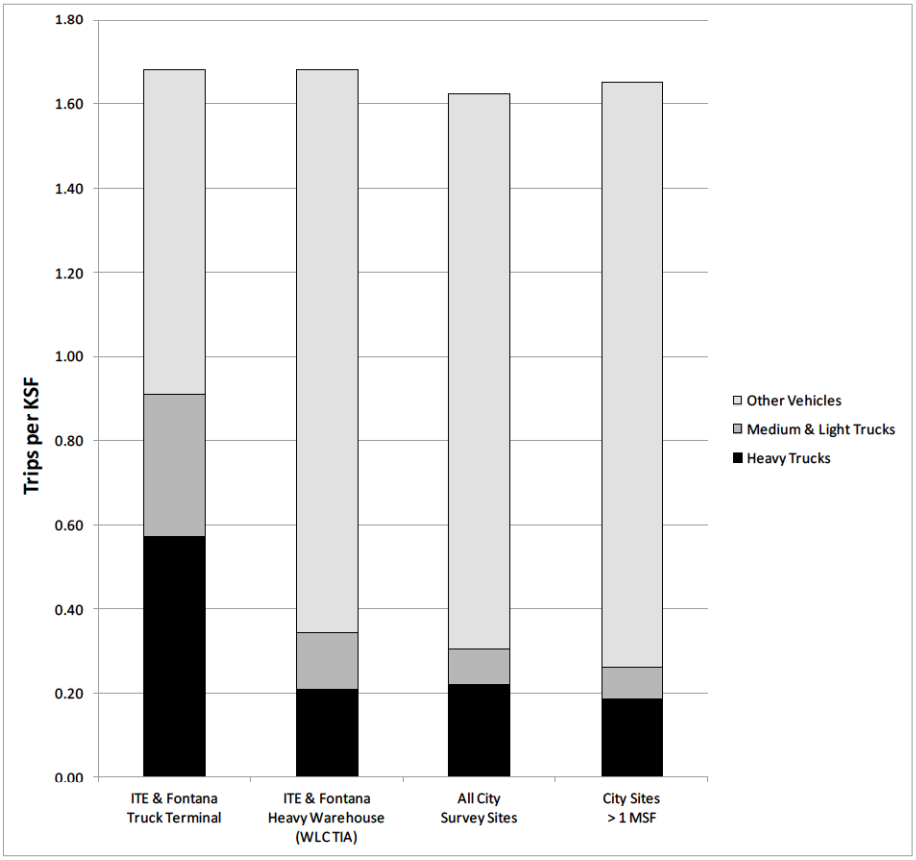

Figure 11: Daily Trip Generation from ITE compared to City Surveys (Trips)

Conclusions from the Comparisons

The trip generation rates from the ITE Trip Generation Manual and the four local sources are compared in Table 8.

Table 8: Comparison of Trip Generation Rates for High-Cube Logistics Warehouses

Data Source	AM Peak Hour	As % of ITE Rate	Ratio ITE/Other	PM Peak Hour	As % of ITE Rate	Ratio ITE/Other
ITE 9th Edition (Code 152)	0.110			0.120		
Fontana Truck Study	0.070	64%	1.57	0.073	61%	1.64
2011 NAIOP Study	0.047	43%	2.34	0.070	58%	1.71
Skechers Counts	0.035	32%	3.14	0.037	31%	3.24
City Survey	0.051	46%	2.16	0.060	50%	2.00

As shown in the table, the ITE trip generation rate is at a minimum 57% higher than any of the locally-measured rates, and is two or three times higher than some of the locally-measured rates. Based on this data, a decision was made to use the ITE rate as a conservative scenario for the WLC project. Readers should therefore bear in mind that because the rate used in the WLC analysis is very high in comparison with all locally-measured rates, and the Project traffic impacts analysis reflects these high rates, the actual traffic impacts of the WLC project are expected to be much less than those identified in this study.

Trip Generation Assumptions for Other WLC Land Uses

The trip generation rates used for other land uses on the WLC site were taken from the ITE *Trip Generation Manual*. The existing homes, which occur in the No-Project scenario, used the rates for ITE land use code 210, Single Family Dwellings. For light logistics uses, ITE code 150, Warehousing, was used, and for the existing utilities servicing stations ITE code 170, Utilities, was used. *Trip Generation Manual* does not have trip generation rates for a fire station so for that use an average rate from three studies was used[9].

Passenger Car Equivalents (PCEs)

The analytical methods used to forecast traffic impacts must take into account the driving characteristics of different classes of vehicles. This is typically done through the use of Passenger Car Equivalents (PCE) factors, which convert the number of heavy vehicles in the traffic stream into an equivalent number of passenger cars. The term PCE was first used in the 1965 *Highway Capacity Manual* (HCM), and was determined by comparing the number of times cars passed trucks to the number of times trucks pass cars. According to the *HCM 2000*:

[9] LLG Engineers, *Peaceful Valley Ranch*, County of San Diego, 2007. Fehr and Peers, *Loyola Marymount University Master Plan Project*, City of Los Angeles Department of Transportation, 2009. McMahon, *Upper Dublin Fire House*, Montgomery County, Pennsylvania, 2010. These were the only recent studies found that offered rates for fire stations.

"The entry of heavy vehicles-that is, vehicles other than passenger cars (a category that includes small trucks and vans)-into the traffic stream affects the number of vehicles that can be served. Heavy vehicles are vehicles that have more than four tires touching the pavement.

Trucks, buses, and recreational vehicles (RVs) are the three groups of heavy vehicles addressed by the methods in this manual. Heavy vehicles adversely affect traffic in two ways:

- *They are larger than passenger cars and occupy more roadway space; and*
- *They have poorer operating capabilities than passenger cars, particularly with respect to acceleration, deceleration, and the ability to maintain speed on upgrades.*

*The second impact is more critical. The inability of heavy vehicles to keep pace with passenger cars in many situations creates large gaps in the traffic stream, which are difficult to fill by passing maneuvers. The resulting inefficiencies in the use of roadway space cannot be completely overcome. This effect is particularly harmful on sustained, steep upgrades, where the difference in operating capabilities is most pronounced, and on two-lane highways, where passing requires use of the opposing travel lane." (*Transportation Research Board, *Highway Capacity Manual 2000*, page 2-5)

Grade is by far the most important determinant in the PCE factor to be used. The HCM's recommended PCE for trucks ranges from 1.5 for places with slopes of less than 2% up to 7.0 for places with steep grades more than a mile long[10]. HCM's recommended PCE factors were used for the WLC freeway analysis.

For the analysis of surface streets, the City's TIA guidelines mandate the use of PCE factors taken from the San Bernardino County CMP, 2003 Update. These are somewhat higher than the HCM rates; for example, HCM recommends two PCEs per heavy truck while the San Bernardino County CMP uses three. This means that the San Bernardino County CMP PCE rates used in the WLC analysis represent a deliberately conservative approach in the sense that the analysis will tend to over-state the impact of trucks on traffic conditions.

B. ANALYTICAL TOOLS

Regional Model

The macro-level traffic forecasting was conducted using the Riverside County Transportation and Analysis Model (RivTAM). RivTAM is a version of the SCAG's latest six-county model with additional detail (traffic analysis zones and local roads) added within Riverside County. It was developed for TIAs in

[10] A PCE factor of 7.0 means that under the stated conditions each truck takes up 7 times as much road capacity as a car would use in level terrain.

Riverside County as a replacement for several older models that covered different portions of the county. RivTAM has both the geographic scope needed to capture all likely impacts and conformity with regional planning assumptions. There is a memorandum of understanding[11] among the jurisdictions of Riverside County that encourages the use of the RivTAM model for TIAs. The MOU reads, in part,

> *"RivTAM was designed to address most city and county level modeling needs in Riverside County. The model inputs and zone system were designed with sufficient detail to support most city/county planning applications. The modeling methodology can support evaluation of a range of highway, HOV, and transit scenarios. The Agencies encourage the use of RivTAM by Cities, other governmental jurisdictions, and private entities for their own transportation planning purposes. Universal use of RivTAM by the Agencies, Cities, other governmental jurisdictions, and private entities, and their consultants will ensure that planning decisions in Riverside County are made on accurate and consistent travel forecasts."* (*MOU for RIVTAM Model Maintenance, Update, and Usage*, page 4)

The use of RivTAM for the analysis in this TIA[12] included the following refinements:

- The traffic analysis zones (TAZs) within the project site were subdivided to allow for a detailed analysis of internal traffic patterns, and the proposed internal road network was substituted for the existing road network for all "with-project" scenarios.
- RivTAM forecasts traffic for two peak periods; a three-hour period in the morning and a four-hour period in the evening. These were converted into forecasts for single peak hours using conversion factors in the *San Bernardino County CMP Appendix H – Post Processed Traffic Volume Guidelines* in accordance with the City's TIA guidelines.
- RivTAM quantifies non-residential developments in units of employees rather than acres or square feet of building space. For developments in the City of Moreno Valley, future developments' acreage was converted into square feet of development using the existing developmental densities in Moreno Valley, and then the square footage was used to estimate the number of employees using the conversion factors in the City's General Plan. For areas outside Moreno Valley the conversion factors used in the Riverside County General Plan were used.

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11 *MOU for RIVTAM Model Maintenance, Update, and Usage*. Not dated, but signed by various parties between June and September, 2010. The signatories were Riverside County Transportation Department, Riverside County Transportation Commission, Western Riverside Council of Governments, Coachella Valley Association of Governments, Southern California Association of Governments, and Caltrans.

12 The modeling data in RIVTAM is based upon modeling information originally developed by the Southern California Association of Governments (SCAG), which has been modified by Parsons Brinckerhoff. The modeling data used in this study does not necessarily reflect the official views or policies of SCAG. Parsons Brinckerhoff is wholly responsible for the modeling results and the content of the documentation.

- In the trip distribution stage of RivTAM the model assigns destinations to the trucks trips originating in the WLC warehouses. Since WLC warehouses are attractors of truck trips as well as generators of truck trips, the model assigns approximately 10% of WLC truck trips to destinations that are other warehouses within the project site. As this does not reflect the WLC's expected operations and might result in an under-estimation of truck trips entering and leaving the WLC site, these internal trips were replaced with an equal number of external trips that were distributed among the routes available to trucks leaving the site. Since some trucks may in fact have deliveries or pick-ups at more than one warehouse within the WLC site this represents a conservative assumption.
- Like other regional travel demand models, RivTAM is designed to forecast movements along paths consisting of links between trip origins and destinations. Therefore post-processing is required to convert the link-level forecasts from RivTAM into turning movements for the intersection-level analysis. The Furness method[13] was used to allocate approach volumes among the possible turning movements based on traffic counts of existing traffic patterns.
- The RivTAM model was calibrated to ensure that its forecasts are reasonable. Nevertheless, a model covering a six-county area cannot be expected to be perfectly accurate on each of the hundreds of thousands of links in the model. For that reason, best industry practice is to use the model to forecast the change in traffic volumes and add this change to existing traffic volumes, rather than using the forecast volumes directly from the model. This technique, called the "difference method", was used in this TIA[14]. The difference method eliminates certain types of imperfections in the forecast of background traffic and so improves the accuracy of traffic forecasts.
- To ensure that vehicle trips were not under-estimated, it was also assumed that no trips would be taken by transit. This is another conservative assumption since the WLC would be designed to accommodate bus routes and it is expected that transit service would be provided once the project reaches a transit-supportable level of development.

In summary, RivTAM was used to provide accurate forecasts of project impacts on the regional road network. Several highly conservative assumptions were used to ensure that the TIA over-estimated rather than under-estimated impacts.

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[13] The Furness method is a technique for balancing the forecast turning movements in such a way as to match both the total approach volume and the total departure volume for each leg predicted in the traffic model. Furness K.P. *Time Function Interaction*. Traffic Engineering and Control, Vol. 7, No. 7, 1970, pp. 19-36

[14] This is the "difference method" described in NCHRP Report 255 *Highway Traffic Data for Urbanized Area Project Planning and Design*, Transportation Research Board, 1982.

Manual Trip Generation and Assignment for Fueling Station

The project includes a fueling station and convenience store intended to serve the needs of truckers picking up or delivering cargos at the WLC site. Traffic to the fueling station/convenience store was estimated using the ITE trip generation rates separately for the refueling function (ITE code 945, Gas Station with Convenience Store, measured in pumps) and the convenience store function (ITE code 851, Convenience Store, measured in square feet). In accordance with industry practice a 30% reduction was made for trips going to both the refueling pumps and the convenience store, and 84% of traffic to the facility was categorized as either pass-by trips or diverted linked trips[15]. These are trips that stop at the fueling station as a side trip during the course of a primary trip or from their primary destination in the WLC. Figure 12 shows examples of diverted linked trip paths for inbound trucks going to WLC destinations at the north and south end of the WLC site. All of the trips to and from the fueling station were manually added to the traffic forecast produced by RivTAM.

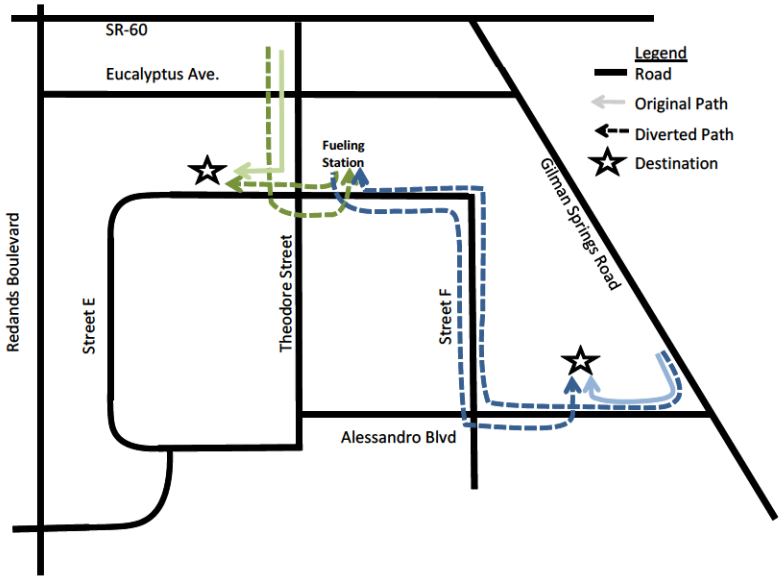


Figure 12: Examples of Routes Taken by Diverted Linked Trips

Definition of LOS

The HCM defines level of service as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility, ranging from "A" for the best operating conditions to "F" for the worst, based on driver's perceptions of those conditions. Most jurisdictions have adopted policies that set target levels of LOS for road facilities under their control.

[15] See ITE *Trip Generation Handbook 2nd Edition*, page 29.

Daily Roadway LOS

For the road segments affected by the proposed General Plan amendment, a roadway segment analysis was performed consistent with the City of Moreno Valley *Traffic Impact Analysis Preparation Guide* using the daily capacity standards identified in the Guide and shown in Table 9.

Table 9: Level of Service (LOS) Thresholds for Surface Streets in Moreno Valley

Type of Roadway	Level of Service*				
	LOS A	LOS B	LOS C	LOS D	LOS E
6-Lane Divided Arterial	33,900	39,400	45,000	50,600	56,300
4-Lane Divided Arterial	22,500	26,300	30,000	33,800	37,500
4-Lane Undivided Arterial	15,000	17,500	20,000	22,500	25,000
2-Lane Industrial Collector	7,500	8,800	10,000	11,300	12,500
2-Lane Undivided Residential	N/A	N/A	N/A	N/A	2,000
* Maximum Average Daily Traffic (ADT)					
Source: City of Moreno Valley *Traffic Impact Analysis Preparation Guide* , 2007					
Note: These roadway capacities are "rule of thumb" estimates for planning purposes. The LOS "E" service volumes are estimated maximum daily capacity for respective classifications. Capacity is affected by such factors as intersections (spacing, configuration, and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic), and pedestrian and bicycle traffic.					

Gilman Springs Road is a Riverside County facility and so the County LOS thresholds would apply for this study road segment. These thresholds are shown on Table 10[16].

Table 10: Riverside County LOS Thresholds for Surface Streets

Type of Roadway	Level of Service(1)		
	LOS C	LOS D	LOS E
8-Lane Urban Arterial	57,400	64,600	71,800
6-Lane Urban Arterial	43,100	48,500	53,900
4-Lane Urban Arterial	28,700	32,300	35,900
2-Lane Collector	10400	11700	13,000
Notes: All capacity figures are based on optimum conditions and are intended as guidelines for planning purpose only. (1) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.			
Source: County of Riverside General Plan, Circulation Element, 2008			

[16] Road types not relevant to this study are not shown.

Intersection LOS

The LOS analysis of study intersections was performed using the methodology described in the Highway Capacity Manual (HCM) 2010 Chapter 16, for signalized intersections, and Chapter 17 for unsignalized intersections. The computations were performed using Synchro computer software with the settings specified in the City's *Traffic Impact Analysis Preparation Guide*. Synchro defaults were used as appropriate with the standard saturation flow rate of 1900 vehicles/hour and zero percent grade for the signalized intersections. Signal timings were optimized within Synchro and considered uncoordinated except for the following corridors which were identified by the City of Moreno Valley to be coordinated:

- Alessandro Blvd. from Old 215 Frontage Rd. to Kitching St.
- Cactus Ave. from SR 215 Ramps to Lasselle St.
- Ironwood Ave. from Moreno Beach Dr to Redland Blvd.
- Perris Blvd. from Iris Ave. to Krameria Ave.
- Arlington Blvd. from SR-91 WB Ramps to Victoria Ave
- Alessandro Blvd from Sycamore Canyon Blvd to SR-215 NB Ramps
- Martin Luther King Jr. Blvd. from Canyon Crest Dr to SR-60 EB Ramp
- Central Ave. from Lochmoor Dr to SR-60 WB Ramps
- The Ramona Expressway in the City of Perris
- Perris Blvd. in the City of Perris

A cycle length of 120 seconds was used for all coordinated signals. Cycle lengths were maintained at 120 seconds or less with a 3 second yellow and a one-second all red for consistency. Except for the existing conditions scenario which uses actual traffic and truck counts, all future scenario volumes were calculated in PCEs therefore the heavy truck percentage in Synchro was set to zero to avoid double-counting truck trips.

The HCM LOS thresholds for signalized and unsignalized intersections are shown in Table 11. Note that a lower boundary is defined for LOS "F" but no upper boundary is defined. In cases where the forecast delay is greater than 180 seconds drivers would tend to divert to other routes, change their time of travel, select an alternate destination (for example choose to shop at a different store) or change their behavior in other ways that are not well represented in the HCM methodology. For that reason results over 180 seconds are not meaningful and so the results are shown simply as ">180".

Table 11: LOS Thresholds for Signalized and Unsignalized Intersections

Level of Service	Description	Average Control Delay (seconds/vehicle)	
		Signalized	Unsignalized & Roundabouts
A	Very low control delay. Progression is very favorable; most vehicles do not stop.	≤ 10	≤ 10
B	Low delay with good progression and/or short cycle lengths.	> 10 to 20	> 10 to 15
C	Moderate delay resulting from fair progression and/or longer cycle times. Some vehicles may not clear intersection in one green phase.	> 20 to 35	> 15 to 25
D	Longer control delays with noticeable congestion. Many vehicles stop and the proportion not served by the first green phase rises.	> 35 to 55	> 25 to 35
E	High delay due to poor progression, long cycle lengths, or both.	> 55 to 80	> 35 to 50
F	Intersection oversaturated; arrival rates exceed intersection capacity so queues build up.	> 80	> 50
Source: *Highway Capacity Manual 2000* , Transportation Research Board, 2000			
Note: For signalized intersections and roundabouts the LOS is based on the average for all vehicles entering the intersection. For unsignalized intersections the LOS is based on the delay for the worst-performing approach.			

Freeway LOS

The freeway LOS was determined using the density analysis methodology in the HCM. The capacities are based on information contained in the HCM and the Caltrans Ramp Meter Design Manual. Freeway terrains were determined by comparing the grades found in Google Earth Pro to the HCM definitions for level, rolling and mountainous terrain. Existing count data were obtained from Caltrans for the freeway mainline volumes. Three types of freeway facilities were analyzed, namely:

- Freeway mainline levels of service are determined from segment density.
- Freeway weaving is defined as the crossing of two streams of traffic traveling in the same direction along a significant length of highway without the aid of traffic control devices. The weaving analysis used the most current version of the HCM to find the density for the weaving area within the freeway segment and the corresponding LOS.

- The ramp merge and diverge analysis was performed by applying Highway Capacity Software (HCS), the electronic version of the HCM for freeway-to-arterial interchanges. The HCM methodology for ramp areas focused on an influence area of 1,500 feet, including the acceleration or deceleration lane and adjacent freeway lanes.

Table 12 presents the correlation between LOS and density in terms of passenger cars per mile per lane (pc/mi/ln) for various types of freeway facilities.

Table 12: Caltrans Freeway LOS Criteria

LOS	Basic Freeway Segment Denstiy	Freeway Weaving Segment Density	Freeway Ramp Density
	(pc/mi/ln)	(pc/mi/ln)	(pc/mi/ln)
A	0-11.0	≤ 10.0	≤ 10.0
B	11.0 – 18.0	> 10.0 and ≤ 20.0	> 10.0 and ≤ 20.0
C	18.0 – 26.0	> 20.0 and ≤ 28.0	> 20.0 and ≤ 28.0
D	26.0 – 35.0	> 28.0 and ≤ 35.0	> 28.0 and ≤ 35.0
E	35.0 – 45.0	>35.0 and ≤ 43.0	> 35.0
F	> 45.0	> 43.0	Demand Exceeds Capacity

C. PERFORMANCE CRITERIA

The study area for surface streets includes intersections located in seven jurisdictions. Each of these jurisdictions has established a target level of service for use in traffic impact studies, which are shown in Table 13.

Table 13: Intersection LOS Standards by Jurisdiction

Jurisdiction	Type of Facility	# of Study Intersections	LOS Standard
Moreno Valley	Intersections adjacent to freeways or employment centers	57	D
	All other intersections	14	C
Beaumont	Most intersections	2	C
	Intersections with major highways	2	D
Perris	Intersections with SR-74, Ramona Exp, or I-215	5	E
	Expressway/arterial intersections	10	D
	All other intersections	6	C
Redlands	Intersections currently operating at "D" or worse	1	Existing LOS
	All other intersections	2	C
Riverside (County)	Most intersections*	7	C
	Intersections with Ramona Expressway	2	D
Riverside (City)	Intersections of collectors or higher roads	27	D
San Jacinto	Arterial intersections	1	D
Caltrans	State highway facilities currently operating at LOS "E" or "F"		Existing Density
	State highway facilities		D

* Intersections between arterials, highways, expressways, and freeway ramps within community development areas are allowed LOS "D" as an exception.

A project's impact on an intersection is considered significant if the project adds more than 50 peak-hour trips to a surface street or 100 peak-hour trips to a freeway and it would either cause the LOS to exceed the target level set by the jurisdiction or, if the LOS in the no-project condition would already exceed the target LOS level, if the project causes an increase in traffic delay beyond the no-project condition.

Caltrans has established LOS D as the threshold of significance for freeway mainline segments and freeway ramps in the corridors relevant to this study. It is Caltrans policy that if an existing state facility is operating at less than the appropriate target LOS, the existing measure of effectiveness should be maintained. Caltrans uses traffic density (passenger-cars per mile per lane) as the measure of effectiveness for freeways, so if a freeway facility currently operates at LOS "E" or "F" then a project that would increase the traffic density on that facility would be deemed to have a significant impact.

3. TRANSPORTATION SETTING

A. PROJECT SITE

The World Logistics Center (WLC) project area is located in the northwestern Riverside County in the Rancho Belago area, within the eastern portion of the City of Moreno Valley. The proposed project is situated south of State Route 60 (SR-60), between Redlands Blvd. and Gilman Springs Rd. (the easterly City limit), extending to the southerly City limit. Figure 13 depicts the location of the proposed project within the region.

Existing Land Uses

At the present time, the project area is largely undeveloped land. There are seven single-family homes in various locations along with associated ranch/farm buildings within the area. Most of the area has been used intermittently for dry farming since the early 1900s, and much of it continues to be used for dry farming. San Diego Gas & Electric operates a natural gas compressor station, known as the Moreno Compressor Station, on 19 acres in the southern portion of the project area. Southern California Gas Company operates a valving, metering, and pipe cleaning station on a one-acre parcel in the south-central portion of the project area.

The major roadways that currently provide access to the project area are SR-60, Redlands Blvd., Alessandro Blvd., Gilman Springs Rd. and Theodore St. SR-60 is a highway running in a 70-mile-long east-west alignment from Beaumont to Los Angeles. The portion of SR-60 that forms the northern boundary of the project currently has two lanes in each direction of travel. Redlands Blvd. and Theodore St. are north-south collector roadways that intersect with SR-60. Alessandro Blvd. is an east-west thoroughfare that runs through Moreno Valley from Interstate-215 on the west end to Gilman Springs Rd. on the east end. Gilman Springs Rd. runs in a northwesterly-southeasterly direction connecting SR-60 to the Hemet-San Jacinto area and beyond. Redlands Blvd., Theodore St., Alessandro Blvd., and Gilman Springs Rd. all currently have one lane for each direction of travel.

The areas adjacent to the east and south boundaries of the project area are mostly undeveloped. The area east of the project, commonly referred to as the Badlands, is a rugged area that separates the City of Moreno Valley from San Timoteo Canyon and the City of Beaumont. Due to its steep slopes and canyons, the Badlands area has had little development; however there are several single-family homes in this area east of Gilman Springs Rd. The Badlands Sanitary Landfill, operated by the County of Riverside Waste Management Department, is located approximately 1.5 miles northeast of the project area.

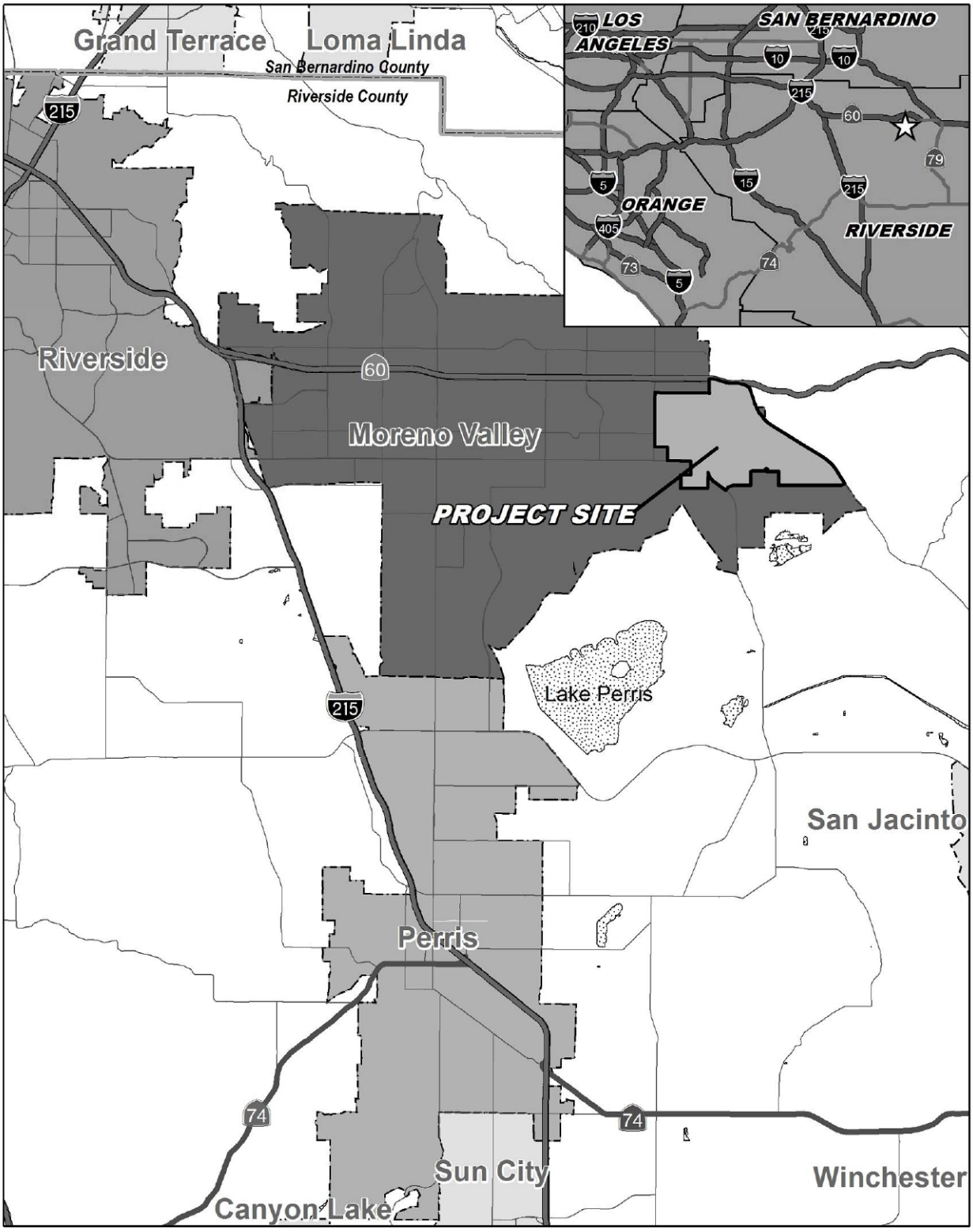


Figure 13: Project Location

Directly south of the proposed project is the San Jacinto Wildlife Area (SJWA), which includes the Upland Game Hunting Area and the Lake Perris State Recreation Area. These are state-owned lands and access to these areas is restricted. The SJWA is owned and operated by the California Department of Fish and Wildlife and comprises approximately 20,000 acres of restored wetland and ponds. The Lake Perris State Recreation Area is owned and operated by the California State Parks Department and comprises approximately 9,000 acres of open space land, which is used both for recreation and for the preservation of the native southern California landscape.

Highland Fairview Corporate Park (HFCP), located north and west of the project area between Redlands Blvd. and Theodore St., is currently under development, with the first phase (the Skechers building) completed in late 2011. The area north of SR-60 is largely undeveloped, with clusters of low density residential uses within the Moreno Valley city limits.

To the west of the proposed project is the more developed portion of the City of Moreno Valley. There are existing single family homes located west of Redlands Blvd. Near the southwest corner of the proposed project there is an existing residential neighborhood at the intersection of Redlands Blvd. and Alessandro Blvd.; a small market and a post office are also located near this intersection. The Moreno Valley Ranch and Golf Club residential community is approximately one mile southwest of the project area.

B. EXISTING TRANSPORTATION FACILITIES

The analysis of existing conditions provides a basis for comparison with the forecasted future conditions with the proposed project.

The existing road system serving the project site consists of:

- Theodore St., a 2-lane undivided arterial running in a north-south direction through the center of the project.
- Alessandro Blvd., a 2-lane undivided arterial running in an east-west direction through the southern half of the project. Alessandro Blvd. has a discontinuity at Theodore St., with its eastern portion intersecting Theodore St. approximately 600 feet north of where the western section intersects Theodore St.
- State Route 60 (SR-60), which runs in a generally east-west alignment from the I-110 in Los Angeles to I-10 in Beaumont. The portion of SR-60 running along the northern edge of the project has two travel lanes per direction.

- Fir (future Eucalyptus) Ave. is part-way through the process of conversion from a 2-lane minor arterial into a portion of Eucalyptus Ave., which would ultimately be a 4-lane arterial. The westbound direction along the HFCP (Skechers) site currently has two lanes while the eastbound direction has one. Fir (future Eucalyptus) is closed between HFCP and Redlands Blvd. with a gate allowing only emergency vehicles to pass.
- Redlands Blvd. is a 2-lane minor arterial running in a north-south direction along a portion of the western edge of the project.
- Gilman Springs Rd. is a 2-lane undivided arterial running in a northwest-southeast direction alongside the eastern edge of the project.
- Dracaea Ave. is a discontinuous east-west residential street providing access to several existing houses on the project site.
- Cottonwood Ave. is a short east-west residential street providing access to several houses on the project site.
- Virginia St. is a north-south access road serving a utilities site. The portion south of Alessandro Blvd. is paved while the portion north of Alessandro Blvd. is unpaved.
- Eucalyptus Ave. is an unpaved service road running east-west between Theodore St. and Gilman Springs Rd.
- Sinclair St. is currently an unimproved right-of-way running north-south between Theodore St. and Redlands Blvd.

A short section of Redlands Blvd. from Dracaea Ave. to McAbee Ave. has sidewalks and a bicycle lane, as does the westbound portion of Fir (Eucalyptus) Ave. fronting HFCP. A class 1 mixed-use trail runs along the east side of Redlands Blvd. from McAbee Ave. to Dracaea Ave. These are the only roads with sidewalks or bicycle lanes. At the present time there is no bus or other transit service to the project site.

Truck Routes

Cities and counties in California have the authority to adopt codes that restrict the use of trucks on public roadways, though not all jurisdictions choose to do so. Figure 14 shows the designated truck routes in the vicinity of the WLC. The Cities of Moreno Valley and Perris have designated specific routes while the County of Riverside does not (i.e. trucks may use any County road, though truck parking restrictions may apply). The City of Riverside does not designate truck routes but instead identifies roadways where trucks are not allowed (mostly residential streets). There are no restrictions on truck usage of the state highway system.

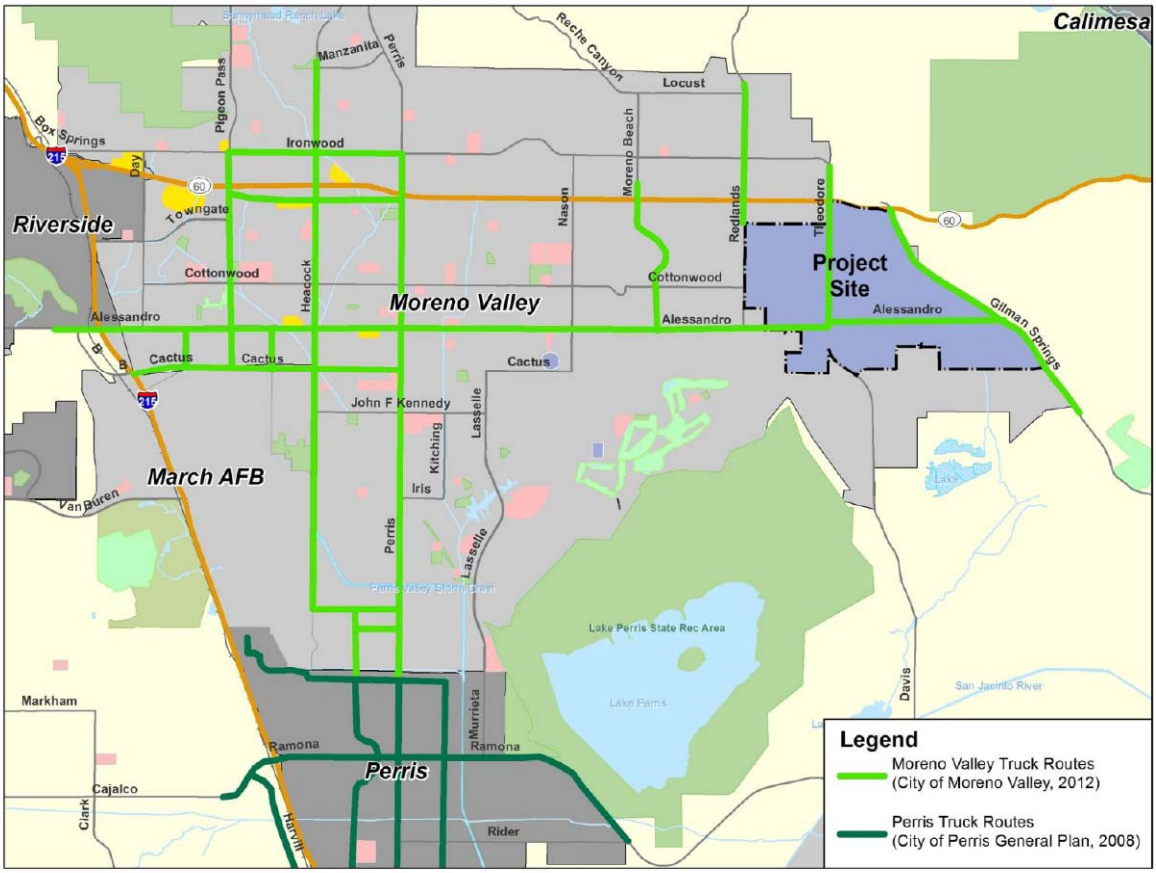


Figure 14: Existing Designated Truck Routes

Transit Services

Transit services in the area are provided by the Riverside Transit Agency, which operates several bus routes in the City of Moreno Valley. Figure 15 displays the Riverside Transit Agency's existing routes in the area. The bus routes do not currently provide service in the vicinity of the project site.

Figure 15: Existing Transit Services in Moreno Valley
(Source: Riverside Transit Agency System Map)

C. EXISTING TRAFFIC VOLUMES

Traffic counts for turning movements in the AM and PM peak hours were collected for study intersections during typical workdays in 2011 and 2012. Figure 16 provides a key diagram for the location of each study intersection in the intersection turning volume graphics, including Figure 17 (and similar figures for other scenarios) which shows the turning movement volumes under Existing Conditions. The traffic counts are reported in detail in Appendix A. In situations where an intersection does not exist in the scenario the intersection is marked “Future”, if it will be built later, or “Non-Existent” if had existed but has been replaced by an intersection in a different location.

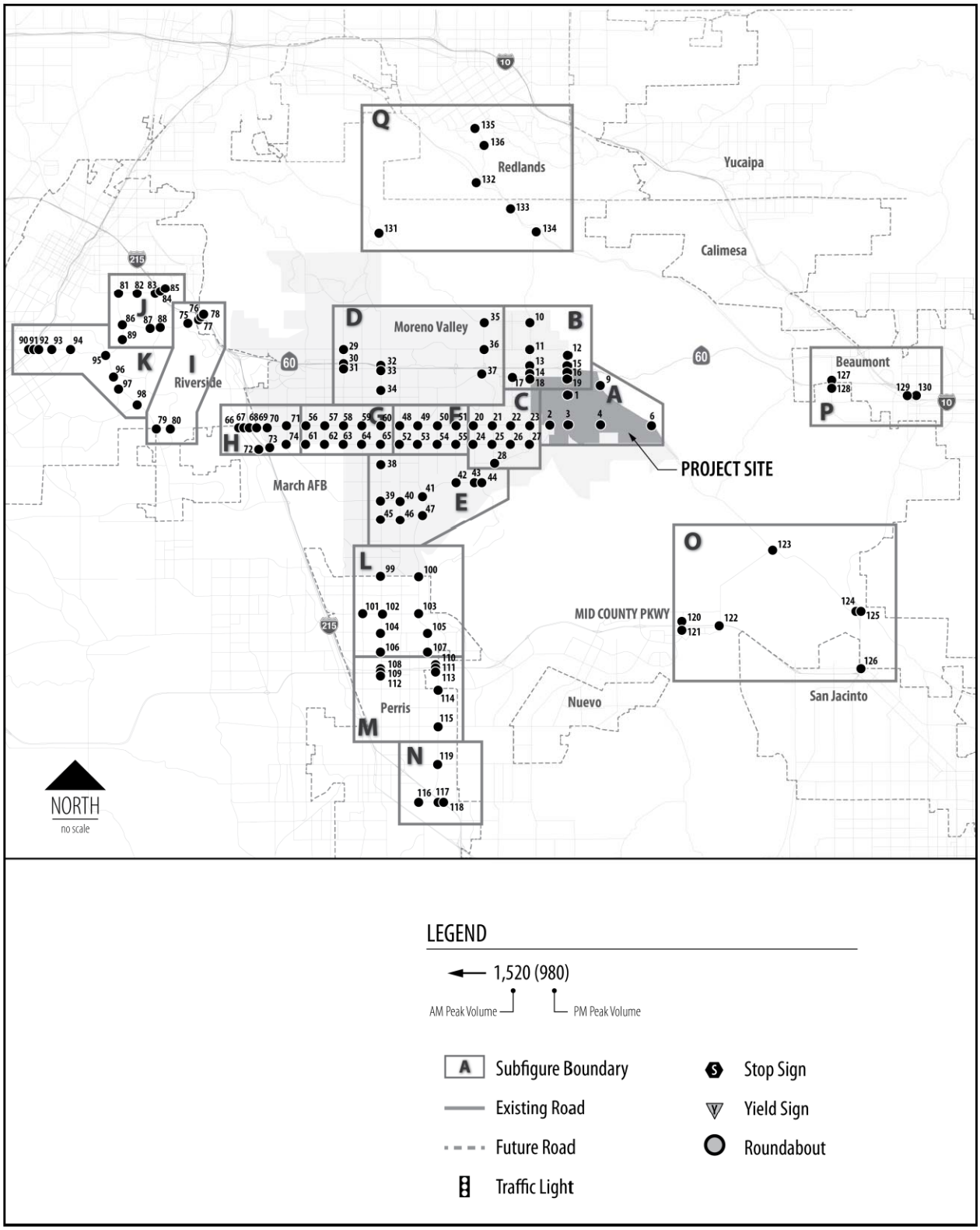


Figure 16: Study Intersections

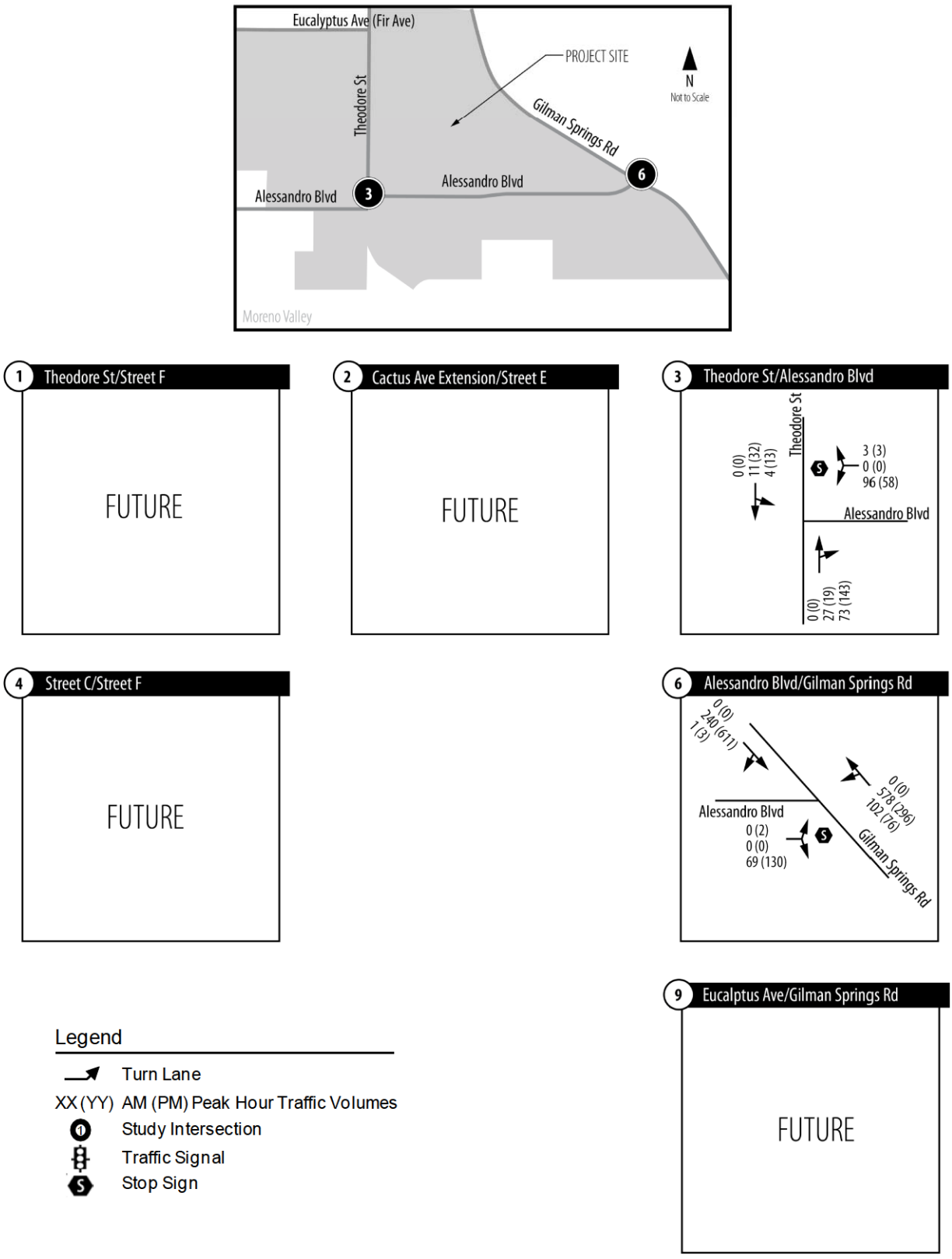


Figure 17: Turning Movement Volumes under Existing Conditions

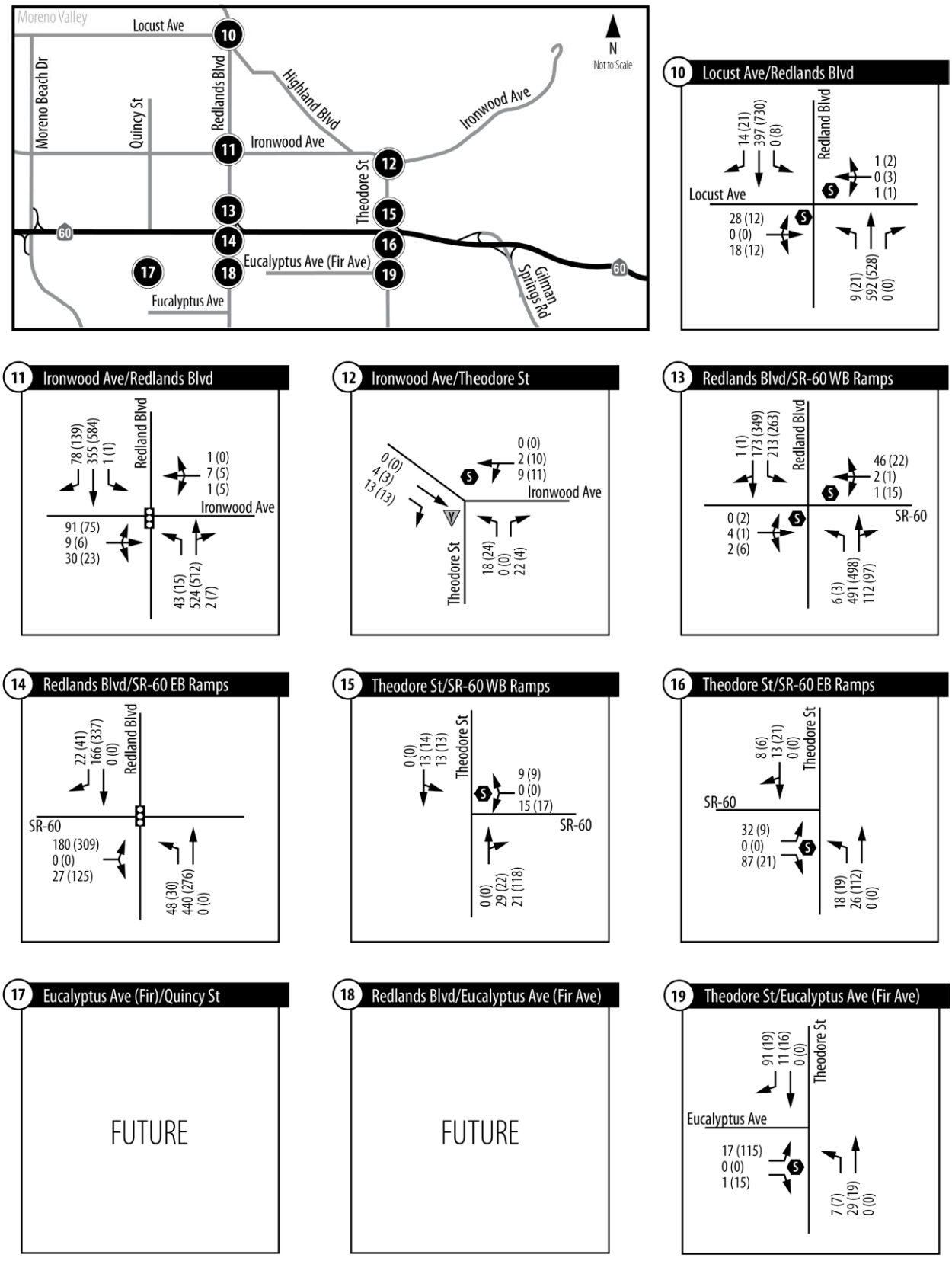


Figure 17: Turning Movement Volumes under Existing Conditions (B)

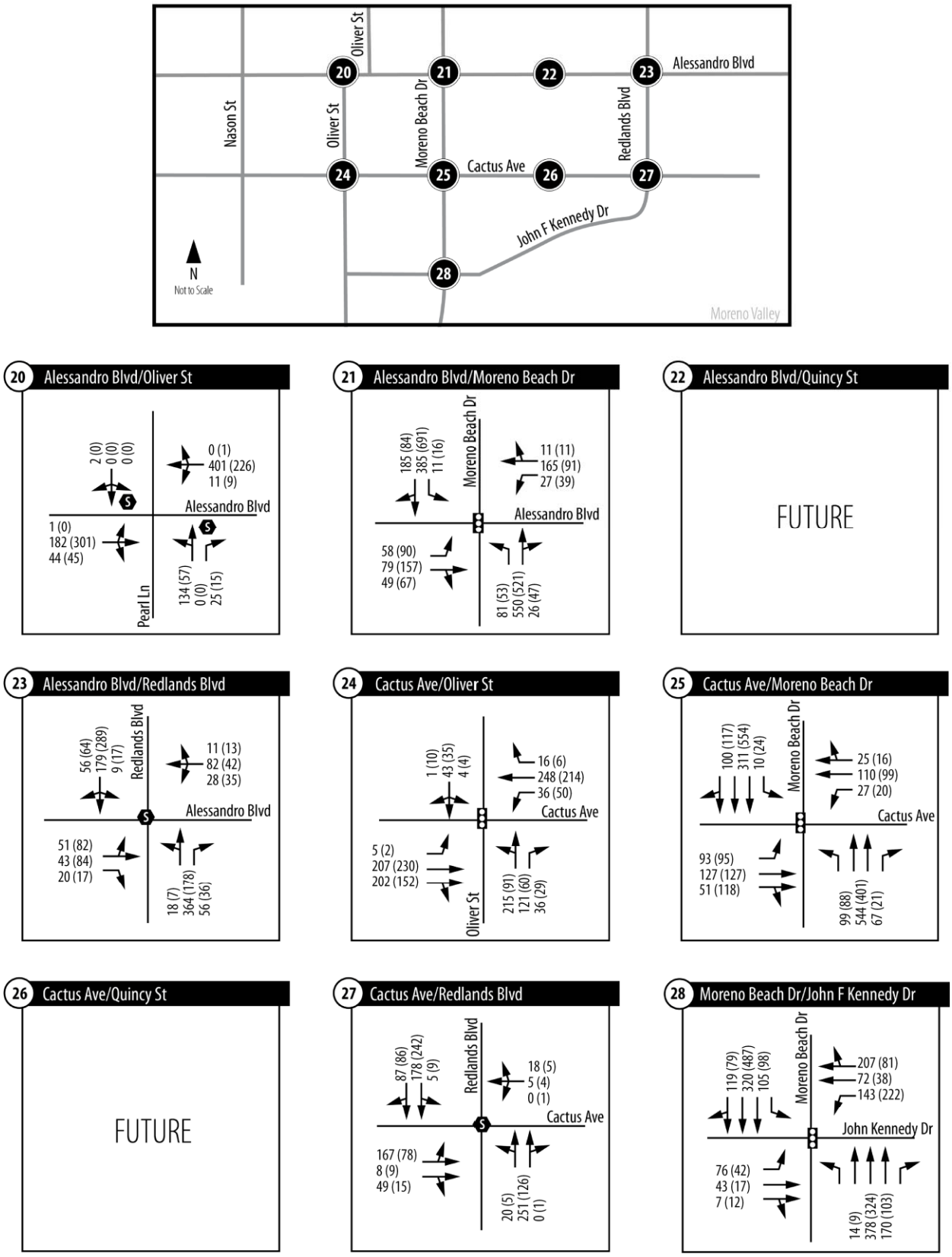


Figure 17: Turning Movement Volumes under Existing Conditions (C)

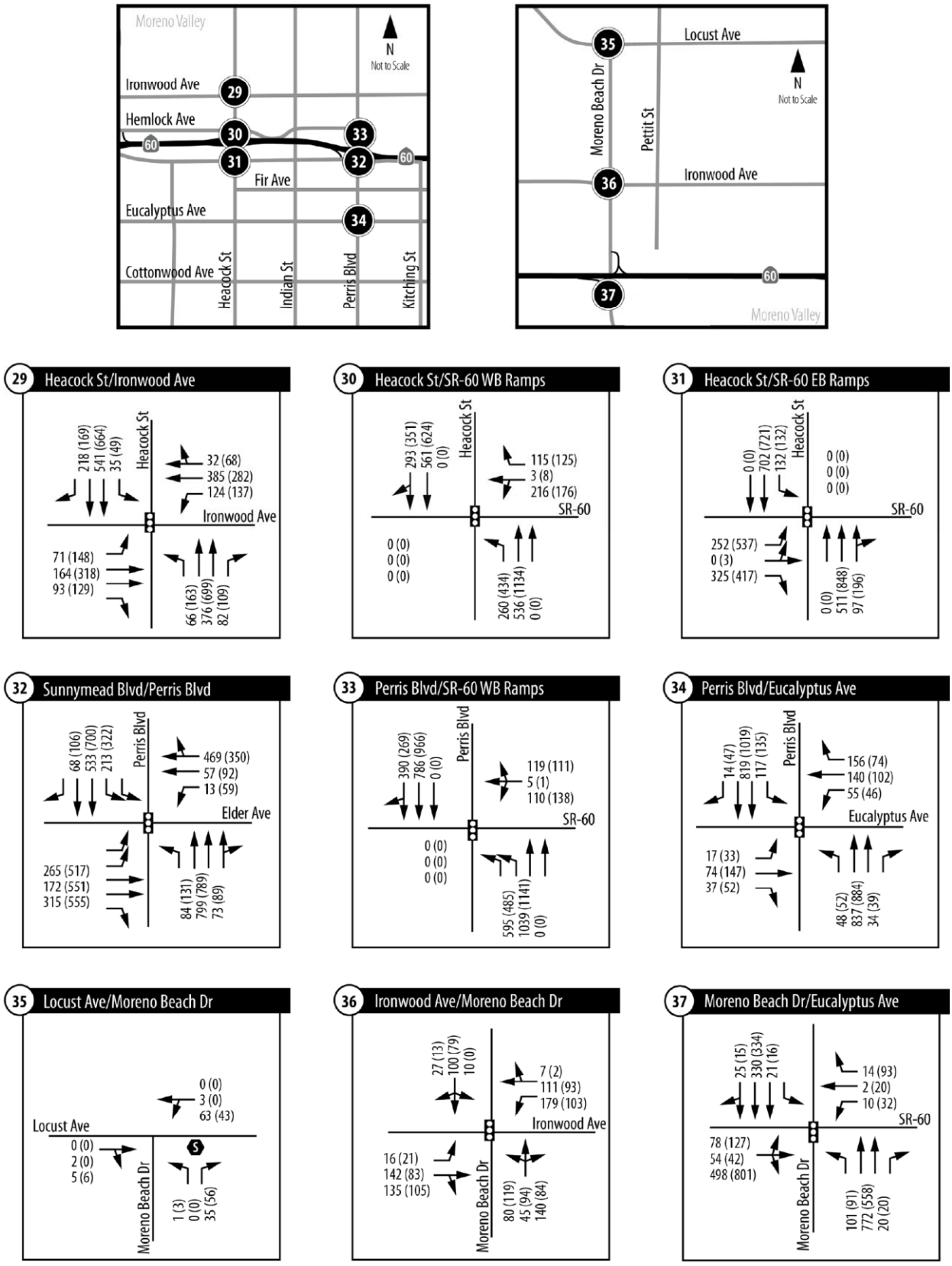


Figure 17: Turning Movement Volumes under Existing Conditions (D)

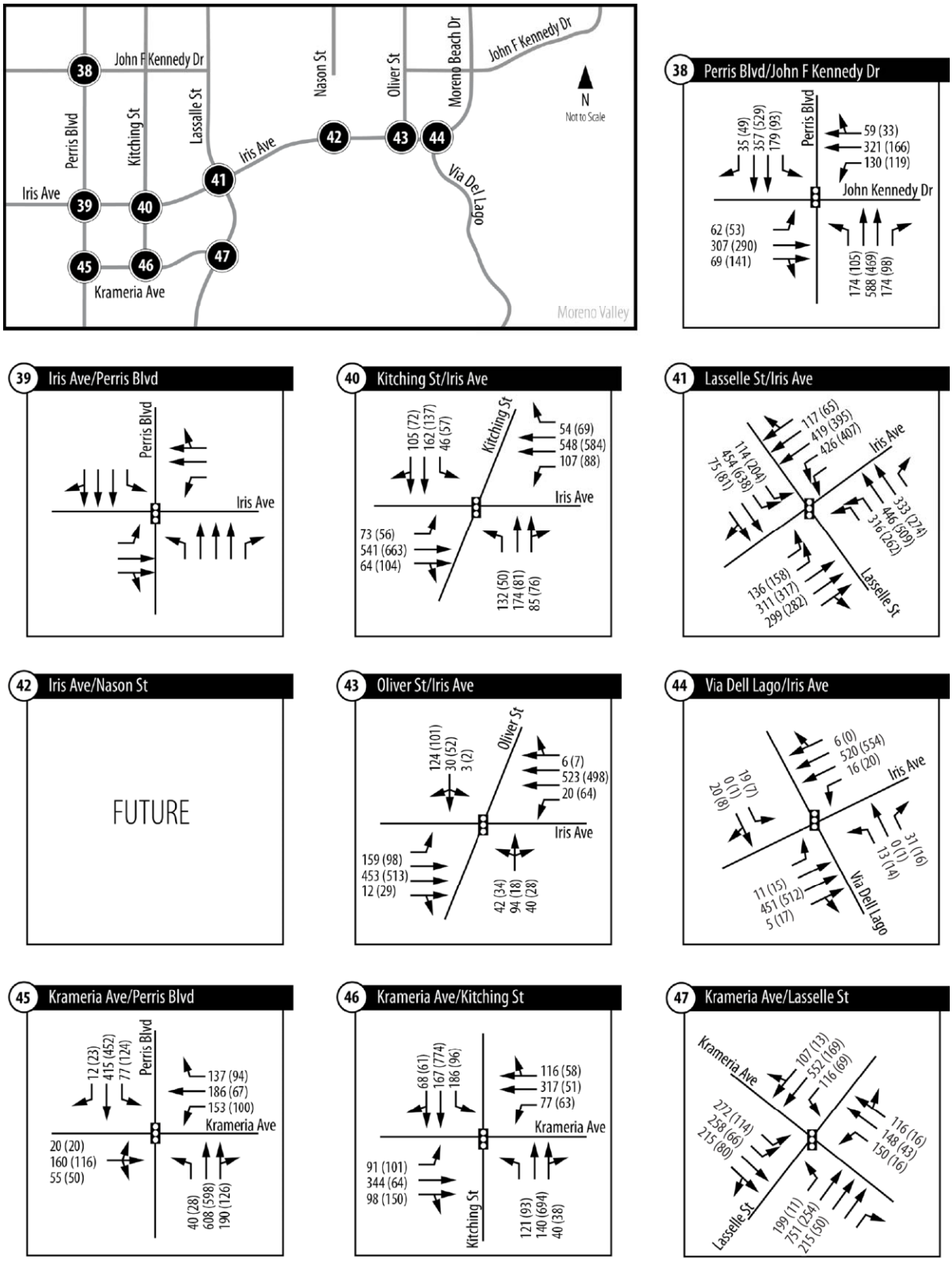


Figure 17: Turning Movement Volumes under Existing Conditions (E)

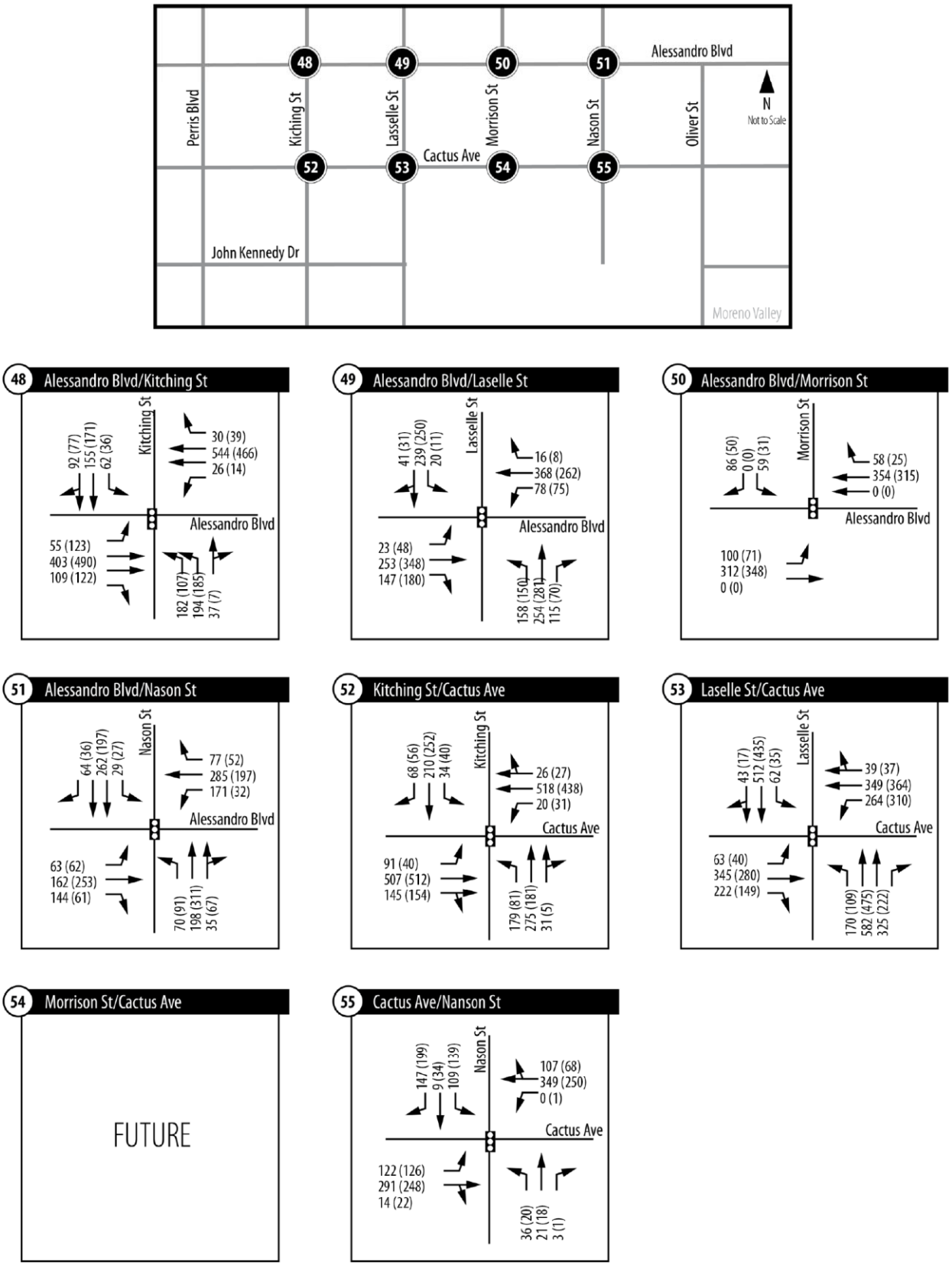


Figure 17: Turning Movement Volumes under Existing Conditions (F)

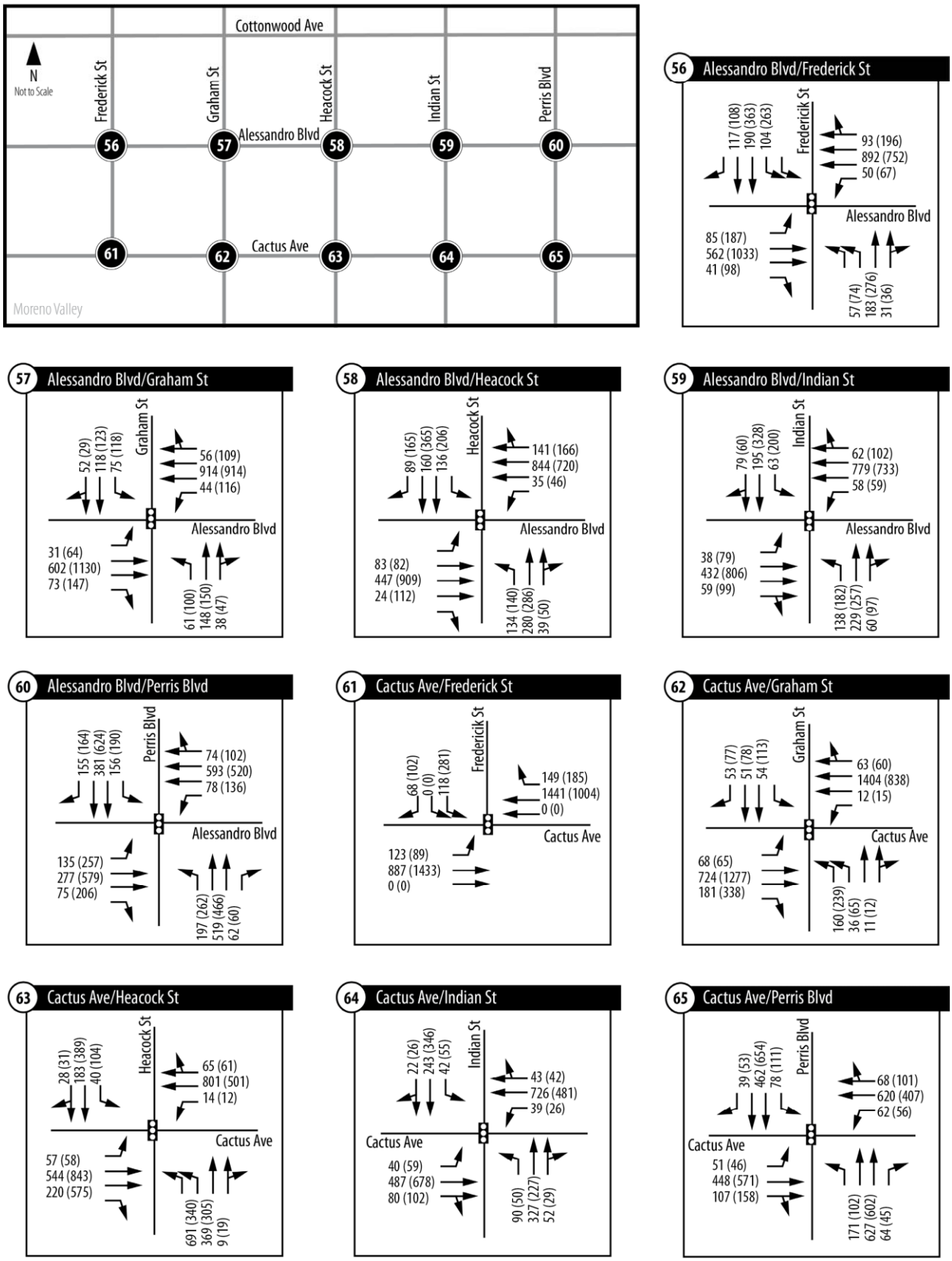


Figure 17: Turning Movement Volumes under Existing Conditions (G)

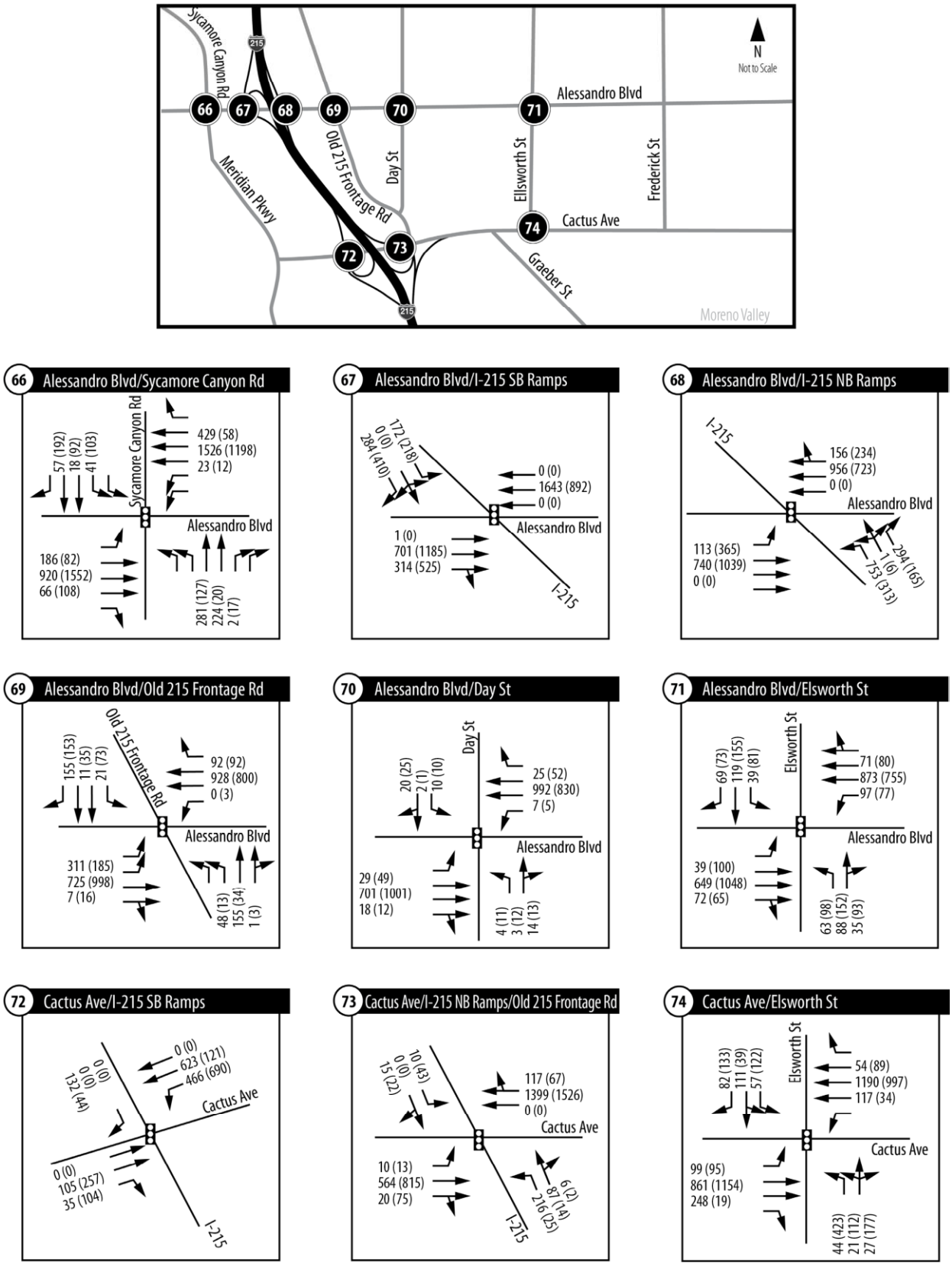


Figure 17: Turning Movement Volumes under Existing Conditions (H)

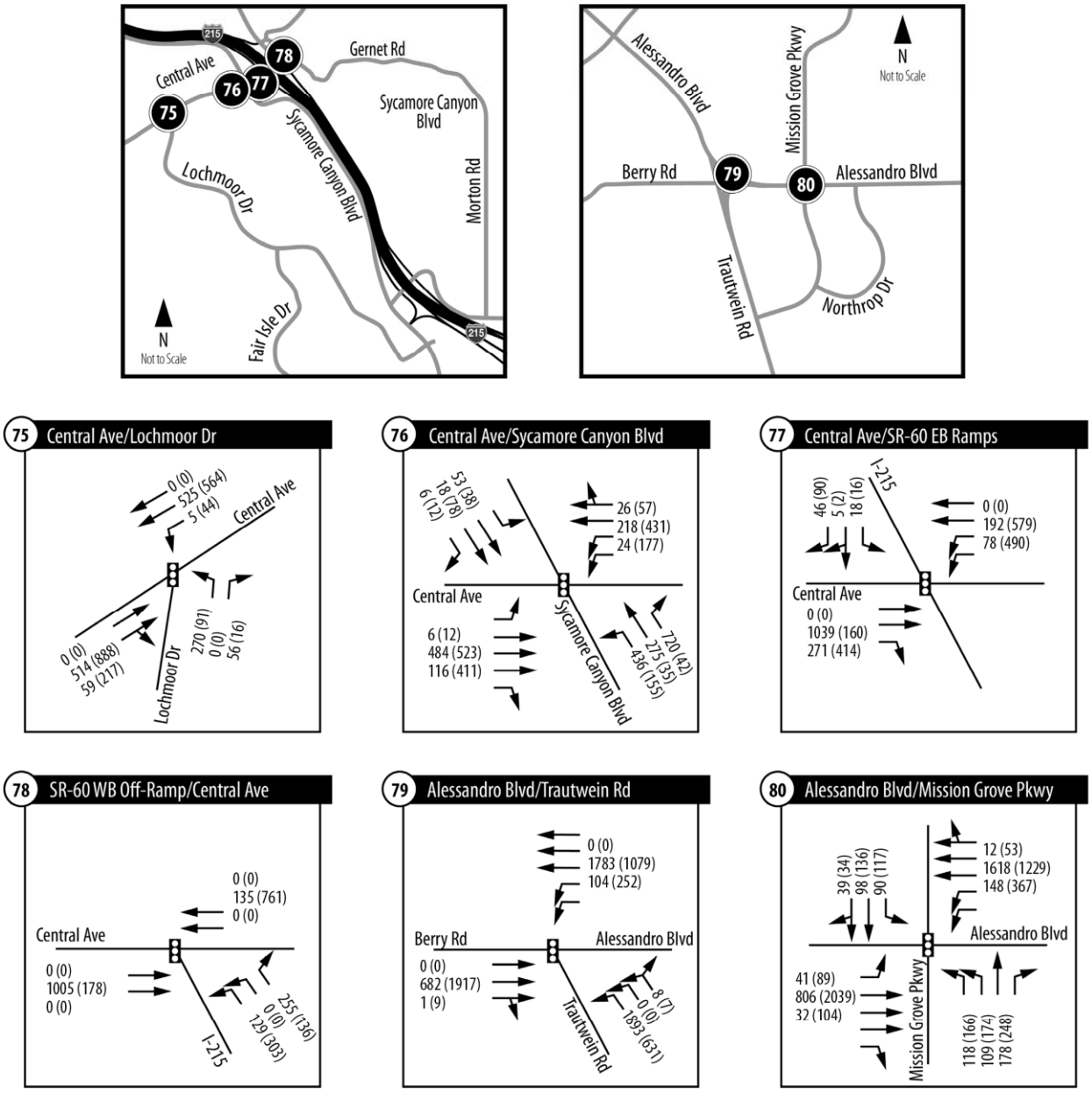


Figure 17: Turning Movement Volumes under Existing Conditions (I)

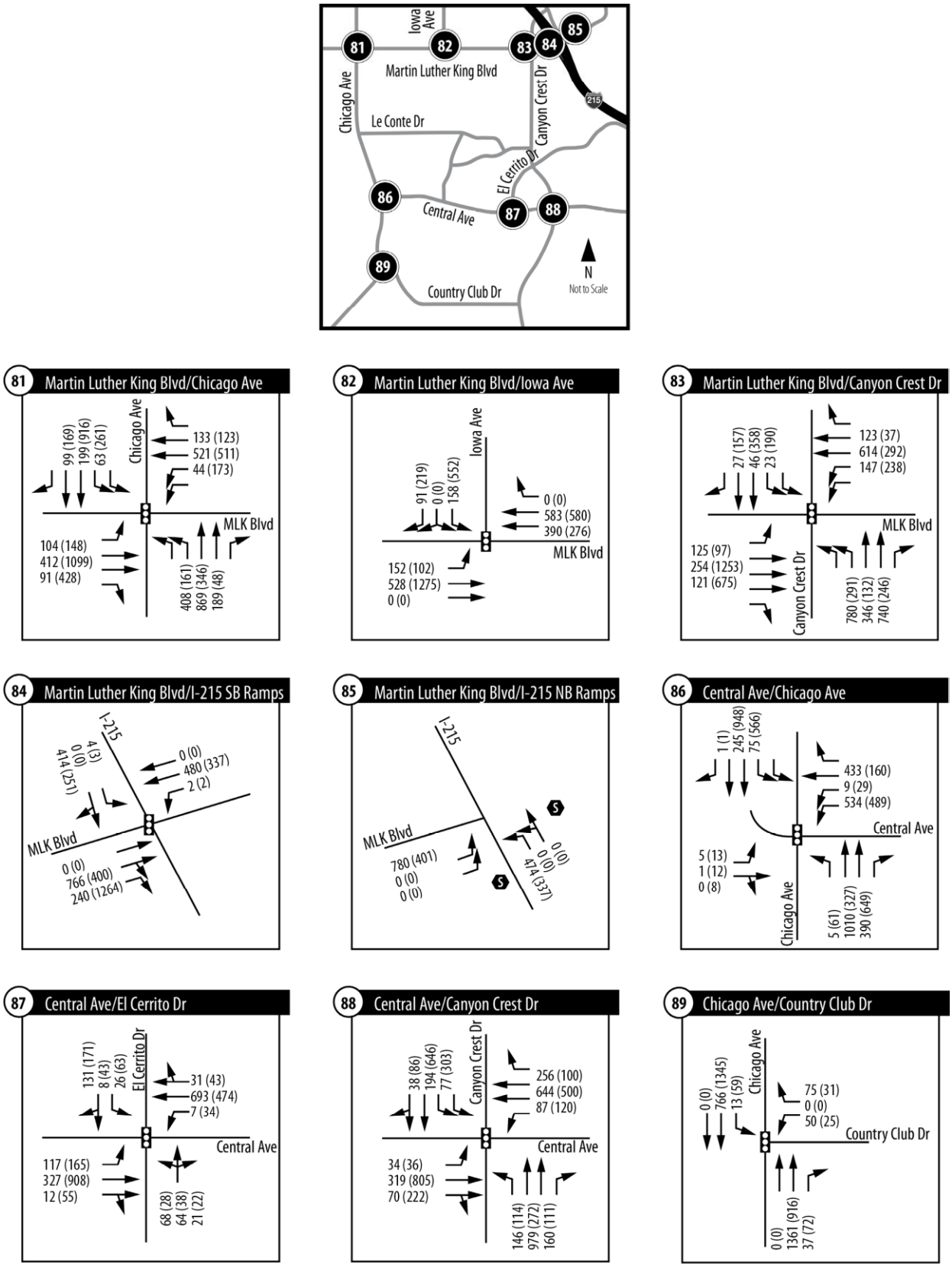


Figure 17: Turning Movement Volumes under Existing Conditions (J)

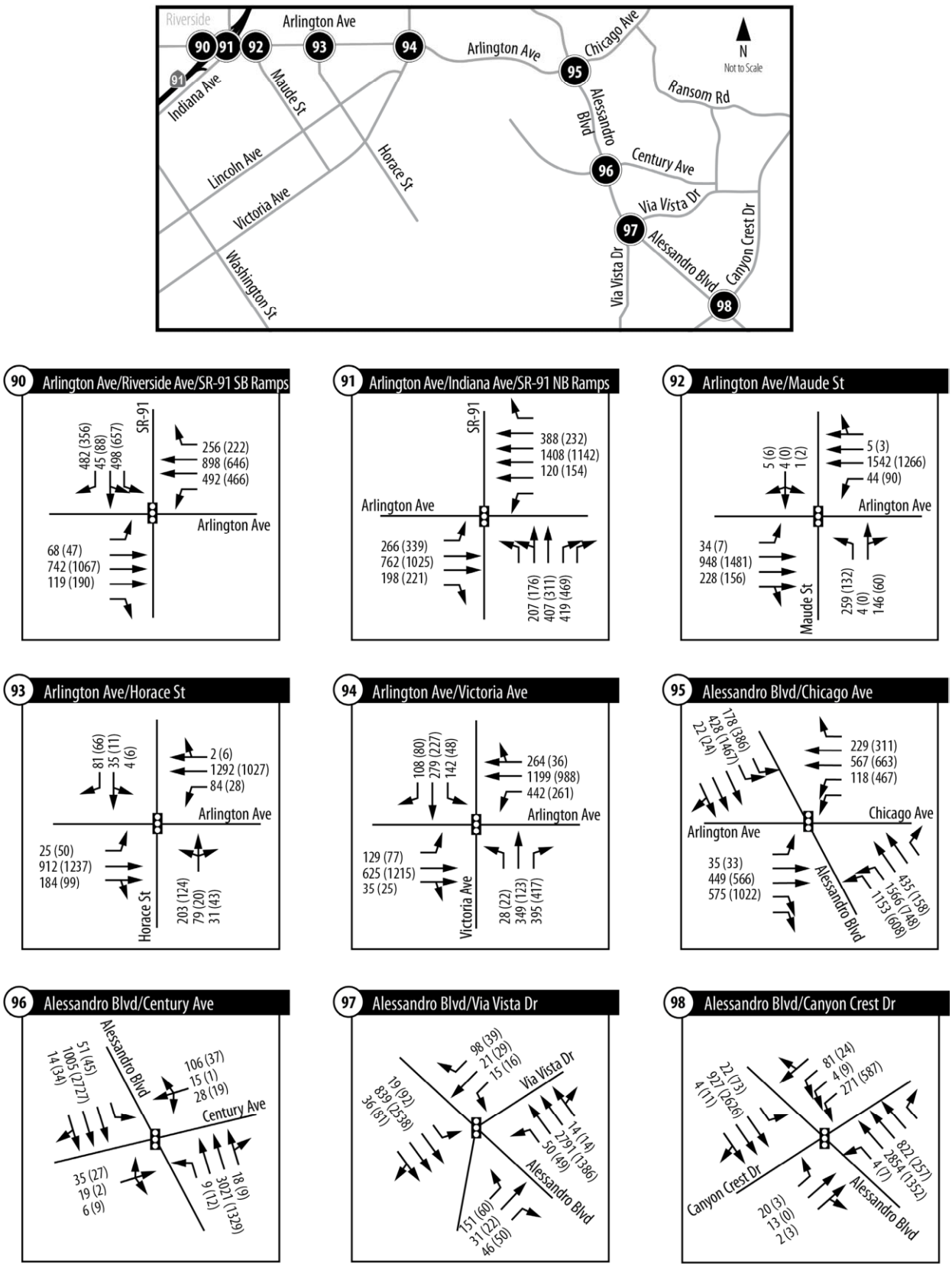


Figure 17: Turning Movement Volumes under Existing Conditions (K)

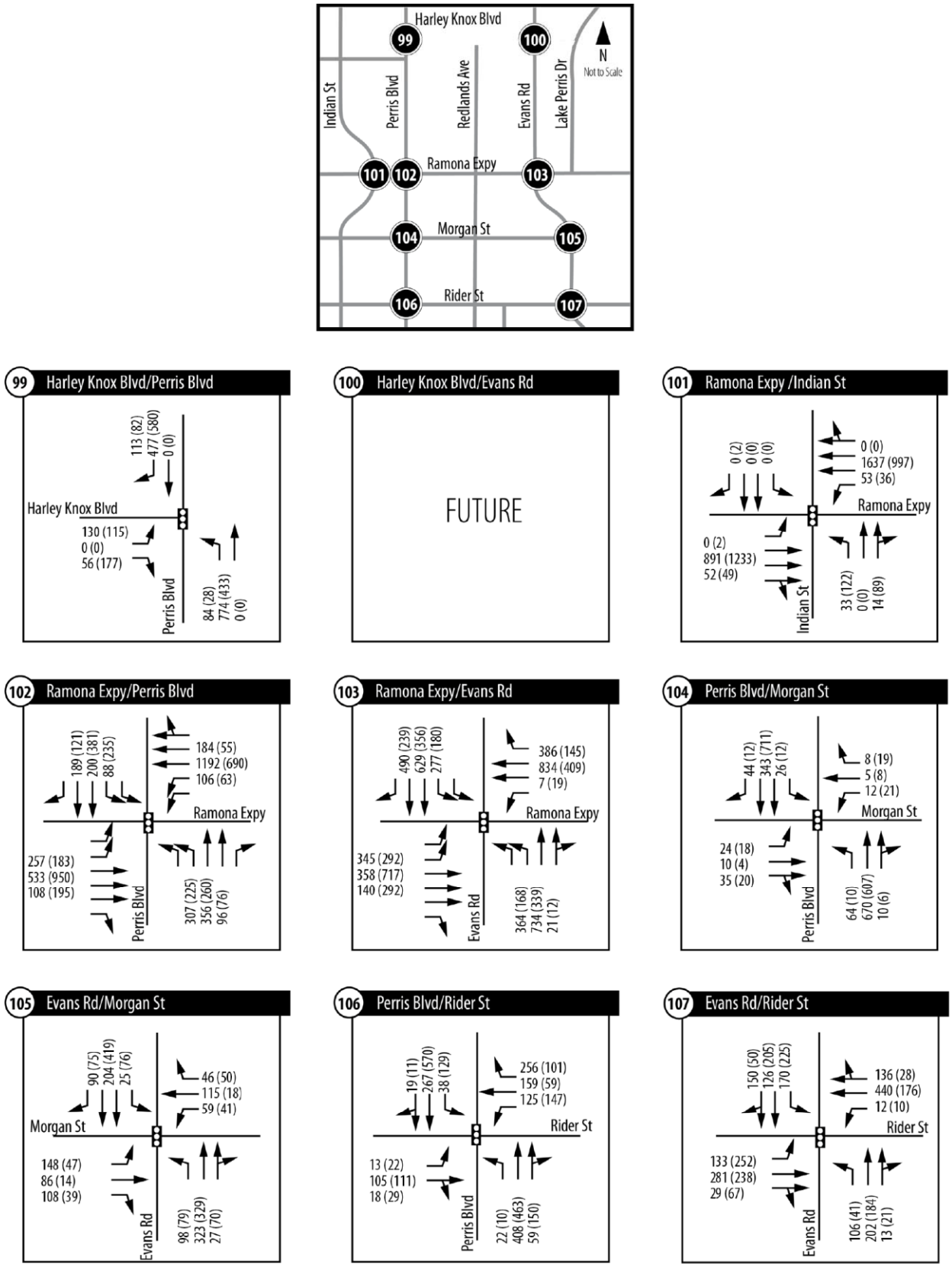
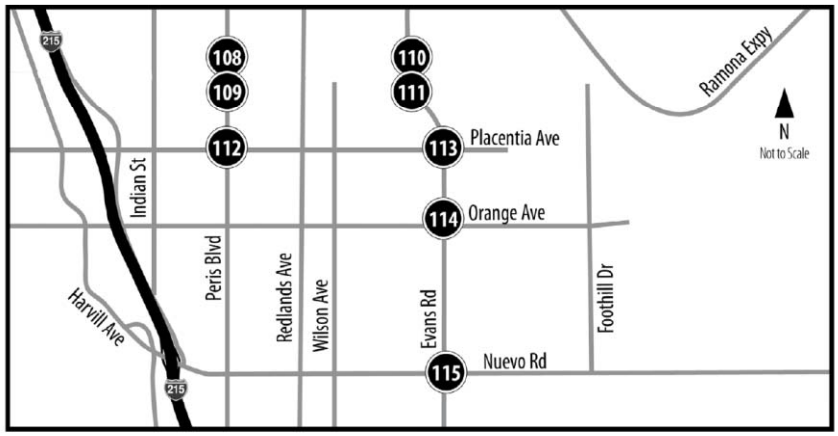


Figure 17: Turning Movement Volumes under Existing Conditions (L)



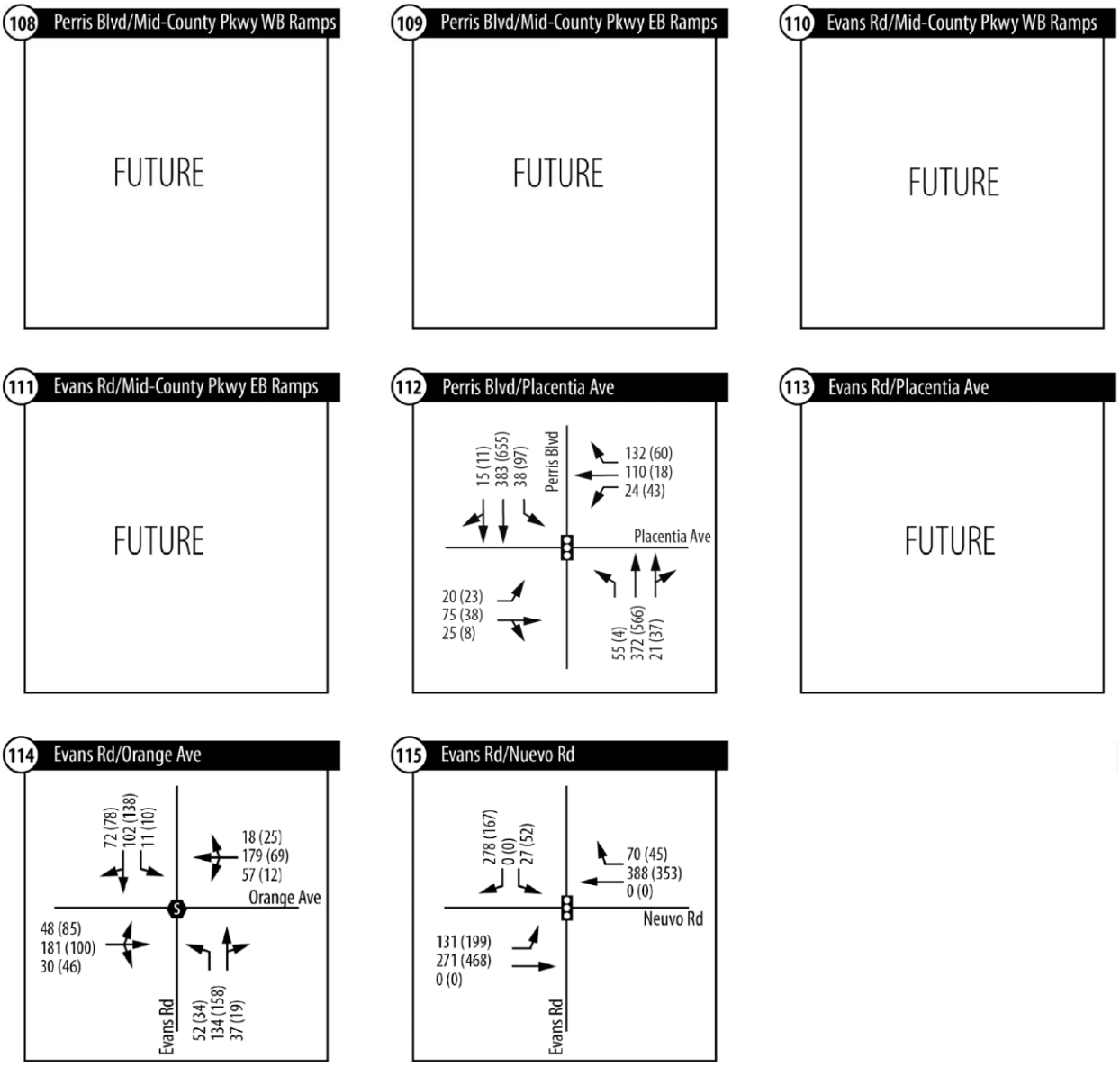


Figure 17: Turning Movement Volumes under Existing Conditions (M)

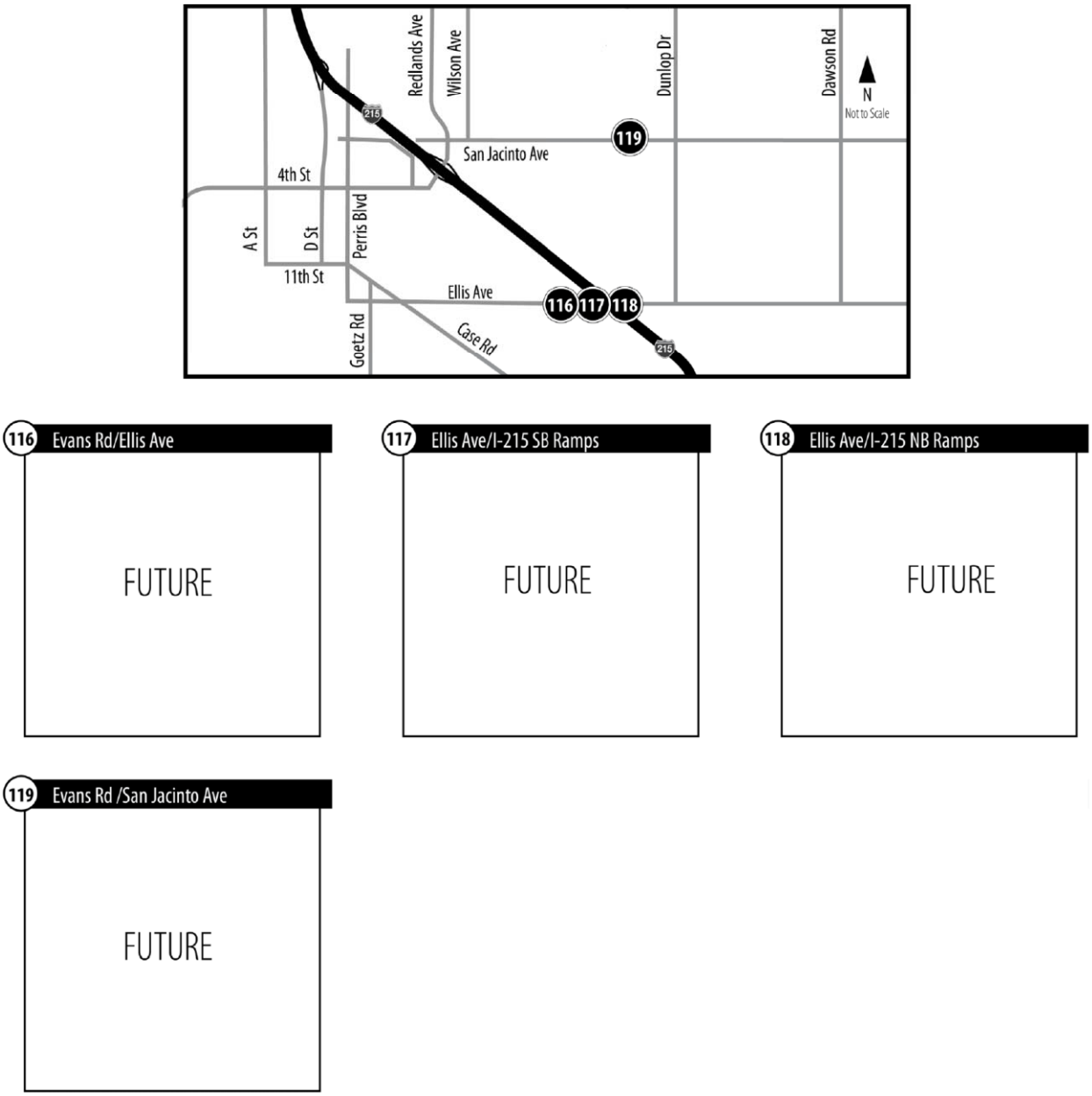
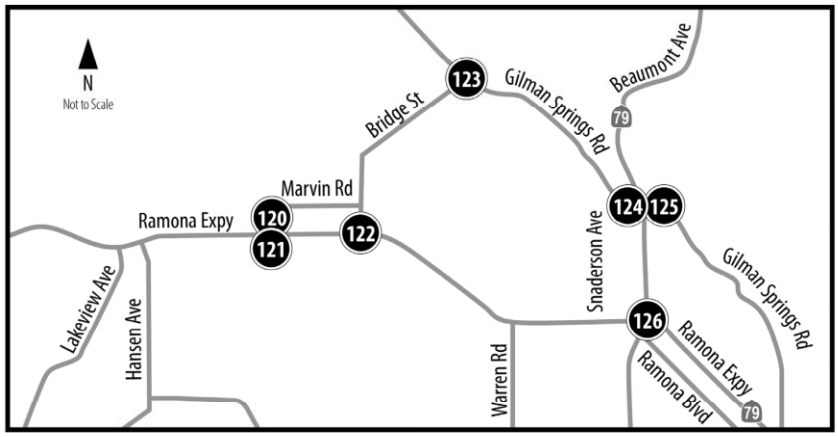


Figure 17: Turning Movement Volumes under Existing Conditions (N)



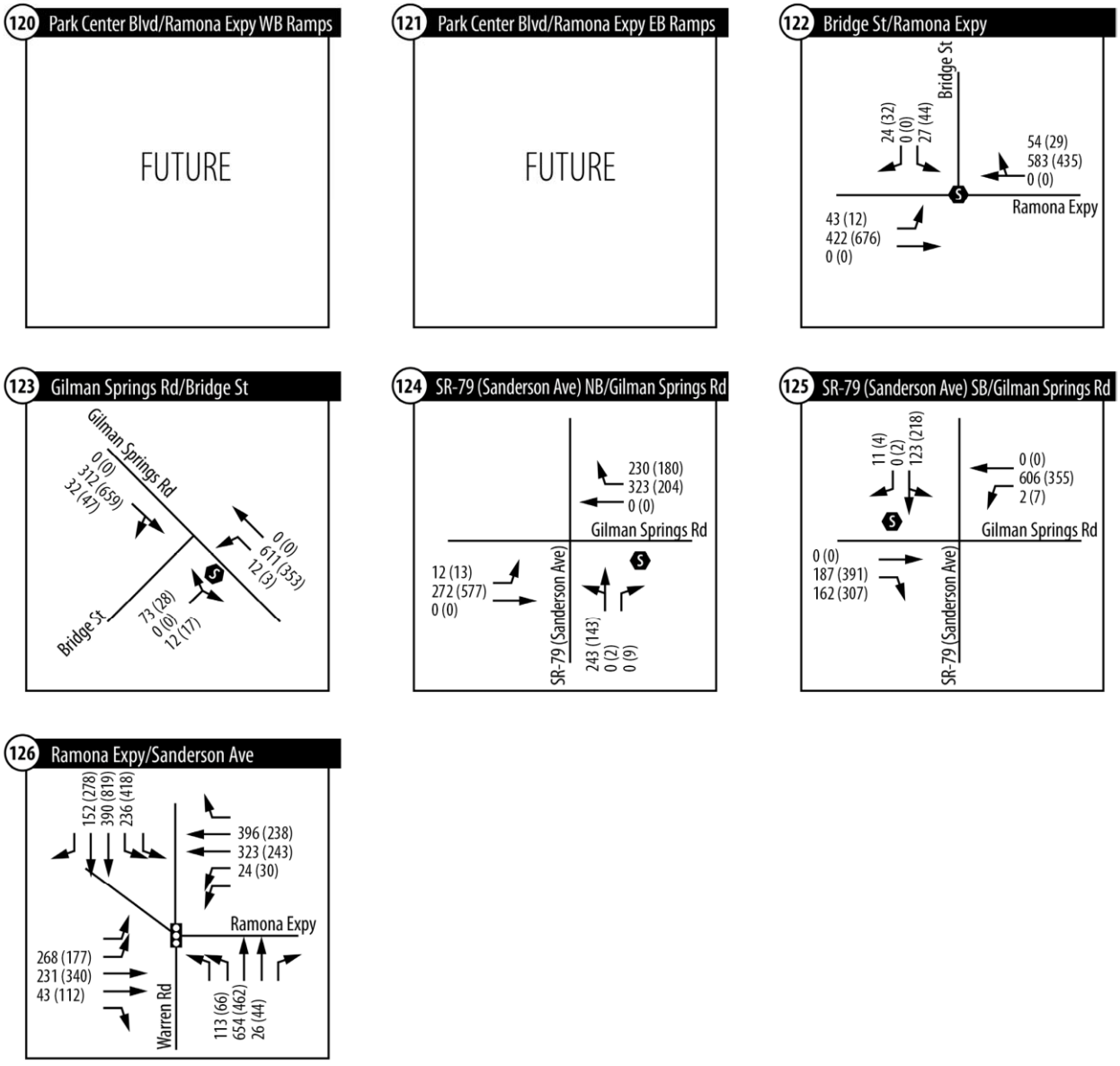


Figure 17: Turning Movement Volumes under Existing Conditions (O)

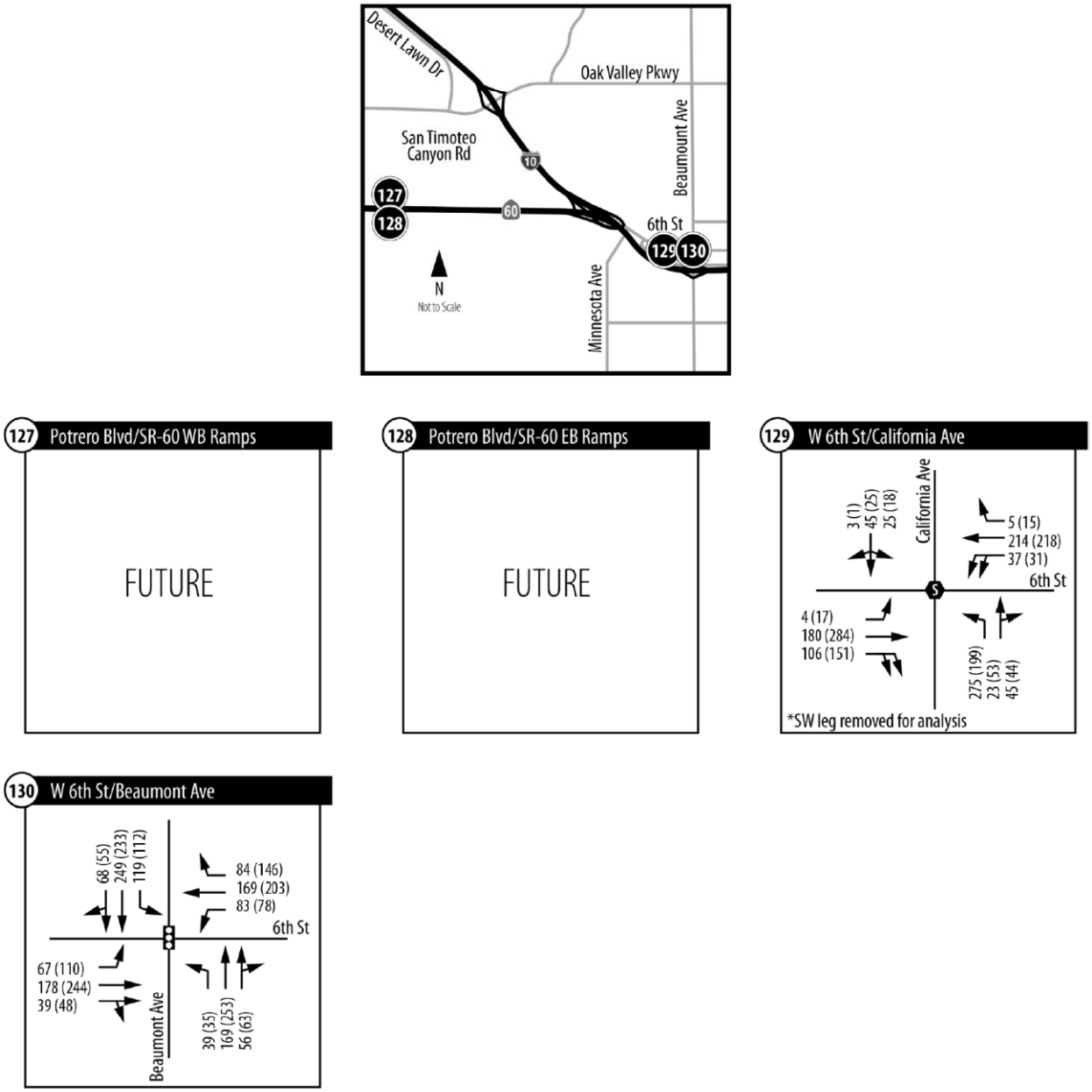


Figure 17: Turning Movement Volumes under Existing Conditions (P)

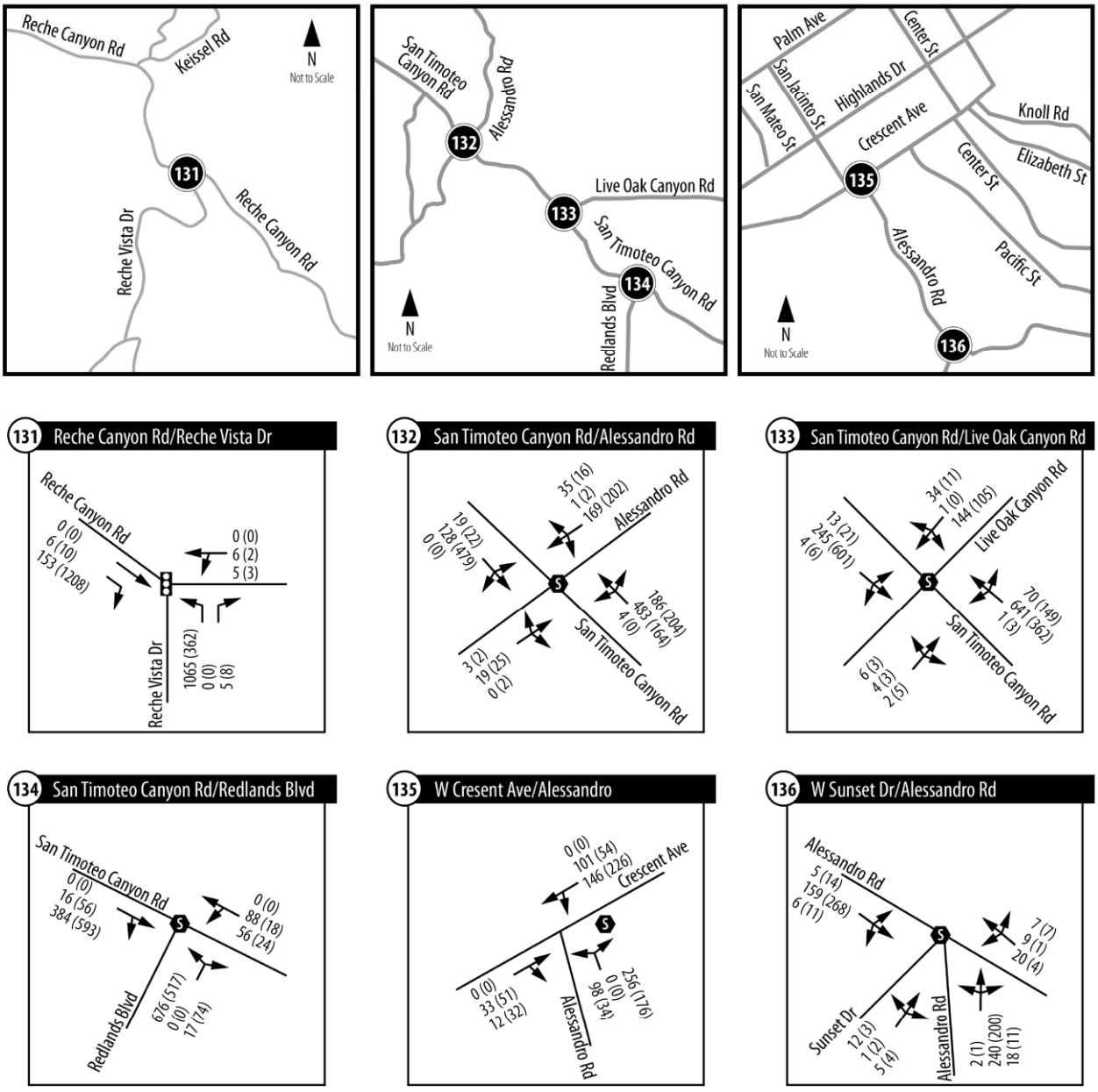


Figure 17: Turning Movement Volumes under Existing Conditions (Q)

D. EXISTING LEVELS OF SERVICE

Roadway Segment Analysis

Part of the project involves a proposed change to the circulation element of the General Plan. The roads that would be affected by the change are shown in Figure 18, which is the key map for the tables reporting sectional traffic volumes.

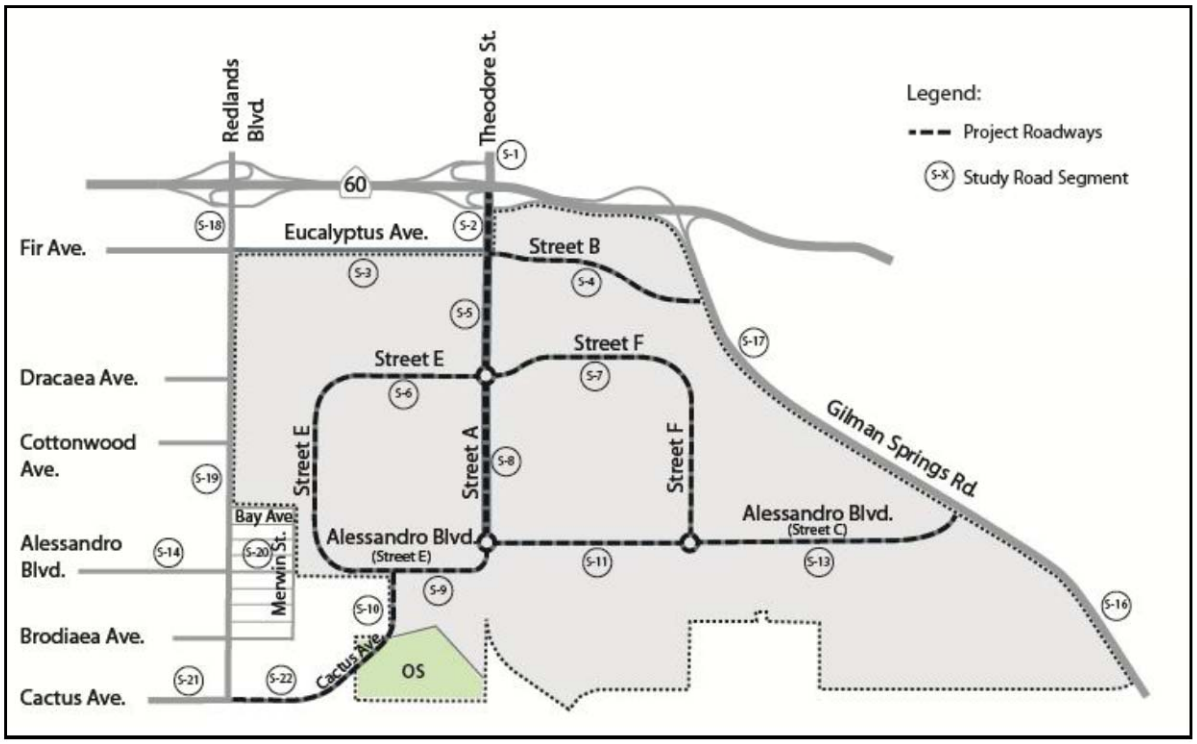


Figure 18: Study Road Segments

24-Hour traffic counts were collected on the study road segments. Table 14 shows the existing LOS for the study road segments. As shown in the table, Gilman Springs Rd. north and south of Alessandro Blvd. (road segments S-16 and S-17) currently exceeds the target LOS established in the General Plan. The existing traffic volumes on all other study roadway segments meet the LOS target in the General Plan.

Table 14: LOS of Study Road Segments under Existing Conditions

	Roadway	From	To	LOS Standard*	Roadway Section**	Daily Volume	LOS
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	771	A
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	2,046	A
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U***	1,339	A
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road		
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	641	A
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	N/A	Future Road		
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	N/A	Future Road		
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	641	A
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	2,537	A
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	N/A	Future Road		
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	1,896	A
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	1,896	A
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	2U	D	3,877	A
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	2U	14,407	**F**
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	11,973	**E**
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	7,338	A
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	2U	6,786	A
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	2U	2,537	A
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	2U	6,786	A
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	2U***	472	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.
** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.
*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.
Indicates LOS exceeds the target level

Intersection Level of Service (LOS)

Table 15 shows the existing LOS for the study intersections in the AM and PM peak hours. Detailed worksheets are presented in Appendix B. Of the 136 study intersections that were studied, 12 intersections failed to meet the General Plan target under Existing Conditions in the AM peak hour, the PM peak hour, or both. These intersections were:

- Redlands Blvd./Locust Ave. (AM, PM)
- Redlands Blvd./SR-60 WB ramps (AM, PM)
- Oliver St./Alessandro Blvd. (AM)
- Moreno Beach Dr./SR-60 EB Ramps (PM)
- Lasselle St./Cactus Ave. (AM, PM)
- Alessandro Blvd./Chicago Ave. (PM)
- Gilman Springs Rd./Bridge St. (AM)
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. (AM, PM)
- San Timoteo Canyon Rd./Alessandro Rd. (AM)
- San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Table 15: Existing Conditions LOS at Study Intersections

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-1	Theodore St/Street F	-	N/A	Non-Existent		Non-Existent	
IN-2	Cactus Ave Extension/Street E	-	N/A	Non-Existent		Non-Existent	
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	9.7	A	10.1	B
IN-4	Alessandro Blvd (Street C)/Street F	-	N/A	Non-Existent		Non-Existent	
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	10.3	B	15.7	C
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	26.7	**D**	42.8	**E**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	40.9	D	37.3	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	9.7	A	9.8	A
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	42.2	**E**	54.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	9.6	A	14.4	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	9.0	A	9.6	A
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	9.2	A	9.4	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	-	N/A	Non-Existent		Non-Existent	
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.2	A	9.8	A
IN-20	Oliver Str/Alessandro Blvd	C	CSS	25.9	**D**	14.7	B
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	24.0	C	28.2	C
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	20.5	C	13.8	B
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	23.8	C	17.3	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	17.0	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.4	B	8.2	A
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	16.2	B	13.8	B
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	29.6	C	31.9	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	22.6	C	21.5	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	12.5	B	15.9	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	29.4	C	36.0	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	22.0	C	19.7	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	22.8	C	23.4	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	8.6	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	50.3	D	40.0	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	38.0	D	76.6	**E**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	37.0	D	31.2	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	41.5	D	36.5	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	23.4	C	17.5	B
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	25.4	C	26.6	C
IN-42	Nason Str/Iris Ave	-	N/A	Non-Existent		Non-Existent	
IN-43	Oliver Str/Iris Ave	D	SIGNAL	22.1	C	15.8	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	6.7	A	6.5	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	34.6	C	29.3	C
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	21.7	C	19.4	B
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	37.9	D	13.5	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.8	C	24.7	C

Table 15: Existing Conditions LOS at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	31.7	C	26.6	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	8.8	A	7.8	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	20.5	C	16.9	B
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	33.3	C	22.6	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	47.2	**D**	38.6	**D**
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	22.5	C	21.0	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	19.5	B	25.6	C
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	19.8	B	24.2	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	25.8	C	23.6	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	17.6	B	27.9	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	32.4	C	42.3	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	9.8	A	11.7	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	12.9	B	17.4	B
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	30.1	C	20.3	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	24.4	C	19.6	B
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	26.9	C	30.7	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	25.8	C	18.0	B
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.4	A	12.6	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	19.4	B	24.1	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	18.2	B	18.6	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	4.6	A	8.2	A
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	19.2	B	27.6	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	12.1	B	19.7	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	11.1	B	3.7	A
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	26.7	C	29.5	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	10.9	B	6.7	A
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	22.2	C	17.6	B
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	7.3	A	10.3	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.8	A	8.2	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	28.4	C	14.8	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	18.8	B	34.9	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	43.2	D	36.5	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	9.0	A	13.0	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	43.2	D	28.0	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	8.6	A	4.7	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	24.3	C	12.2	B
IN-86	Central Ave/Chicago Ave	D	SIGNAL	23.4	C	23.1	C
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	11.7	B	12.0	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	27.8	C	35.2	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	6.3	A	4.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.3	C	30.7	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	21.0	C	20.8	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	13.8	B	11.1	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	12.3	B	7.2	A

Table 15: Existing Conditions LOS at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	54.8	D	30.9	C
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	40.7	D	65.9	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	16.7	B	7.6	A
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	30.7	C	18.9	B
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	20.4	C	17.9	B
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	15.4	B	15.1	B
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	3.3	A	8.5	A
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	31.7	C	34.6	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	54.5	D	28.8	C
IN-104	Perris Blvd/Morgan St	D	SIGNAL	11.8	B	6.7	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	32.5	C	20.6	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	24.5	C	23.0	C
IN-107	Evans Rd/Rider St	C	SIGNAL	34.2	C	28.3	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	30.1	C	14.0	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	12.5	B	10.1	B
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	23.3	C	22.6	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	22.4	C	20.6	C
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	26.6	**D**	20.8	C
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	34.7	**D**	30.7	**D**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	29.2	**D**	48.2	**E**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	27.1	C	20.8	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	16.6	C	18.0	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	13.2	B	12.8	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	18.9	B	6.3	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	77.2	**F**	23.9	C
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	50.9	**F**	60.2	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	81.8	**F**	80.5	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	14.0	B	11.5	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	8.9	A	9.0	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Freeway LOS

The LOS for freeway mainline sections under existing conditions is shown in Table 16 (for basic freeway sections[17]) and Table 17 (for weaving sections[18])[19]. The target LOS is currently exceeded in 17 mainline sections as follows:

North or Eastbound

- SR-60 Ramona Ave. to Central Ave. (PM)
- SR-60 Central Ave. to Mountain Ave. (PM)
- SR-60 Euclid Ave. to Grove Ave. (PM)
- SR-60 Grove Ave. to Vineyard Ave. (PM)
- SR-60 Vineyard Ave. to Archibald Ave. (PM)
- SR-60 Market St. to Main St. (PM)
- SR-60 Martin Luther King Blvd. to Central Ave. (PM)
- SR-91 I-15 to McKinley St. (PM)
- I-215 SR-74 to Redlands Ave. (PM)
- I-215 Barton Rd. to Mt. Vernon Ave./Washington St. (AM)

Southbound or Westbound

- SR-60 Reservoir St. to Ramona Ave. (AM)
- SR-60 Ramona Ave. to Central Ave. (AM)
- SR-60 I-215 to Day St. (AM)
- SR-91 Pierce St. to Magnolia Ave. (PM)
- SR-91 Magnolia Ave. to La Sierra Ave. (PM)

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[17] A basic freeway segment is one that is outside the influence of ramps and weaving areas. Basic freeway segments exist between interchanges that are not closely spaced. Note that segment numbers are not always consecutive in the table because weaving sections may occur between basic freeway segments, and because the two directions of travel may be different in terms of where ramps are provided.

[18] A weaving section occurs when one traffic movement must cross the path of another along a relatively short length of roadway without the aid of signals or other traffic control devices. Such cases typically occur where merge junction is followed closely by a diverge junction.

[19] In addition to the analysis shown here, there is a supplemental analysis of truck trips to the Ports of Los Angeles and Long Beach found in Chapter 12, Section F of this report.

- I-215 SR-74 to Redlands Ave. (AM)
- I-215 Baseline Rd. to Highland Ave. (AM, PM)

The target LOS is currently exceeded in six weave sections as follows:

North or Eastbound

- SR-60 SR-71/Garey Ave. to Reservoir St. (PM)
- SR-60 SR-91 to Blaine St./3rd St. (PM)
- SR-60 Blaine St./3rd St. to University Ave. (PM)
- SR-91 Arlington Ave. to Central Ave. (AM)

North or Eastbound

- SR-60 Central Ave. to Fair Isle Dr./Box Springs Rd. (AM)
- SR-91 14th St. to University Ave. (PM)

Of the 23 freeway sections currently exceeding the target LOS, 20 (90%) involve congestion in the peak direction. That is why regional agencies stress the importance of promoting reverse commuting; to move some traffic from the congested side of the freeway to the uncongested side. To the extent that the WLC can encourage this shift, it can help reduce congestion for all travelers, including those not directly associated with the WLC. This is discussed further in Section D of the next chapter.

Table 18 shows the existing level of service (LOS) at the study freeway ramps. One study ramp currently operates below the LOS “D” target, namely the SR-60 eastbound on-ramp from Central Ave. in the PM peak hour.

Details of the LOS calculations for freeways under Existing Conditions can be found in Appendix I.

Table 16: Existing Freeway Mainline Level of Service

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	24.5	C	7,822	33.0	D	8,762	41.4	E	6,381	25.6	C
F-3	SR-60	Ramona Ave to Central Ave	5,687	22.8	C	9,400	47.3	F	8,283	37.1	E	5,925	23.4	C
F-4	SR-60	Central Ave to Mountain Ave	6,339	26.2	D	9,338	46.6	F	6,336	24.7	C	6,076	24.1	C
F-5	SR-60	Mountain Ave to Euclid Ave	6,205	25.4	C	6,664	26.1	D	6,259	24.4	C	6,495	26.3	D
F-6	SR-60	Euclid Ave to Grove Ave	7,650	34.7	D	9,091	43.8	E	6,461	25.4	C	6,302	25.2	C
F-7	SR-60	Grove Ave to Vineyard Ave	6,923	29.6	D	9,400	47.3	F	6,274	24.3	C	6,699	27.4	D
F-8	SR-60	Vineyard Ave to Archibald Ave	6,823	28.7	D	9,400	47.3	F	7,658	32.1	D	6,245	25.0	C
F-9	SR-60	Archibald Ave to Haven Ave	6,268	25.6	C	6,471	25.1	C	See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	6,096	19.1	C	6,864	20.6	C	5,804	17.4	B	5,698	17.5	B
F-11	SR-60	Milliken Ave to I-15	4,234	16.5	B	4,529	16.9	B	5,456	20.5	C	5,111	19.5	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	2,593	10.2	A	2,910	10.8	A	4,490	13.4	B	4,275	13.0	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	3,026	11.9	B	3,968	14.8	B	4,220	15.7	B	3,881	14.8	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	2,596	10.2	A	3,061	11.4	B	4,172	15.5	B	3,963	15.1	B
F-15	SR-60	Pedley Rd to Pyrite St	2,813	11.1	B	3,334	12.4	B	3,216	12.0	B	3,068	11.7	B
F-16	SR-60	Pyrite St to Valley Way	3,348	13.2	B	3,642	13.6	B	2,653	9.9	A	2,567	9.8	A
F-17	SR-60	Valley Way to Rubidoux Blvd	4,398	23.7	C	4,252	21.4	C	4,532	23.1	C	4,725	24.9	C
F-18	SR-60	Rubidoux Blvd to Market St	4,943	27.6	D	4,706	24.3	C	3,568	17.7	B	3,868	19.7	C
F-19	SR-60	Market St to Main St	4,498	24.4	C	7,050	47.8	F	5,631	30.9	D	5,109	27.6	D
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			5,248	27.9	D	4,720	24.9	C
F-24	SR-60	Martin Luther King Blvd to Central Ave	5,865	24.6	C	8,976	45.7	F	7,050	30.6	D	5,800	24.1	C
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	4,332	16.9	B	6,795	26.6	D	7,461	31.1	D	6,376	25.6	C
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			7,050	47.9	F	3,093	15.9	B
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,702	21.6	C	3,713	30.2	D	3,013	23.1	C	3,254	26.5	D
F-30	SR-60	Heacock St to Perris Blvd	2,349	18.6	C	3,355	26.1	D	2,638	19.9	C	2,671	20.8	C
F-31	SR-60	Perris Blvd to Nason St	1,812	14.3	B	2,344	17.4	B	1,910	14.3	B	2,045	15.8	B
F-32	SR-60	Nason St to Moreno Beach Dr	1,619	12.8	B	2,038	15.1	B	See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,326	10.5	A	1,397	10.4	A	988	7.4	A	1,336	10.3	A
F-34	SR-60	Redlands Blvd to Theodore St	1,614	12.7	B	1,920	14.2	B	1,193	8.9	A	1,498	11.6	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,521	12.0	B	1,915	14.2	B	1,183	8.9	A	1,393	10.8	A
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,213	11.2	B	1,484	12.3	B	837	7.0	A	1,002	9.1	A
F-37	SR-60	Jack Rabbit Trail to I-10	1,215	9.6	A	1,482	11.0	A	837	6.3	A	1,002	7.7	A
F-39	SR-91	I-15 to McKinley St	5,914	22.6	C	9,400	53.3	F	6,402	25.1	C	5,971	24.1	C
F-40	SR-91	McKinley St to Pierce St	5,382	29.1	D	5,427	31.4	D	4,788	25.0	C	5,183	29.3	D
F-41	SR-91	Pierce St to Magnolia Ave	4,888	25.5	C	4,922	27.2	D	4,629	23.9	C	7,050	53.3	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			4,894	25.7	C	7,050	53.3	F
F-43	SR-91	La Sierra Ave to Tyler St	4,585	23.5	C	4,939	27.3	D	4,467	22.9	C	5,167	29.2	D
F-44	SR-91	Tyler St to Van Buren Blvd	5,704	21.7	C	5,851	23.5	C	5,769	22.1	C	6,661	27.8	D

Table 16: Existing Freeway Mainline Level of Service (continued)

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,841	22.3	C	4,999	19.6	C	5,342	20.2	C	6,401	26.3	D
F-46	SR-91	Adam St to Madison St	6,531	26.1	D	4,742	18.7	C	4,939	18.6	C	5,453	21.5	C
F-47	SR-91	Madison St to Arlington Ave	5,879	22.8	C	4,530	17.9	B	4,218	21.4	C	4,711	25.5	C
F-49	SR-91	Central Ave to 14th St	6,021	34.8	D	5,391	30.8	D	4,737	24.7	C	4,940	27.2	D
F-51	SR-91	University Ave to Spruce St	7,244	22.1	C	6,394	20.0	C	See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,739	22.0	C	3,285	25.8	C	2,294	17.2	B	2,318	17.2	B
F-68	I-215	Newport Rd to McCall Blvd	1,900	15.0	B	2,047	15.3	B	2,528	19.0	C	3,111	23.7	C
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	19.5	C	3,293	25.8	C	3,069	23.6	C	2,539	18.9	C
F-70	I-215	Ethanac Rd to SR-74	3,787	34.5	D	3,150	24.4	C	2,882	21.9	C	3,854	32.0	D
F-71	I-215	SR-74 to Redlands Ave	3,350	28.5	D	4,181	37.4	E	4,539	44.2	E	3,710	30.1	D
F-74	I-215	Columbia Ave to Center St	5,587	33.5	D	5,150	27.3	D	5,191	27.6	D	4,917	25.4	C
F-75	I-215	Center St to La Cadena Dr	5,474	32.4	D	5,034	26.5	D	5,541	30.4	D	5,235	27.6	D
F-76	I-215	La Cadena Dr to Barton Rd	5,341	31.2	D	5,164	27.5	D	5,414	29.4	D	5,196	27.3	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,738	35.1	E	5,533	30.3	D	5,435	29.5	D	5,256	27.7	D
F-78	I-215	Mt. Vernon Ave to I-10	5,582	22.5	C	5,420	20.5	C	5,776	22.0	C	5,606	21.0	C
F-80	I-215	Auto Plaza Dr to Mill St	4,319	17.1	B	4,533	17.0	B	4,022	15.1	B	4,090	15.2	B
F-83	I-215	Baseline Rd to Highland Ave	3,023	24.8	C	3,355	26.5	D	4,537	44.1	E	4,700	46.7	F
F-52	I-10	SR-60 to Beaumont Ave	3,037	11.9	B	4,252	16.4	B	4,288	18.1	C	3,675	13.8	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,087	12.1	B	4,322	16.7	B	4,358	18.4	C	3,736	14.0	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,236	12.6	B	4,531	17.5	B	4,569	19.4	C	3,916	14.7	B
F-55	I-10	Highland Springs Ave to Sunset Ave	3,112	12.2	B	4,357	16.8	B	4,393	18.6	C	3,766	14.1	B
F-56	I-10	Sunset Ave to 22nd St	3,037	11.9	B	4,252	16.4	B	4,288	18.1	C	3,675	13.8	B
F-57	I-10	22nd St to 8th St	2,987	11.7	B	4,182	16.2	B	4,218	17.8	B	3,615	13.5	B
F-58	I-10	8th St to Hargrave St	2,987	11.7	B	4,182	16.2	B	4,218	17.8	B	3,615	13.5	B
F-59	I-10	Hargrave St to Fields Rd	2,689	10.5	A	3,764	14.5	B	3,796	16.0	B	3,254	12.2	B
F-60	I-10	Fields Rd to Morongo Trail	2,564	10.0	A	3,590	13.9	B	3,620	15.3	B	3,103	11.6	B
F-61	I-10	Morongo Trail to Main St	2,265	8.8	A	3,172	12.3	B	3,198	13.5	B	2,741	10.3	A
F-62	I-10	Main St to Haugen-Lehmann Way	2,265	8.8	A	3,172	12.3	B	3,198	13.5	B	2,741	10.3	A
F-64	I-10	SR-111 to Tipton Rd	1,967	7.7	A	2,753	10.6	A	2,777	11.7	B	2,380	8.9	A
F-65	I-10	Tipton Rd to SR-62	1,967	7.7	A	2,753	10.6	A	2,777	11.7	B	2,380	8.9	A

Indicates that the LOS exceeds the target level

Table 17: Existing Freeway Weaving Sections Level of Service

ID	Freeway	Weaving Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,985	24.0	C	8,616	35.7	**E**	6,125	21.4	C	5,892	20.8	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			6,288	23.5	C	6,071	23.5	C
W-20	SR-60	Main St to SR-91	5,418	25.8	C	7,050	33.6	D	See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	3,885	14.8	B	9,400	39.0	**E**	7,729	28.6	D	7,211	27.2	C
W-22	SR-60	Blaine St/3rd St to University Ave	3,919	18.7	B	7,050	37.4	**E**	5,714	20.1	C	6,204	23.0	C
W-23	SR-60	University Ave to Martin Luther King Blvd	4,528	20.4	C	5,932	25.7	C	5,601	28.0	C	5,876	28.0	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs Rd	3,856	14.5	B	7,840	32.4	D	7,050	37.0	**E**	6,026	29.3	D
W-27	SR-60	I-215 to Day St	2,988	10.6	B	4,704	18.8	B	See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	2,995	12.8	B	4,749	20.7	C	4,700	31.0	D	4,197	27.2	C
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			1,609	9.2	A	1,753	10.2	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	5,445	24.6	C	5,684	27.4	C	See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,050	35.3	**E**	4,073	19.6	B	4,642	21.1	C	5,118	23.8	C
W-50	SR-91	14th St to University Ave	4,643	21.8	C	4,441	21.9	C	5,179	24.1	C	7,050	35.5	**E**
W 51	SR 91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			5,075	14.4	B	8,804	26.9	C
W-73	I-215	SR-60 to Columbia Ave	6,260	34.4	D	5,548	28.0	C	5,877	26.4	C	5,495	24.5	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,400	16.3	B	4,147	14.5	B	4,890	16.8	B	4,591	16.3	B
W-81	I-215	Mill St to 2nd St	5,044	23.0	C	5,095	22.5	C	4,442	19.6	B	4,380	19.4	B
W-82	I-215	5th St to Baseline Rd	3,754	16.5	B	3,590	14.9	B	3,607	15.6	B	3,481	15.1	B
W-63	I-10	Haugen-Lehmann Way to SR-111	2,265	7.5	A	3,172	10.5	B	3,198	11.8	B	2,741	10.3	B

Indicates that the LOS exceeds the target level

Table 18: Existing Freeway Ramp Level of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	4,110	242	16.9	B	5,678	906	26.5	C
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,796	349	18.5	B	8,868	904	31.8	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,326	207	3.3	A	1,397	434	3.2	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,119	26	12.2	B	963	25	10.3	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,614	119	17.3	B	1,920	30	19.1	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,495	70	17.3	B	1,890	71	19.8	B
R-8	SR-60 EB	Direct On-Ramp from Theodore St	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,521	330	16.4	B	1,915	385	19.0	B
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,191	7	14.2	B	1,530	8	16.3	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	837	11	9.6	A	1,002	9	11.3	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	826	357	13.5	B	993	306	14.6	B
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,183	24	12.7	B	1,393	26	14.9	B
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,159	34	12.1	B	1,367	131	14.8	B
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,193	49	12.8	B	1,498	38	15.9	B
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,144	329	14.3	B	1,460	361	17.4	B
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	384	32.6	D	6,026	439	28.5	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	474	21.0	C	5,800	337	15.9	B

Indicates that the LOS exceeds the target level

E. REGIONAL CONTEXT

This chapter discusses the regional context of the proposed World Logistics Center (WLC) project.

Moreno Valley's Economy

Moreno Valley is a predominantly residential community, with one of the lowest jobs-to-housing ratios in the six-county SCAG region[20]. More than 70%[21] of jobs in the city are in education, retail, public administration and other services with local client bases. Moreno Valley has relatively few jobs that bring in revenue from outside the city. For example, the manufacturing sector is both quite small (3.7% of jobs in Moreno Valley) and is shrinking[22] .

One consequence of the existing imbalance between jobs and housing is that a large majority (70%) of Moreno Valley workers commute to jobs outside the city, and in many cases far outside the city. According to the U.S. Census Bureau[23], 20.2% of Moreno Valley workers commute more than 50 miles one way to work, and another 22.2% drive 25 to 50 miles one way. Nearly four out of five Moreno Valley workers drive to work alone[24]. Since other Inland Empire cities have similar commute characteristics, the resulting transportation pattern is one of heavy westbound flows in the morning and eastbound flows in the evening, overwhelming the freeway system during peak commuting hours. Another consequence is the high cost of commuting both in terms of out-of-pocket expenses and reduced quality of life for the commuters and their families.

The Moreno Highlands Specific Plan

The Community Development Element of the City's General Plan currently designates the project site as the Moreno Highlands Specific Pan (MHSP). The Specific Plan, approved by the City in 1992, envisioned the 3,038-acre site as a master planned, mixed use community, with up to 7,763 residential dwelling units (on approximately 2,435 acres) and approximately 603 acres of business, retail, institutional, and other uses.

Figure 19 shows the land use plan, and a summary of uses by acreage is presented in Table 19.

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20 Only 0.58 jobs/household, which is less than half of the regional average of 1.24. Source: *Profile of the City of Moreno Valley*, SCAG, May 2011, page 2.

21 ibid.

22 ibid. The number of manufacturing jobs in Moreno Valley has declined 31% since 2007.

23 Source: On-the-Map website, U.S. Census Bureau. Based on data collected in 2011.

24 Source: *Profile of the City of Moreno Valley*, SCAG, May 2011.

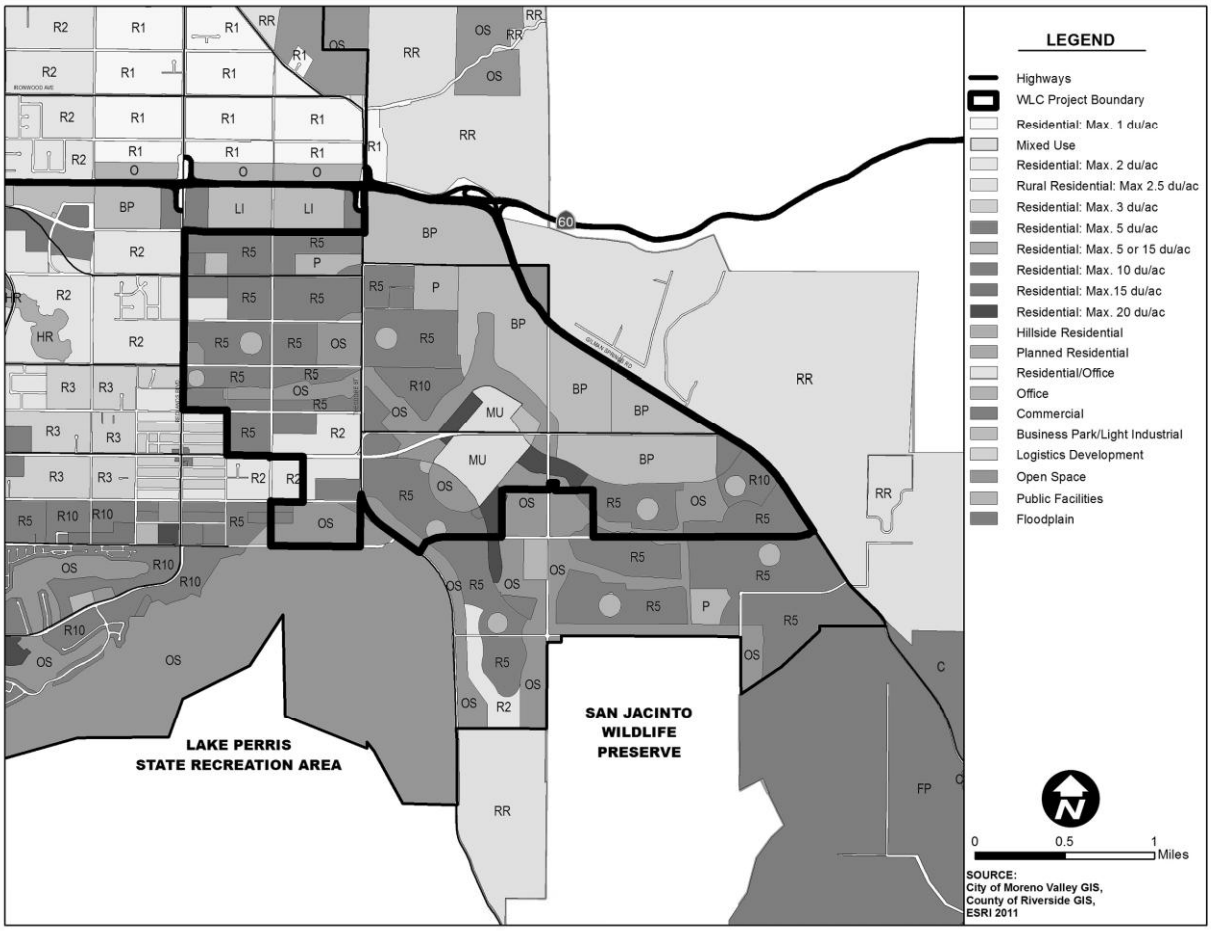

Figure 19: General Plan Land Use Designations in the Project Area

Table 19: Moreno Highlands Specific Plan (Current Land Use Designations)

Land Use	Acreage
Residential Community	
Residential (7,283 du)	1,359
Parks and Open Space	702
Neighborhood Commercial	10
Cemetery	17
Public Facilities	348
Planned Business Center	
Business Park	361
Mixed Use	81
Community Commercial	16
Parks and Open Space	78
Public Facilities	67
Project Total	**3,038**

Adopted by City Council March 17, 1992

The MHSP had two serious weaknesses. The first is that the SCAG region has had an over-abundance of land designated for business park uses, which means that only the most attractive locations are likely to be developed. Since the Specific Plan was adopted, most business park development has taken place in the coastal counties rather than in the Inland Empire. Within Moreno Valley, sites at the eastern end of the city have not been successful. Sites at the western end of town closer to I-215 had very limited success and are struggling. Therefore, despite being designated for business park development for the last 20 years, no such development actually occurred in the MHSP.

The second weakness that the Specific Plan faced was the general decline in the housing market, which impacted Moreno Valley particularly hard. Without the business park jobs there has been little demand for the residential component of the MHSP. Moreover, if housing had been developed pursuant to the Specific Plan without the jobs component, it would have further exacerbated Moreno Valley's jobs/housing imbalance.

As a result, neither the commercial nor the residential component of the Specific Plan proved marketable, even during the prolonged real estate boom in the late 1990s and early 2000s. The MHSP has never come to fruition and the site remains today much the same as it was in 1992[25].

Policy Updates

An updated Housing Element, adopted by the City in February 2011, identified the Moreno Highlands area as a potential location for future jobs-producing land uses[26]. In April 2011, the City adopted its Economic Development Action Plan which identified eastern Moreno Valley as a potential area for major job-producing land uses[27]. The proposed World Logistics Center project is consistent with this planning objective, as it provides a comprehensive plan for jobs-producing land uses.

General Plan Road Network

The current General Plan, based on the MHSP, treats the western side of the project area as a continuation of the city street grid (see Figure 20). On the eastern side of the project area, Eucalyptus Ave. and Alessandro Blvd. would curve south and then east to connect with Gilman Springs Rd. at new intersections south of where the existing intersections are located. There is also a proposed Spine Rd. on a southwest-to-northeast alignment. Virginia Ave. would curve on a northwest-to-southeast alignment that would cross Eucalyptus Ave. twice.

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[25] The exception being the Skechers facility, which is outside the boundaries of the MHSP.

[26] *City of Moreno Valley Draft Housing Element 2008-2014*, page 6

[27] *Economic Development Action Plan, April 2011*, page 10

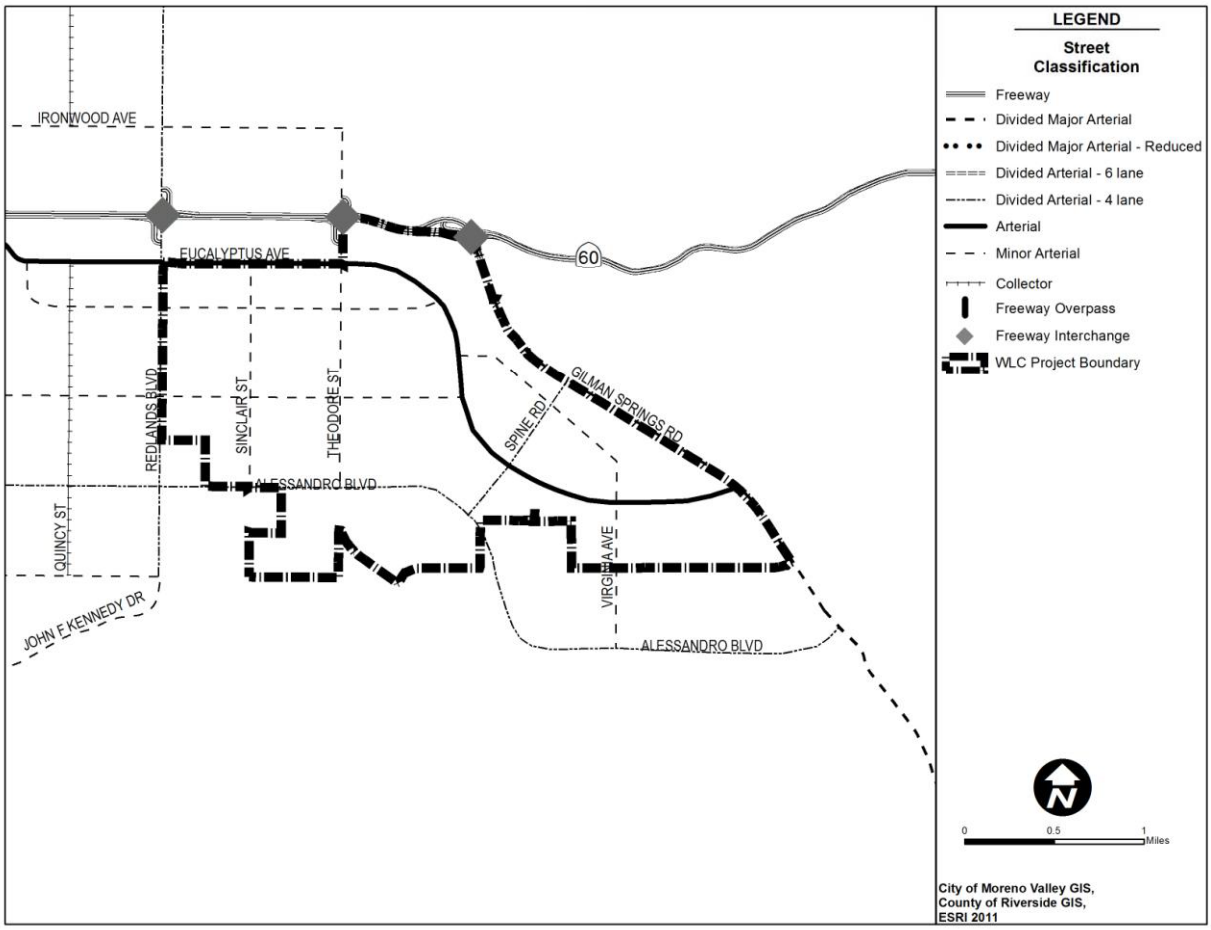

Figure 20: Roadway System in Current General Plan

Regional Truck Traffic Patterns

Truck traffic in the SCAG region is comprised of four major components. These are:

- Internal Trips – Truck trips that begin and end within the SCAG region. These include trips between industries, warehouses, and retail businesses within the region, excluding port-related cargo trips.
- External Trips – Truck trips with either the origin or destination in the SCAG region, and the other end of the trips outside the region, excluding port-related cargo trips. These include agricultural products brought into the region and industrial goods made in southern California and shipped to other parts of the U.S.
- Port Trips – Truck trips that begin or end at the Ports of Los Angeles or Long Beach, or secondary trips involving cargos transloaded from trucks from the port.

- Intermodal Trips – Truck trips involving cargos transferred to or from trains that are not port-related.

Table 20 shows the relative sizes of these components[28]. In Riverside County, 88% of the truck trips are internal to the region. Another 10% are external trips, while port-related trips and intermodal trips account for less than 2% of truck traffic.

Table 20: Daily Truck Trips by Major Category

	SCAG Region		Riverside County	
	Truck Trips	% of Truck Trips	Truck Trips	% of Truck Trips
Internal	1,011,993	87.3%	94,469	87.9%
External	81,019	7.0%	11,183	10.4%
Port-Related	59,645	5.1%	1,569	1.5%
Intermodal	7,170	0.6%	271	0.3%
Total	1,159,827	100.0%	107,492	100.0%

The truck traffic associated with the WLC and other logistics centers is expected to follow this general pattern. Most of the warehouse occupants in the NAIOP survey of logistics centers in southern California (Lowe's, Target, Big5, Walgreen's, Home Depot, Costco, Toys "R" Us, Staples, etc.) have extensive business interests in southern California. Thus, it is reasonable to assume that a future warehouse logistics center located in this region would be used in part to support operations within the region; i.e. some of the truck trips they generate would be internal to the region. It is also reasonable to assume that the external trips would follow the overall regional pattern, which is as follows (also see Figure 21)[29]:

- I-5 and US-101 are the main truck routes for cargos transported north of the SCAG region, accounting for 38% of external truck trips
- I-15 is the main route for cargos going northeast (Salt Lake City, Chicago, etc.) , accounting for 10% of external truck trips
- I-40 is the main route for cargos going east (Albuquerque, St. Louis, Atlanta, New York, etc.), accounting for 11% of external truck trips
- I-10 is the main route for cargos going southeast (Phoenix, Houston, New Orleans, etc.), accounting for 12% of external truck trips

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28 Source: *Draft Regional Transportation Plan 2012-2035*, *Goods Movement,* Southern California Association of Governments. December 2011, page 13.

29 Data Source: Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework.

- I-5 and I-215 are the major routes going south (San Diego, Mexico), accounting for 29% of external truck trips.

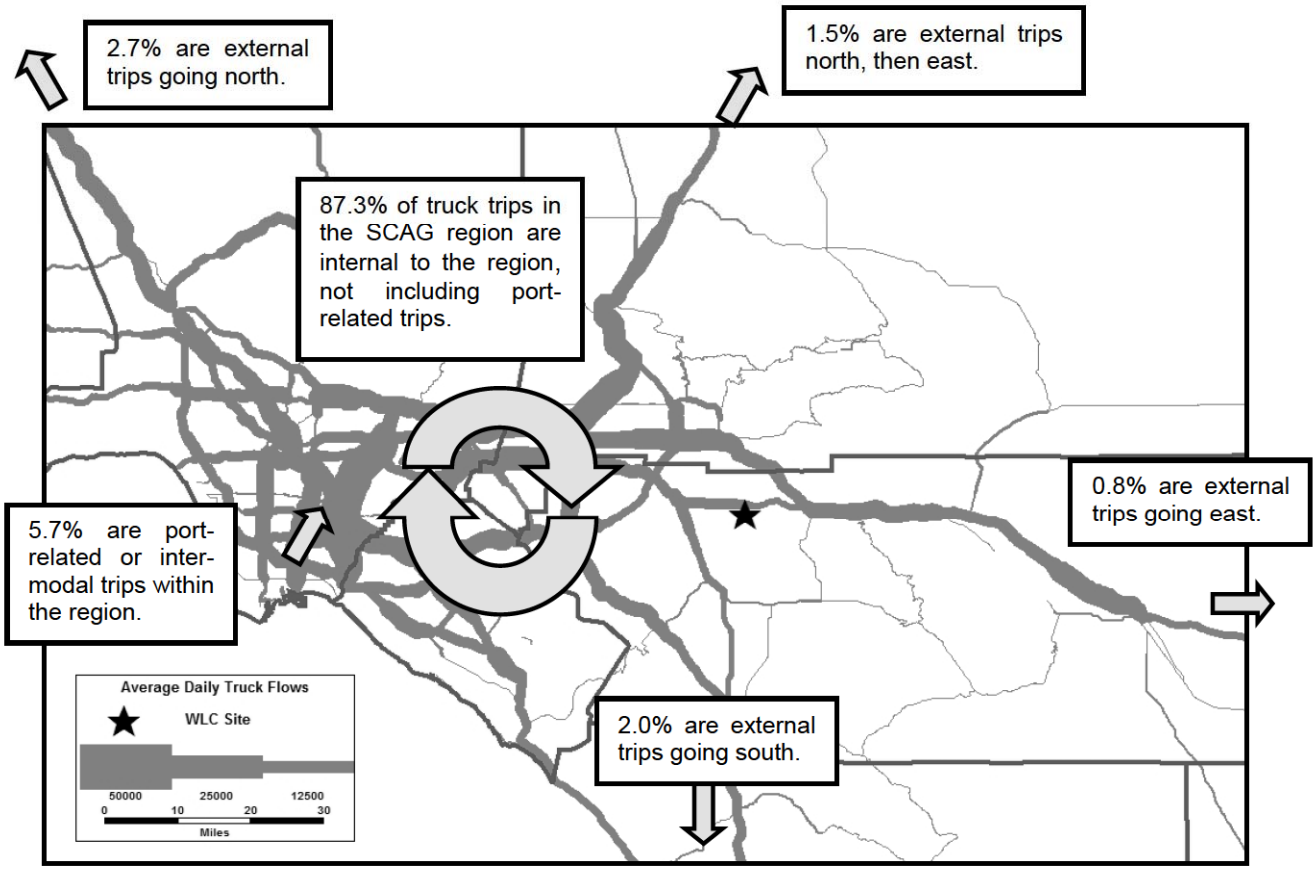

Figure 21: Major Truck Flows in the SCAG Region, 2010

4. PROPOSED PROJECT

A. POTENTIAL ROLE OF LOGISTICS

The type of development envisioned in the Moreno Highland Specific Plan has proven to be infeasible at this location; since the plan's approval more than twenty years ago no development has occurred on the site. This raises the question of whether a different type of development would be more feasible and so would provide more scope for benefits to Moreno Valley. SCAG has studied this issue in the larger context of the region's relative standard of living. In the period from 1987 to 2001, the SCAG region slipped from 4th place to 17th (last) place in per capita income among the 17 consolidated metropolitan areas in the United States[30]. Among the chief reasons for this decline was the loss in manufacturing jobs, which reduced the earning potential for the region's large and growing number of workers who lack a college education. One possibility for replacing these lost jobs is the logistics sector, since:

- Logistics has shown steady growth due to the adoption of "just-in-time" inventory systems, which rely on rapid-response warehouses as a substitute for goods stored on-site.
- The growth in trade with Asia has increased the volume of cargos while the introduction of post-Panamax container ships[31] limits the choice of west coast ports to L.A./Long Beach, Seattle/Tacoma, and Vancouver. Consequently they all have good prospects for continuing long-term growth.
- Logistics jobs offer better-than-average wages. These wages are better t han the wages of the blue-collar jobs in the declining sectors of manufacturing and construction[32].

Within the Inland Empire context, logistics development would bring high-paying blue collar jobs into an area with an under-employed labor force, including many workers lacking a college education[33]. Also, since modern logistics warehouses are very large buildings requiring large vacant parcels of land near freeways, it gives the Inland Empire region a comparative advantage over the coastal counties that do not have such parcels readily available or regions further inland that are not as easily accessible from the Ports of Los Angeles and Long Beach. Forecasts suggest that the regional demand for warehouse space

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30 *Logistics & Distribution: An Answer to Regional Upward Social Mobility*, Dr. John Husing for SCAG, June 2004, page 1.

31 Post-Panamax vessels are too large to go through the Panama Canal.

32 In 2003 the average pay was $45,314/yr for logistics jobs compared to $43,871 for manufacturing and $40,439 for construction (from *Logistics & Distribution: An Answer to Regional Upward Social Mobility*, Dr. John Husing for SCAG, June 2004, page 12.)

33 In 2010 only 14.1% of adults aged 25 or older in Moreno Valley had a bachelor's degree or higher. This compares to 36.5% in Orange County. Source: American Fact Finder, U.S. Census Bureau.

will triple over the next 25 years, from approximately 1.5 billion square feet to 4.5 billion square feet, and that half of this space will be built in the Inland Empire[34].

B. PROJECT DESCRIPTION

The proposed World Logistics Center is a plan for the development of modern high-cube logistics warehouse distribution facilities on land in eastern Moreno Valley. The project includes the development of up to 40.6 million square feet of modern high-cube logistics facilities within the 2,610-acre World Logistics Center Specific Plan, while designating 1,084 acres as "open space," and 19 acres as "public facility."

Proposed Land Uses

The project includes a Specific Plan to implement a proposed General Plan Amendment and to set forth comprehensive land use regulations governing the proposed World Logistics Center. The Specific Plan provides for a master planned development of up to 40.6 million square feet of modern high-cube logistics warehouse distribution facilities.

The Specific Plan includes development standards and use regulations, a master plan for circulation and infrastructure, architectural, landscape and design guidelines, and sustainability goals which would be applicable to all future development within the project area.

Table 21 lists the acreage associated with the proposed Logistics Development, Light Logistics, Public Utility, and Open Space uses within the project site.

Table 21: The World Logistics Center Land Use Summary

Land Use	Acreage
Specific Plan Area	
Logistics Development (includes Logistics Support site)	2,383
Light Logistics	37
Open Space	74
Street ROW	116
Outside Specific Plan	
Open Space (CDFW)	1,084
Public (SDGE, SCG)	20
Total	**3,714**

[34] Source: *Multi-County Goods Movement Action Plan*, Wilbur Smith Associates, August 2008.

Within the Specific Plan, the primary land use category is Logistics Development. This land use designation would provide for development of high-cube logistics warehouse uses consisting of warehouse buildings at least 500,000 square feet in size. Warehousing and logistics activities, consistent with the storage and processing of manufactured goods and materials prior to their distribution to other facilities and retail outlets, would be permitted within this category. Ancillary office and maintenance space would be permitted, along with the outdoor storage of trucks, trailers, and shipping containers.

A smaller area would be devoted to Light Logistics. The light logistics land use designation is for conventional warehouse buildings smaller than 500,000 square feet in floor area.

In consultation with the South Coast Air Quality Management District (SCAQMD) a combined fueling station and convenience store was been added to the plans for the WLC which would be developed within the Logistics Support (LS) land use area. The purpose of the fueling station/convenience store is to provide an on-site location to purchase alternative fuels such as compressed/liquefied natural gas (CNG) / (LNG), diesel fuel, snacks, soft drinks, toiletries, cigarettes, etc. for WLC truck drivers. The station is not intended to attract customers from outside of the WLC and would only have driveway access onto a side street in the WLC; no driveway access to external roads would be provided. The facility would have restrooms and operate on a 24/7 basis. There would be no shower facilities, stand-alone food uses, drive-through food operations, alcohol products, vehicle maintenance, vehicle washing, or long-term parking.

Proposed Road Network

The proposed network is shown in Figure 22 and the lane configurations are summarized in Table 22. As in the current General Plan, the proposed road network would feature two major east-west connections for through traffic between Redlands Blvd. and Gilman Springs Rd. Theodore St. would remain the main north-south road but would be changed from a minor arterial (in the current plan) to a major arterial. The other project streets are designed to provide internal access to project buildings and are not expected to serve external traffic. The overall density of streets is low because the very large size of the WLC buildings can only be accommodated in large blocks.

Table 22: Lane Configurations for WLC Internal Roads

Road	Lane Configuration
Street A (Theodore St.)	6 lanes and 4 lanes, wide median
Street B (Eucalyptus Ave.)	4 lanes, standard median
Street C (Alessandro Blvd.)	4 lanes, undivided
Cactus Ave. Extension	4 lanes, undivided
Street E (Alessandro Blvd.)	4 lanes, undivided
Street F	2 lanes, undivided

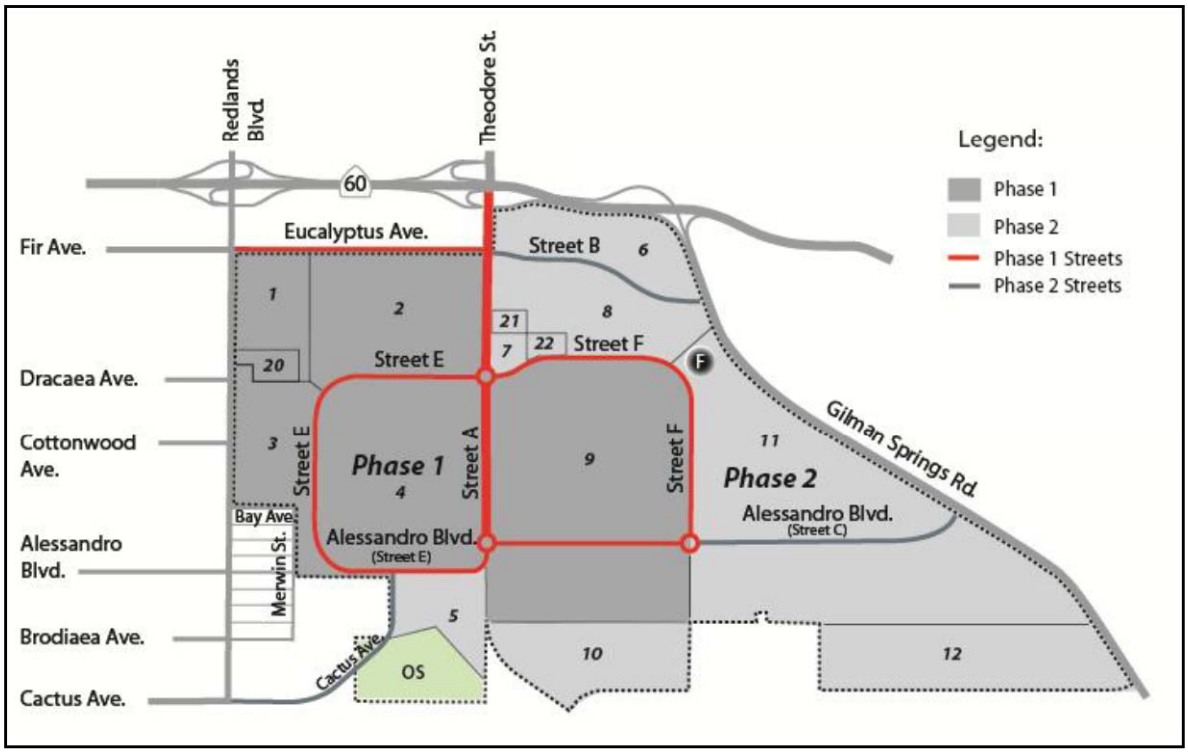

Figure 22: Proposed Roadways and Phasing

The WLC's internal streets are proposed as follows:

Street "A" (Theodore St.) would run on its present alignment north-south through the World Logistics Center. It is planned to be a 6-lane divided roadway north of Street E/F (see Figure 23) and 4-lane divided roadway south of Street E/F (see Figure 24), with additional widening and lane improvements at its intersections with SR-60, Eucalyptus Ave. and local interior collector streets. Two interior intersections would be roundabouts to provide for efficient traffic flow.

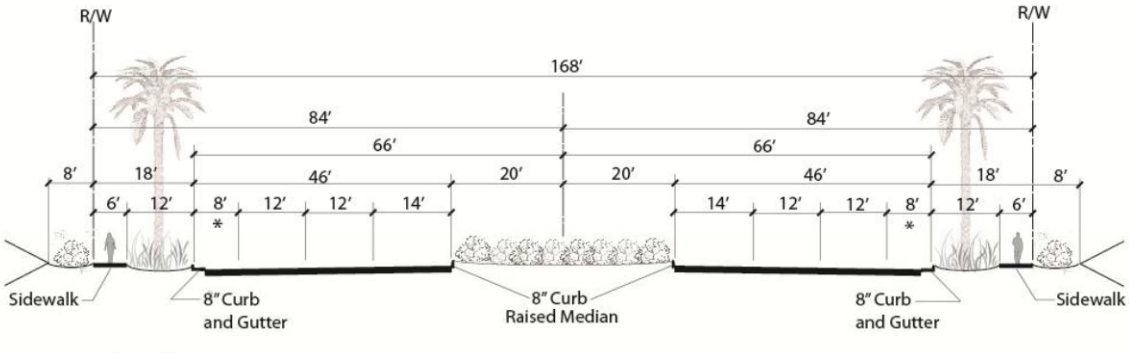

Figure 23: Street A Typical 6-Lane Section

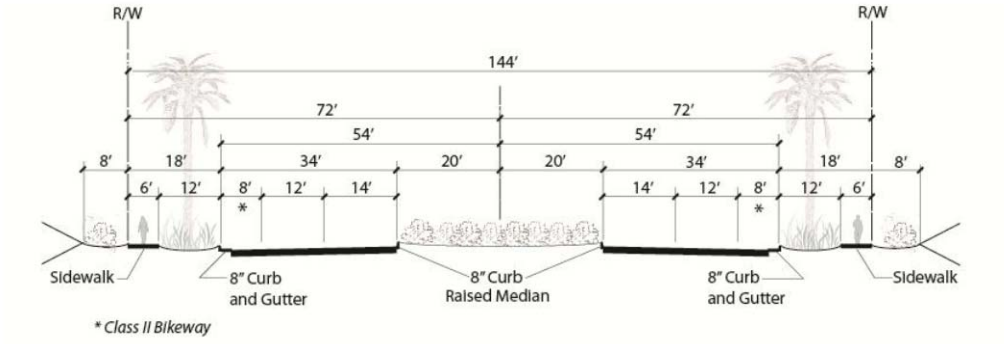

Figure 24: Street A Typical 4-Lane Section

Street "B" is proposed to be a 4-lane divided roadway running east-west through the northerly portion of the World Logistics Center from Gilman Springs Rd. on the east to existing Eucalyptus Ave. at Street "A" on the west (see Figure 25). The City's General Plan shows this street ultimately extending westerly across the City.

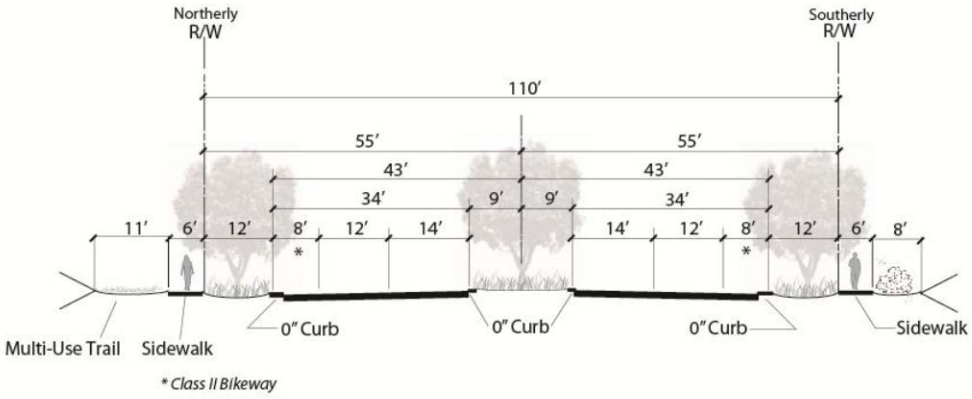

Figure 25: Street B Typical Section

Alessandro Boulevard[35] would retain its name. ROW width, and current alignment as an undivided roadway running east-west through the World Logistics Center, intersecting with Gilman Springs Rd. on the east (see Figure 26) and the Cactus Avenue Extension on the west. An existing section of Alessandro Blvd. between Merwin Street and the Cactus Avenue Extension would be closed to vehicular traffic except for emergency vehicles and bicycles and pedestrians. This is to prevent project traffic from traveling through existing residential neighborhoods. Passenger cars and light trucks heading west through the site would use Cactus Ave. Extension.

[35] Alessandro Boulevard was labeled “Street C” and “Street E” (the western portion) in some draft reports discussing the WLC internal road network.

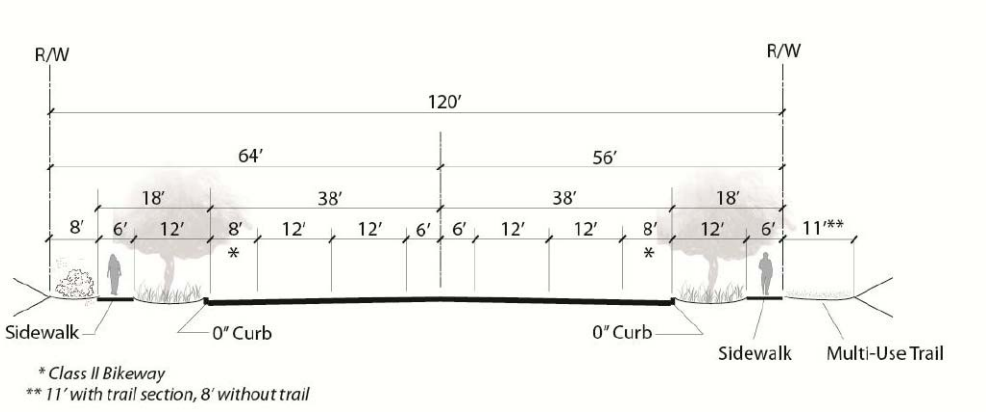

Figure 26: Alessandro Boulevard Typical Section

Cactus Avenue Extension is proposed to be a 4-lane undivided north-south roadway (see Figure 27) connecting existing Cactus Ave. with the westerly internal loop street (Street "E"). The intersection with Street "E" would be designed to prohibit large trucks from using Cactus Ave. Extension to prevent their travel through adjacent residential neighborhoods. Special design features and signage will reinforce this restriction.

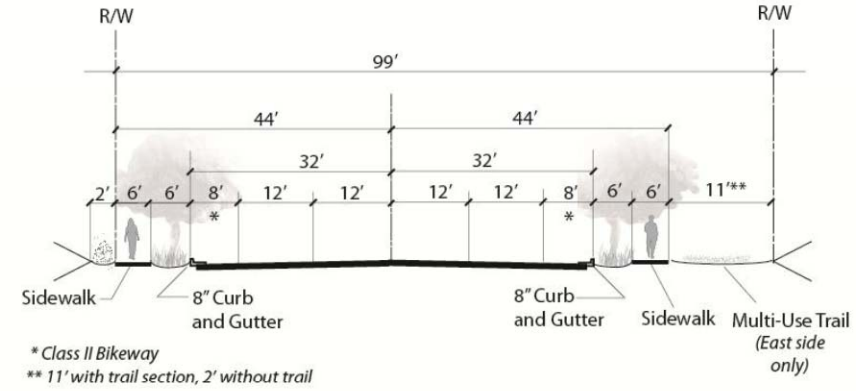

Figure 27: Cactus Boulevard Extension Typical Section

Street "E" is proposed to be a 4-lane undivided internal collector loop (see Figure 28) road providing direct access to development areas in the westerly portion of the project. Design details of this roadway will be determined by subsequent subdivision and site development approvals.

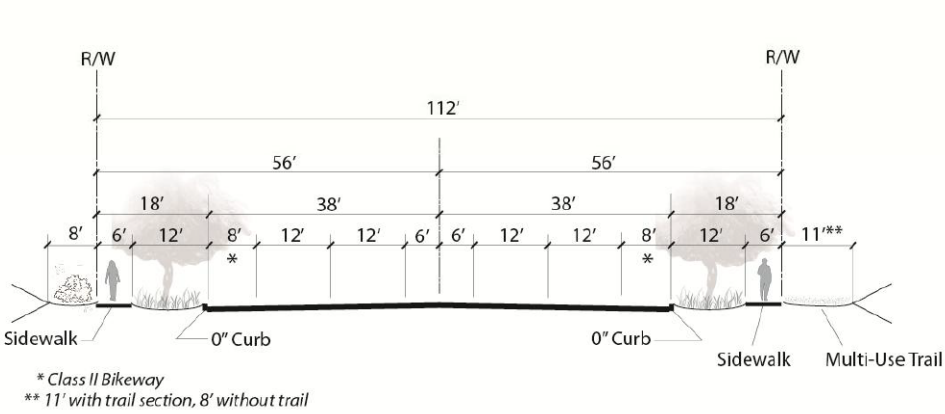

Figure 28: Street E Typical Section

Street "F" is proposed to be a 2-lane internal collector road providing direct access to development areas in the central portion of the project (see Figure 29). It would intersect with Street "A" at its northerly end and with Alessandro Boulevard at its southerly end. A roundabout is planned at its intersection with Alessandro Boulevard. Specific design details of this roadway will be determined by subsequent subdivision and site development approvals.

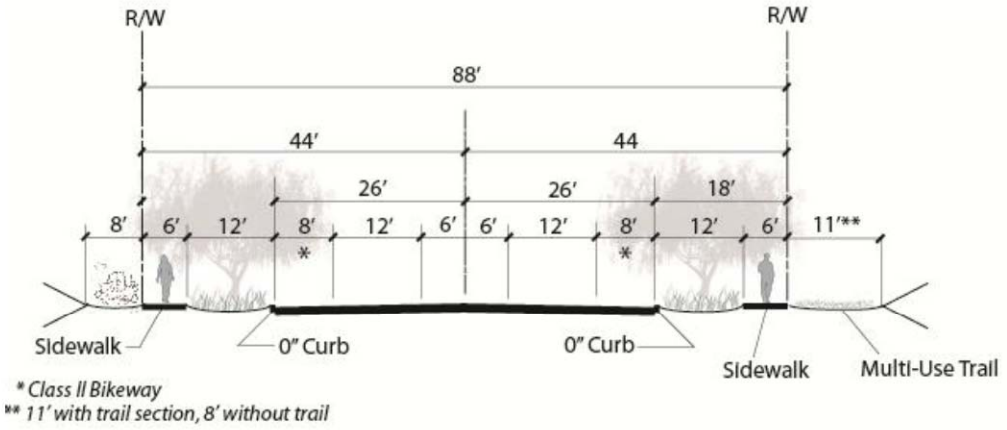

Figure 29: Street F Typical Section

Eucalyptus Avenue is proposed to be a 4-lane divided roadway running east-west through the northerly portion of the World Logistics Center from Street “B” on the east to a future Eucalyptus Ave. west of Redlands Blvd. (see Figure 30). The City's General Plan shows this street ultimately extending westerly across the City.

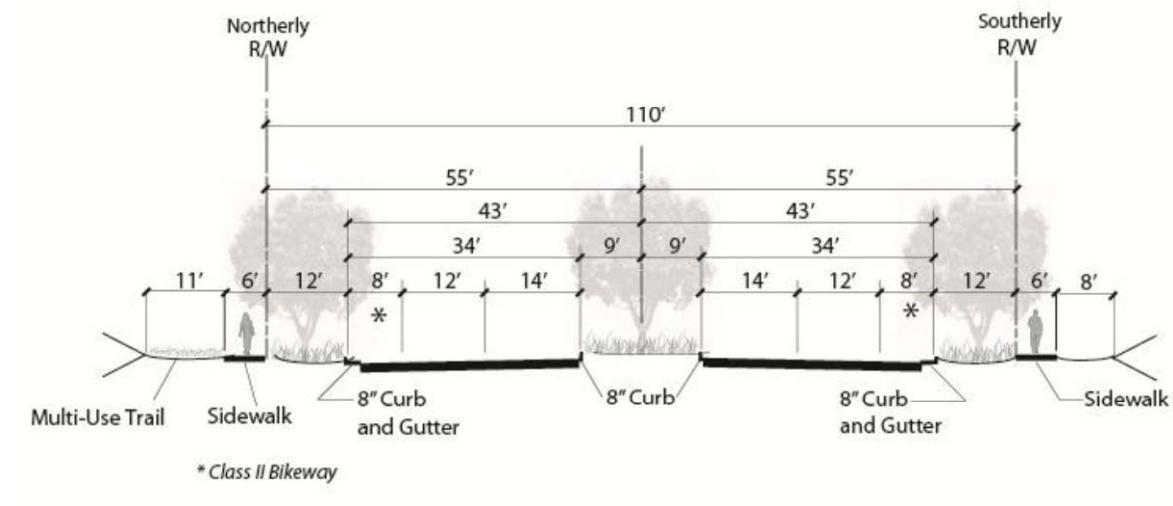

Figure 30: Eucalyptus Avenue Typical Section

The project would change a number of existing intersections in or adjacent to the project site, including:

- **Alessandro Blvd./Gilman Springs Rd. (IN-6)** would be signalized in Phase 1, and the eastbound approach changed from a shared left-turn/right-turn lane to dedicated left-turn lane and right-turn lanes. The northbound approach would have a left-turn pocket and two through lanes while the southbound approach would have a right-turn pocket and two through lanes. In Phase 2 an additional through lane would be added to the northbound and southbound approaches.
- **Theodore St./SR-60 WB ramps (IN-15)** would be signalized in Phase 1, one westbound and two northbound right-turn pockets would be added along with a southbound left-turn pocket. In Phase 2 this intersection would be replaced as part of the re-configuration of the interchange that will be described later in this section.
- **Theodore St./SR-60 EB ramps (IN-16)** would be signalized in Phase 1, eastbound and southbound right-turn pockets would be added, a northbound through lane would be added, and the existing left-turn pocket would be extended south to the adjacent intersection (IN-19). In Phase 2 this intersection would be eliminated and replaced with a new intersection to the north as part of the re-configuration of the interchange that will be described later in this section.
- **Theodore St. (Street A)/Fir Ave. (Eucalyptus) (IN-19)** would be signalized in Phase 1 and two northbound and southbound lanes added as part of the widening of Theodore St. In Phase 2 right-turn pockets would be added in the northbound, southbound, and eastbound directions, and an eastbound through lane added. A new westbound approach would be added with a left-turn pocket and a shared through/right turn lane.

Three roundabouts would be created, namely:

- **Alessandro Blvd. (Streets C and E)/Theodore St. (St. A) (IN-3)** is currently two closely-spaced offset intersections. These would be replaced with a 3-legged roundabout as shown in Figure 31.

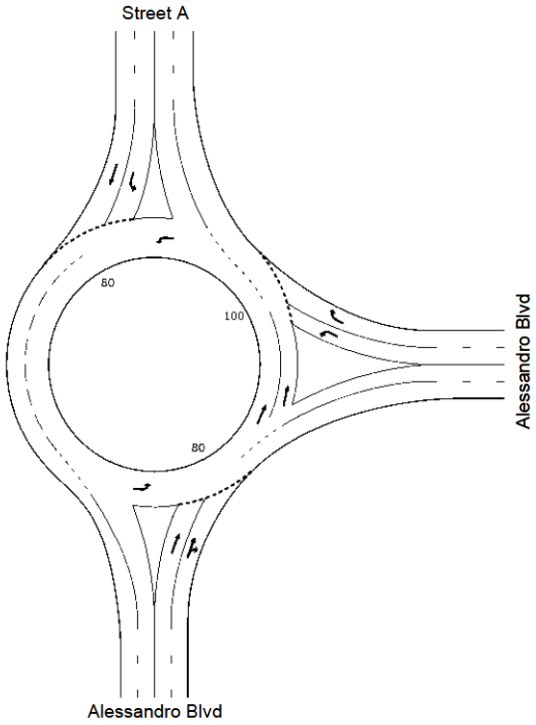

Figure 31: Alessandro Blvd. (Streets C and E)/Theodore St. (Street A) Roundabout

- **Streets E and F/Theodore St. (Street A) (IN-1)** would be created as a 4-leg roundabout in Phase 1 as shown in Figure 32.

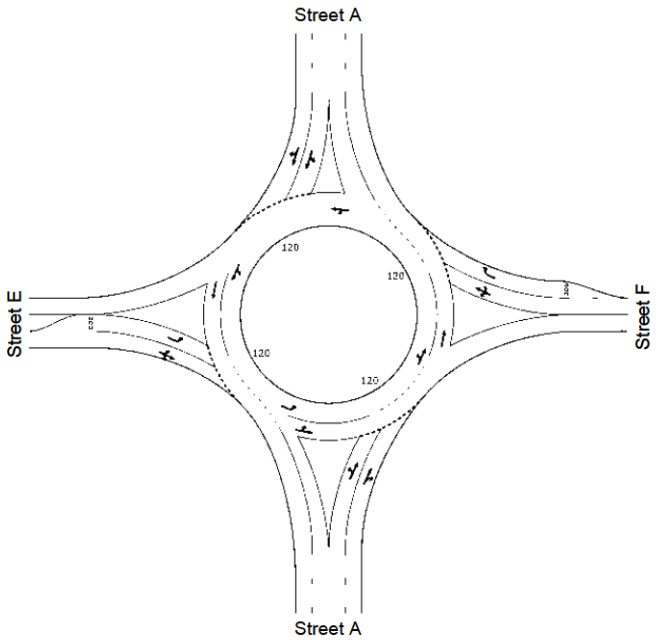

Figure 32: Roundabout at Intersection of Streets A (Theodore St.), E, and F

- **Streets C/Street F (IN-4)** would be created as a 3-leg roundabout as shown in Figure 33.

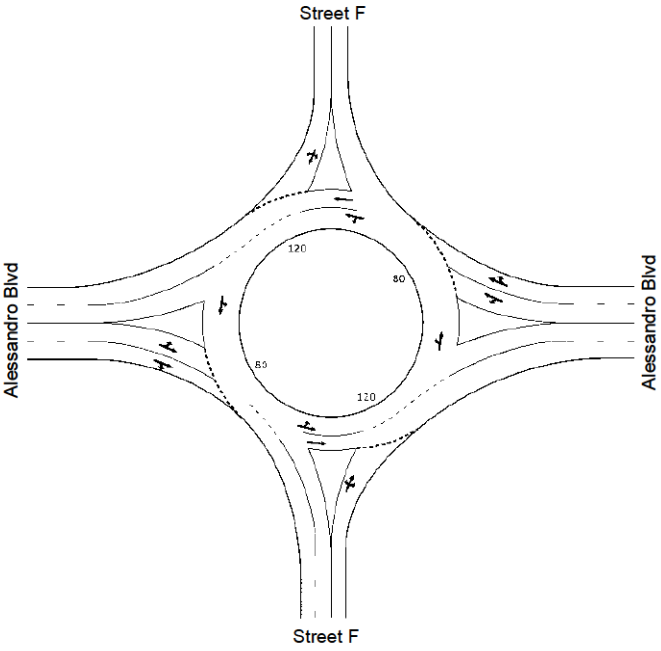

Figure 33: Roundabout at Intersection of Streets F and C (Alessandro Blvd.)

Another change from the current General Plan is that Alessandro Blvd. would be severed east of Merwin St. and connected to Cactus Ave. via Cactus Ave. Extension. This re-configuration is proposed to avoid impacts to the existing residential community west of the project area that would occur if Alessandro Blvd. were not severed and was widened into a 6-lane arterial as shown in the current General Plan.

The proposed circulation plan for the General Plan is shown in Figure 34.

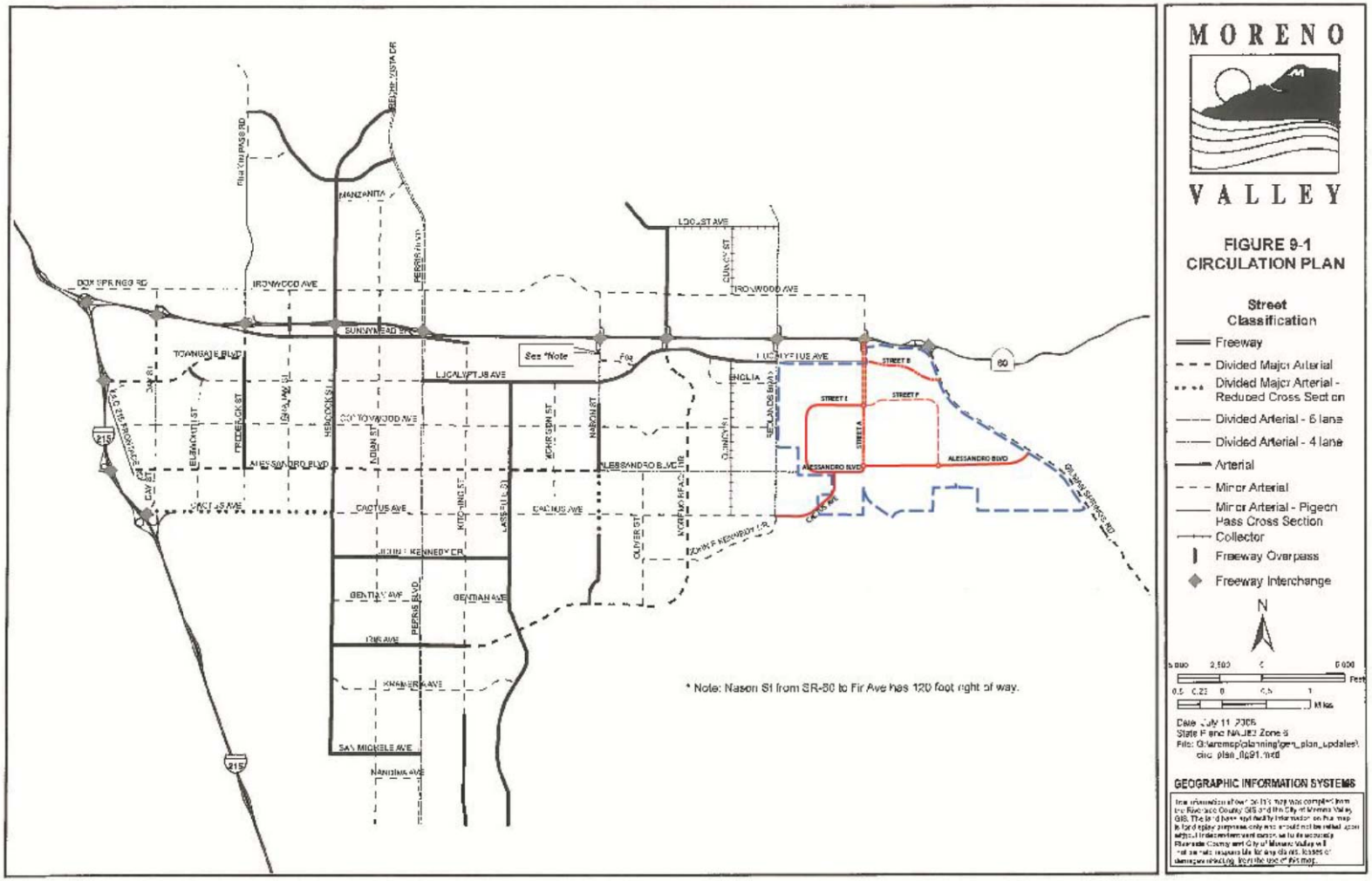

Figure 34: Circulation Plan After Proposed Amendment

A closely-related project that would serve the WLC is the reconfiguration of the SR-60 interchange at Theodore St. One of the new configurations being considered is shown in Figure 35. This project is included in the financially-constrained RTP project list and was assumed to be completed prior to Phase 2 of the WLC.

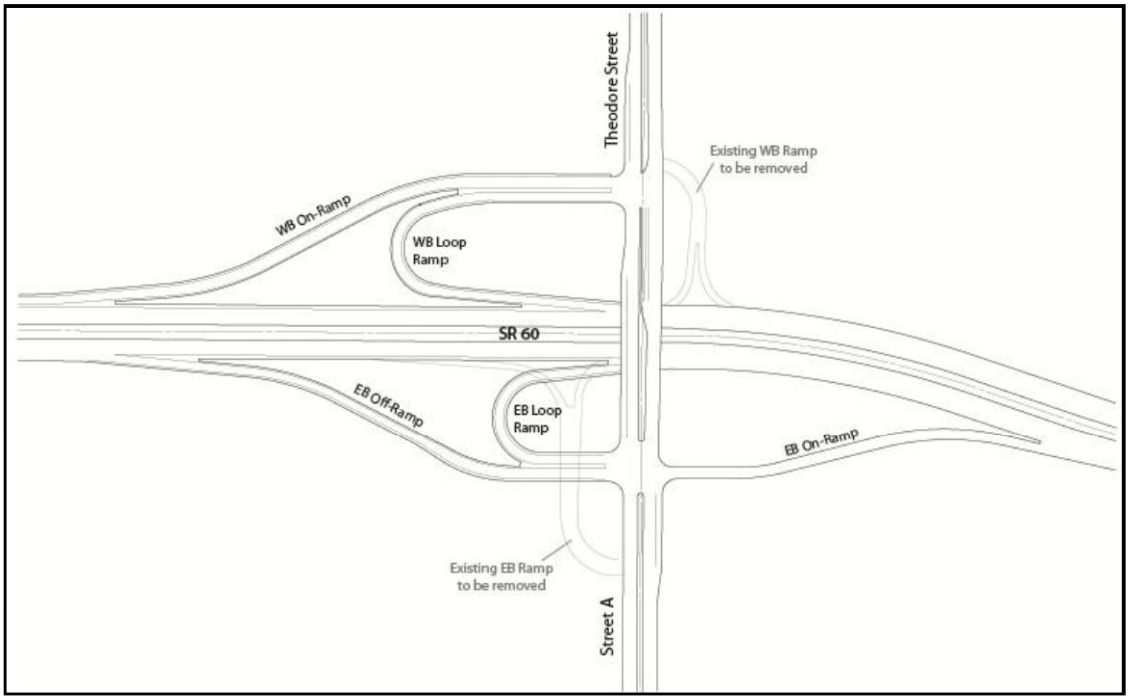

Figure 35: Possible Future Configuration for the SR-60 Interchange at Theodore St.

The developer of the WLC has discussed the interchange project with the City and has also entered into discussions with Caltrans and other agencies regarding this interchange project. The planning and design of this interchange is currently underway. For the purposes of this report, the improvements to the SR-60/Theodore interchange have been analyzed as part of the WLC project and have been studied in the same manner as the proposed project's internal roadways.

Proposed Truck Routes

The proposed revision to truck routes near the project site is shown in Figure 36. These routes would need to be incorporated into the Municipal Code.

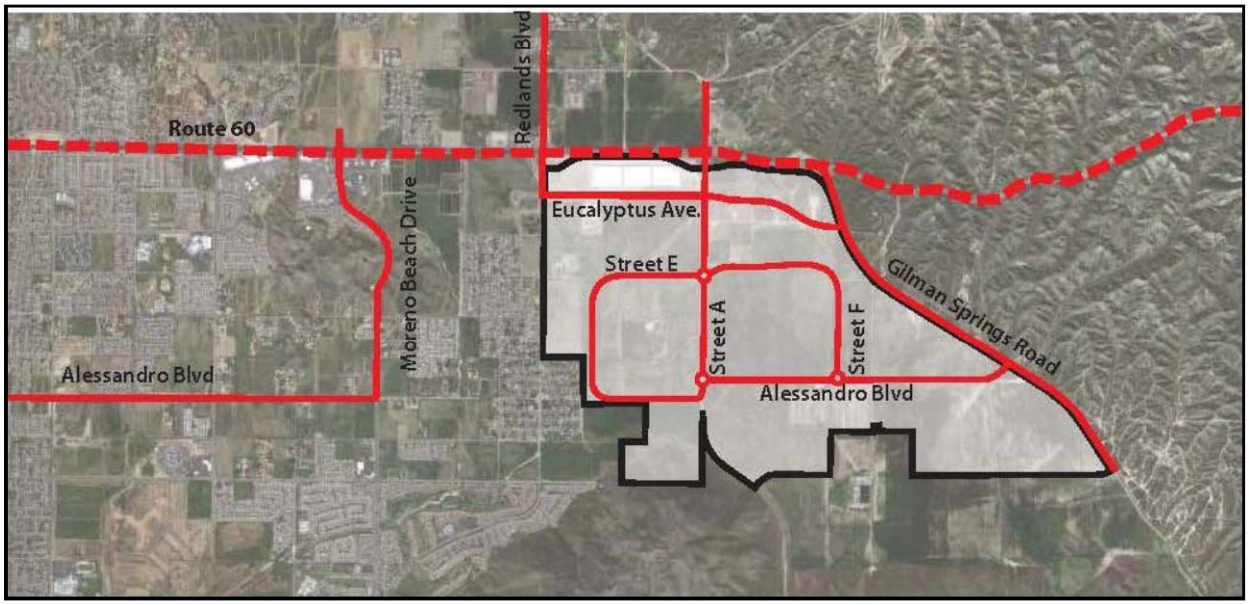

Figure 36: Proposed Truck Routes Near Project Site

Bicycle and Pedestrian Facilities

The WLC proposes Class II bike routes on all of its internal streets, thus providing safe access to all WLC buildings for employees wishing to commute by bicycle, as well as creating north-south and east-west paths through the site for bicycle through trips (see Figure 37).

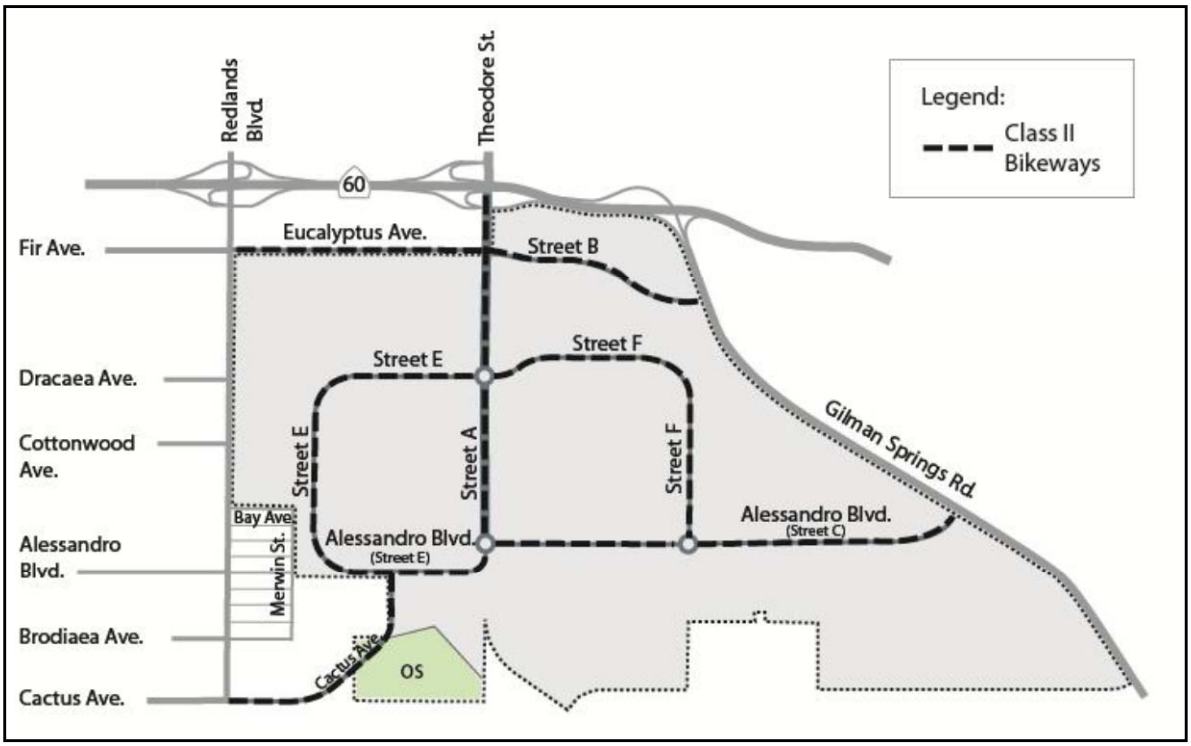

Figure 37: Proposed WLC Bikeways

The World Logistics Center proposes a network of pedestrian ways on project streets, as required to comply with ADA and other applicable codes, to connect all areas of the project to surrounding areas and to interconnect all buildings within the project.

An extension of the City's Redlands Blvd multi-use trail is proposed to be routed along the eastside of Redlands Blvd., and extend southerly through the project connecting to the existing trail along the south side of Cactus Ave., and to the San Jacinto Wildlife Area at the former Davis Rd. alignment (see Figure 38). Details of this trail alignment would be established with site-specific development proposals. The multi-use trails within the World Logistics Center would comply with existing City standards.

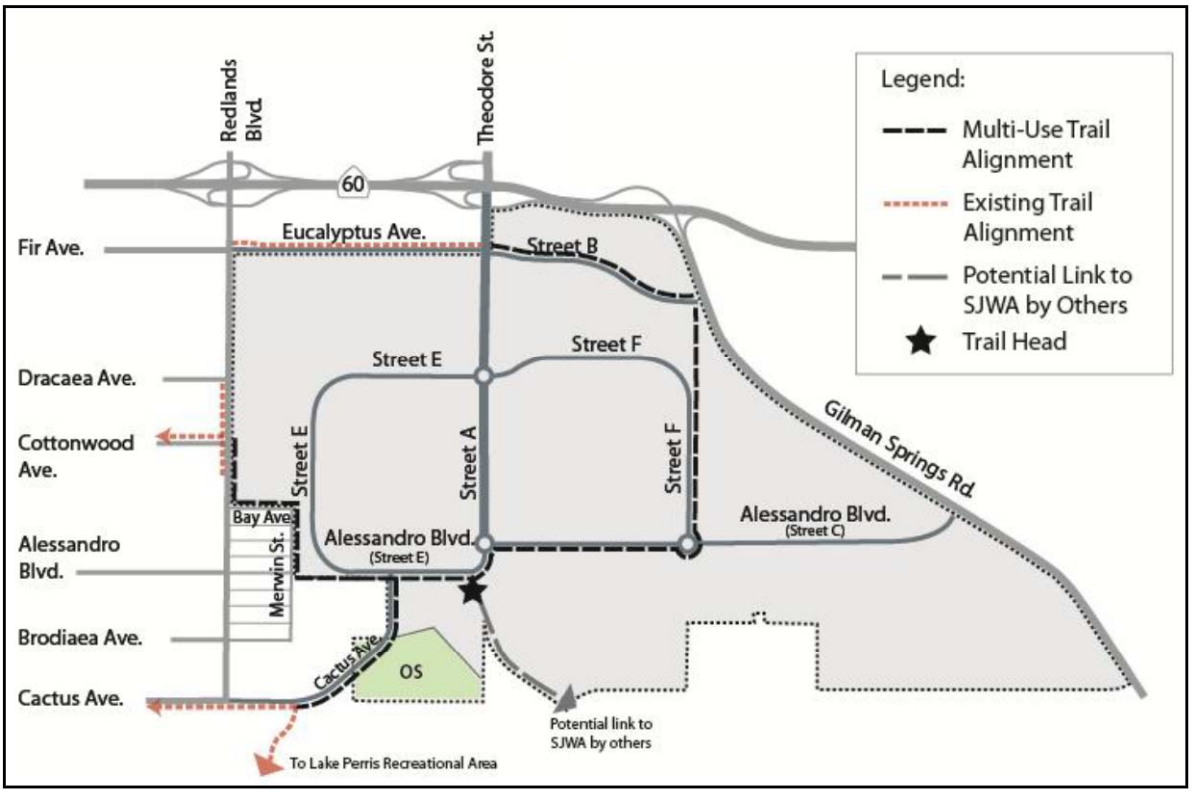

Figure 38: Proposed Multi-Use Trails

Phasing

The WLC would be developed over a number of years. For planning purposes it was assumed that Phase 1, to be completed by 2022, would contain approximately 21,450,000 square feet of logistics warehouse uses. This is approximately 52% of the total project building space. At that time, the road system would be partially built out (see Figure 22) with east-west through traffic served by Cactus Ave. Extension and Streets C and E, and north-south traffic served by Theodore St.

For Phase 2, full build-out of the project was assumed. An additional east-west through route would be provided when Eucalyptus Ave. (Street B) is connected with Redlands Blvd. to the west and Gilman Springs Rd. to the east.

C. PROJECT TRIP GENERATION

As was discussed in an earlier chapter, in order to ensure that the traffic forecasts would be conservative (i.e. not underestimate actual volumes) the trip generation rates selected for use in this study were the rates found in the latest edition of ITE's *Trip General Manual*. These rates are shown in Table 23.

Table 23: Trip Generation Rates for Proposed and Existing Land Uses

Land Use Type	Unit	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Proposed Land Uses								
High-Cube Logistics Center (ITE 152)	KSF	0.076	0.034	0.110	0.037	0.083	0.120	1.680
Light Logistics (ITE 150)	KSF	0.237	0.063	0.300	0.080	0.240	0.320	3.560
Utilities Servicing Station (ITE 170)*	KSF	0.720	0.080	0.800	0.342	0.418	0.760	8.000
Fire Station**	Site	20	8	28	10	20	29	137
Gas Station w Convenience Store (ITE 945)	Pumps	5.08	5.08	10.16	6.76	6.76	13.51	162.78
Convenience Store (ITE 851)	KSF	33.52	33.52	67.03	26.73	25.68	52.41	737.99
Existing Land Uses								
Single-Family Dwellings (ITE 210)	DU	0.188	0.563	0.750	0.630	0.370	1.000	9.520
Utilities Servicing Station (ITE 170)*	KSF	0.720	0.080	0.800	0.342	0.418	0.760	8.000

"KSF" means "thousand square feet"

* Note: AM directionality taken from table for trips/employee. Daily rate is assumed to be ten time peak-hour rates

** Fire Station rate is based on the average of three traffic studies:

Fehr and Peers, *Loyola Marymount University Master Plan Project*, City of Los Angeles Department of Transportation, 2009, Table 5.

LLG Engineers, *Peaceful Valley Ranch*, County of San Diego, 2007, page 11.

McMahon, *Upper Dublin Fire House*, Montgomery County, Pennsylvania, 2010, page 15.

Using these rates, the trips that would be generated by the WLC are shown in Table 24 and Table 25.

Table 24: Trips Generated by Proposed and Existing Land Uses

Land Use Type	Unit	Amount	AM Peak Hour			PM Peak Hour			ADT
			In	Out	Total	In	Out	Total	
Proposed Land Uses									
High-Cube Logistics Center	KSF	40,400	3,066	1,378	4,444	1,503	3,345	4,848	67,872
Light Logistics	KSF	200	47	13	60	16	48	64	712
SCG Valve/Metering Station (ITE 170)	KSF	0.15	0	0	0	0	0	0	1
SDG&E Gas Compression Station (ITE 170)	KSF	30.8	22	2	25	11	13	23	247
Fire Station	Site	1	20	8	28	10	20	29	137
Gas Station with Convenience Store (ITE 945)	Pumps	12	5	5	11	10	10	21	219
Convenience Store (ITE Category 851)	KSF	3	11	11	22	13	12	25	354
Total			3,172	1,417	4,590	1,563	3,449	5,010	69,542
Existing Land Uses									
Single-Family Dwellings (ITE 210)	DU	7	1	4	5	4	3	7	67
SCG Valve/Metering Station (ITE 170)	KSF	0.15	0	0	0	0	0	0	1
SDG&E Gas Compression Station (ITE 170)	KSF	30.8	22	2	25	11	13	23	247
Total			24	6	30	15	16	31	314

Table 25: WLC Trips by Vehicle Type [36]

Vehicle Type	Surface Street PCEs	Freeway PCEs	AM Peak Hour						PM Peak Hour						Daily		
			Vehicles			PCEs			Vehicles			PCEs					
			In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	Vehicles	Surface Street PCEs	Freeway PCEs
PHASE 1																	
Autos	1.0	1.0	1,197	466	1,663	1,197	466	1,663	412	1,396	1,807	412	1,396	1,807	30,879	30,879	30,879
Light Trucks	1.5	1.5	97	55	152	146	83	229	77	90	167	115	135	251	1,340	2,009	2,009
Medium Trucks	2.0	1.5	130	74	204	260	148	408	103	121	223	206	241	447	1,792	3,585	2,689
Heavy Trucks	3.0	1.5	345	197	542	1,035	590	1,625	273	320	594	820	961	1,781	4,760	14,279	7,140
Total			1,769	792	2,561	2,638	1,287	3,924	866	1,927	2,792	1,554	2,733	4,286	38,771	50,753	42,717
PHASE 2																	
Autos	1.0	1.0	923	356	1,279	923	356	1,279	313	1,075	1,388	313	1,075	1,388	23,835	23,835	23,835
Light Trucks	1.5	1.5	75	43	118	113	64	177	60	70	130	90	105	195	1,046	1,569	1,569
Medium Trucks	2.0	1.5	100	57	157	200	114	314	79	93	173	159	187	345	1,389	2,778	2,083
Heavy Trucks	3.0	1.5	266	151	418	799	454	1,253	211	248	459	633	744	1,376	3,680	11,040	5,520
Total			1,365	606	1,971	2,035	987	3,023	663	1,486	2,149	1,194	2,110	3,305	29,950	39,222	33,007
Full Build-out																	
Autos	1.0	1.0	2,120	821	2,941	2,120	821	2,941	726	2,471	3,195	726	2,471	3,195	54,714	54,714	54,714
Light Trucks	1.5	1.5	172	98	271	259	147	406	137	160	297	205	241	446	2,385	3,578	3,578
Medium Trucks	2.0	1.5	230	131	361	460	262	722	182	214	396	365	428	792	3,181	6,363	4,772
Heavy Trucks	3.0	1.5	611	348	959	1,834	1,044	2,878	484	568	1,052	1,453	1,704	3,157	8,440	25,319	12,660
Total			3,134	1,398	4,532	4,673	2,274	6,947	1,529	3,413	4,941	2,748	4,843	7,590	68,721	89,975	75,724

D. PROJECT TRIP DISTRIBUTION

A survey of warehouses in the Inland Empire[37] found that 80% of the vehicles entering or leaving warehouse sites are passenger cars, nearly all of which are used for commute trips by employees of the warehouses. The travel pattern of the project-related auto traffic is discussed below, followed by a discussion of project-related truck traffic.

WLC Auto Traffic

As discussed previously, Moreno Valley currently has a severe jobs/housing imbalance that results in long westbound commutes for thousands of city residents every workday. The WLC would create approximately 20,000 local job opportunities[38]; nearly doubling the number of jobs in Moreno Valley. This would have several effects on commute patterns:

- Many current and future residents of Moreno Valley would have the opportunity to work locally with very short commute trips.
- Residents of neighboring cities who work at the WLC would have short commutes and, importantly, be able to access the site using the arterial road network. This is consistent with the

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[36] Light trucks are 2 axle trucks with six wheels, medium trucks are those with three axles, and heavy trucks are those with four or more axles. Pickup trucks with four wheels are included in the "auto" category.

[37] *Truck Trip Generation Study*, City of Fontana, August 2003.

[38] Based on a ratio of 0.5 employees per 1000 square feet of logistics. This ratio is taken from: *DTA Public Works Database; confirmed by "Employment Density Study," SCAG (2001), and "Logistics Trends and Specific Industries," NAIOP Research Foundation (March 2010).San Bernardino Planning Department.*

policies of the Western Riverside Council of Governments and the Riverside County Transportation Commission to promote use of the arterial road network as an alternative to freeways. Tests with the RivTAM model (see Figure 39) suggest that nearly half of auto traffic associated with the WLC would be on surface streets; i.e. not on freeways.

- Workers coming from more distant locations would, in most cases, be travelling on freeways in the off-peak direction; i.e. commuters traveling to the WLC from Los Angeles or Orange Counties would be headed eastbound in the morning and westbound in the evening. This would enable them to take advantage of the existing unused off-peak capacity of freeways, since the freeways were sized for flows in the peak direction.

- Assuming, as RivTAM does, that WLC employees would work elsewhere if the WLC project were not implemented, then the availability of jobs at the east end of Moreno Valley would reduce the number of workers driving long commutes to distant jobsites to the west and southwest. Figure 40 shows that although the project would increase freeway auto traffic eastbound in the morning (where unused capacity is available), it would also decrease the traffic in the more congested westbound direction. In the evening the pattern would reverse, with the project relieving traffic in the congested eastbound direction (see Figure 41). Therefore, the WLC project would have a net beneficial impact on the regional freeway auto traffic. This is the effect sought in the policies of SCAG, WRCOG, and other regional governments and agencies that encourage better jobs/housing balances as a way to reduce peak directional flows on the regional freeway system.

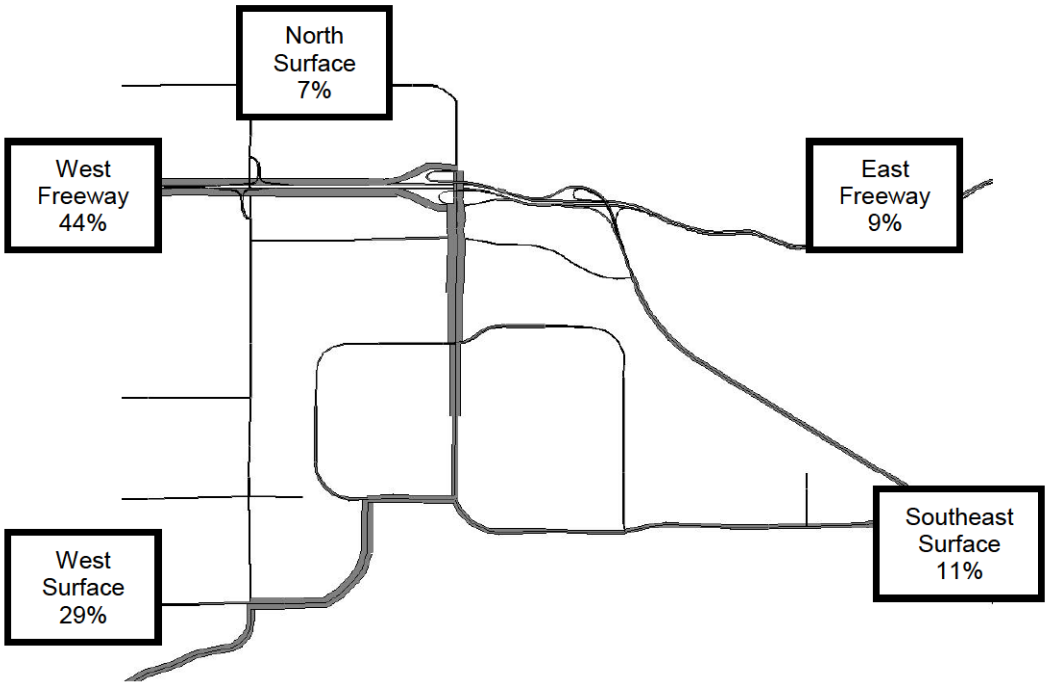

Figure 39: Daily Distribution of WLC Auto Trips

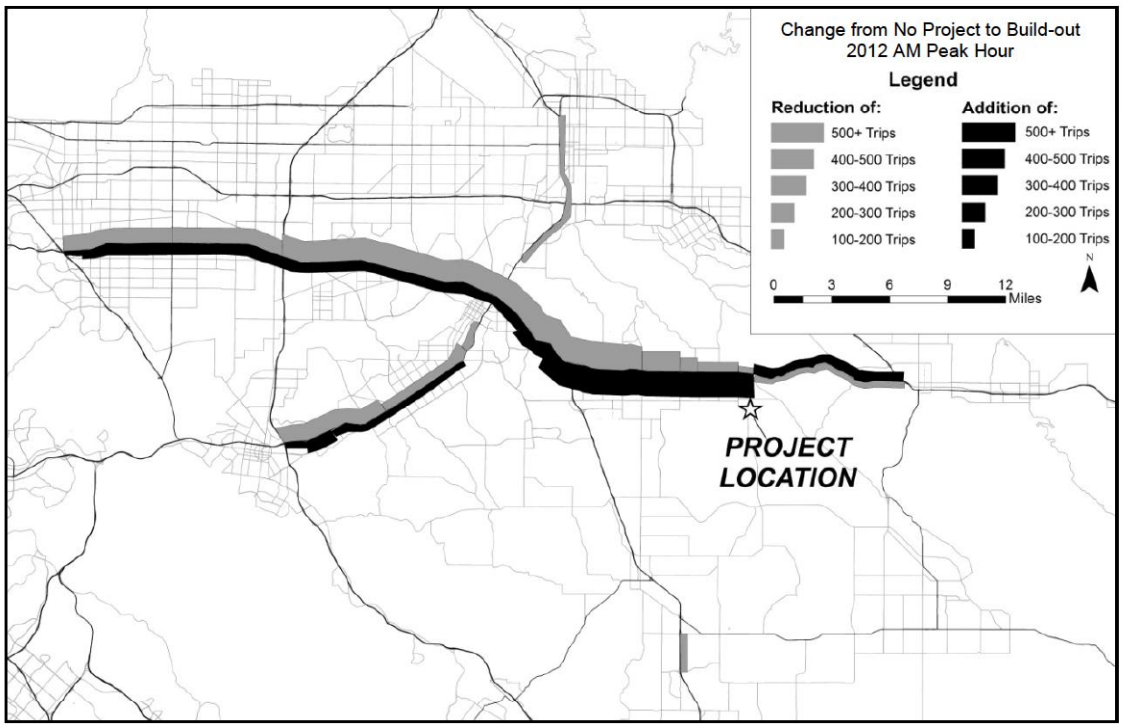

Figure 40: Effect of WLC on Freeway Car Traffic, AM Peak Hour 2012

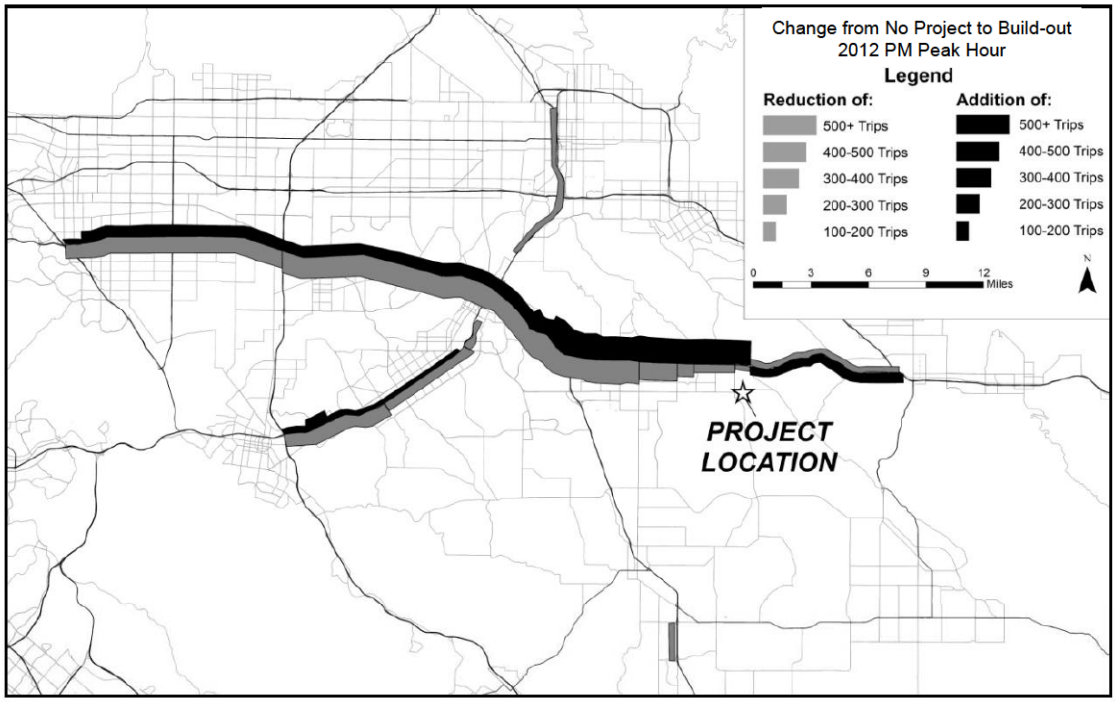

Figure 41: Effect of WLC on Freeway Car Traffic, PM Peak Hour 2012

WLC Truck Traffic

The truck traffic associated with a typical logistics center has a much different time-of-day pattern than auto traffic. Figure 42 shows the combined traffic data for vehicles entering or leaving the 31 logistics centers in 2011 NAIOP trip generation study. As shown, besides being much larger, the auto traffic shows distinct peaks while truck traffic is spread much more evenly throughout the 24-hour period. The five hours with the highest truck traffic all occurred outside of the freeway peak periods.

Some readers of the Draft TIA misunderstood Figure 42 to mean that the WLC traffic analysis did not cover the worst-case scenario. In fact, because of the conservatively high trip-generation rate used in the WLC analysis, along with the fact that the peak hour of trip generation for the WLC was assumed to occur simultaneous with the peak hour of background traffic, the assumptions in the WLC analysis are far more conservative (i.e. assume worse conditions) than the NAIOP survey would suggest is likely to occur (see Figure 43). In addition, the 2PM to 3PM hour was also studied with regards to possible impacts on pedestrians in the areas around schools, since most schools release students at that time of the day (see Chapter 12, Section B of this report).

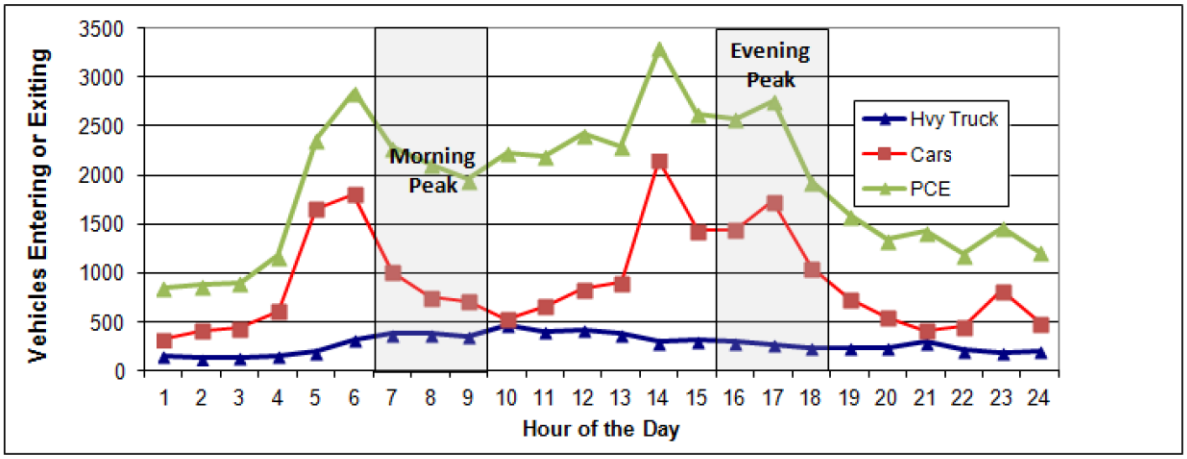

Figure 42: Time-of-Day Distribution of Traffic from Logistics Warehouses

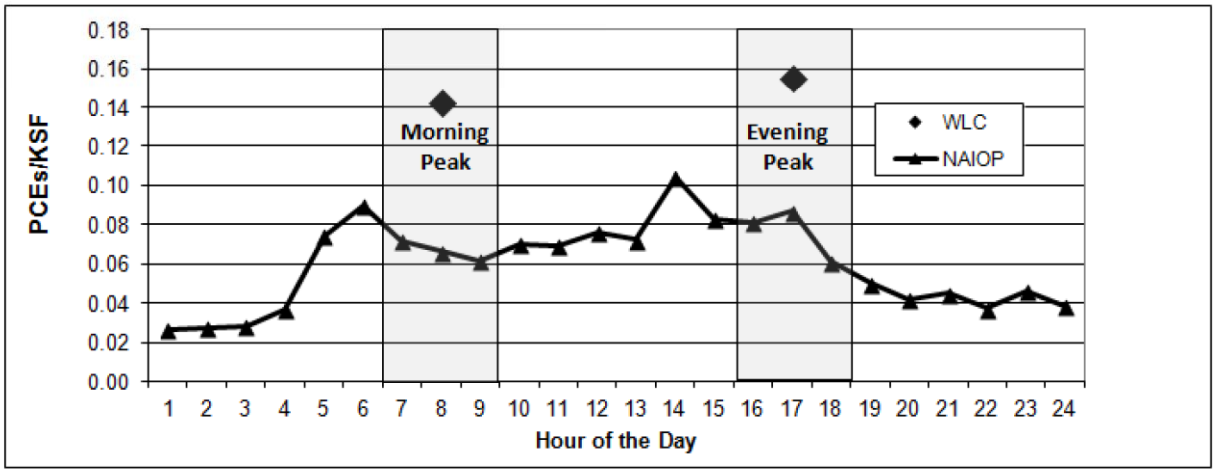

Figure 43: Time-of-Day Distribution, WLC Assumptions Compared to NAIOP

Since the internal trips, the port-related trips, and the majority of external trips (all but those on I-10) use routes west of the project site, it is anticipated that a large majority of the WLC truck traffic would be oriented to the west of the project, with a much smaller amount to and from the east. Also, due to truck routing restrictions the majority of WLC truck traffic would use the freeway system to enter and leave the site. However, there may be some trips between the WLC and local businesses, for example trip chaining among warehouses to consolidate cargos, that may use surface streets such as Gilman Springs Rd. Tests with the RivTAM model confirm this pattern (see Figure 44).

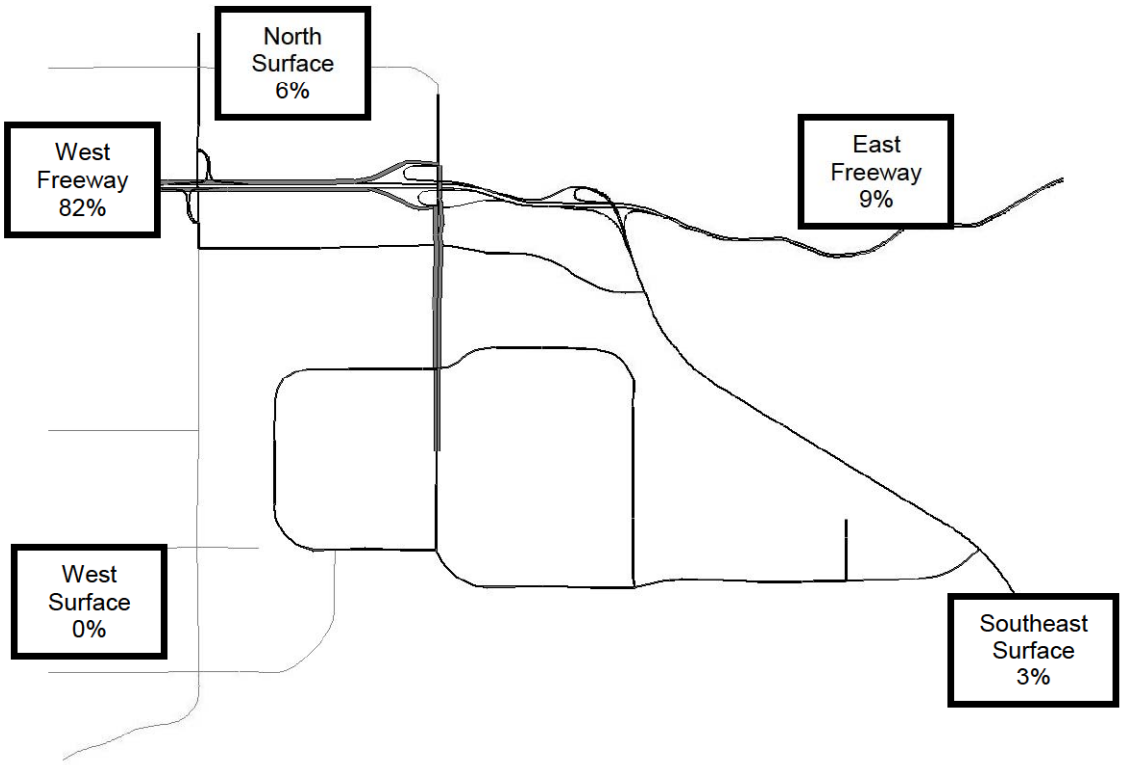

Figure 44: Daily Distribution of WLC Truck Trips

The percentage of WLC truck trips that would go to the port were estimated based on the assumptions described in Chapter 12 (see Table 87) for each study year. These percentages were then applied to the trip generation rates to find the number of WLC trucks going to and from the port in each analysis period. These are shown in Table 26. Tests with the SCAG traffic model showed that these trips would split approximately evenly between the two routes shown in Figure 56, so half of these trips were assigned to the SR-60 route and the other half assigned to the SR-91 route.

Table 26: WLC Truck Trips to and from the Port by Analysis Period

Scenario	AM Peak Hour		PM Peak Hour		Daily	
	In	Out	In	Out	In	Out
2012 Plus Build-out	18	10	14	17	121	121
2022 Plus Phase 1	19	11	15	18	127	127
2035 Plus Build-out	57	33	46	53	393	393

E. TRIP GENERATION COMPARISONS

The final traffic study for the Moreno Highlands Specific Plan [39], which served as the basis for approval of that plan, forecast a total of 178,608 average vehicle trips per day (ADT) being generated by the Specific Plan. That would be more than two-and-a-half times as many trips (256%; see Figure 45) as are forecast for the WLC (69,542 ADT). The Moreno Highlands traffic studies did not distinguish between car and truck traffic and so did not provide a forecast in terms of PCEs. However, even if the Moreno Highlands plan were to generate no truck trips at all (only auto trips), it would still generate nearly twice as many PCEs trips as the WLC[40]. Thus, the World Logistics Center would generate substantially less traffic than what is envisioned in the existing Specific Plan.

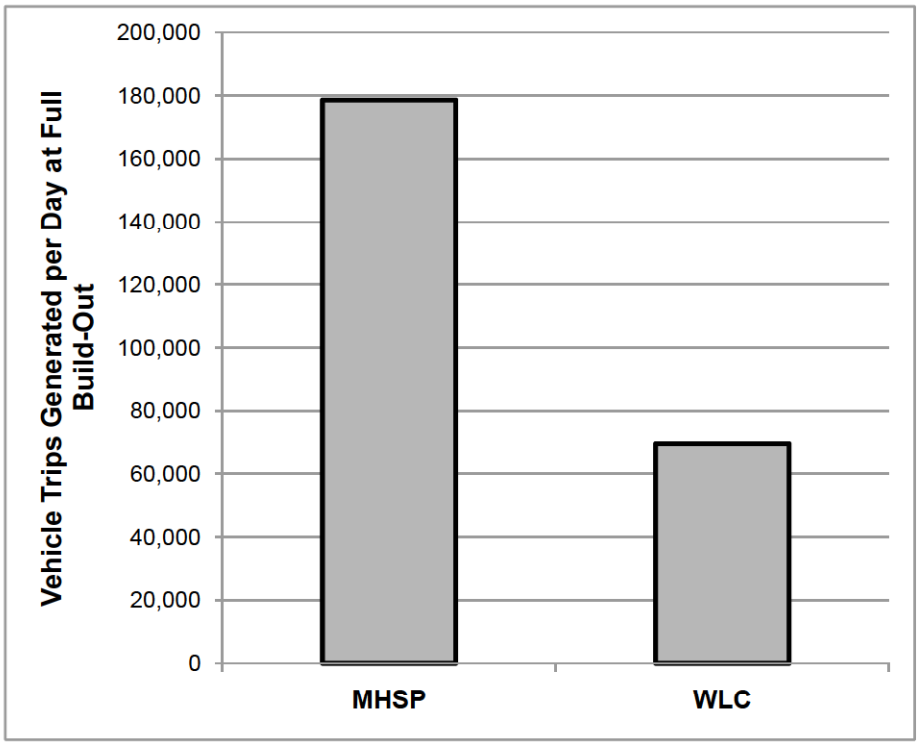

Figure 45: Comparison of Trip Generation

The comparison between the traffic forecast for the proposed WLC project and the traffic forecast for the Moreno Highlands Specific Plan indicates that the current Circulation Element of the General Plan is designed to accommodate approximately twice as much traffic from the WLC site than the WLC project is likely to generate. The much lower traffic volumes forecast for the WLC can therefore be expected to

[39] *Moreno Highlands SP 212-1 Traffic Impact Study Addendum*, Endo Engineering, October 1991

[40] 178,608 PCEs for Moreno Highlands would be 191% of the 93,414 PCEs forecast for the WLC

result in less strain on the transportation system than the land uses envisioned in the current General Plan.

F. RAIL ALTERNATIVE

Several comments received on the DEIR requested that the provision of rail service to the project site be studied as a potential means of reducing the number of trucks driving between the ports and the site, and therefore a reduction in the number of significant impacts caused by the project. This section describes why rail service is not considered a viable option for reducing the traffic impacts of the WLC. This conclusion is based on several factors, including the physical constraints to bringing rail service to the WLC site, the cost of cargo movement by rail relative to movement by truck, capacity constraints in the rail system that the WLC branch line would tie into, and the minimal effect that rail service would have even if all other factors could be overcome. These factors are discussed in turn below.

The Possible Alignments for Bringing Rail Service to the WLC Site

The WLC site is not currently served by rail. The rail lines nearest the site are the Union Pacific Yuma Line (single-track in this area), the Riverside County Transportation Commission's San Jacinto Branch Line (single-track, currently inactive), and the BNSF double-track line through the City of Riverside (see Figure 46).

As can be seen in Figure 46, there are four general alignment possibilities for a branch line to the WLC. Each has problems associated with it:

- Western Alignment – Alignments running from the BNSF line in Riverside to the WLC, an approximate distance of 15 miles, would have to run through built-up areas of the Cities of Riverside and Moreno Valley. The cost of acquiring right-of-way through these areas, and the impacts to the community (noise, traffic disruption, safety, division of the community, etc.) render such alignments unviable. Moreover, trains using the at-grade rail crossings in the City of Riverside already impose substantial delays on road traffic. In fact, in recent years the City of Riverside has sued the ports over the issue of traffic impacts from additional trains passing through their city. Adding more crossings and more trains would exacerbate this problem.

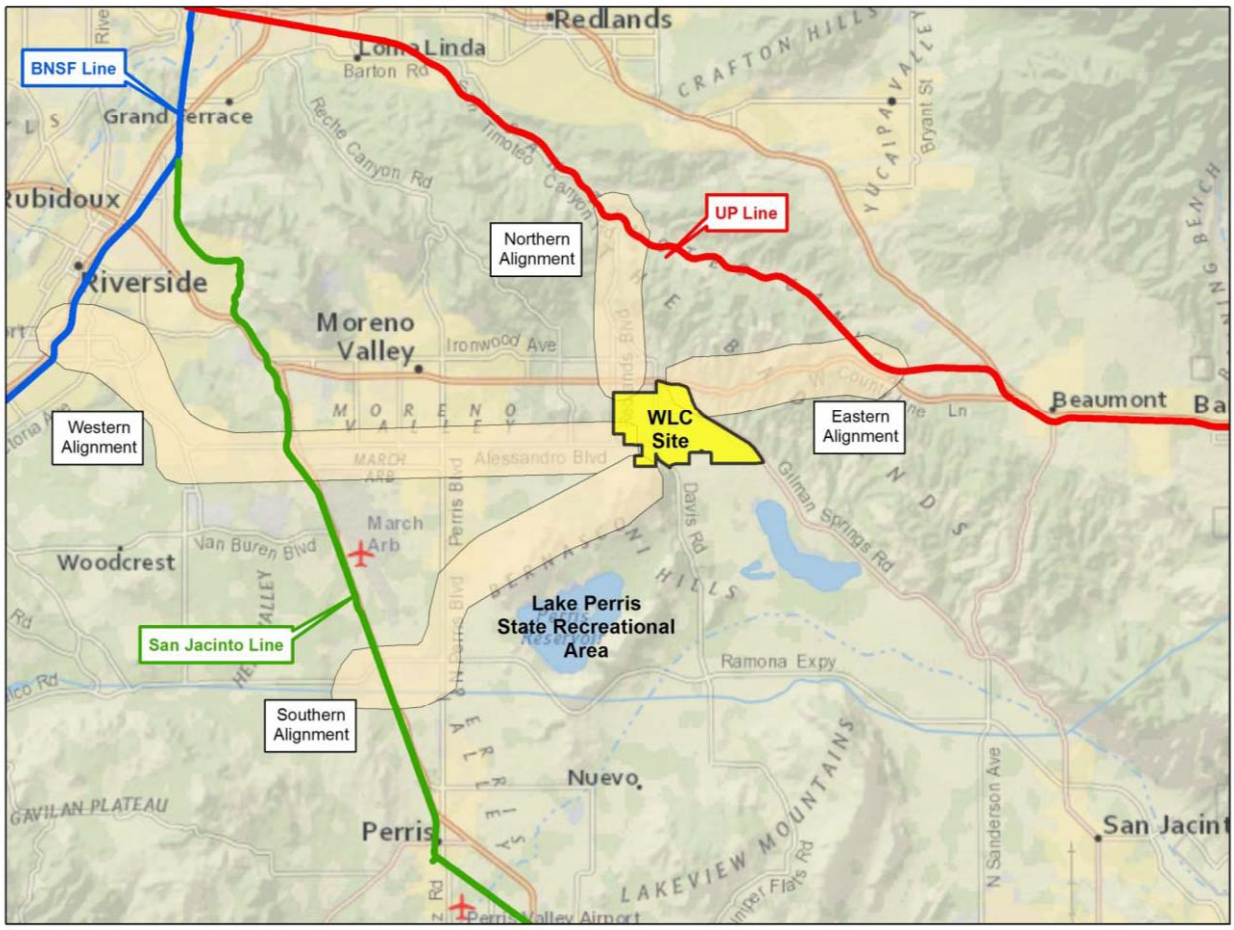

Figure 46: Conceptual Rail Alignments

- Southern Alignment – It would be possible to avoid densely populated and built-out areas by connecting to the San Jacinto Branch Line south of March Air Reserve Base. However, the only way to avoid established communities would be to pass along the northern portion of the Lake Perris State Recreation Area. The alignment, approximately 10 miles in length, would be a major impact as it would require constructing and operating a rail line along the slopes of the Lake Perris State Recreation Area and potentially the San Jacinto Wildlife Area. There would also be traffic impacts at road crossings, potential grade issues, and grade separated crossings needed for drainage channels and I-215. The impacts and costs of this approach would be disproportionate to the benefit of removing WLC trucks from the freeways (which will be discussed in a later section).
- Northern Alignment – The shortest alignment to an existing rail line is to the north in the vicinity of Redlands Blvd. and connecting to the UP Yuma line near the intersection of Redlands Blvd. and San Timoteo Canyon Rd., approximately five miles from the project site. This alignment would require extensive ROW acquisition, very serious grade issues that would increase the length of

track needed[41], environmental impacts on the Badlands, and a grade separated crossing of SR-60. The impacts and costs of this approach would be disproportionate to the benefit of removing WLC trucks from the freeways.

- Eastern Alignment – The final possibility would be to connect to the UP Yuma line along an alignment parallel to SR-60. This alignment would connect to the existing rail network near the Morongo Golf Club at Tukwet Canyon, approximately five miles to the east of the WLC site. The eastern alignment would be affected by the same drawbacks as the northern alignment, with the addition of the need to construct a bridge over San Timoteo Creek.

  As can be seen from the discussion above, providing rail service to the WLC along any of the possible alignments would in itself create serious environmental impacts.

Relative Costs of Truck and Rail Service

The loading and unloading of rail cargos require special equipment and handling and can only be performed at specialized places, which adds to the cost of shipping goods by rail. On the other hand, the actual movement of goods by rail is more energy-efficient and less expensive than movement by truck. This combination of relatively high fixed costs at each end of a trip with low variable costs for the distance traveled means rail can be a less expensive way to ship cargo than truck, but only if the shipping distance is sufficiently long.

The breakeven distance between rail and truck shipping has been the subject of several studies. The industry rule-of-thumb is that the rail becomes economically viable when cargos are shipped more than 500 miles. For example, the National Rail Plan, a nationwide guiding document from the U.S. Department of Transportation Federal Railroad Administration, has set the freight rail goal to, "Develop strategies to attract 50 percent of all shipments 500 miles or greater to intermodal rail."[42] In addition, the Plan highlights the importance that trucks have in conjunction with rail when moving freight as trucks, "excel in providing time-sensitive delivery services for high-value goods being transported over medium and short-haul distances."[43] A local example is the Ports of Long Beach/Los Angeles Rail Master Planning Study, which indicates that rail loaded with two levels of shipping containers, "traditionally competes well with

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41 Although the grade passable by train depends on the load, generally tracks climb at less than three percent. For example, as the BNSF Cajon line traverses the Cajon Pass, the maximum uphill grade is 2.2 percent. Therefore, constructing a track through the Badlands, either near Redlands Blvd. or State Route 60, may require a longer more circuitous layout to avoid the grades. A longer track would require more right-of-way, result in a greater impact to the environmentally sensitive area, and be more costly to construct.

42 National Rail Plan, U.S. Department of Transportation Federal Railroad Administration, September 2010. Available at: https://www.fra.dot.gov/eLib/Details/L02696, page 14.

43 Ibid.

trucks at distances greater than 500 miles.[44] Figure 47, from the San Pedro Bay Ports Rail Market Study, shows the breakeven point between truck and rail freight transport beginning east of Las Vegas and Phoenix, and north of the Bay Area. For shipments between the Ports of Los Angeles and Long Beach and the WLC, a distance of about 70 miles, shipping by rail would be far more expensive than by truck. So even if a rail line were built to the WLC, it would be uneconomical to use it for trips to and from the ports.

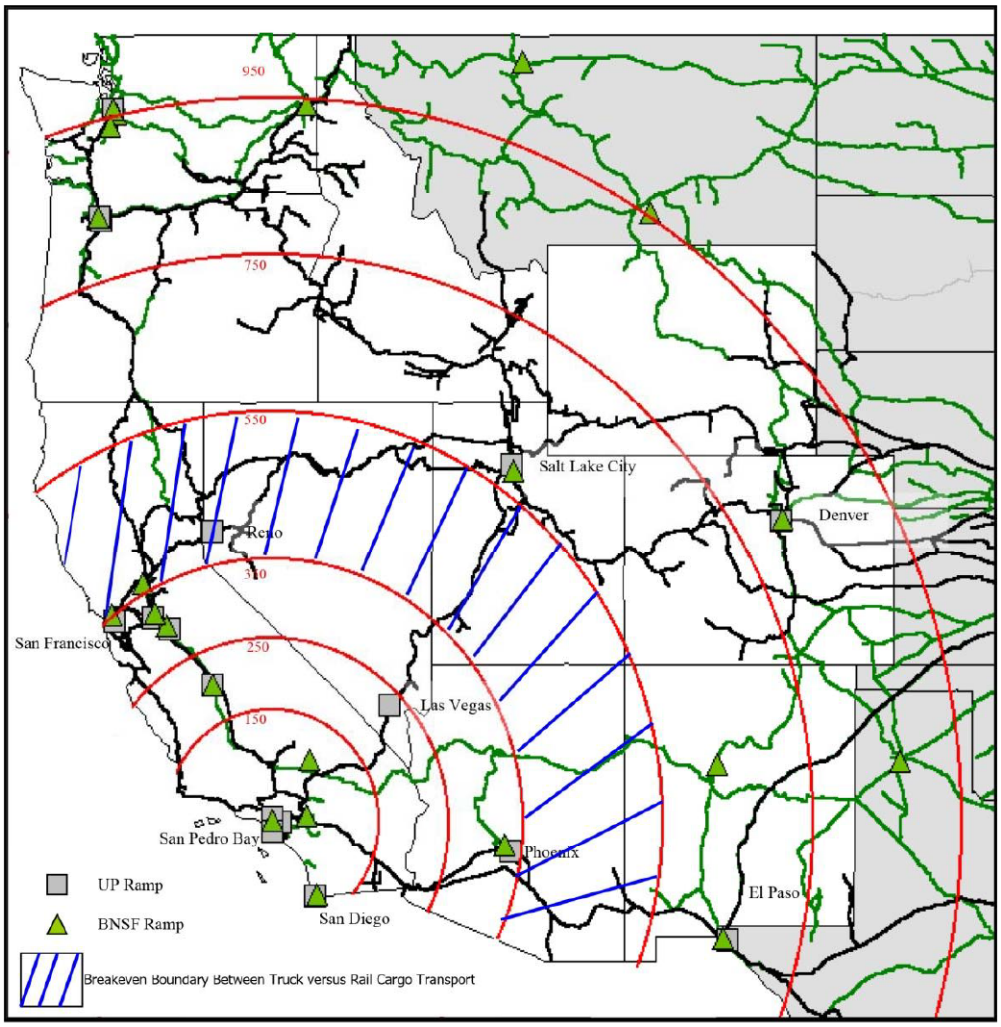

Figure 47: Range of Typical Rail Market in Southern California[45]

44 Ports of Long Beach/Los Angeles Rail Master Planning Study, Michael Leue, PE, Kerry Cartwright, PE, 2004. Available at: http://www.ite.org/Membersonly/annualmeeting/2004/AB04H4203.pdf

45 San Pedro Bay Ports Rail Market Study, Port of Los Angeles and Parsons Transportation Group, April 2004.Available at: http://www.portoflosangeles.org/DOC/REPORT_SPBayPortsRailMarketStudy.pdf, page 9.

Capacity Constraints in the Rail System

If a rail line could be built to the WLC site and tenants could be induced to use it despite higher costs, this would only be helpful if the regional rail system had sufficient capacity to accommodate WLC freight without detriment to other users.

In fact, there are serious capacity constraints in the rail network in the Los Angeles basin. Among other things, rail operations for both BNSF and UP are already constrained by the capacity of the lines between the ports and western Riverside County. Two studies, completed in the early 2000s and using the year 2000 as the existing condition, found that many of the rail lines were already operating near capacity.[46] The studies evaluated 10 and 25 years of projected growth on the network and found that within 10 years (of the date of the study) the network would be overcapacity. Without capacity increasing improvements, 10 years of train traffic growth was forecast to increase delay more than six-fold. This did not include additional delays that would be caused by trains serving the WLC.

The Los Angeles-Inland Empire Railroad Main Line Advanced Planning Study from October 2002 found that the, "region's rail system is inadequate for forecast train traffic."[47] The study presented other findings that illustrate the near-capacity state of the rail network, for example, "…just 25 percent of the forecast 2010 traffic is sufficient to roughly double the average delay per train, to 67.6 minutes for BNSF freight and 54.4 minutes for UP freight." This occurs because small increases in train traffic result in disproportionate delays as the network nears capacity.

Several minor improvements to the rail network have been made since the 2002 study. However, accommodating estimated future demand in the year 2025 by providing capacity improvements alone would be costly; to meet future demand without rerouting would require capacity of some segments to be increased from two to four tracks. Therefore, an approach has been developed to revise train routing on the existing rail network and make limited capacity-increasing improvements. Even the limited improvements are estimated to cost over $2 billion.[48]

The fact that the rail system has limited capacity to accommodate additional traffic means that potential users have to be prioritized so that the capacity can be allocated efficiently. Highest priority would be for long-distance rail service direct from the ports. Short-distance cargo trips between the ports and the WLC would receive much lower priority than long-distance shipments because they would generate less revenue (unless a premium was charged). If regional passenger trains (e.g. Metrolink) share the tracks with freight trains, as is the case for some lines, then service to WLC would drop even further on the priority list.

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46 Los Angeles-Inland Empire Railroad Main Line Advanced Planning Study, Los Angeles Economic Development Corporation, October 2002, page 15.

47 Ibid. page 8.

48 Inland Empire Railroad Main Line Study, Southern California Association of Governments, June 2005, page 75.

Based on existing capacity of the rail network and projected growth, the studies indicated that the rail network would be overcapacity without further capital investments, which are beyond the scope of the WLC project.

Minimal Reduction in Traffic

Assuming that a rail line could be built to the WLC site and assuming that WLC freight could be accommodated by the rail network and that the costs for these things could be covered by subsidies or by increasing the prices on goods moved through the WLC, the question must be asked, "how much of a reduction in truck traffic impacts would be achieved?"

The answer is, "very little". As was discussed earlier, the economics of freight shipment make rail viable only for trips of 500 miles or more. As is described elsewhere in this report (Chapter 12, Section F), between 2% and 7% (depending on the year) of the truck trips beginning or ending in WLC go to the ports and these trips have no significant impact on freeway LOS for most of their length. So the effect of rail service on reducing truck impacts would be very small.

Conclusions About the Rail Alternative

This analysis of the rail alternative found that bringing rail service to the site would be very costly, result in serious environmental impacts, create major disruption to existing communities, and take many years to design, acquire right-of-way and construct. Even if a line were built, both economics and system constraints would deter its use for cargos between the WLC and the ports. Even if built and used, rail service would have very little effect on reducing the traffic impacts of the WLC. Based on these considerations rail service was not included in the design of the WLC.

5. EXISTING PLUS PHASE 1 CONDITIONS

The analysis of Existing Plus Phase 1 conditions shows the effect of project-related traffic using the same land use and road network assumptions as the Existing scenario plus the build-out of Phase 1 (only) of the WLC and no changes occurred to the off-site land uses or roadway system.

A. ROAD SEGMENT LOS, IMPACTS, AND MITIGATIONS

Table 27 compares the average daily traffic (ADT) volumes for study roadway segments to Existing Conditions and to their threshold of significance under the City's General Plan policies. Under Existing Plus Phase 1 Conditions two segments would exceed the threshold of significance set by General Plan policy, namely:

- Gilman Springs Rd. between SR-60 and Alessandro Blvd. would exceed the threshold of significance under both Existing Conditions and under Existing Plus Phase 1 Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under Existing Plus Phase 1 Conditions.

- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. would exceed the threshold of significance under both Existing Conditions and under Existing Plus Phase 1 Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under Existing Plus Phase 1 Conditions.

In each case adding lanes would bring the LOS above the target threshold set in the General Plan. The feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

B. INTERSECTION LOS, IMPACTS, AND MITIGATIONS

Figure 48 shows the turning movement volumes under Existing Plus Phase 1 (see Figure 16 for the key map).

Table 28 presents the LOS for the study intersections under the Existing Plus Phase 1 conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix C.

Table 27: Existing Plus Phase 1 Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	Existing Conditions			Existing Plus Phase 1 Conditions			Project Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section*	Daily Volume	LOS			
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	771	A	2U	2,709	A			
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	2,046	A	6D	26,532	A			
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U***	1,339	A	4D	2,102	A			
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road			Future Road					
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	641	A	6D	27,883	A			
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	D	Future Road			4U	14,240	A			
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	D	Future Road			2U	2,242	A			
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	641	A	4D	10,443	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	2,537	A	4U	5,761	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	D	Future Road			4U	9,250	A			
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	1,896	A	4U	4,006	A			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	1,896	A	4U	3,799	A			
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	2U	3,877	A	2U	3,367	A			
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	2U	14,407	F	2U	14,970	F	Yes	Widen to 4 lanes	C
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	11,973	E	2U	11,973	E	Yes	Widen to 4 lanes	C
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	7,338	A	2U	9,634	C			
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	2U	6,786	A	2U	4,146	A			
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	2U	2,537	A	2U	565	A			
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	2U	6,786	A	2U	3,415	A			
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	2U***	472	A	2U	9,250	C			

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

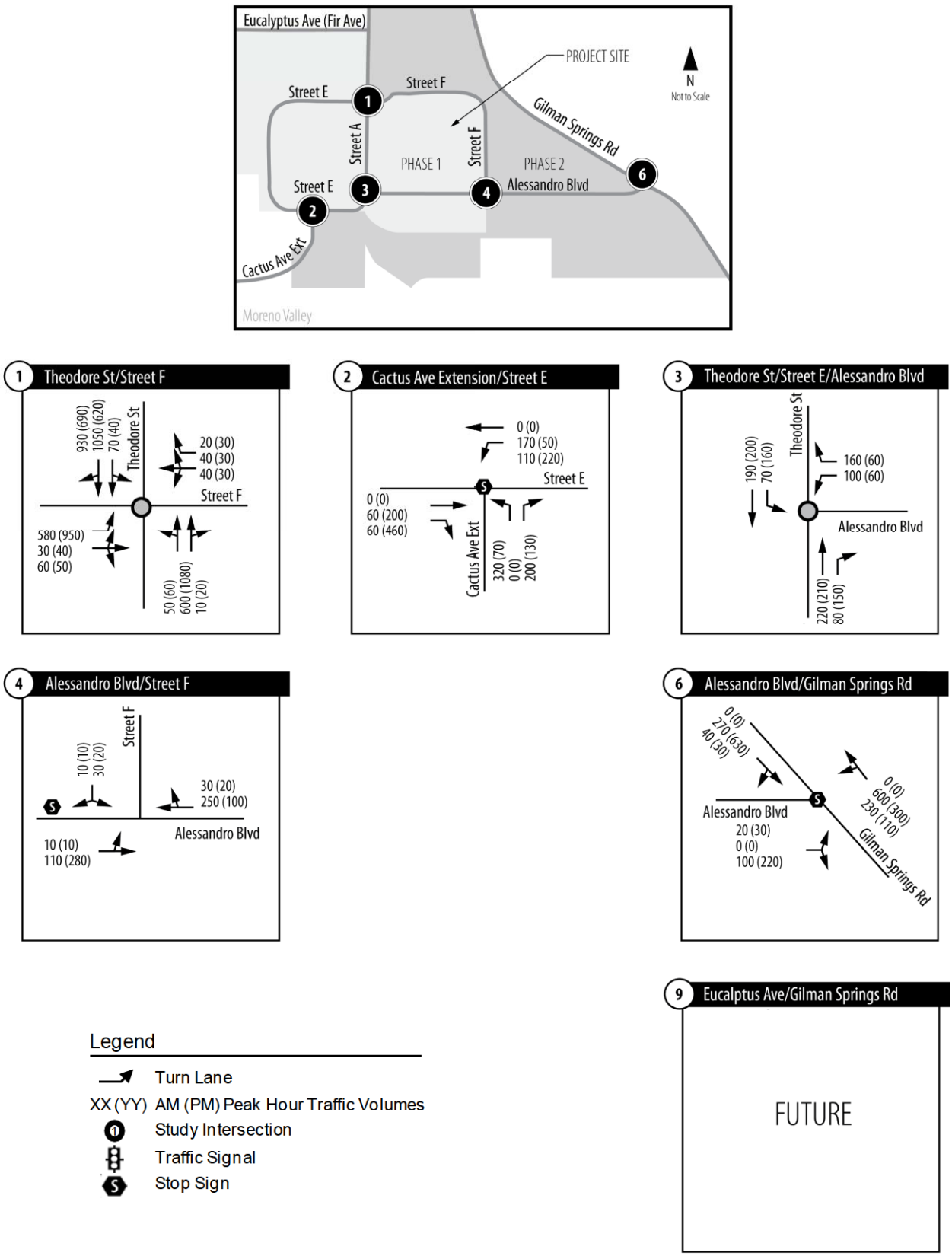


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions

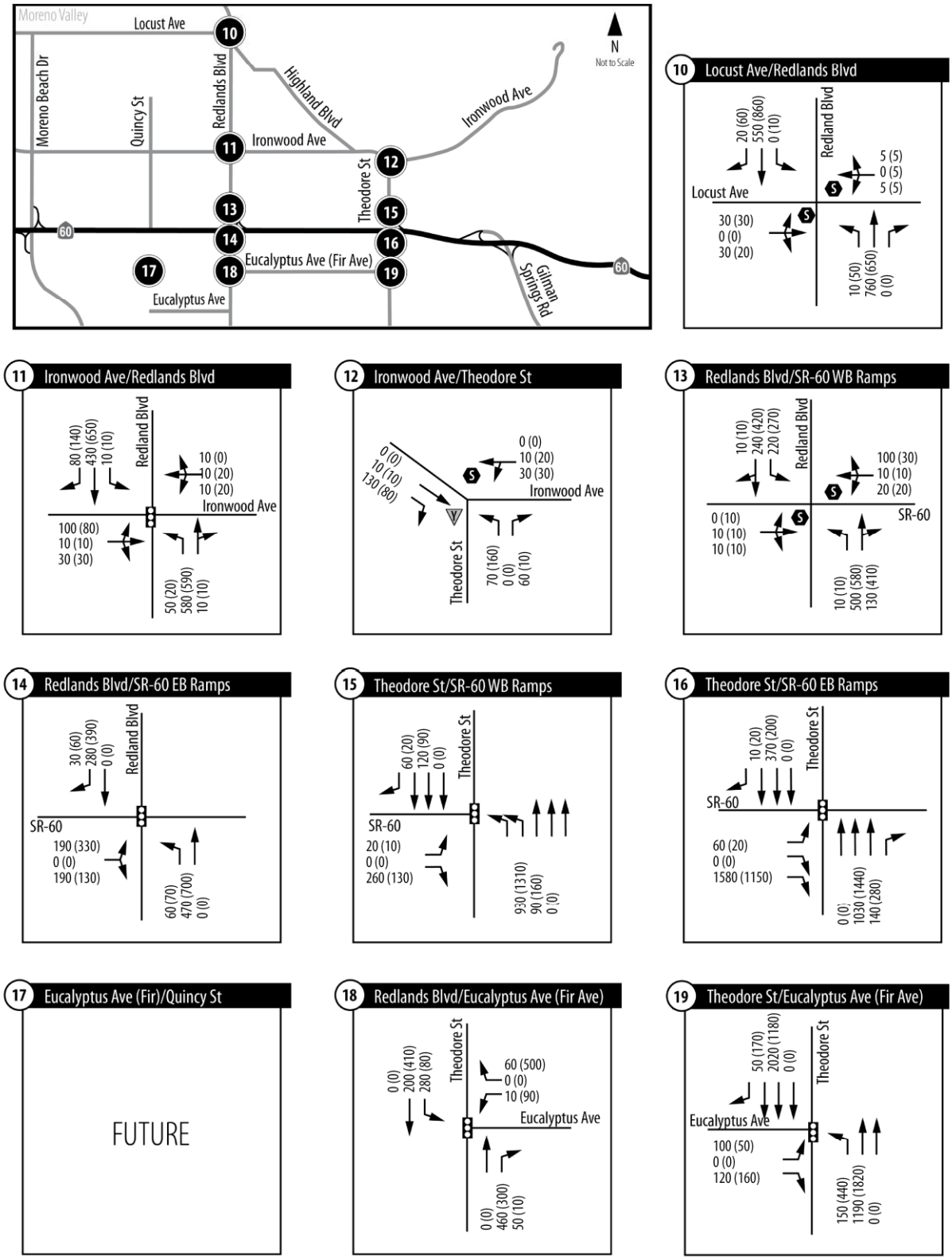


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (B)

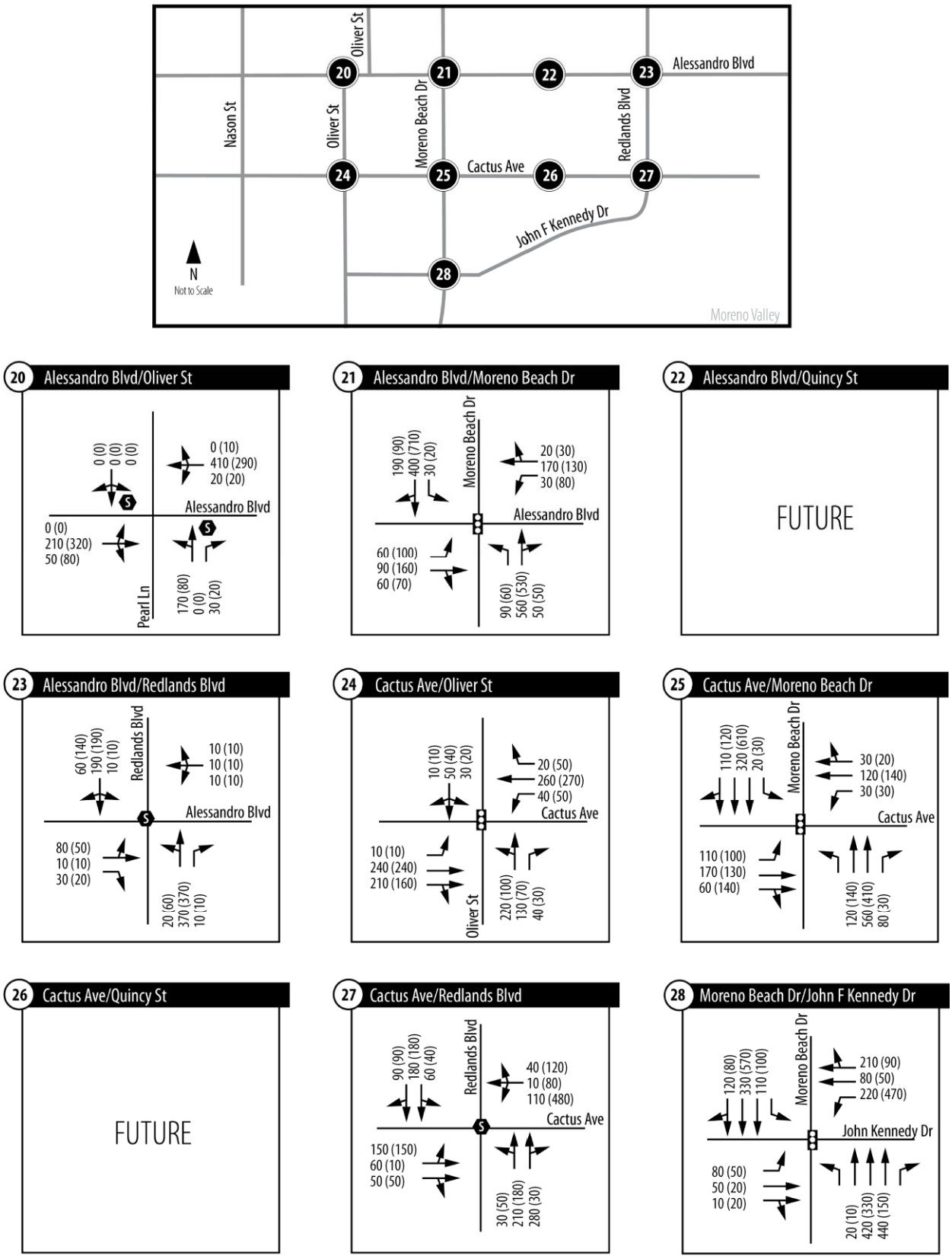


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (C)

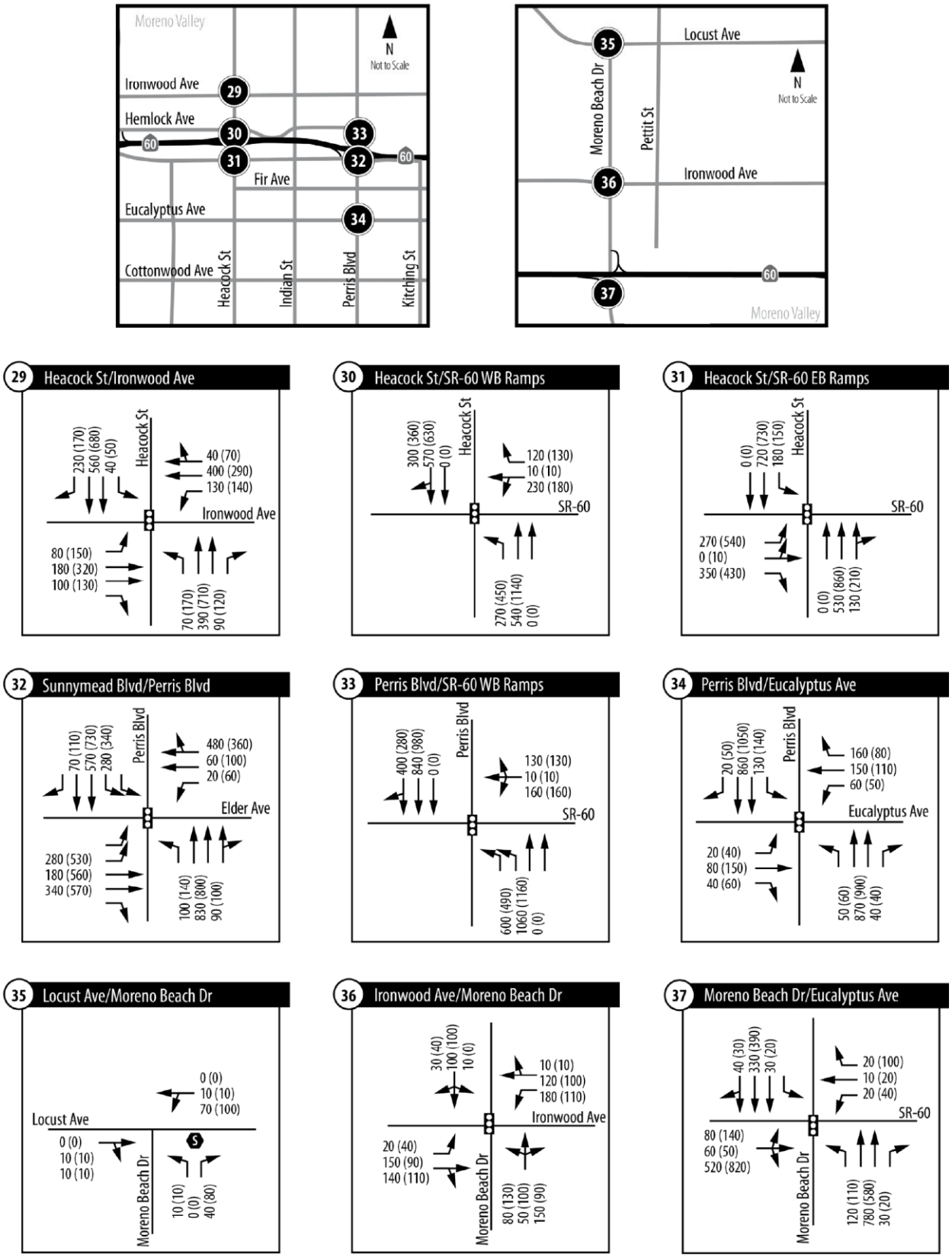


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (D)

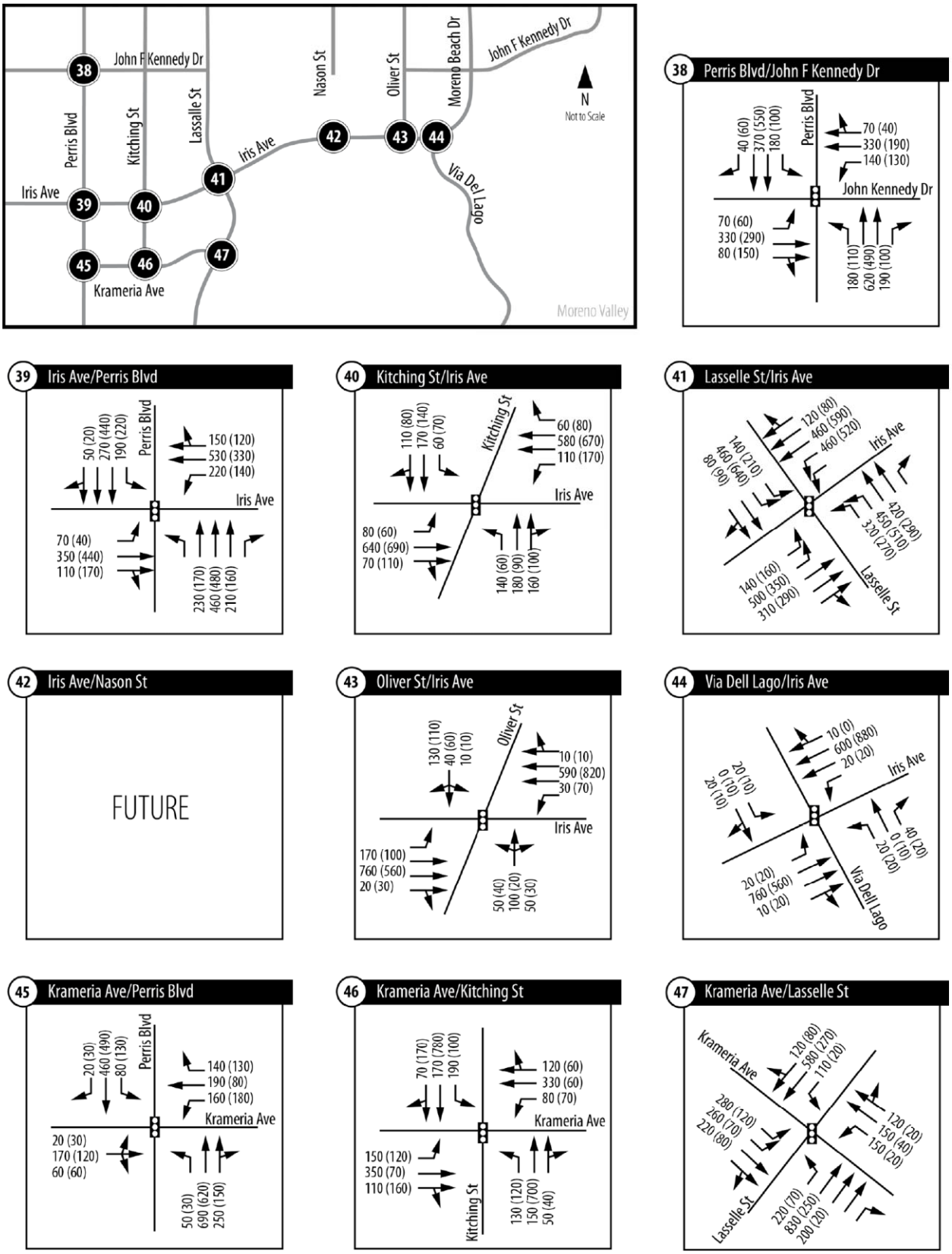


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (E)

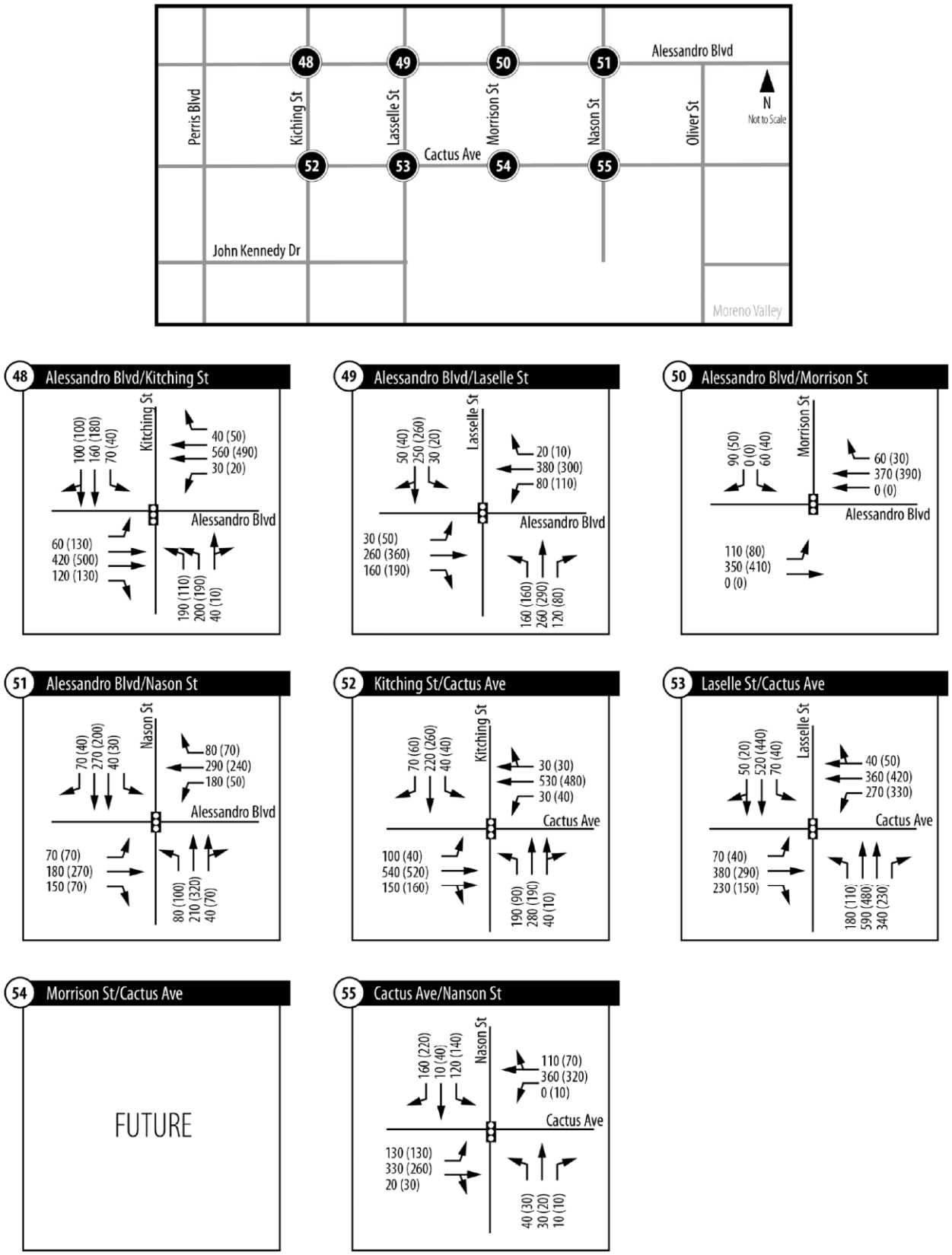


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (F)

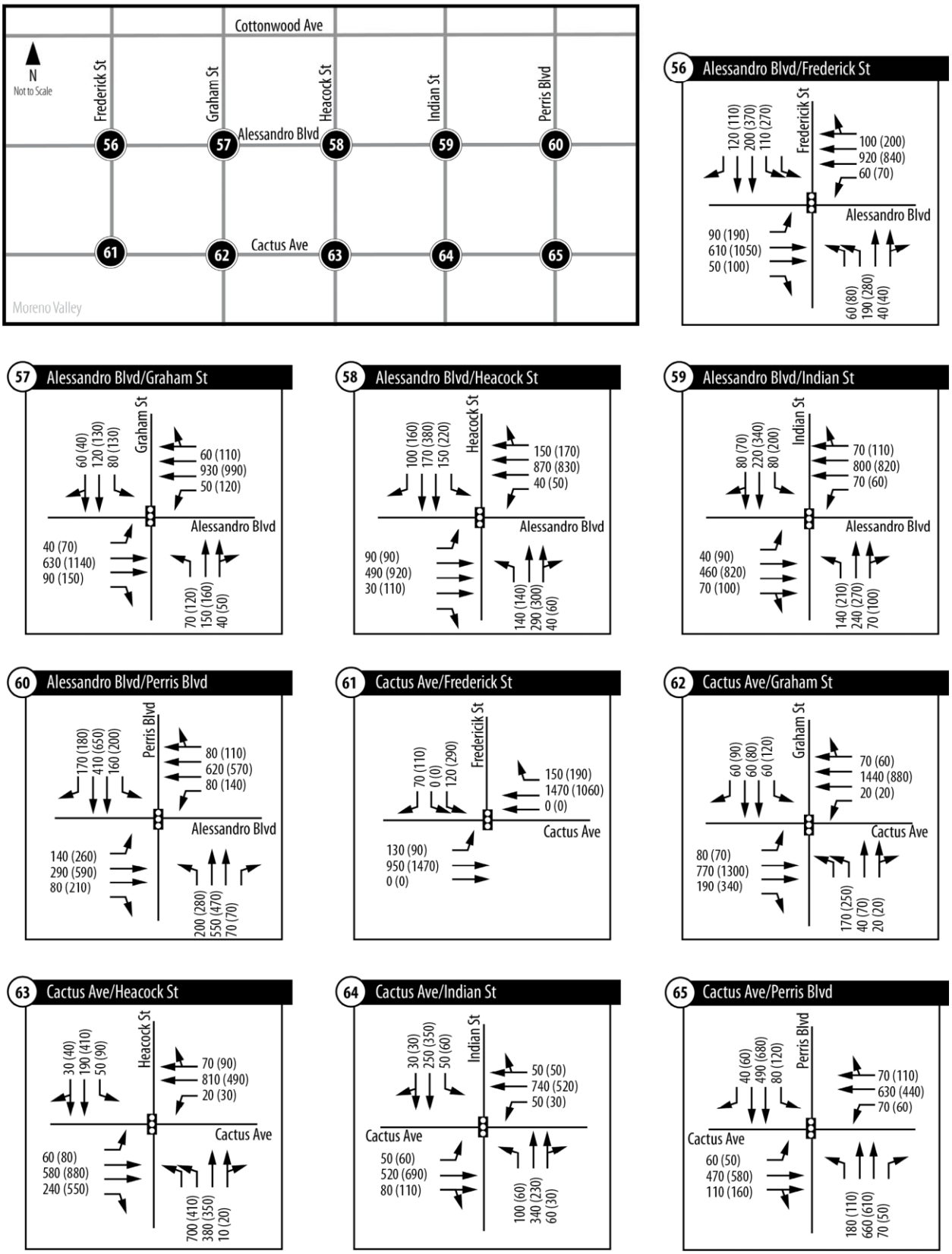


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (G)

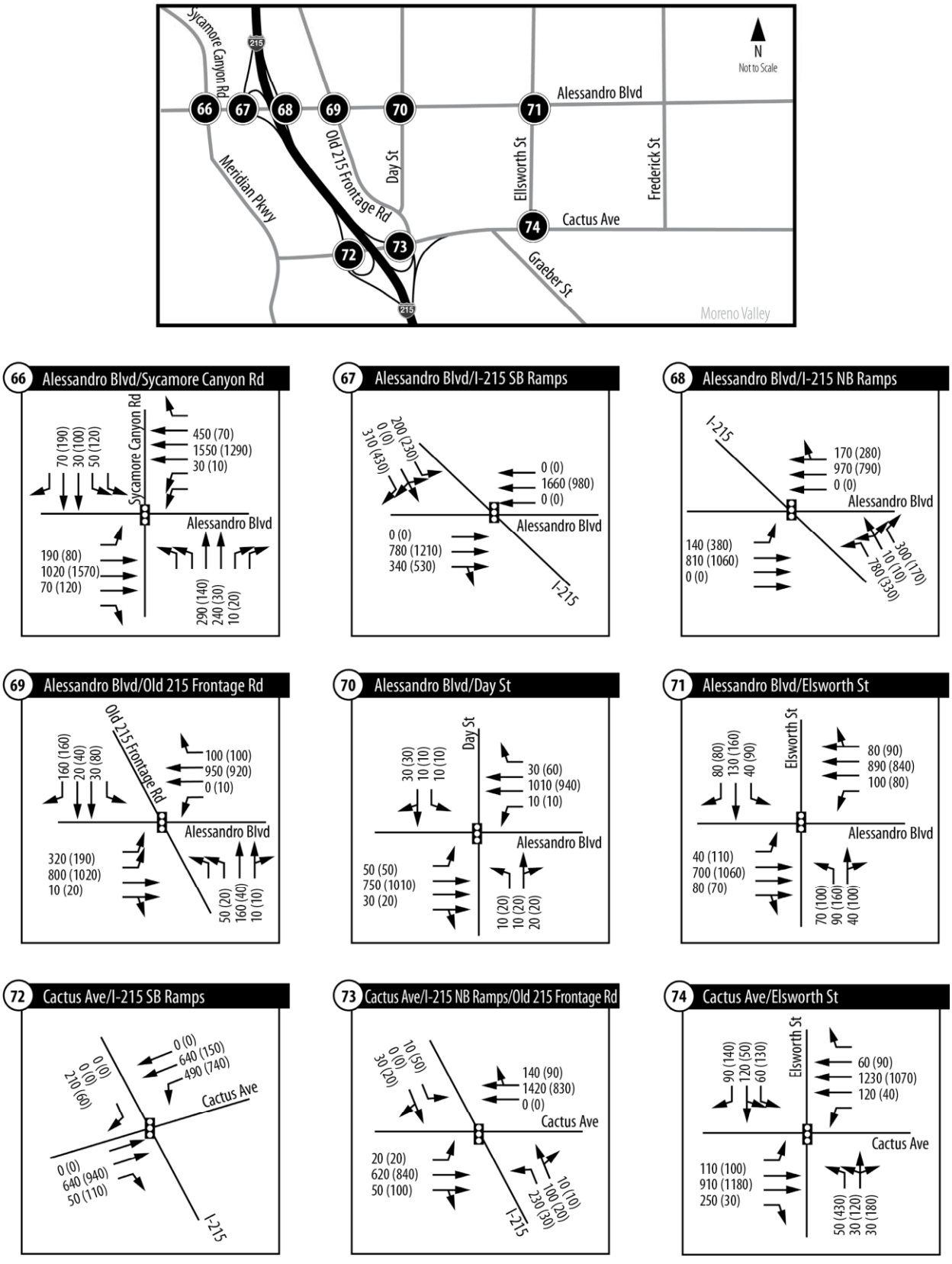


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (H)

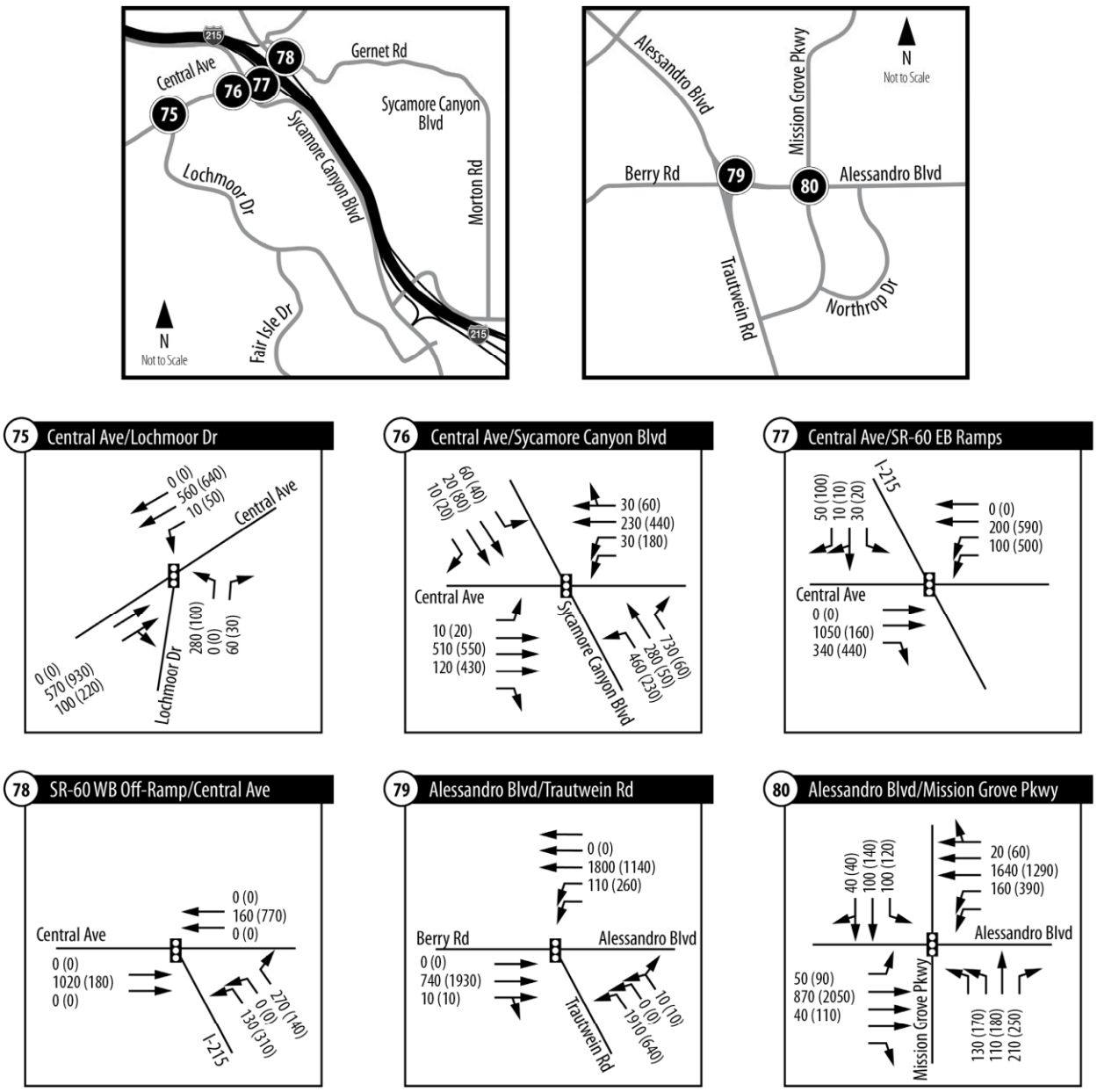


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (I)

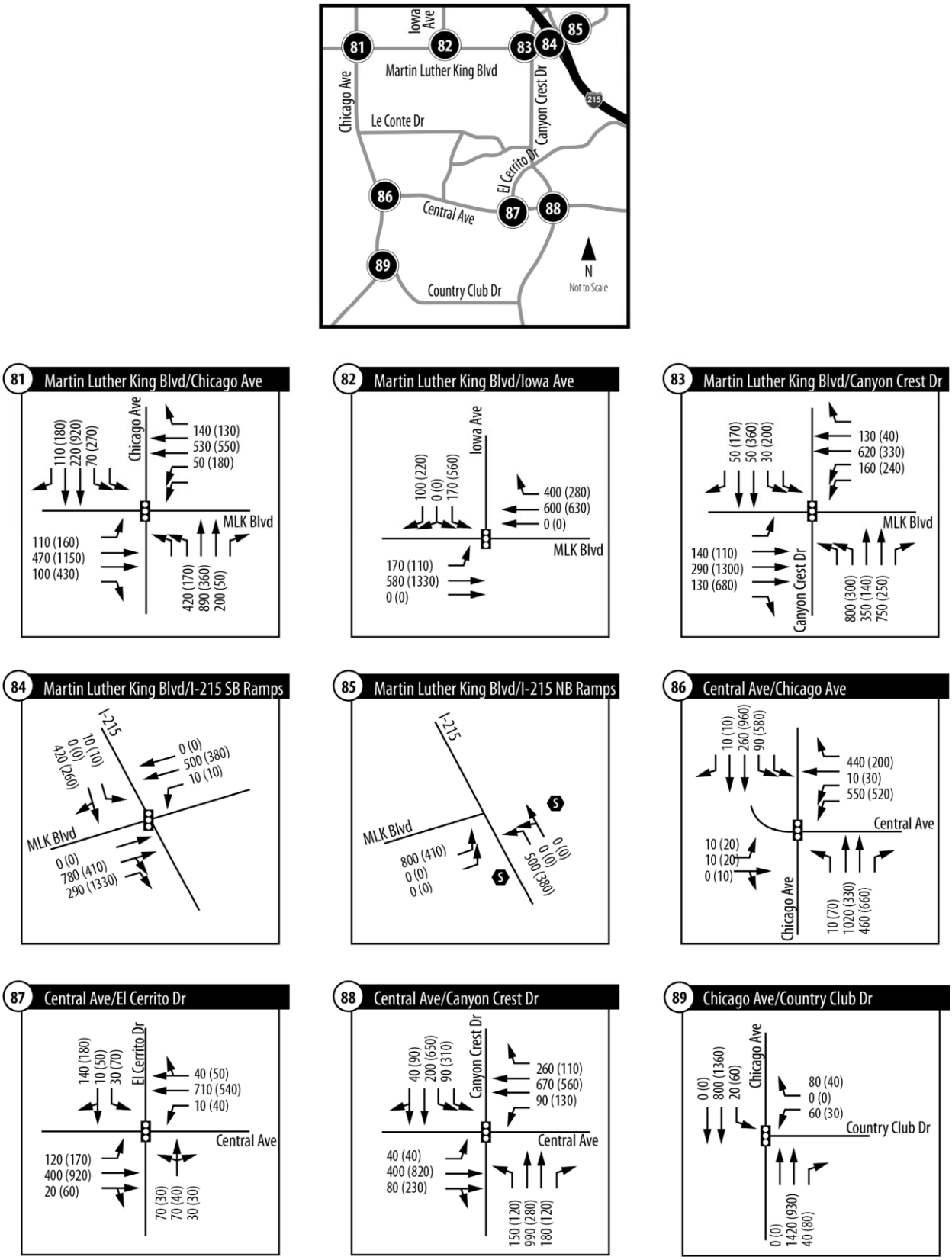


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (J)

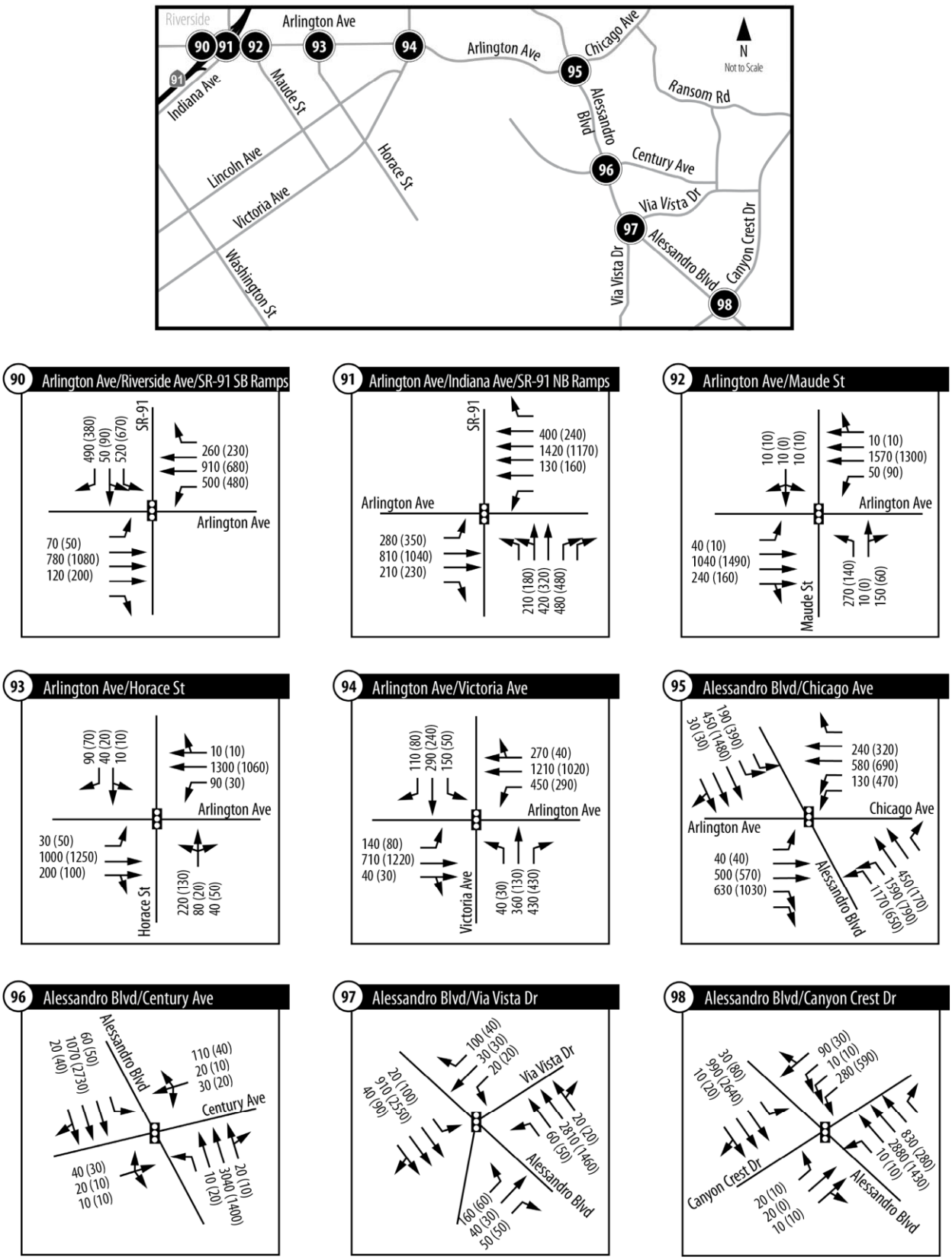


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (K)

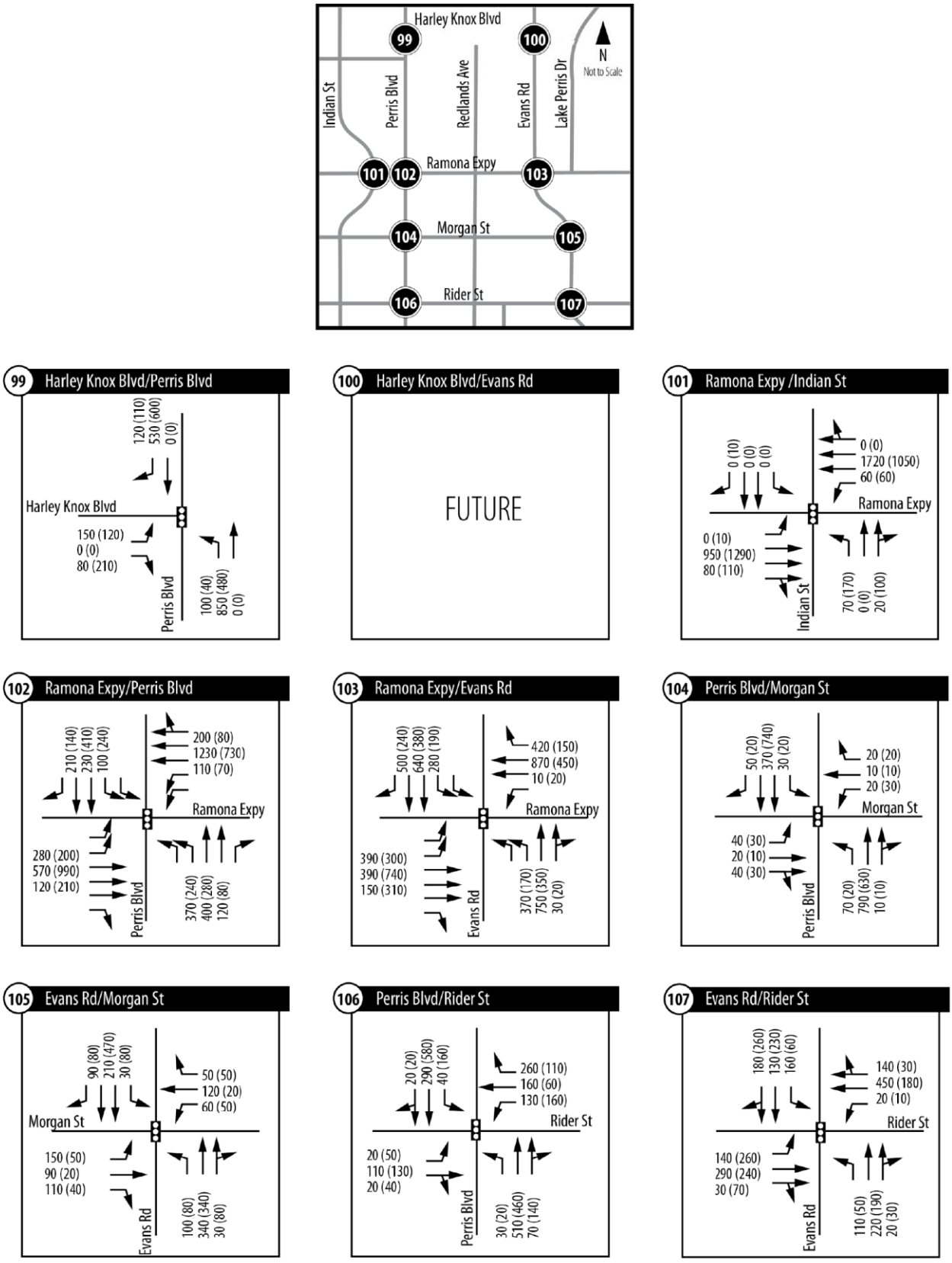
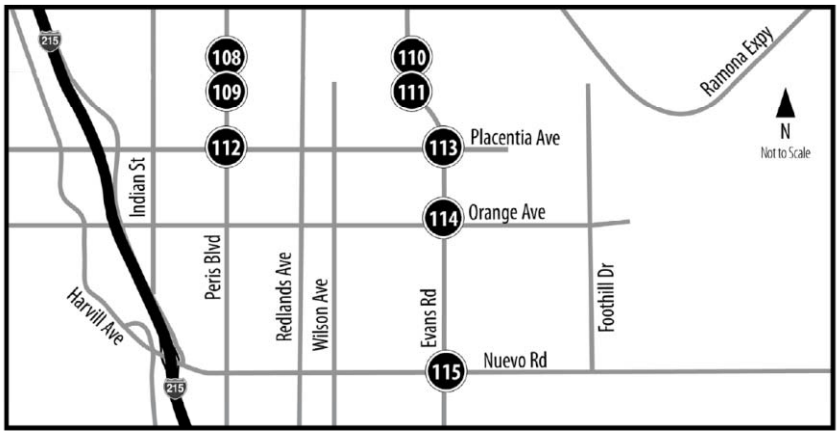


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (L)



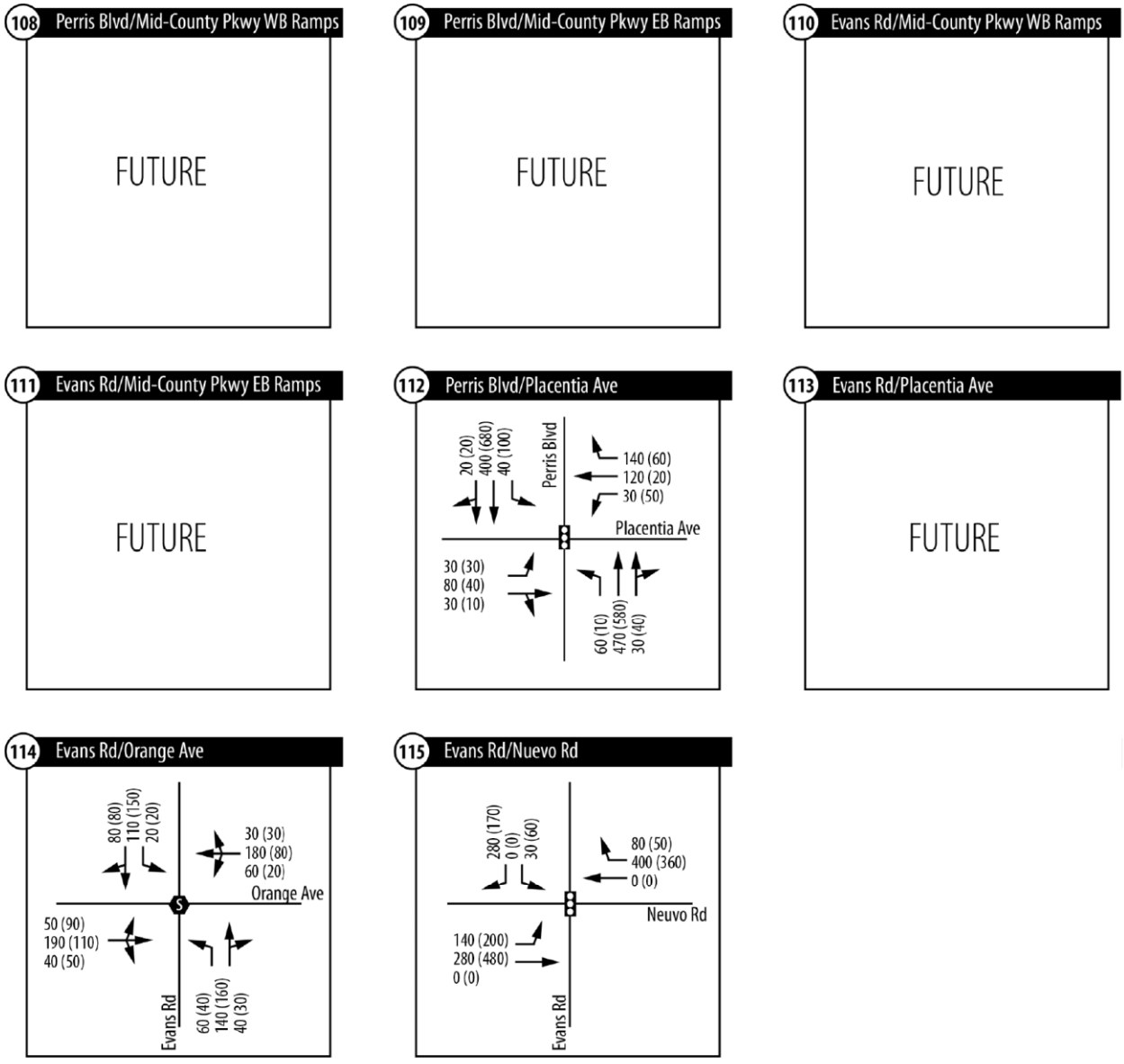


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (M)

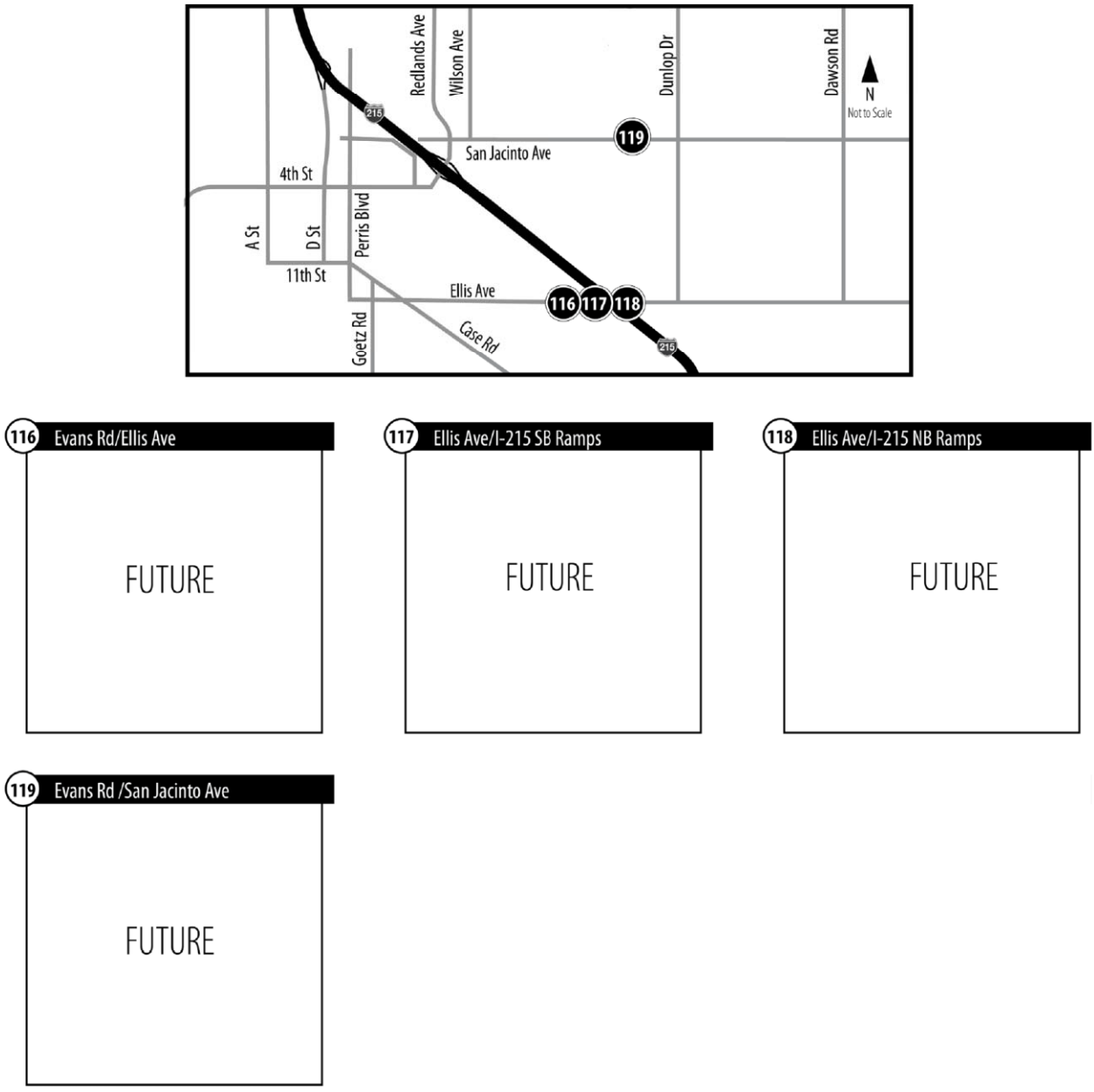


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (N)

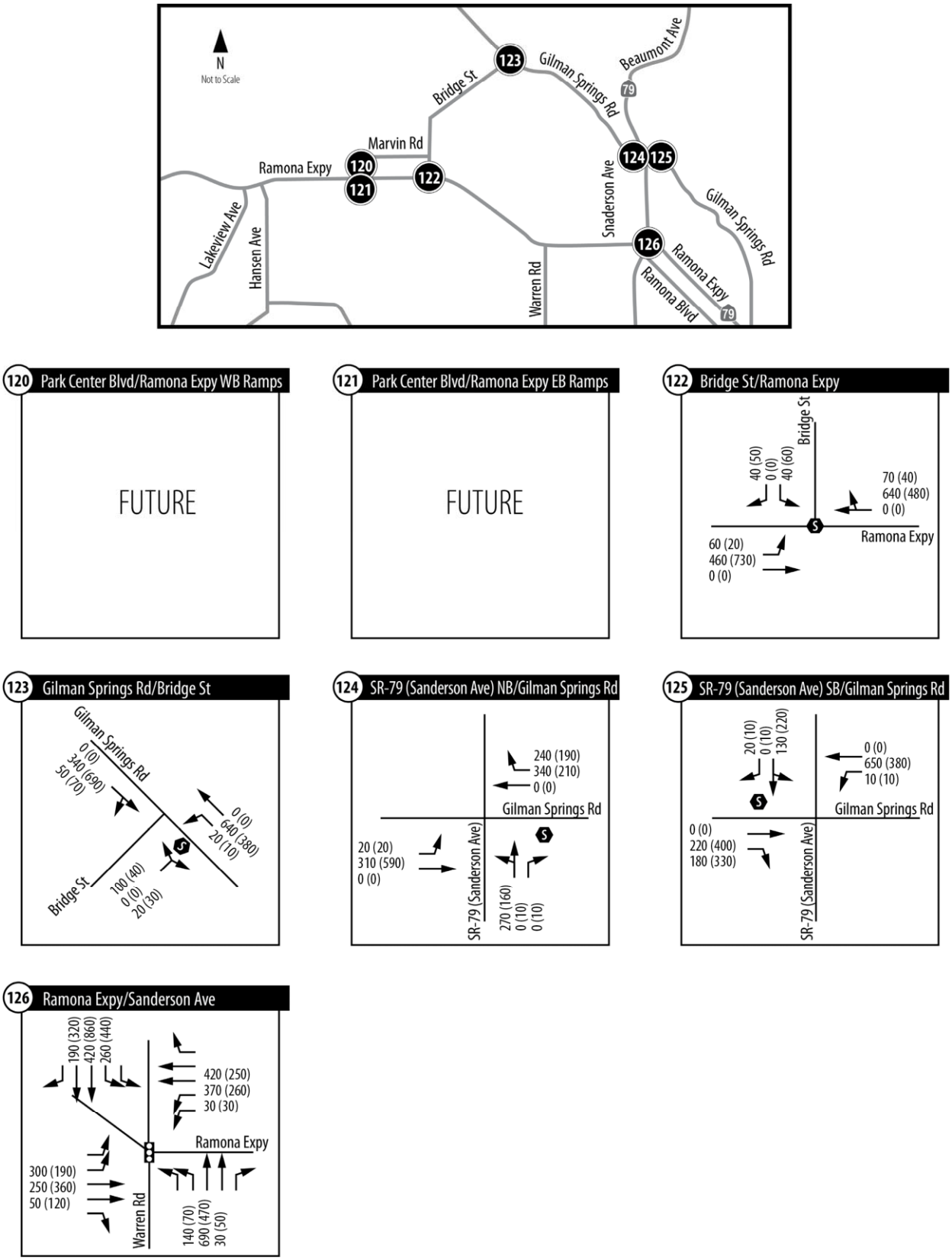


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (O)

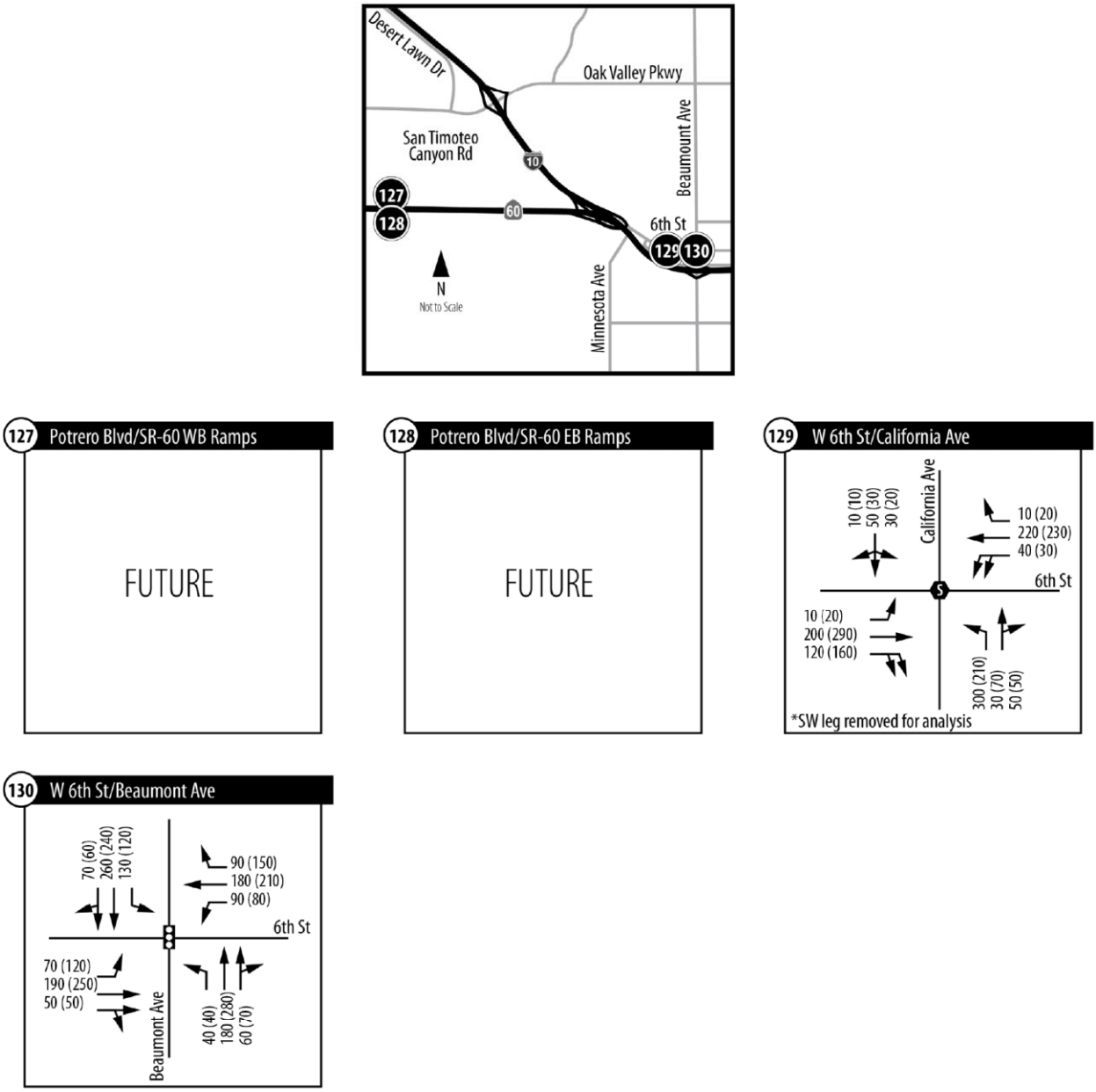


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (P)

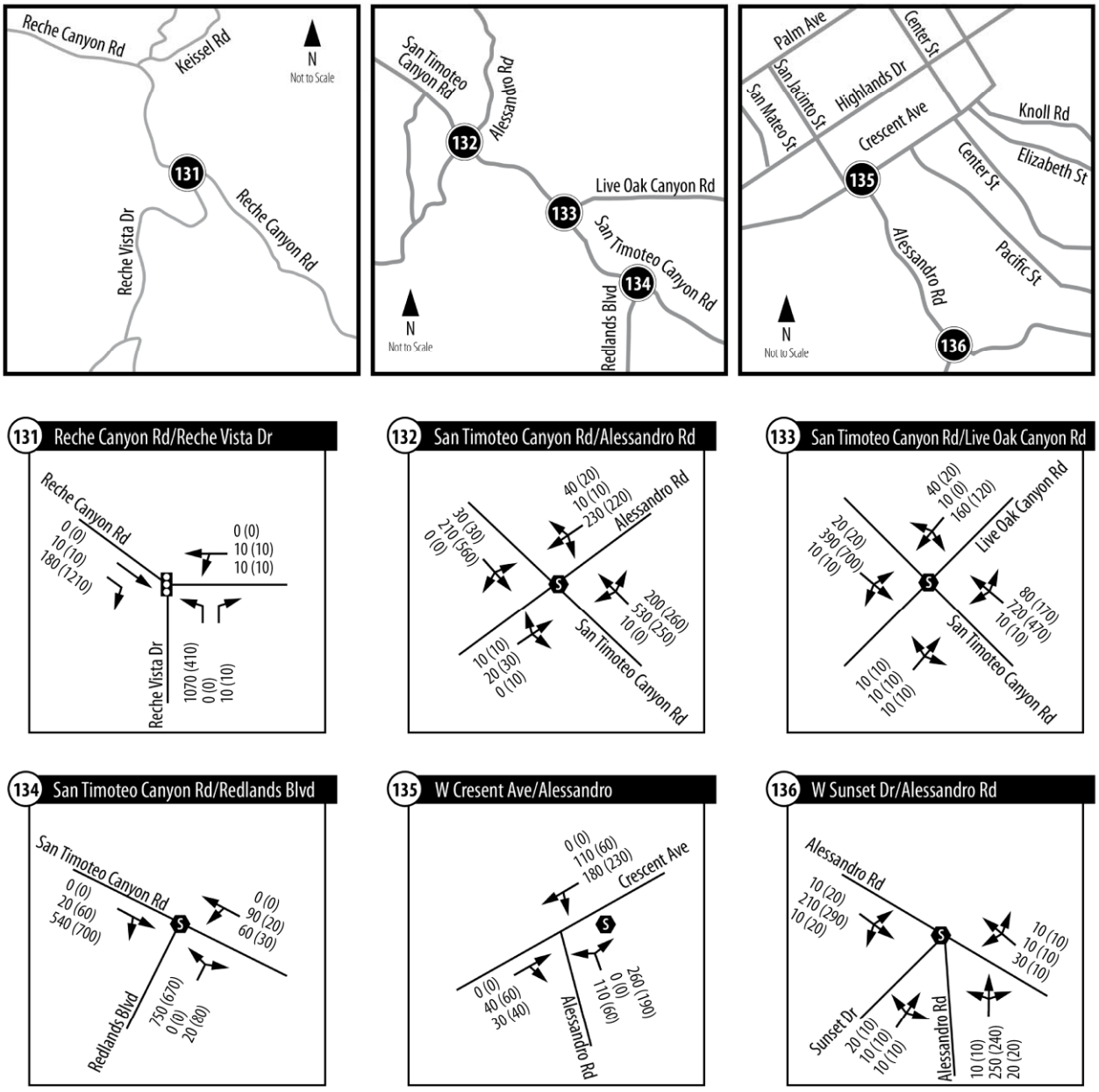


Figure 48: Turning Movement Volumes under Existing Plus Phase 1 Conditions (Q)

Table 28 identifies where impacts occur. As shown in the table, there are 15 study intersections where the project would have a significant impact. Twelve of these intersections would exceed the threshold of significance under Existing Conditions and three would exceed the threshold of significance with the addition of the project. These intersections are:

Would Exceed Threshold of Significance Under Both Existing Conditions and Existing Plus Phase 1 Conditions

- Redlands Blvd./Locust Ave.
- Redlands Blvd./SR-60 WB ramps
- Oliver St./Alessandro Blvd.
- Lasselle St./Cactus Ave.
- Gilman Springs Rd./Bridge St.
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd.
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd.
- San Timoteo Canyon Rd./Alessandro Rd.
- San Timoteo Canyon Rd./Live Oak Canyon Rd.
- Redlands Blvd./San Timoteo Canyon Rd.
- Moreno Beach Dr./SR-60 EB Ramps
- Alessandro Blvd./Chicago Ave.

Would Exceed Threshold of Significance Under Existing Plus Phase 1 Conditions (only)

- Redlands Blvd./Cactus Ave.
- Arlington Ave./Victoria Ave.
- Moreno Beach Dr./John Kennedy Dr.

The mitigation measures shown in Table 29 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that if they could be constructed they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	9.5	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	12.3	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	9.7	A	RABT	7.8	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	11.4	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	10.3	B	SIGNAL	20.9	C
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	26.7	**D**	CSS	44.8	**E**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	40.9	D	SIGNAL	37.5	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	9.7	A	CSS	12.6	B
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	42.2	**E**	CSS	70.5	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	9.6	A	SIGNAL	12.9	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	9.0	A	CSS	13.3	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	9.2	A	CSS	2.4	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	12.9	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.2	A	SIGNAL	12.4	B
IN-20	Oliver Str/Alessandro Blvd	C	CSS	25.9	**D**	CSS	40.5	**E**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	24.0	C	SIGNAL	27.9	C
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	20.5	C	AWS	17.6	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	23.8	C	SIGNAL	26.2	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	SIGNAL	17.9	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.4	B	AWS	37.9	**E**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	16.2	B	SIGNAL	17.0	B
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	29.6	C	SIGNAL	29.9	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	22.6	C	SIGNAL	23.4	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	12.5	B	SIGNAL	13.9	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	29.4	C	SIGNAL	30.7	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	22.0	C	SIGNAL	24.6	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	22.8	C	SIGNAL	23.8	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	8.8	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	50.3	D	SIGNAL	51.8	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	38.0	D	SIGNAL	42.0	D
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	37.0	D	SIGNAL	37.6	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	41.5	D	SIGNAL	43.0	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	23.4	C	SIGNAL	25.0	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	25.4	C	SIGNAL	28.5	C
IN-42	Nason Str/Iris Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-43	Oliver Str/Iris Ave	D	SIGNAL	22.1	C	SIGNAL	25.6	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	6.7	A	SIGNAL	8.0	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	34.6	C	SIGNAL	35.1	D
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	21.7	C	SIGNAL	23.9	C
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	37.9	D	SIGNAL	40.8	D
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.8	C	SIGNAL	29.6	C

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	31.7	C	SIGNAL	32.2	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	8.8	A	SIGNAL	8.8	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	20.5	C	SIGNAL	20.7	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	33.3	C	SIGNAL	34.3	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	47.2	D	SIGNAL	47.3	D
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	22.5	C	SIGNAL	22.6	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	19.5	B	SIGNAL	19.5	B
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	19.8	B	SIGNAL	20.4	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	25.8	C	SIGNAL	26.3	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	17.6	B	SIGNAL	19.2	B
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	32.4	C	SIGNAL	32.7	C
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	9.8	A	SIGNAL	10.3	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	12.9	B	SIGNAL	13.7	B
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	30.1	C	SIGNAL	30.9	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	24.4	C	SIGNAL	25.3	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	26.9	C	SIGNAL	26.8	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	25.8	C	SIGNAL	26.1	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.4	A	SIGNAL	6.7	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	19.4	B	SIGNAL	19.9	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	18.2	B	SIGNAL	18.4	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	4.6	A	SIGNAL	6.2	A
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	19.2	B	SIGNAL	19.6	B
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	12.1	B	SIGNAL	18.7	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	11.1	B	SIGNAL	10.3	B
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	26.7	C	SIGNAL	30.6	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	10.9	B	SIGNAL	11.4	B
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	22.2	C	SIGNAL	23.9	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	7.3	A	SIGNAL	8.3	A
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.8	A	SIGNAL	6.9	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	28.4	C	SIGNAL	28.4	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	18.8	B	SIGNAL	20.7	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	43.2	D	SIGNAL	43.8	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	9.0	A	SIGNAL	9.2	A
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	43.2	D	SIGNAL	47.8	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	8.6	A	SIGNAL	8.8	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	24.3	C	AWS	26.9	D
IN-86	Central Ave/Chicago Ave	D	SIGNAL	23.4	C	SIGNAL	23.7	C
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	11.7	B	SIGNAL	12.9	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	27.8	C	SIGNAL	28.6	C
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	6.3	A	SIGNAL	6.7	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.3	C	SIGNAL	31.6	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	21.0	C	SIGNAL	21.1	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	13.8	B	SIGNAL	14.1	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	12.3	B	SIGNAL	13.0	B

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	54.8	D	SIGNAL	55.8	**E**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	40.7	D	SIGNAL	42.9	D
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	16.7	B	SIGNAL	17.8	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	30.7	C	SIGNAL	30.6	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	20.4	C	SIGNAL	25.3	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	15.4	B	SIGNAL	16.5	B
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	3.3	A	SIGNAL	4.5	A
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	31.7	C	SIGNAL	32.5	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	54.5	D	SIGNAL	58.1	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	11.8	B	SIGNAL	13.6	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	32.5	C	SIGNAL	32.5	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	24.5	C	SIGNAL	24.5	C
IN-107	Evans Rd/Rider St	C	SIGNAL	34.2	C	SIGNAL	34.4	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	30.1	C	SIGNAL	29.9	C
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	12.5	B	AWS	13.6	B
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	23.3	C	SIGNAL	23.5	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	22.4	C	CSS	26.2	C
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	26.6	**D**	CSS	37.9	**E**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	34.7	**D**	CSS	56.8	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	29.2	**D**	CSS	36.6	**E**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	27.1	C	SIGNAL	28.2	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	16.6	C	AWS	20.2	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	13.2	B	SIGNAL	12.7	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	18.9	B	SIGNAL	21.5	C
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	77.2	**F**	AWS	145.4	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	50.9	**F**	AWS	110.2	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	81.8	**F**	AWS	142.8	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	14.0	B	CSS	16.9	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	8.9	A	AWS	9.7	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	12.1	B
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		AWS	13.2	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	10.1	B	RABT	8.1	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	10.9	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	15.7	C	SIGNAL	31.2	C
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	42.8	**E**	CSS	> 180.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	37.3	D	SIGNAL	35.2	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	9.8	A	CSS	15.9	C
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	54.0	**F**	CSS	> 180.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	14.4	B	SIGNAL	20.3	C
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	9.6	A	CSS	13.7	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	9.4	A	CSS	1.5	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	10.6	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.8	A	SIGNAL	27.1	C
IN-20	Oliver Str/Alessandro Blvd	C	CSS	14.7	B	CSS	18.6	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	28.2	C	SIGNAL	38.6	D
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	13.8	B	AWS	14.9	B
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	17.3	B	SIGNAL	18.1	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	17.0	B	SIGNAL	18.9	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	8.2	A	AWS	103.0	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	13.8	B	SIGNAL	66.5	**E**
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	31.9	C	SIGNAL	32.0	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	21.5	C	SIGNAL	21.7	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	15.9	B	SIGNAL	16.8	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	36.0	D	SIGNAL	36.4	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	19.7	B	SIGNAL	21.5	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	23.4	C	SIGNAL	23.9	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	8.9	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	40.0	D	SIGNAL	41.6	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	76.6	**E**	SIGNAL	98.0	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	31.2	C	SIGNAL	31.8	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	36.5	D	SIGNAL	37.0	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	17.5	B	SIGNAL	20.1	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	26.6	C	SIGNAL	28.4	C
IN-42	Nason Str/Iris Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-43	Oliver Str/Iris Ave	D	SIGNAL	15.8	B	SIGNAL	18.3	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	6.5	A	SIGNAL	7.3	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	29.3	C	SIGNAL	33.7	C
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	19.4	B	SIGNAL	20.2	C
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	13.5	B	SIGNAL	13.7	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	24.7	C	SIGNAL	25.4	C

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	26.6	C	SIGNAL	29.5	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	7.8	A	SIGNAL	8.1	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	16.9	B	SIGNAL	18.2	B
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	22.6	C	SIGNAL	22.7	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	38.6	D	SIGNAL	38.6	D
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	21.0	C	SIGNAL	21.8	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	25.6	C	SIGNAL	26.5	C
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	24.2	C	SIGNAL	26.0	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	23.6	C	SIGNAL	24.1	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	27.9	C	SIGNAL	28.7	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	42.3	D	SIGNAL	44.2	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	11.7	B	SIGNAL	13.8	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	17.4	B	SIGNAL	17.9	B
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	20.3	C	SIGNAL	22.9	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	19.6	B	SIGNAL	19.3	B
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	30.7	C	SIGNAL	30.6	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	18.0	B	SIGNAL	18.1	B
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	12.6	B	SIGNAL	12.7	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	24.1	C	SIGNAL	25.0	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	18.6	B	SIGNAL	20.0	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	8.2	A	SIGNAL	9.9	A
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	27.6	C	SIGNAL	29.0	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	19.7	B	SIGNAL	40.1	D
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	3.7	A	SIGNAL	4.1	A
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	29.5	C	SIGNAL	29.2	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	6.7	A	SIGNAL	7.7	A
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	17.6	B	SIGNAL	18.6	B
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	10.3	B	SIGNAL	10.6	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	8.2	A	SIGNAL	8.3	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	14.8	B	SIGNAL	14.8	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	34.9	C	SIGNAL	36.9	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	36.5	D	SIGNAL	38.3	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	13.0	B	SIGNAL	13.4	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	28.0	C	SIGNAL	28.9	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	4.7	A	SIGNAL	5.5	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	12.2	B	AWS	13.0	B
IN-86	Central Ave/Chicago Ave	D	SIGNAL	23.1	C	SIGNAL	26.7	C
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	12.0	B	SIGNAL	12.6	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	35.2	D	SIGNAL	36.5	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	4.9	A	SIGNAL	4.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	30.7	C	SIGNAL	30.9	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	20.8	C	SIGNAL	20.9	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	11.1	B	SIGNAL	11.6	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	7.2	A	SIGNAL	7.6	A

Table 28: Intersection LOS under Existing Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	30.9	C	SIGNAL	32.5	C
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	65.9	**E**	SIGNAL	70.0	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	7.6	A	SIGNAL	8.7	A
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	18.9	B	SIGNAL	18.7	B
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	17.9	B	SIGNAL	17.7	B
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	15.1	B	SIGNAL	15.5	B
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	8.5	A	SIGNAL	11.1	B
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	34.6	C	SIGNAL	34.8	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	28.8	C	SIGNAL	28.7	C
IN-104	Perris Blvd/Morgan St	D	SIGNAL	6.7	A	SIGNAL	8.7	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	20.6	C	SIGNAL	20.4	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	22.9	C	SIGNAL	26.8	C
IN-107	Evans Rd/Rider St	C	SIGNAL	28.3	C	SIGNAL	27.8	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	14.0	B	SIGNAL	15.1	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	10.1	B	AWS	10.7	B
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	22.6	C	SIGNAL	22.5	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	20.6	C	CSS	25.5	C
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	20.8	C	CSS	23.7	C
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	30.7	**D**	CSS	41.0	**E**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	48.2	**E**	CSS	63.6	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	20.8	C	SIGNAL	21.0	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	18.0	C	AWS	20.9	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	12.8	B	SIGNAL	11.9	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	6.3	A	SIGNAL	6.5	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	23.9	C	AWS	68.8	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	60.2	**F**	AWS	135.8	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	80.5	**F**	AWS	170.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	11.5	B	CSS	13.5	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.0	A	AWS	9.8	A

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 29: Existing Plus Phase 1 Intersection Impacts and Mitigations

ID	Study Intersection	LOS Standard	Determination of Impact					Existing Plus Phase 1 & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	Traffic Control	AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS			Delay	LOS	Delay	LOS	
IN-10	Redlands Blvd/Locust Ave	C	D	E	E	F	Yes	SIGNAL	4.8	A	8.9	A	Signalize. Add 1 EB LT and 1 WB LT.
IN-13	Redlands Blvd/SR-60 WB ramps	D	E	F	F	F	Yes	SIGNAL	14.6	B	13.3	B	Signalize. Add 1 NB RT.
IN-20	Oliver Str/Alessandro Blvd	C	D	E	B	C	Yes	AWS	15.9	C	11.5	B	Change to AWS.
IN-27	Redlands Blvd/Cactus Ave	C	B	E	A	F	Yes	SIGNAL	11.8	B	14.5	B	Signalize. Add 1 WB LT, 1 EB LT lanes.
IN-28	Moreno Beach Dr/John Kennedy Dr	D	B	B	B	E	Yes	SIGNAL	15.9	B	15.3	B	Add 1 WB LT Lane.
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	D	D	E	F	Yes	SIGNAL	18.7	B	25.6	C	Add 1 EB RT lane.
IN-53	Lasselle Str/Cactus Ave	C	D	D	D	D	Yes	SIGNAL	36.3	D	33.5	C	Add 1 WB LT, 1 NB LT, 1 SB LT, Add overlap phase for NB and EB RT.
IN-94	Arlington Ave/Victoria Ave	D	D	E	C	C	Yes	SIGNAL	54.7	D	32.5	C	Add WB LT lane
IN-95	Alessandro Blvd/Chicago Ave	D	D	D	E	E	Yes	SIGNAL	38.6	D	53.9	D	Add NB LT lane.
IN-123	Gilman Springs Rd/Bridge Str	C	D	E	C	C	Yes	SIGNAL	6.2	A	4.7	A	Signalize.
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	D	F	D	E	Yes	SIGNAL	6.6	A	7.3	A	Signalize.
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	D	E	E	F	Yes	SIGNAL	6.0	A	6.2	A	Signalize.
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	F	F	C	F	Yes	SIGNAL	28.5	C	14.5	B	Signalize.
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	F	F	F	F	Yes	SIGNAL	15.5	B	11.0	B	Signalize.
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	F	F	F	F	Yes	SIGNAL	30.8	C	20.9	C	Signalize.

Indicates that the LOS exceeds the target leve "LT" and "RT" denote left turn and right turn respectively

Notes: "CSS" means cross-street is stop-controlled "NB" and "SB" denote northbound and southbound respectively

"AWS" means all-way stop "EB" and "WB" denote eastbound and westbound respectively

C. FREEWAY SEGMENT LOS, IMPACTS, AND MITIGATIONS

Freeway Mainline Basic Sections

Table 30 compares the LOS for freeway mainline sections for the Existing and Existing Plus Phase 1 conditions. Details of the LOS calculations for freeways under Existing Plus Phase 1 conditions can be found in Appendix J. As shown in Table 31, there are nine sections where the project would have a significant impact. Eight of these sections would be deficient under both Existing and Existing Plus Phase 1 conditions, namely:

Northbound or Eastbound

- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- I-215 from SR-74 to Redlands Ave.

Southbound or Westbound

- SR-60 from I-215 to Day St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- I-215 from SR-74 to Redlands Ave.
- I-215 from Baseline Rd. to Highland Ave

An additional section was found to be deficient under Plus Phase 1 conditions: SR-91 from Central Ave. to 14th St. in the eastbound direction.

Adding a mixed-flow lane would improve these sections to better than LOS "E" in the Plus Phase 1 condition and thus would reduce the impact of the WLC project to a less-than-significant level. Mitigation measures that would be needed to reduce the impact of the project to a less-than-significant level are summarized in Table 31. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11

Table 30: Existing Plus Phase 1 Freeway Mainline LOS

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	24.5	C	7,822	33.0	D	6,200	25.7	C	7,770	32.9	D
F-3	SR-60	Ramona Ave to Central Ave	5,687	22.8	C	9,400	47.3	F	5,880	24.0	C	9,330	47.0	F
F-4	SR-60	Central Ave to Mountain Ave	6,339	26.2	D	9,338	46.6	F	6,540	27.6	D	9,280	46.4	F
F-5	SR-60	Mountain Ave to Euclid Ave	6,205	25.4	C	6,664	26.1	D	6,410	26.9	D	6,590	26.0	D
F-6	SR-60	Euclid Ave to Grove Ave	7,650	34.7	D	9,091	43.8	E	7,860	36.7	E	9,010	43.4	E
F-7	SR-60	Grove Ave to Vineyard Ave	6,923	29.6	D	9,400	47.3	F	7,130	31.2	D	9,320	46.9	F
F-8	SR-60	Vineyard Ave to Archibald Ave	6,823	28.7	D	9,400	47.3	F	7,030	30.3	D	9,310	46.7	F
F-9	SR-60	Archibald Ave to Haven Ave	6,268	25.6	C	6,471	25.1	C	6,480	27.1	D	6,370	24.9	C
F-10	SR-60	Haven Ave to Milliken Ave	6,096	19.1	C	6,864	20.6	C	6,310	20.0	C	6,750	20.5	C
F-11	SR-60	Milliken Ave to I-15	4,234	16.5	B	4,529	16.9	B	4,430	17.6	B	4,430	16.7	B
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	2,593	10.2	A	2,910	10.8	A	2,840	11.4	B	2,770	10.5	A
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	3,026	11.9	B	3,968	14.8	B	3,290	13.2	B	3,850	14.5	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	2,596	10.2	A	3,061	11.4	B	2,860	11.6	B	2,950	11.2	B
F-15	SR-60	Pedley Rd to Pyrite St	2,813	11.1	B	3,334	12.4	B	3,100	12.5	B	3,160	12.0	B
F-16	SR-60	Pyrite St to Valley Way	3,348	13.2	B	3,642	13.6	B	3,640	14.6	B	3,460	13.1	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,398	23.7	C	4,252	21.4	C	4,690	26.2	D	4,080	20.8	C
F-18	SR-60	Rubidoux Blvd to Market St	4,943	27.6	D	4,706	24.3	C	5,250	30.7	D	4,600	24.0	C
F-19	SR-60	Market St to Main St	4,498	24.4	C	7,050	47.8	F	4,800	27.0	D	6,940	47.1	F
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	5,865	24.6	C	8,976	45.7	F	6,280	29.7	D	8,860	48.9	F
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	4,332	16.9	B	6,795	26.6	D	4,680	18.9	C	6,750	26.9	D
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,702	21.6	C	3,713	30.2	D	3,050	26.8	D	3,770	32.6	D
F-30	SR-60	Heacock St to Perris Blvd	2,349	18.6	C	3,355	26.1	D	2,840	24.6	C	3,420	28.3	D
F-31	SR-60	Perris Blvd to Nason St	1,812	14.3	B	2,344	17.4	B	2,340	19.8	C	2,460	19.4	C
F-32	SR-60	Nason St to Moreno Beach Dr	1,619	12.8	B	2,038	15.1	B	2,070	17.7	B	2,160	17.0	B
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,326	10.5	A	1,397	10.4	A	1,930	16.7	B	1,660	13.5	B
F-34	SR-60	Redlands Blvd to Theodore St	1,614	12.7	B	1,920	14.2	B	2,310	19.7	C	2,260	18.0	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,521	12.0	B	1,915	14.2	B	1,480	11.8	B	1,900	14.3	B
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,213	11.2	B	1,484	12.3	B	1,190	11.7	B	1,590	14.4	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,215	9.6	A	1,482	11.0	A	1,200	9.6	A	1,590	12.0	B
F-39	SR-91	I-15 to McKinley St	5,914	22.6	C	9,400	53.3	F	6,030	23.3	C	9,350	52.5	F
F-40	SR-91	McKinley St to Pierce St	5,382	29.1	D	5,427	31.4	D	5,510	30.4	D	5,370	31.1	D
F-41	SR-91	Pierce St to Magnolia Ave	4,888	25.5	C	4,922	27.2	D	5,020	26.8	D	4,860	26.9	D
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	4,585	23.5	C	4,939	27.3	D	4,700	24.6	C	4,890	27.2	D
F-44	SR-91	Tyler St to Van Buren Blvd	5,704	21.7	C	5,851	23.5	C	5,810	22.3	C	5,810	23.4	C

Table 30: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,841	22.3	C	4,999	19.6	C	5,930	22.8	C	4,970	19.6	C
F-46	SR-91	Adam St to Madison St	6,531	26.1	D	4,742	18.7	C	6,620	26.7	D	4,720	18.7	C
F-47	SR-91	Madison St to Arlington Ave	5,879	22.8	C	4,530	17.9	B	5,960	23.4	C	4,510	17.9	B
F-49	SR-91	Central Ave to 14th St	6,021	34.8	D	5,391	30.8	D	6,070	35.6	E	5,400	31.2	D
F-51	SR-91	University Ave to Spruce St	7,244	22.1	C	6,394	20.0	C	7,280	22.3	C	6,410	20.2	C
F-66	I-215	Scott Rd to Newport Rd	2,739	22.0	C	3,285	25.8	C	2,700	21.8	C	3,280	25.7	C
F-68	I-215	Newport Rd to McCall Blvd	1,900	15.0	B	2,047	15.3	B	1,860	14.8	B	2,050	15.4	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	19.5	C	3,293	25.8	C	2,400	19.1	C	3,290	25.8	C
F-70	I-215	Ethanac Rd to SR-74	3,787	34.5	D	3,150	24.4	C	3,730	33.9	D	3,160	24.5	C
F-71	I-215	SR-74 to Redlands Ave	3,350	28.5	D	4,181	37.4	E	3,290	27.9	D	4,210	37.9	E
F-74	I-215	Columbia Ave to Center St	5,587	33.5	D	5,150	27.3	D	5,550	33.1	D	5,230	27.9	D
F-75	I-215	Center St to La Cadena Dr	5,474	32.4	D	5,034	26.5	D	5,440	32.1	D	5,100	27.0	D
F-76	I-215	La Cadena Dr to Barton Rd	5,341	31.2	D	5,164	27.5	D	5,300	30.8	D	5,230	27.9	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,738	35.1	E	5,533	30.3	D	5,680	34.5	D	5,620	31.1	D
F-78	I-215	Mt. Vernon Ave to I-10	5,582	22.5	C	5,420	20.5	C	5,510	22.1	C	5,510	20.8	C
F-80	I-215	Auto Plaza Dr to Mill St	4,319	17.1	B	4,533	17.0	B	4,240	16.7	B	4,580	17.1	B
F-83	I-215	Baseline Rd to Highland Ave	3,023	24.8	C	3,355	26.5	D	2,970	24.2	C	3,400	27.0	D
F-52	I-10	SR-60 to Beaumont Ave	3,037	11.9	B	4,252	16.4	B	3,040	11.9	B	4,320	16.8	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,087	12.1	B	4,322	16.7	B	3,080	12.1	B	4,370	17.0	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,236	12.6	B	4,531	17.5	B	3,220	12.6	B	4,580	17.8	B
F-55	I-10	Highland Springs Ave to Sunset Ave	3,112	12.2	B	4,357	16.8	B	3,080	12.1	B	4,390	17.0	B
F-56	I-10	Sunset Ave to 22nd St	3,037	11.9	B	4,252	16.4	B	3,000	11.8	B	4,290	16.7	B
F-57	I-10	22nd St to 8th St	2,987	11.7	B	4,182	16.2	B	2,950	11.6	B	4,220	16.4	B
F-58	I-10	8th St to Hargrave St	2,987	11.7	B	4,182	16.2	B	2,940	11.5	B	4,210	16.3	B
F-59	I-10	Hargrave St to Fields Rd	2,689	10.5	A	3,764	14.5	B	2,640	10.4	A	3,800	14.8	B
F-60	I-10	Fields Rd to Morongo Trail	2,564	10.0	A	3,590	13.9	B	2,510	9.9	A	3,620	14.1	B
F-61	I-10	Morongo Trail to Main St	2,265	8.8	A	3,172	12.3	B	2,220	8.7	A	3,210	12.5	B
F-62	I-10	Main St to Haugen-Lehmann Way	2,265	8.8	A	3,172	12.3	B	2,220	8.7	A	3,210	12.5	B
F-64	I-10	SR-111 to Tipton Rd	1,967	7.7	A	2,753	10.6	A	1,920	7.5	A	2,780	10.8	A
F-65	I-10	Tipton Rd to SR-62	1,967	7.7	A	2,753	10.6	A	1,940	7.6	A	2,780	10.8	A

Indicates that the LOS exceeds the target level

Table 30: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,762	41.4	E	6,381	25.6	C	8,670	40.9	E	6,490	26.4	D
F-3	SR-60	Ramona Ave to Central Ave	8,283	37.1	E	5,925	23.4	C	8,170	36.5	E	6,040	24.1	C
F-4	SR-60	Central Ave to Mountain Ave	6,336	24.7	C	6,076	24.1	C	6,220	24.3	C	6,200	24.9	C
F-5	SR-60	Mountain Ave to Euclid Ave	6,259	24.4	C	6,495	26.3	D	6,150	24.0	C	6,620	27.1	D
F-6	SR-60	Euclid Ave to Grove Ave	6,461	25.4	C	6,302	25.2	C	6,350	25.0	C	6,430	26.1	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,274	24.3	C	6,699	27.4	D	6,150	23.8	C	6,830	28.3	D
F-8	SR-60	Vineyard Ave to Archibald Ave	7,658	32.1	D	6,245	25.0	C	7,510	31.4	D	6,380	26.0	C
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	5,804	17.4	B	5,698	17.5	B	5,640	17.0	B	5,850	18.2	C
F-11	SR-60	Milliken Ave to I-15	5,456	20.5	C	5,111	19.5	C	5,240	19.7	C	5,270	20.4	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,490	13.4	B	4,275	13.0	B	4,300	12.9	B	4,460	13.8	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,220	15.7	B	3,881	14.8	B	4,010	15.1	B	4,110	15.9	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,172	15.5	B	3,963	15.1	B	3,970	14.9	B	4,190	16.2	B
F-15	SR-60	Pedley Rd to Pyrite St	3,216	12.0	B	3,068	11.7	B	3,010	11.4	B	3,280	12.7	B
F-16	SR-60	Pyrite St to Valley Way	2,653	9.9	A	2,567	9.8	A	2,460	9.3	A	2,790	10.9	A
F-17	SR-60	Valley Way to Rubidoux Blvd	4,532	23.1	C	4,725	24.9	C	4,320	22.0	C	4,950	27.0	D
F-18	SR-60	Rubidoux Blvd to Market St	3,568	17.7	B	3,868	19.7	C	3,390	17.1	B	4,120	21.5	C
F-19	SR-60	Market St to Main St	5,631	30.9	D	5,109	27.6	D	5,440	29.8	D	5,350	30.2	D
F-20	SR-60	Main to SR-91	5,248	27.9	D	4,720	24.9	C	5,100	27.2	D	4,920	26.8	D
F-24	SR-60	Martin Luther King Blvd to Central Ave	7,050	30.6	D	5,800	24.1	C	6,910	30.9	D	6,150	28.0	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,461	31.1	D	6,376	25.6	C	7,280	30.4	D	6,740	28.4	D
F-27	SR-60	I-215 to Day St	7,050	47.9	F	3,093	15.9	B	7,020	49.1	F	3,340	18.0	B
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,013	23.1	C	3,254	26.5	D	2,990	23.7	C	3,550	31.8	D
F-30	SR-60	Heacock St to Perris Blvd	2,638	19.9	C	2,671	20.8	C	2,680	21.0	C	3,040	25.8	C
F-31	SR-60	Perris Blvd to Nason St	1,910	14.3	B	2,045	15.8	B	2,030	15.9	B	2,490	20.5	C
F-32	SR-60	Nason St to Moreno Beach Dr	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	988	7.4	A	1,336	10.3	A	1,270	10.4	A	1,900	16.0	B
F-34	SR-60	Redlands Blvd to Theodore St	1,193	8.9	A	1,498	11.6	B	1,560	12.5	B	2,110	17.3	B
F-35	SR-60	Theodore St to Gilman Springs Rd	1,183	8.9	A	1,393	10.8	A	1,170	9.0	A	1,350	10.6	A
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	837	7.0	A	1,002	9.1	A	970	9.4	A	990	10.0	A
F-37	SR-60	Jack Rabbit Trail to I-10	837	6.3	A	1,002	7.7	A	970	7.4	A	990	7.8	A
F-39	SR-91	I-15 to McKinley St	6,402	25.1	C	5,971	24.1	C	6,310	24.8	C	6,080	24.8	C
F-40	SR-91	McKinley St to Pierce St	4,788	25.0	C	5,183	29.3	D	4,690	24.5	C	5,290	30.4	D
F-41	SR-91	Pierce St to Magnolia Ave	4,629	23.9	C	7,050	53.3	F	4,540	23.5	C	7,150	56.2	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	4,894	25.7	C	7,050	53.3	F	4,800	25.2	C	7,140	55.9	F
F-43	SR-91	La Sierra Ave to Tyler St	4,467	22.9	C	5,167	29.2	D	4,370	22.5	C	5,260	30.2	D
F-44	SR-91	Tyler St to Van Buren Blvd	5,769	22.1	C	6,661	27.8	D	5,690	21.9	C	6,740	28.5	D

Table 30: Existing Plus Phase 1 Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,342	20.2	C	6,401	26.3	D	5,280	20.1	C	6,490	27.0	D
F-46	SR-91	Adam St to Madison St	4,939	18.6	C	5,453	21.5	C	4,890	18.5	C	5,530	22.0	C
F-47	SR-91	Madison St to Arlington Ave	4,218	21.4	C	4,711	25.5	C	4,170	21.3	C	4,780	26.3	D
F-49	SR-91	Central Ave to 14th St	4,737	24.7	C	4,940	27.2	D	4,720	24.7	C	4,990	27.7	D
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,294	17.2	B	2,318	17.2	B	2,280	17.1	B	2,280	17.0	B
F-68	I-215	Newport Rd to McCall Blvd	2,528	19.0	C	3,111	23.7	C	2,530	19.0	C	3,070	23.4	C
F-69	I-215	McCall Blvd to Ethanac Rd	3,069	23.6	C	2,539	18.9	C	3,070	23.6	C	2,510	18.7	C
F-70	I-215	Ethanac Rd to SR-74	2,882	21.9	C	3,854	32.0	D	2,890	22.0	C	3,850	31.9	D
F-71	I-215	SR-74 to Redlands Ave	4,539	44.2	E	3,710	30.1	D	4,570	44.9	E	3,680	29.7	D
F-74	I-215	Columbia Ave to Center St	5,191	27.6	D	4,917	25.4	C	5,260	28.4	D	4,890	25.2	C
F-75	I-215	Center St to La Cadena Dr	5,541	30.4	D	5,235	27.6	D	5,630	31.4	D	5,210	27.4	D
F-76	I-215	La Cadena Dr to Barton Rd	5,414	29.4	D	5,196	27.3	D	5,480	29.9	D	5,170	27.1	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,435	29.5	D	5,256	27.7	D	5,500	30.1	D	5,230	27.5	D
F-78	I-215	Mt. Vernon Ave to I-10	5,776	22.0	C	5,606	21.0	C	5,850	22.3	C	5,580	20.9	C
F-80	I-215	Auto Plaza Dr to Mill St	4,022	15.1	B	4,090	15.2	B	4,080	15.4	B	4,040	15.0	B
F-83	I-215	Baseline Rd to Highland Ave	4,537	44.1	E	4,700	46.7	F	4,590	45.3	F	4,650	45.6	F
F-52	I-10	SR-60 to Beaumont Ave	4,288	18.1	C	3,675	13.8	B	4,320	18.3	C	3,710	14.0	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,358	18.4	C	3,736	14.0	B	4,400	18.7	C	3,740	14.1	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,569	19.4	C	3,916	14.7	B	4,610	19.7	C	3,910	14.7	B
F-55	I-10	Highland Springs Ave to Sunset Ave	4,393	18.6	C	3,766	14.1	B	4,430	18.8	C	3,750	14.1	B
F-56	I-10	Sunset Ave to 22nd St	4,288	18.1	C	3,675	13.8	B	4,330	18.4	C	3,660	13.8	B
F-57	I-10	22nd St to 8th St	4,218	17.8	B	3,615	13.5	B	4,260	18.1	C	3,600	13.5	B
F-58	I-10	8th St to Hargrave St	4,218	17.8	B	3,615	13.5	B	4,250	18.1	C	3,590	13.5	B
F-59	I-10	Hargrave St to Fields Rd	3,796	16.0	B	3,254	12.2	B	3,830	16.3	B	3,220	12.1	B
F-60	I-10	Fields Rd to Morongo Trail	3,620	15.3	B	3,103	11.6	B	3,660	15.5	B	3,070	11.6	B
F-61	I-10	Morongo Trail to Main St	3,198	13.5	B	2,741	10.3	A	3,240	13.8	B	2,710	10.2	A
F-62	I-10	Main St to Haugen-Lehmann Way	3,198	13.5	B	2,741	10.3	A	3,240	13.8	B	2,710	10.2	A
F-64	I-10	SR-111 to Tipton Rd	2,777	11.7	B	2,380	8.9	A	2,810	11.9	B	2,360	8.9	A
F-65	I-10	Tipton Rd to SR-62	2,777	11.7	B	2,380	8.9	A	2,810	11.9	B	2,360	8.9	A

Indicates that the LOS exceeds the target level

Table 31: Existing Plus Phase 1 Freeway Mainline Impacts and Mitigations

ID	Freeway	Segment	Northbound / Eastbound											
			Determination of Impact					Existing Plus Phase 1 & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS		Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-6	SR-60	Euclid Ave to Grove Ave	D	E	E	E	Yes	7,860	26.0	D	9,010	29.3	D	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	C	D	F	F	Yes	6,280	22.2	C	8,860	31.7	D	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	D	E	D	D	Yes	6,070	23.5	C	5,400	21.4	C	Add 1 mixed flow lane
F-71	I-215	SR-74 to Redlands Ave	D	D	E	E	Yes	3,290	17.4	B	4,210	21.3	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

ID	Freeway	Segment	Southbound / Westbound											
			Determination of Impact					Existing Plus Phase 1 & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS		Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-27	SR-60	I-215 to Day St	F	F	B	B	Yes	7,020	28.8	D	3,340	13.5	B	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	C	C	F	F	Yes	4,540	17.2	B	7,150	31.1	D	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sierra Ave	C	C	F	F	Yes	4,800	18.2	C	7,140	31.0	D	Add 1 mixed flow lane
F-71	I-215	SR-74 to Redlands Ave	E	E	D	D	Yes	4,570	23.4	C	3,680	18.2	C	Add 1 mixed flow lane
F-83	I-215	Baseline Rd to Highland Ave	E	F	F	F	Yes	4,590	23.6	C	4,650	23.6	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Freeway Weaving LOS

Table 32 compares the LOS for study weaving sections under Existing and Existing Plus Phase 1 conditions. As shown in the table, four sections would be significantly impacted under Existing Plus Phase 1 conditions, and all of which would operate below target LOS "D" under both Existing and Plus Phase 1. These segments are:

Northbound and Eastbound

- SR-60 from Blaine St./3rd St. to University Ave.
- SR-91 from Arlington Ave. to Central Ave.

Southbound and Westbound

- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from 14th St. to University Ave.

No additional sections would be deficient under Plus Phase 1 conditions. Table 33 identifies mitigation measures that would reduce the impact of the WLC project to a less-than-significant level.

The mitigation measures shown in Table 33 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 32: Existing Plus Phase 1 Freeway Weaving Section LOS

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,985	24.0	C	8,616	35.7	**E**	6,160	25.1	C	8,550	35.5	**E**
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	5,418	25.8	C	7,050	33.6	D	5,690	27.7	C	6,970	33.6	D
W-21	SR-60	SR-91 to Blaine St/3rd St	3,885	14.8	B	9,400	39.0	**E**	4,280	16.9	B	9,330	39.0	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	3,919	18.7	B	7,050	37.4	**E**	4,260	22.5	C	6,980	38.4	**E**
W-23	SR-60	University Ave to Martin Luther King	4,528	20.4	C	5,932	25.7	C	4,890	22.9	C	5,830	25.7	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	3,856	14.5	B	7,840	32.4	D	4,330	18.0	B	7,830	33.8	D
W-27	SR-60	I-215 to Day St	2,988	10.6	B	4,704	18.8	B	3,480	14.9	B	4,770	19.8	B
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	2,995	12.8	B	4,749	20.7	C	3,400	15.1	B	4,740	21.1	C
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-42	SR-91	Magnolia Ave to La Sierra Ave	5,445	24.6	C	5,684	27.4	C	5,560	25.3	C	5,630	27.2	C
W-48	SR-91	Arlington Ave to Central Ave	7,050	35.3	**E**	4,073	19.6	B	7,150	36.2	**E**	4,080	19.8	B
W-50	SR-91	14th St to University Ave	4,643	21.8	C	4,441	21.9	C	4,670	22.1	C	4,450	22.1	C
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	6,260	34.4	D	5,548	28.0	C	6,240	34.3	D	5,610	28.5	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,400	16.3	B	4,147	14.5	B	4,320	16.1	B	4,200	15.0	B
W-81	I-215	Mill St to 2nd St	5,044	23.0	C	5,095	22.5	C	4,970	22.6	C	5,140	22.7	C
W-82	I-215	5th St to Baseline Rd	3,754	16.5	B	3,590	14.9	B	3,700	16.2	B	3,640	15.2	B
W-63	I-10	Haugen-Lehmann Way to SR-111	2,265	7.5	A	3,172	10.5	B	2,220	7.4	A	3,210	10.7	B

Indicates that the LOS exceeds the target level

Table 32: Existing Plus Phase 1 Freeway Weaving Section LOS (continued)

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	6,125	21.4	C	5,892	20.8	C	6,020	21.1	C	6,000	21.4	C
W-9	SR-60	Haven Ave to Archibald Ave	6,288	23.5	C	6,071	23.5	C	6,130	23.0	C	6,210	24.4	C
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	7,729	28.6	D	7,211	27.2	C	7,520	28.1	D	7,530	29.2	D
W-22	SR-60	Blaine St/3rd St to University Ave	5,714	20.1	C	6,204	23.0	C	5,520	20.2	C	6,550	25.9	C
W-23	SR-60	University Ave to Martin Luther King	5,601	28.0	C	5,876	28.0	C	5,430	27.4	C	6,200	31.0	D
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,050	37.0	E	6,026	29.3	D	6,940	37.7	E	6,300	32.6	D
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	4,700	31.0	D	4,197	27.2	C	4,630	30.2	D	4,520	30.6	D
W-32	SR-60	Moreno Beach Dr to Nason St	1,609	9.2	A	1,753	10.2	B	1,780	10.7	B	2,170	13.5	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	4,642	21.1	C	5,118	23.8	C	4,570	20.8	C	5,190	24.4	C
W-50	SR-91	14th St to University Ave	5,179	24.1	C	7,050	35.5	E	5,210	24.4	C	7,070	35.9	E
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	5,075	14.4	B	8,804	26.9	C	5,100	14.6	B	8,820	27.1	C
W-73	I-215	SR-60 to Columbia Ave	5,877	26.4	C	5,495	24.5	C	5,950	26.9	C	5,460	24.4	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,890	16.8	B	4,591	16.3	B	4,940	17.0	B	4,530	16.2	B
W-81	I-215	Mill St to 2nd St	4,442	19.6	B	4,380	19.4	B	4,500	19.9	B	4,330	19.1	B
W-82	I-215	5th St to Baseline Rd	3,607	15.6	B	3,481	15.1	B	3,660	15.9	B	3,440	14.9	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,198	11.8	B	2,741	10.3	B	3,240	12.0	B	2,710	10.1	B

Indicates that the LOS exceeds the target level

Table 33: Existing Plus Phase 1 Freeway Weaving Impacts and Mitigations

			Northbound / Eastbound												
			Determination of Impact					Existing Plus Phase 1 & Mitigations							
								AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS									
W-22	SR-60	W Blaine St/3rd St to University Ave	B	C	E	E	Yes	4,260	21.7	C	6,980	36.9	E	Add a second off-ramp lane	
W-48	SR-91	Arlington Ave to Central Ave	E	E	B	B	Yes	7,150	33.4	D	4,080	18.2	B	Add a second off-ramp lane	

Indicates that the LOS exceeds the target level

			Southbound / Westbound												
			Determination of Impact					Existing Plus Phase 1 & Mitigations							
								AM Peak Hour			PM Peak Hour				
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS									
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	E	E	D	D	Yes	6,940	29.3	D	6,300	25.4	C	Add 1 mixed flow lane	
W-50	SR-91	14th St to University Ave	C	C	E	E	Yes	5,210	22.5	C	7,070	33.5	D	Add a second off-ramp lane	

Indicates that the LOS exceeds the target level

Freeway Ramp LOS

Table 34 compares the freeway ramp level of service on SR-60 under Existing and Existing Plus Phase 1 conditions. Under Existing and Existing Plus Phase 1 conditions only one ramp operates below the target LOS of "D": SR-60 westbound on-ramp from Central Ave.

No ramps that currently operate at an acceptable LOS would exceed the LOS threshold as a result of Phase 1 of the project.

Table 35 shows the mitigation measures needed to reduce the impacts of the WLC to a less-than-significant level. The mitigation measures shown in Table 35 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 34: Existing Plus Phase 1 Freeway Ramp LOS

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Existing Conditions								Existing Plus Phase 1 Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	4,110	242	16.9	B	5,678	906	26.5	C	4,460	290	19.1	B	5,560	1,290	29.6	D
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,796	349	18.5	B	8,868	904	31.8	F	6,190	440	21.1	C	8,740	930	32.0	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,326	119	3.3	A	1,397	30	3.2	A	1,930	350	10.8	B	1,660	440	6.9	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,207	26	12.9	B	1,367	25	13.6	B	1,580	80	17.9	B	1,220	90	13.9	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,614	207	17.3	B	1,920	434	19.1	B	2,310	940	16.1	B	2,260	580	14.8	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,407	70	16.5	B	1,486	71	16.5	B	1,370	10	16.7	B	1,680	20	18.6	B
R-8	SR-60 EB	Direct On-Ramp from Theodore St	1	Does not Exist in this Scenario				Does not Exist in this Scenario				1,360	90	17.3	B	1,660	200	20.1	C
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,521	330	16.4	B	1,915	385	19.0	B	1,480	380	16.1	B	1,900	410	19.2	B
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,191	7	14.2	B	1,530	8	16.3	B	1,100	20	13.6	B	1,490	37	16.4	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	837	11	9.6	A	1,002	9	11.3	B	970	59	11.0	B	990	21	11.4	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	826	357	13.5	B	993	306	14.6	B	911	384	14.7	B	969	397	15.6	B
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,183	24	12.7	B	1,393	26	14.9	B	1,170	190	7.4	A	1,350	70	8.7	A
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,159	34	12.1	B	1,367	131	14.8	B	980	560	15.9	B	1,280	800	20.7	C
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,193	49	12.8	B	1,498	38	15.9	B	1,560	90	17.1	B	2,110	50	22.8	C
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,144	329	14.3	B	1,460	361	17.4	B	1,470	340	18.0	B	2,060	550	25.3	C
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	384	32.6	D	6,026	439	28.5	D	6,940	390	32.6	D	6,300	440	30.4	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	474	21.0	C	5,800	337	15.9	B	6,910	490	20.9	C	6,150	350	17.9	B

Indicates that the LOS exceeds the target level

Table 35: Existing Plus Phase 1 Freeway Ramp Impacts and Mitigations

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Determination of Impact				Project Impact?	Existing Plus Phase 1 & Mitigations								Mitigation Measures Required to Reduce Impact to Less-Than-Significant
				AM Peak Hour		PM Peak Hour			AM Peak Hour				PM Peak Hour				
				No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS		Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
R-2	SR-60 EB	On-Ramp from Central Ave	1	B	C	F	F	Yes	6,190	440	15.3	B	8,740	930	24.3	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

6. EXISTING PLUS BUILD-OUT CONDITIONS

The analysis of Existing Plus Build-out conditions shows the effects that project-related traffic would have on the local and regional road system if the WLC's land uses and internal road network were built-out in full in 2012 and no changes occurred to the off-site land uses or roadway system.

A. ROAD SEGMENT LOS, IMPACTS, AND MITIGATIONS

Table 36 compares the LOS for study roadway segments under Existing Conditions and Existing Plus Build-out Conditions. As shown, under Existing Plus Build-out Conditions three segments exceed the target LOS set by General Plan policy, namely:

- Gilman Springs Rd. between SR-60 and Alessandro Blvd. exceeds the target LOS under both Existing Conditions and under Existing Plus Build-out Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under the Existing Plus Build-out Conditions.

- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. exceeds the threshold of significance under both Existing Conditions and under Existing Plus Build-out Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS under Existing Plus Build-out Conditions.

- Cactus Ave. east of Redlands Blvd. would exceed the threshold of significance under Existing Plus Build-out Conditions. The road currently has two eastbound lanes and one westbound lane. Adding a second westbound lane would enable it to achieve the target LOS under Existing Plus Build-out Conditions.

In each case adding lanes would achieve the LOS target set in the General Plan. The feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

B. INTERSECTION LOS, IMPACTS, AND MITIGATIONS

Figure 49 shows the turning movement volumes under Existing Plus Build-out conditions (see Figure 16 for the key map). Table 37 presents the LOS for the study intersections under the Existing Plus Build-out conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix D. Table 38 identifies where impacts occur and mitigation measures that would reduce the impacts to a less-than-significant level.

Table 36: Existing Plus Build-out Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	Existing Conditions			Existing Plus Build-out Conditions			Project Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section*	Daily Volume	LOS			
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	771	A	2U	4,017	A			
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	2,046	A	6D	35,138	B			
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U***	1,339	A	4D	3,136	A			
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road			4D	2,413	A			
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	641	A	6D	36,806	B			
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	D	Future Road			4U	13,319	A			
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	D	Future Road			2U	4,587	A			
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	641	A	4D	16,641	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	2,537	A	4U	10,660	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	D	Future Road			4U	14,426	A			
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	1,896	A	4U	15,216	B			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	1,896	A	4U	10,395	A			
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	2U	3,877	A	2U	4,242	A			
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	2U	14,407	F	2U	15,180	F	Yes	Widen to 4 lanes	C
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	11,973	E	2U	14,125	F	Yes	Widen to 4 lanes	C
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	7,338	A	2U	10,407	D			
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	2U	6,786	A	2U	4,037	A			
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	2U	2,537	A	2U	565	A			
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	2U	6,786	A	2U	3,210	A			
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	2U***	472	A	2U	14,381	E	Yes	Widen to 4 lanes	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

Indicates LOS exceeds the target level

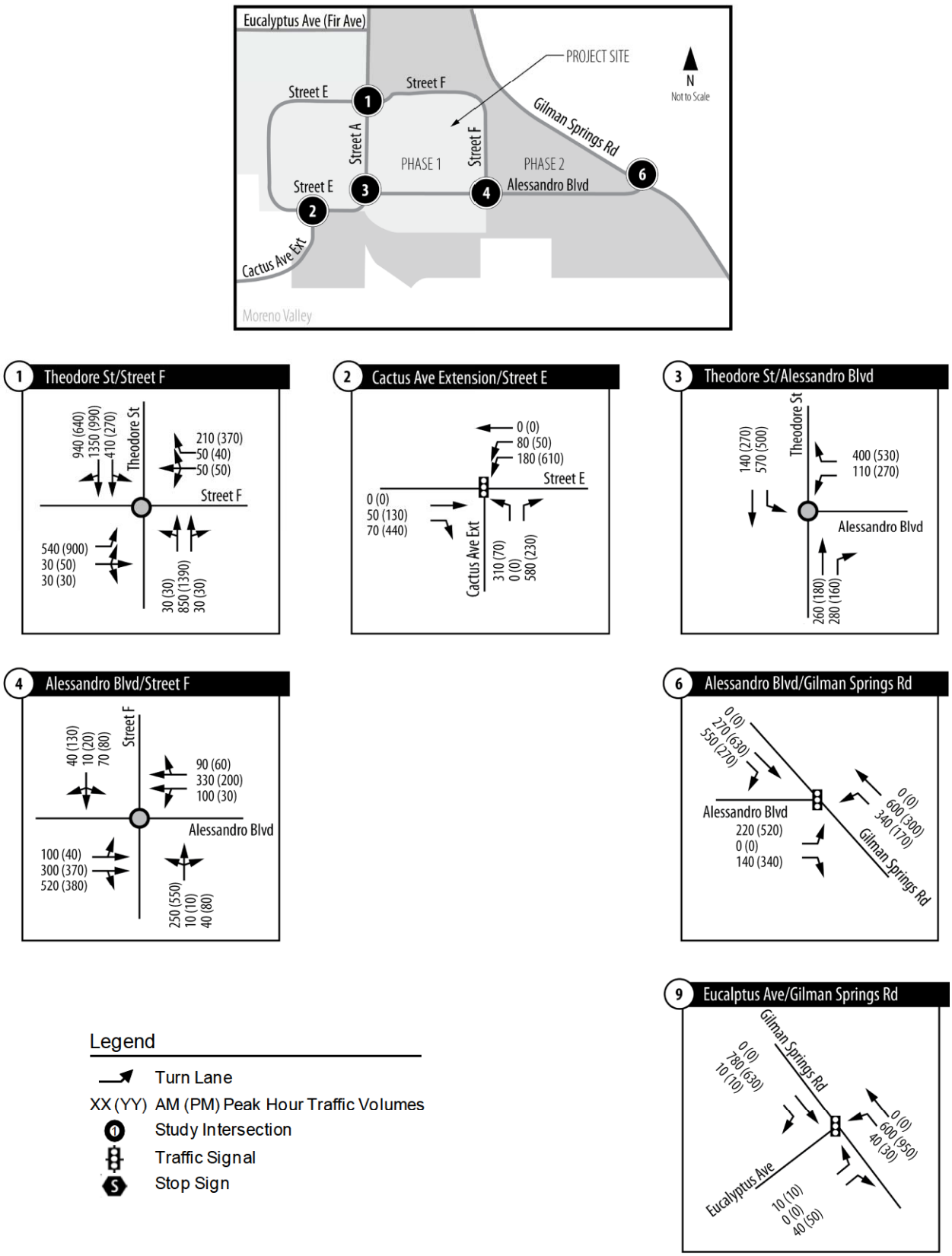


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions

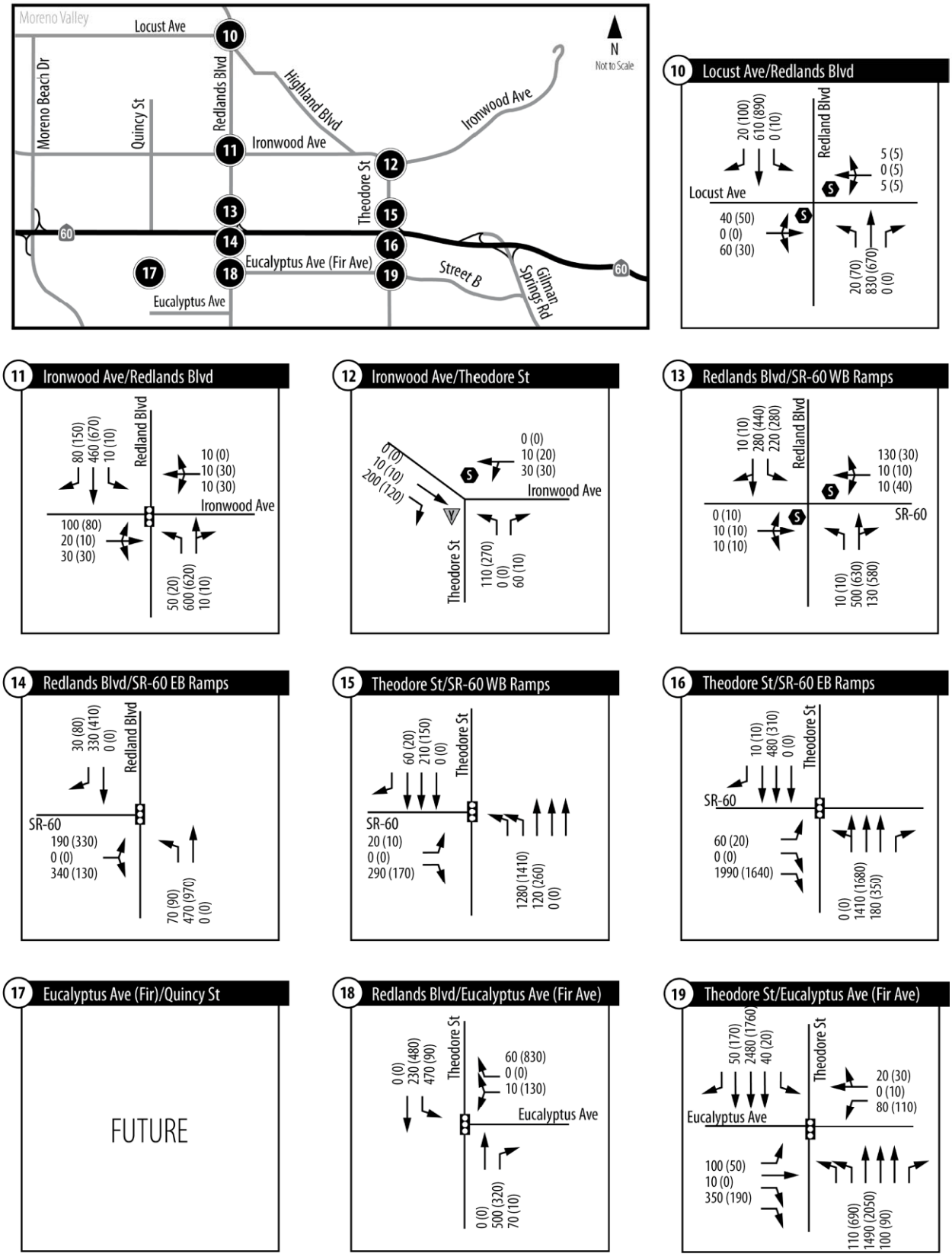


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (B)

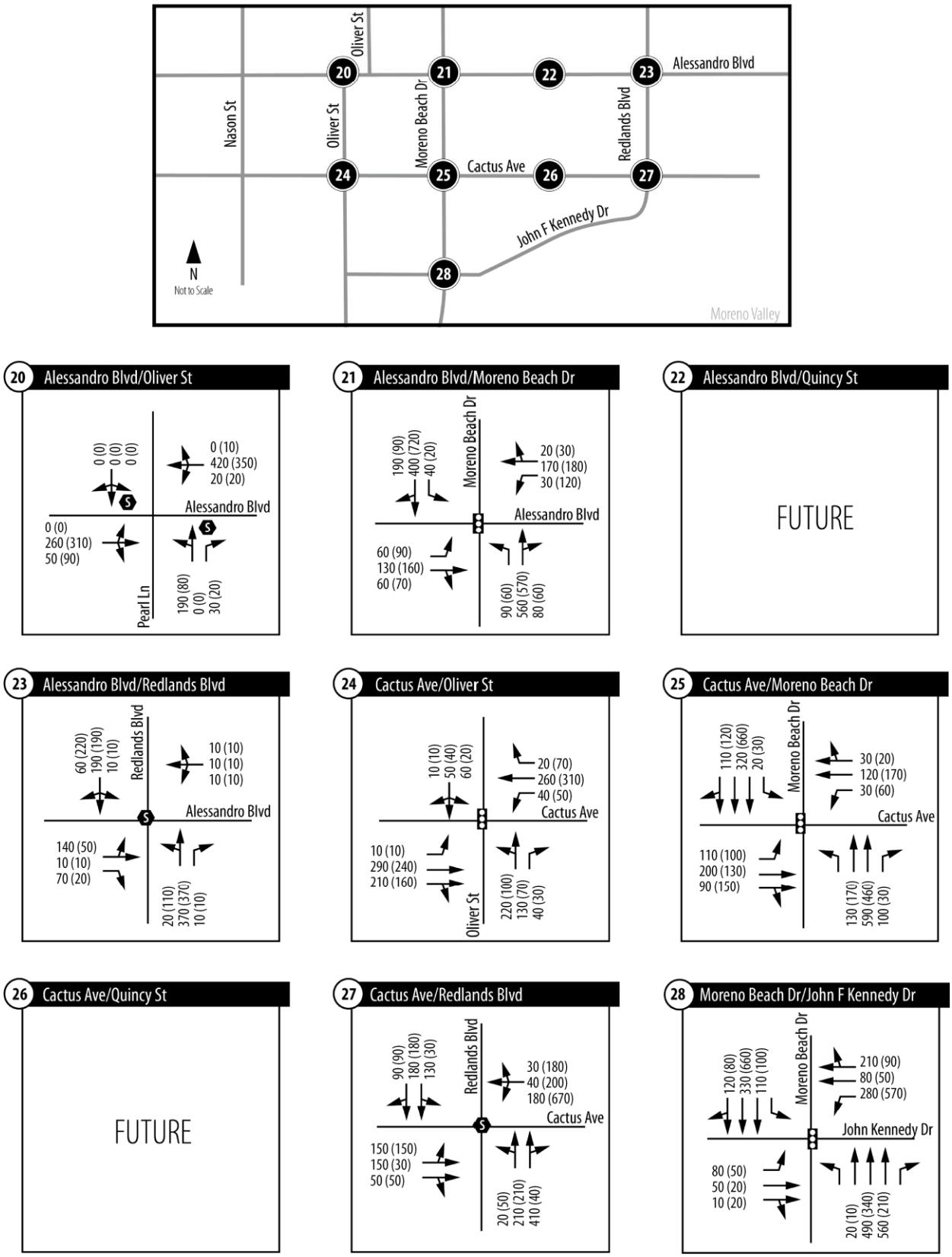


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (C)

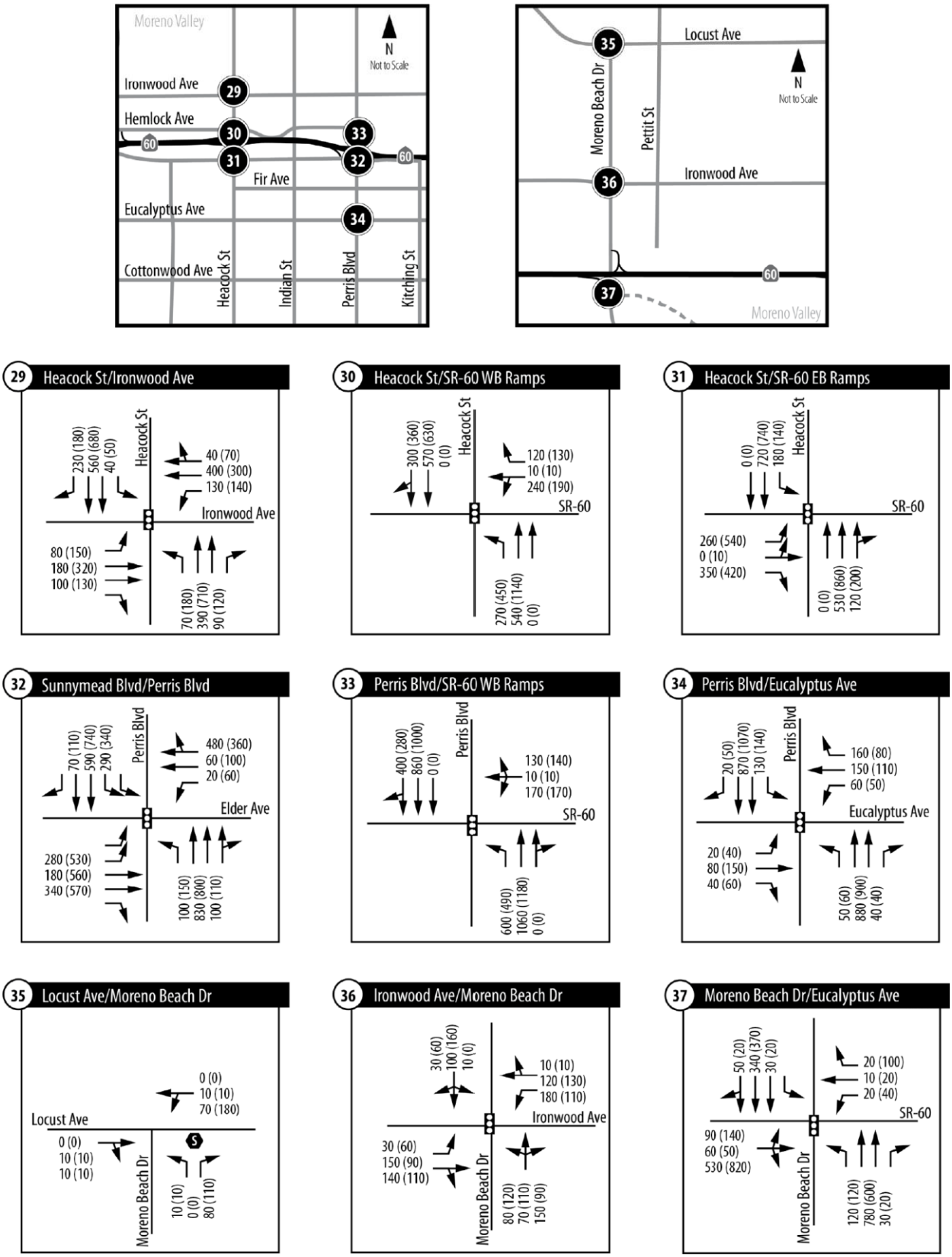


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (D)

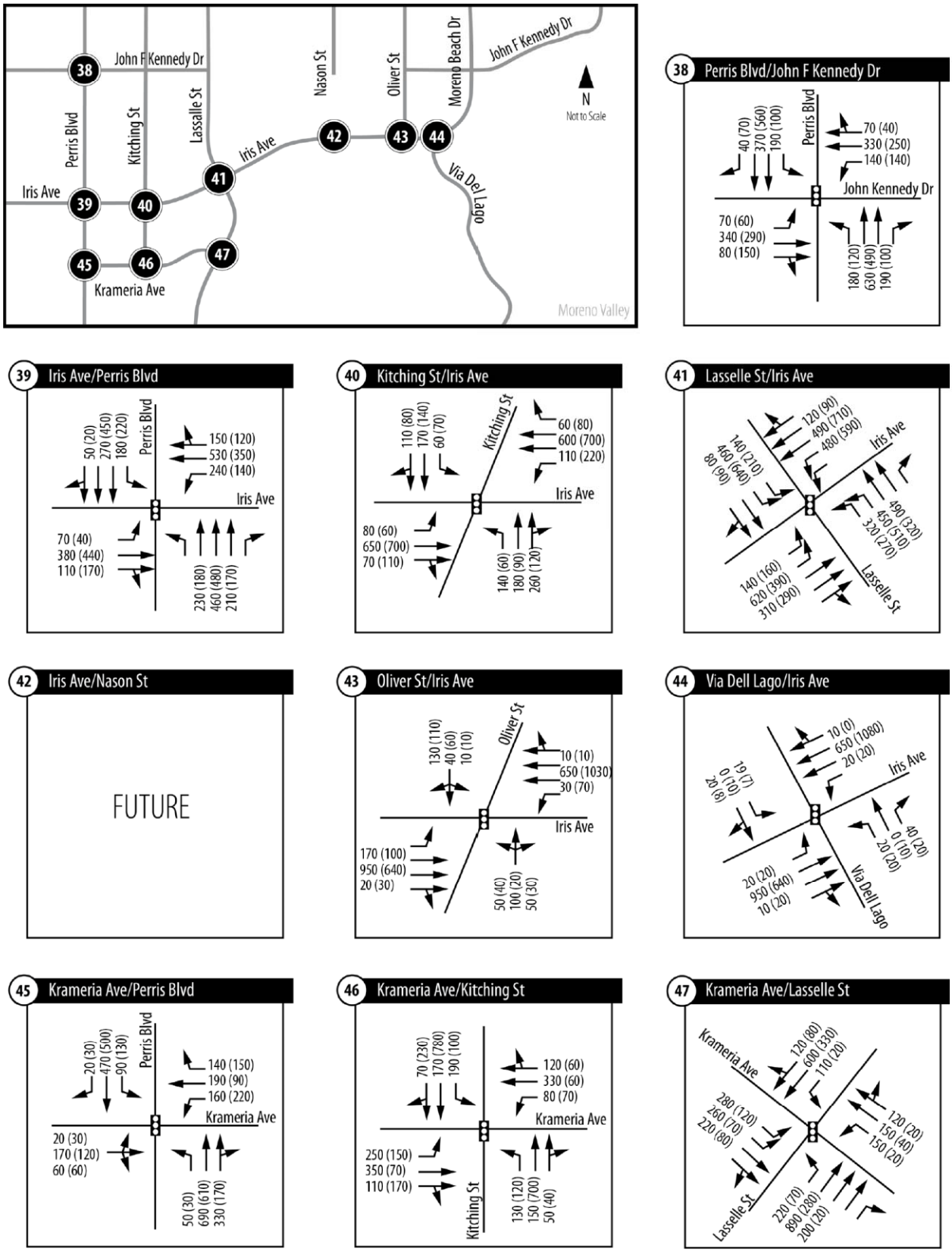


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (E)

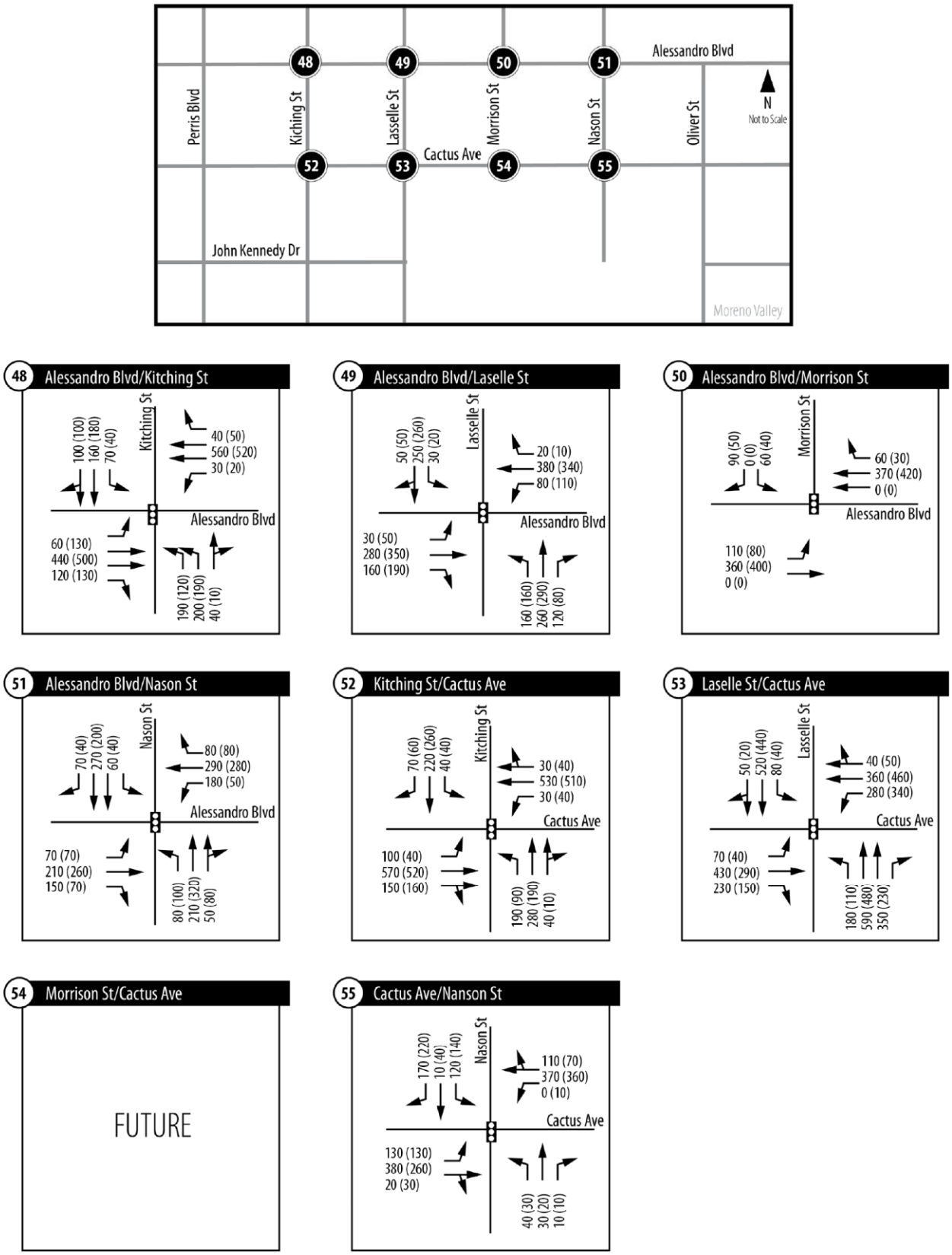


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (F)

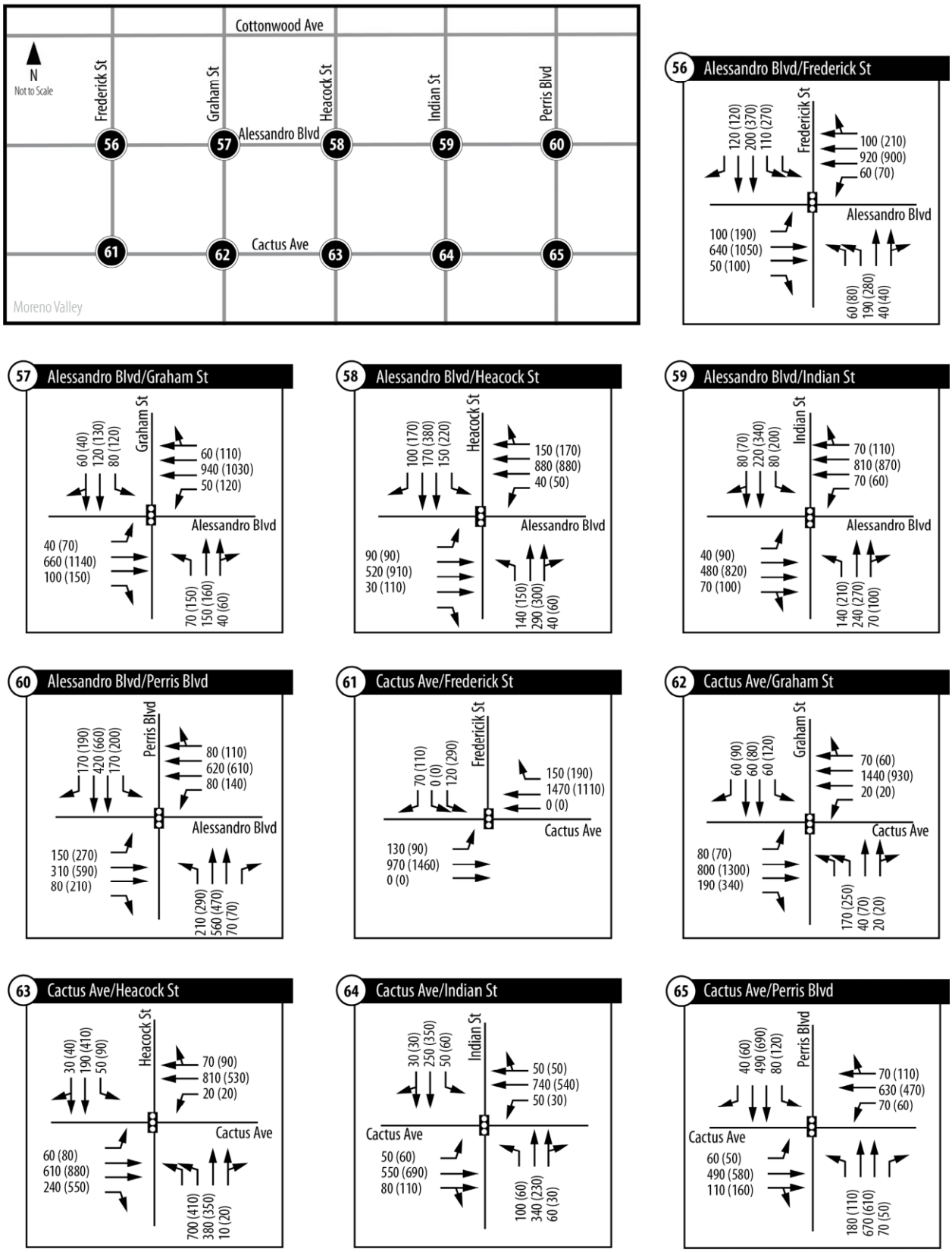


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (G)

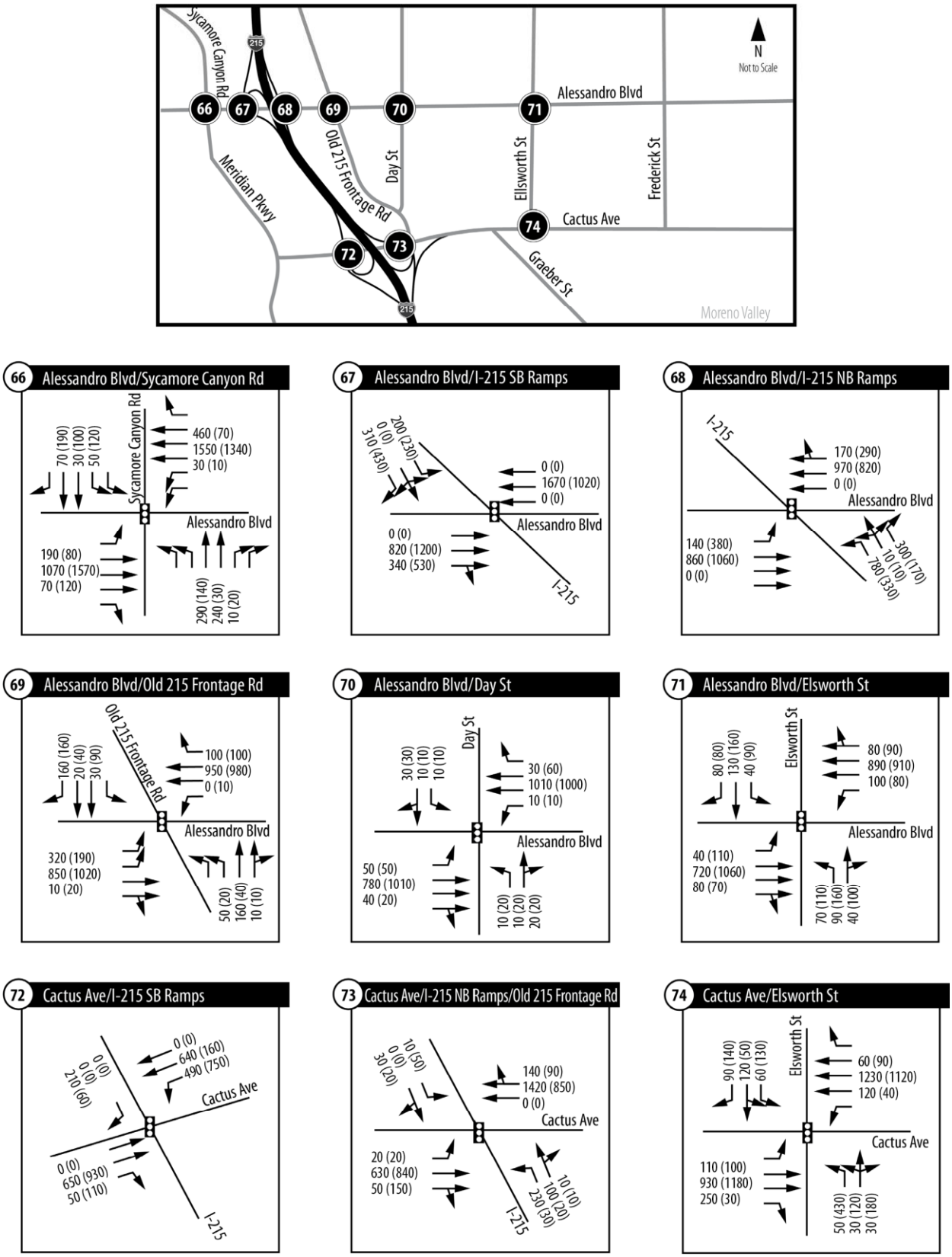


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (H)

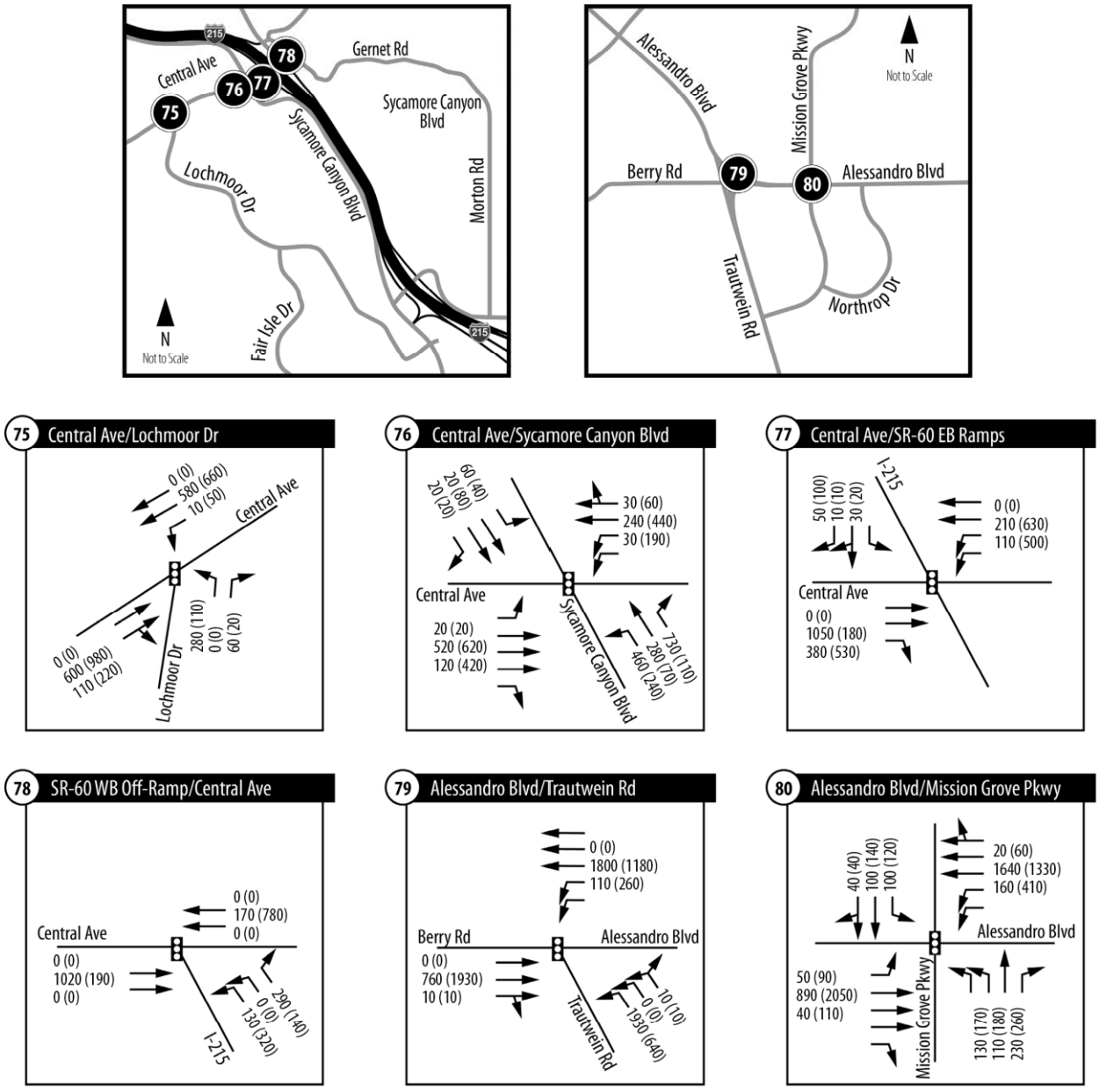


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (I)

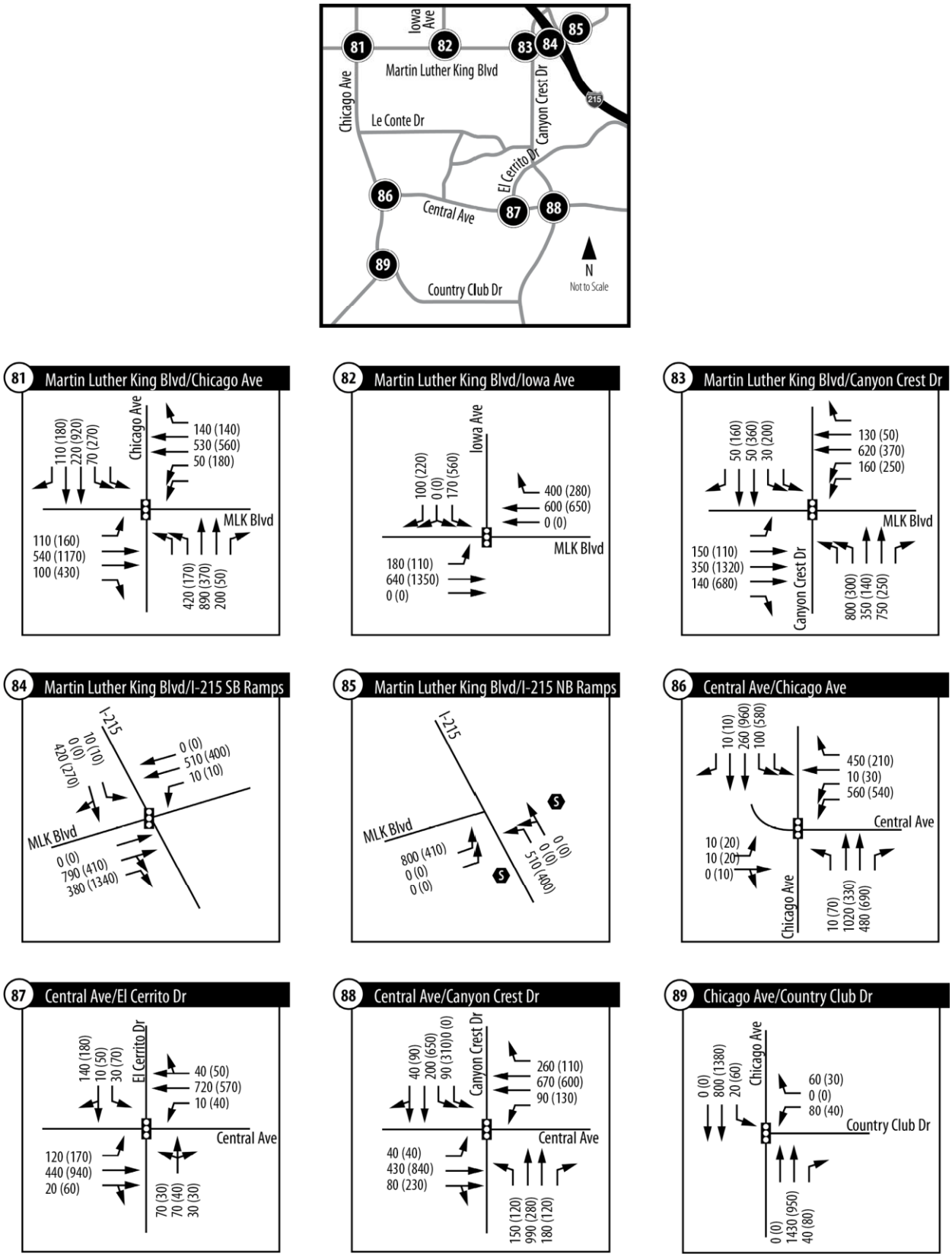


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (J)

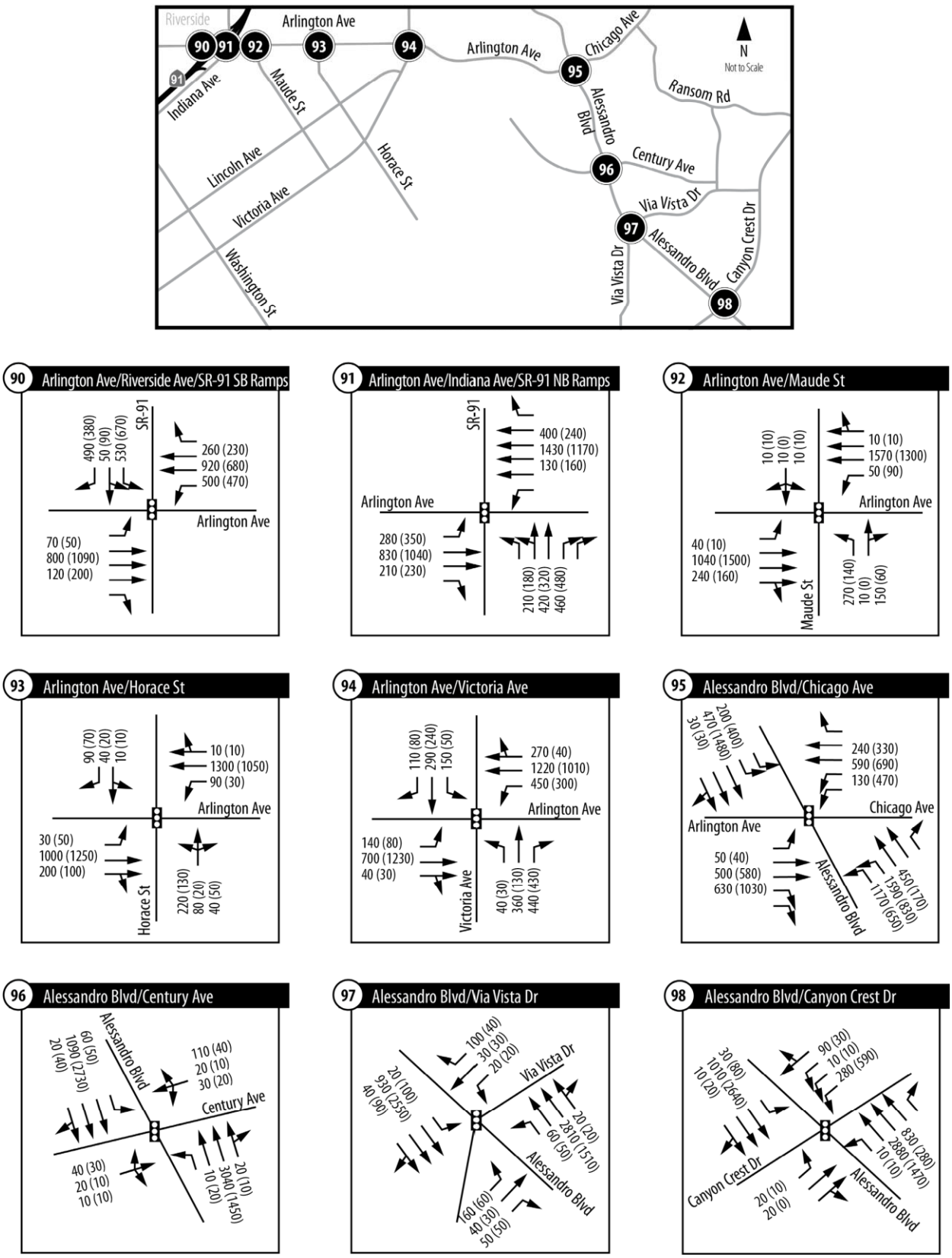


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (K)

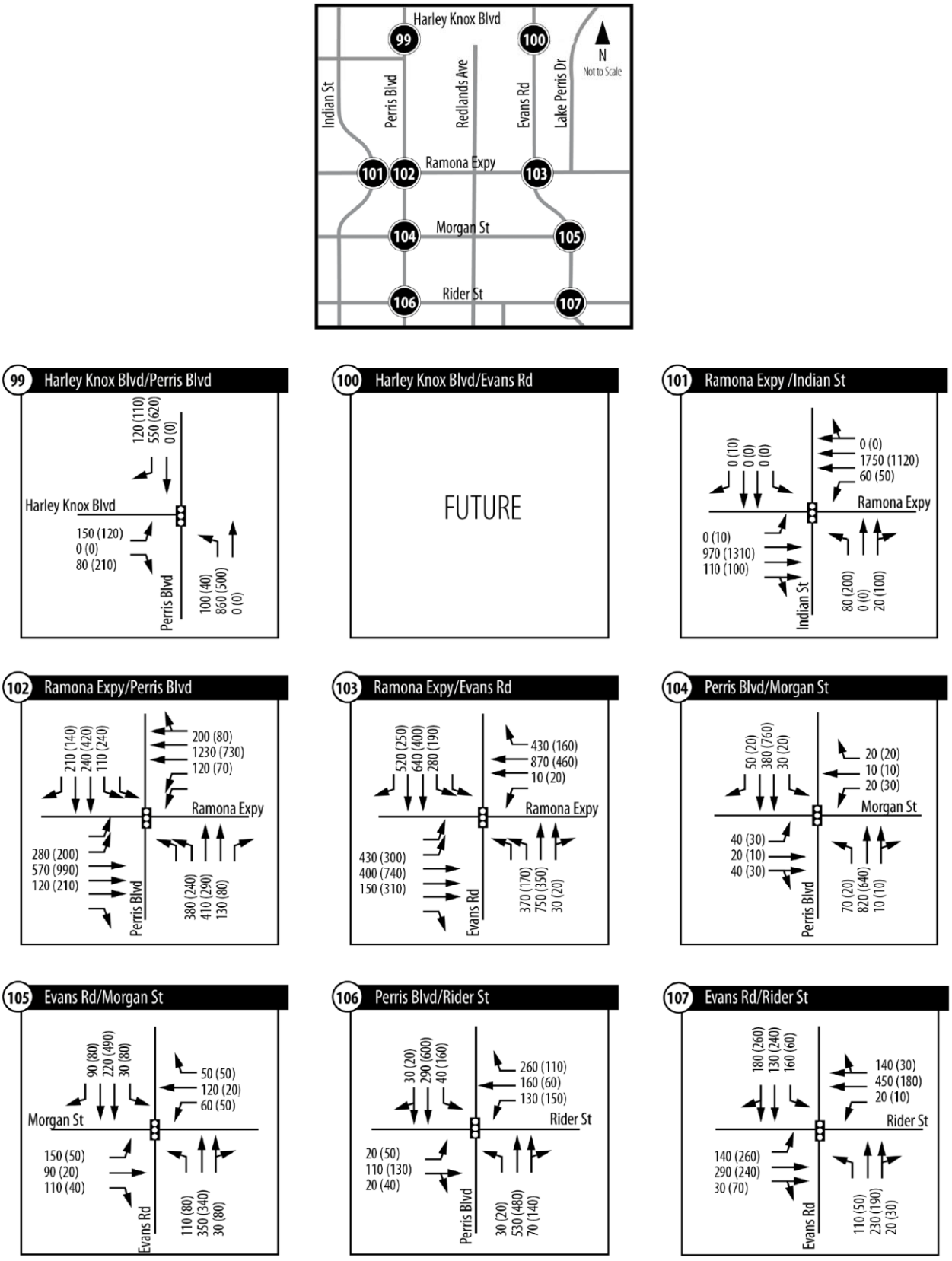


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (L)

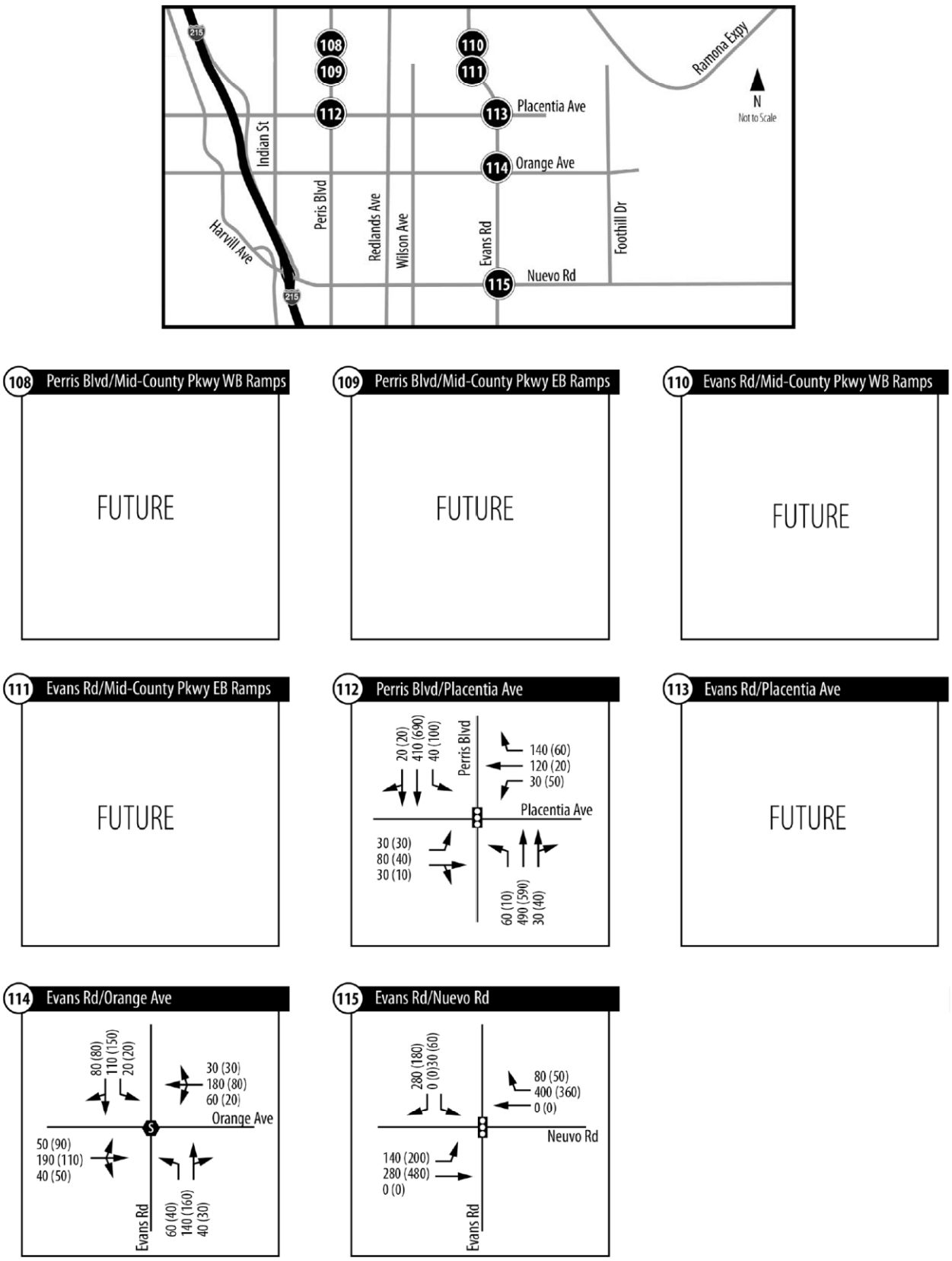


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (M)

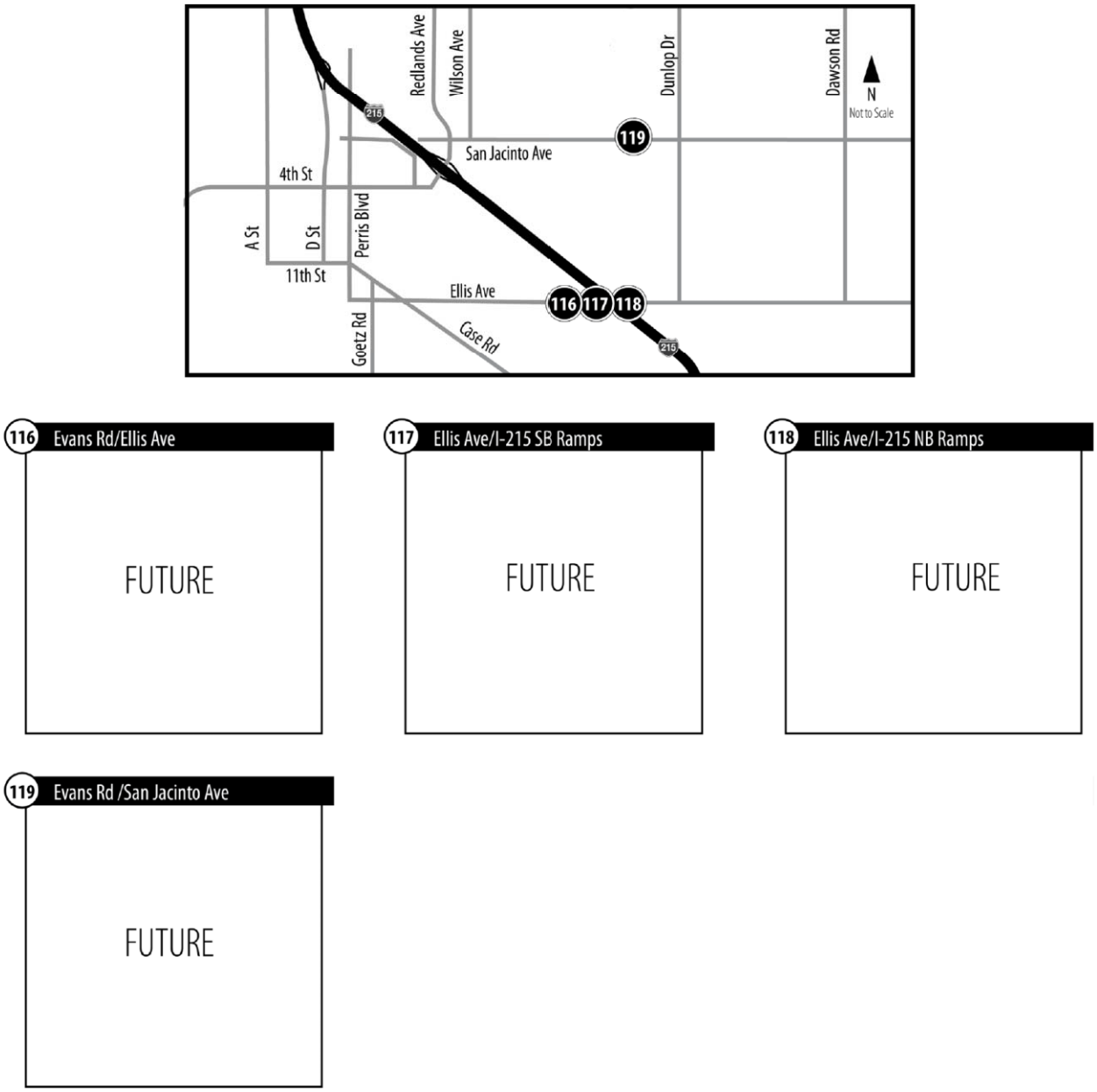


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (N)

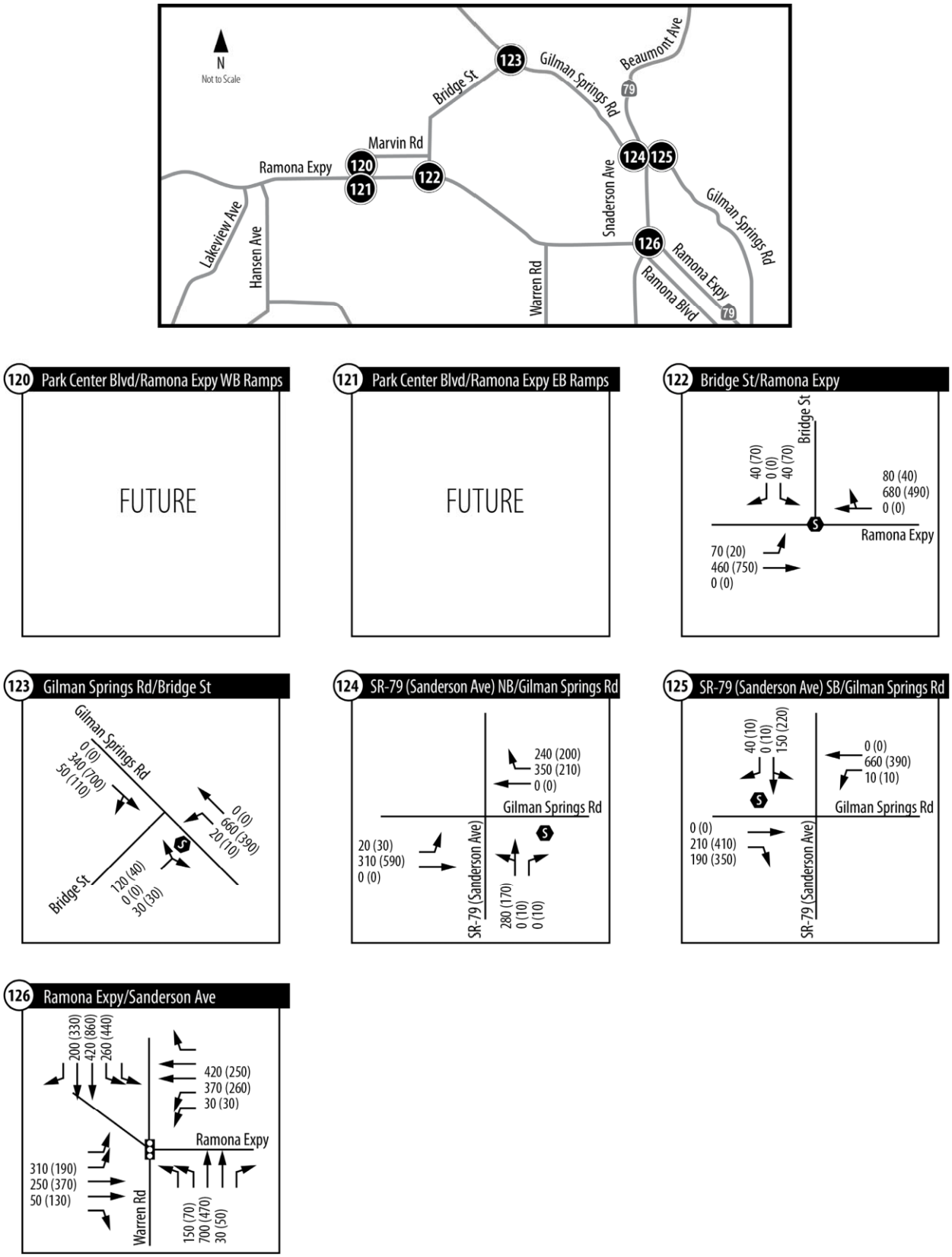


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (O)

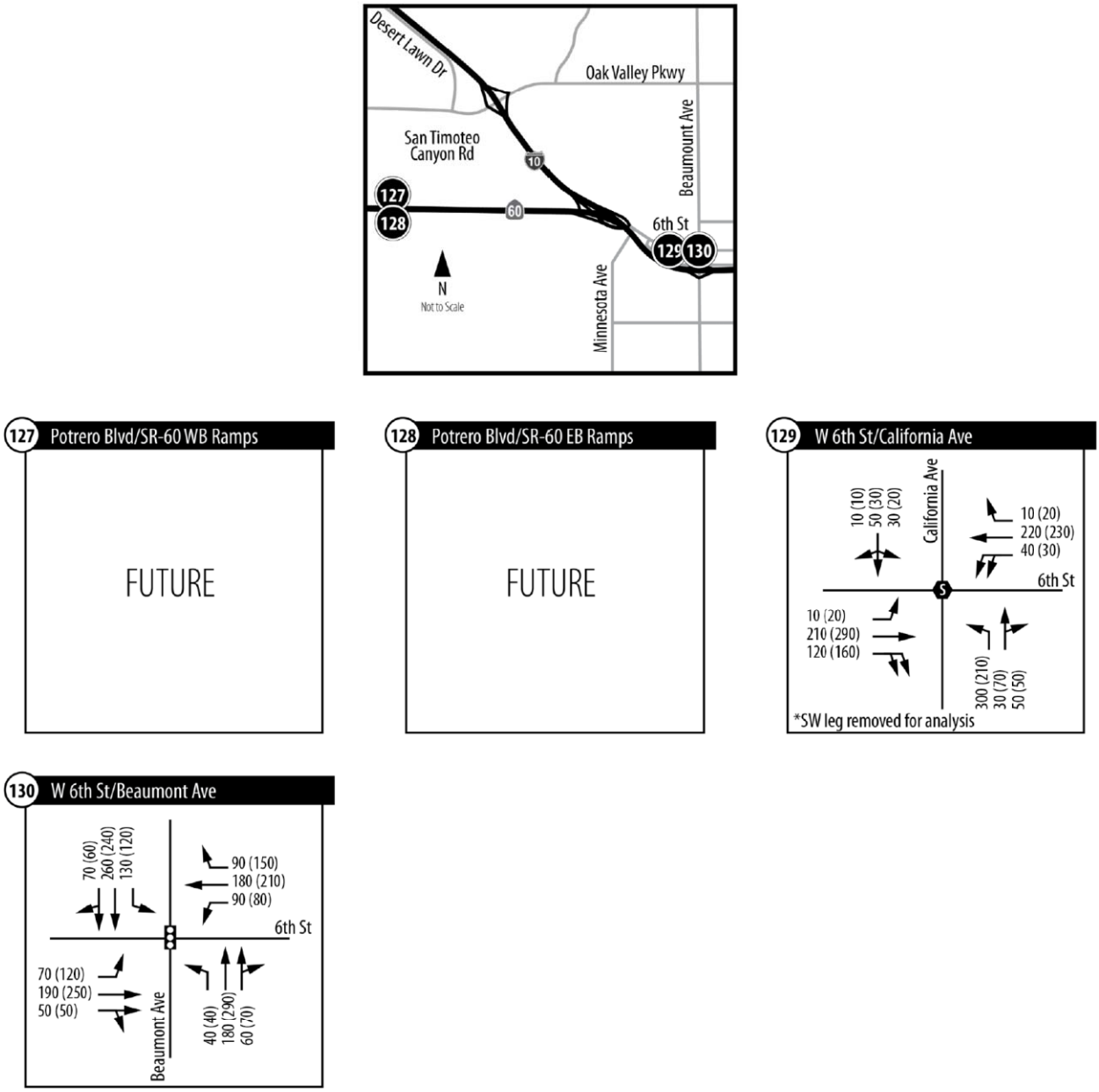


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (P)

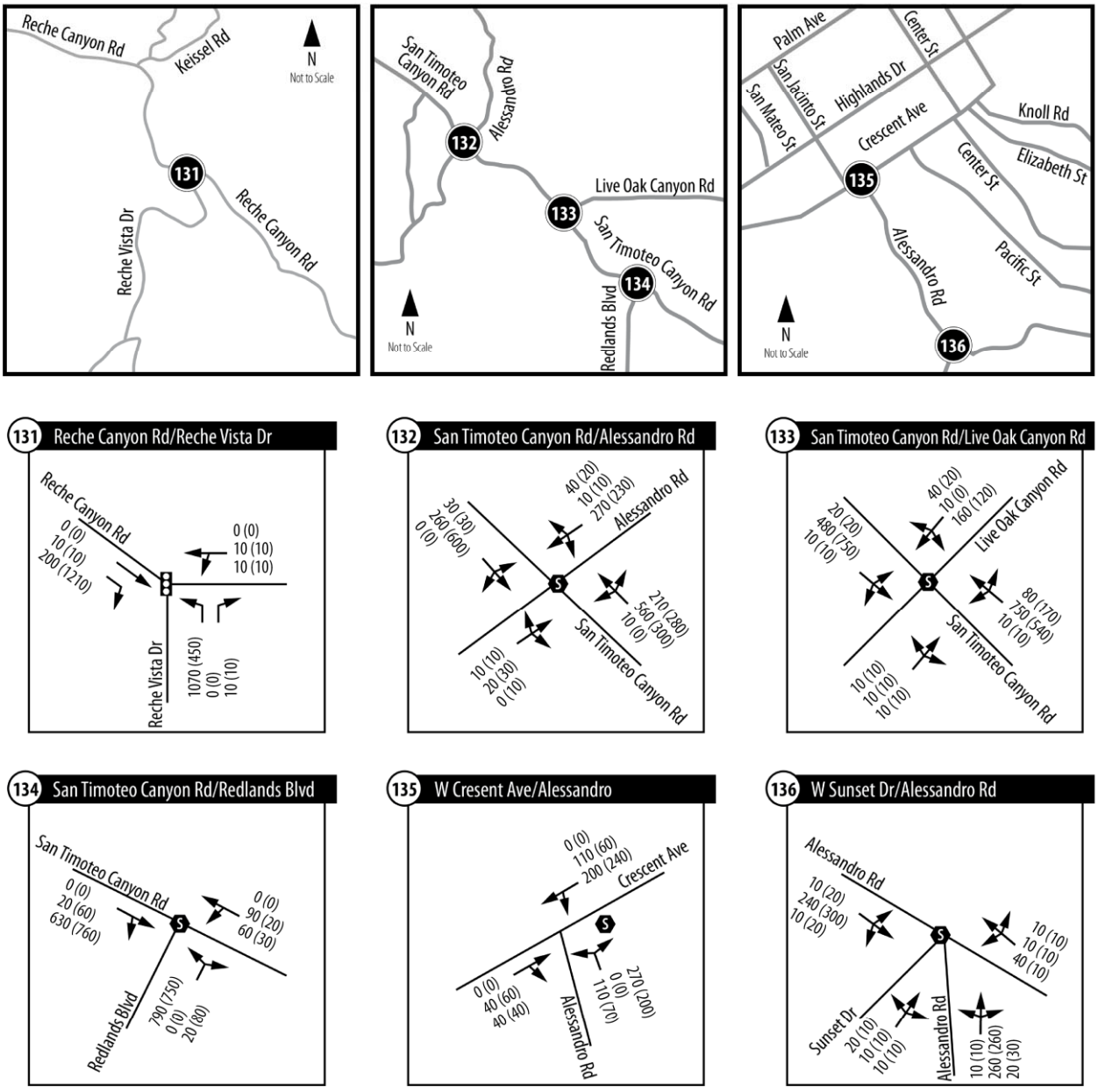


Figure 49: Turning Movement Volumes under Existing Plus Build-out Conditions (Q)

Table 37: Intersection LOS under Existing Plus Build-out Conditions

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	26.3	C
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	10.3	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	9.7	A	RABT	10.5	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	9.6	A
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	10.3	B	SIGNAL	17.9	B
IN-9	Gilman Springs Rd/Eucalytpus Ave	D	N/A	Non-Existent		SIGNAL	6.4	A
IN-10	Redlands Blvd/Locust Ave	C	CSS	26.7	**D**	CSS	92.2	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	40.9	D	SIGNAL	36.0	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	9.7	A	CSS	16.4	C
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	42.2	**E**	CSS	48.0	**E**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	9.6	A	SIGNAL	18.0	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	9.0	A	SIGNAL	15.2	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	9.2	A	SIGNAL	2.3	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	18.3	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.2	A	SIGNAL	14.7	B
IN-20	Oliver Str/Alessandro Blvd	C	CSS	25.9	**D**	CSS	69.7	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	24.0	C	SIGNAL	30.0	C
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	20.5	C	AWS	21.7	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	23.8	C	SIGNAL	28.2	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	16.0	B	SIGNAL	18.2	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	11.4	B	AWS	106.3	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	16.2	B	SIGNAL	22.1	C
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	29.6	C	SIGNAL	29.9	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	22.6	C	SIGNAL	23.8	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	12.5	B	SIGNAL	13.9	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	29.4	C	SIGNAL	30.7	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	22.0	C	SIGNAL	25.1	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	22.8	C	SIGNAL	23.7	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	8.9	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	50.3	D	SIGNAL	55.8	**E**
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	38.0	D	SIGNAL	46.0	D
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	37.0	D	SIGNAL	37.8	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	41.5	D	SIGNAL	45.3	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	23.4	C	SIGNAL	25.1	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	25.4	C	SIGNAL	30.9	C
IN-42	Nason Str/Iris Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-43	Oliver Str/Iris Ave	D	SIGNAL	22.1	C	SIGNAL	25.7	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	6.7	A	SIGNAL	8.7	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	34.6	C	SIGNAL	36.0	D
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	21.7	C	SIGNAL	48.5	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	37.9	D	SIGNAL	42.8	D
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.8	C	SIGNAL	29.7	C

Table 37: Intersection LOS under Existing Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	31.7	C	SIGNAL	32.4	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	8.8	A	SIGNAL	8.7	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	20.5	C	SIGNAL	21.4	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	33.3	C	SIGNAL	34.2	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	47.2	D	SIGNAL	49.2	D
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	22.5	C	SIGNAL	22.4	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	19.5	B	SIGNAL	19.5	B
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	19.8	B	SIGNAL	20.2	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	25.8	C	SIGNAL	26.5	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	17.6	B	SIGNAL	19.2	B
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	32.4	C	SIGNAL	33.9	C
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	9.8	A	SIGNAL	10.3	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	12.9	B	SIGNAL	13.6	B
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	30.1	C	SIGNAL	30.8	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	24.4	C	SIGNAL	25.4	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	26.9	C	SIGNAL	26.6	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	25.8	C	SIGNAL	25.9	C
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.4	A	SIGNAL	6.7	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	19.4	B	SIGNAL	19.7	B
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	18.2	B	SIGNAL	18.2	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	4.6	A	SIGNAL	6.1	A
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	19.2	B	SIGNAL	19.5	B
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	12.1	B	SIGNAL	18.8	B
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	11.1	B	SIGNAL	10.2	B
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	26.7	C	SIGNAL	30.5	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	10.9	B	SIGNAL	11.6	B
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	22.2	C	SIGNAL	24.3	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	7.3	A	SIGNAL	8.3	A
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.8	A	SIGNAL	7.3	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	28.4	C	SIGNAL	29.1	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	18.8	B	SIGNAL	20.8	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	43.2	D	SIGNAL	43.6	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	9.0	A	SIGNAL	9.2	A
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	43.2	D	SIGNAL	47.5	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	8.6	A	SIGNAL	8.9	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	24.3	C	AWS	27.4	D
IN-86	Central Ave/Chicago Ave	D	SIGNAL	23.4	C	SIGNAL	25.0	C
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	11.7	B	SIGNAL	12.8	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	27.8	C	SIGNAL	28.9	C
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	6.3	A	SIGNAL	6.8	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	31.3	C	SIGNAL	31.9	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	21.0	C	SIGNAL	21.1	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	13.8	B	SIGNAL	14.1	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	12.3	B	SIGNAL	13.0	B

Table 37: Intersection LOS under Existing Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	54.8	D	SIGNAL	56.2	**E**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	40.7	D	SIGNAL	45.0	D
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	16.7	B	SIGNAL	17.8	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	30.7	C	SIGNAL	30.5	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	20.4	C	SIGNAL	25.2	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	15.4	B	SIGNAL	16.6	B
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	3.9	A	SIGNAL	5.0	A
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	31.7	C	SIGNAL	33.1	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	54.5	D	SIGNAL	63.5	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	11.9	B	SIGNAL	13.4	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	32.5	C	SIGNAL	32.5	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	24.5	C	SIGNAL	24.3	C
IN-107	Evans Rd/Rider St	C	SIGNAL	34.2	C	SIGNAL	34.2	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	30.1	C	SIGNAL	29.6	C
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	12.5	B	AWS	13.6	B
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	23.3	C	SIGNAL	23.5	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	22.4	C	CSS	29.5	**D**
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	26.6	**D**	CSS	49.6	**E**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	34.7	**D**	CSS	65.5	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	29.2	**D**	CSS	40.6	**E**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	27.1	C	SIGNAL	28.6	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	13.5	B	AWS	20.9	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	13.2	B	SIGNAL	12.7	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	9.4	A	SIGNAL	21.2	C
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	77.2	**F**	AWS	> 180.0	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	50.9	**F**	AWS	135.6	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	81.8	**F**	AWS	174.1	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	14.0	B	CSS	18.5	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	8.9	A	AWS	10.1	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 37: Intersection LOS under Existing Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	53.5	D
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	14.2	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	10.1	B	RABT	10.2	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	14.7	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	CSS	15.7	C	SIGNAL	28.4	C
IN-9	Gilman Springs Rd/Eucalytpus Ave	D	N/A	Non-Existent		SIGNAL	6.3	A
IN-10	Redlands Blvd/Locust Ave	C	CSS	42.8	**E**	CSS	> 180.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	37.3	D	SIGNAL	34.8	C
IN-12	Theodore Street/Ironwood Avenue	D	CSS	9.8	A	CSS	28.7	D
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	54.0	**F**	CSS	> 180.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	14.4	B	SIGNAL	49.0	D
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	9.6	A	SIGNAL	13.0	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	9.4	A	SIGNAL	1.4	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	14.4	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.8	A	SIGNAL	18.5	B
IN-20	Oliver Str/Alessandro Blvd	C	CSS	14.7	B	CSS	20.2	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	28.2	C	SIGNAL	41.6	D
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	13.8	B	AWS	19.3	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	17.3	B	SIGNAL	18.3	B
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	17.0	B	SIGNAL	19.5	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	8.2	A	AWS	102.7	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	13.8	B	SIGNAL	105.1	**F**
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	31.9	C	SIGNAL	32.3	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	21.5	C	SIGNAL	22.1	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	15.9	B	SIGNAL	16.2	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	36.0	D	SIGNAL	36.3	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	19.7	B	SIGNAL	22.3	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	23.4	C	SIGNAL	23.8	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	8.6	A	CSS	9.1	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	40.0	D	SIGNAL	43.8	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	76.6	**E**	SIGNAL	98.8	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	31.2	C	SIGNAL	32.3	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	36.5	D	SIGNAL	37.1	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	17.5	B	SIGNAL	27.9	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	26.6	C	SIGNAL	31.3	C
IN-42	Nason Str/Iris Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-43	Oliver Str/Iris Ave	D	SIGNAL	15.8	B	SIGNAL	18.1	B
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	6.5	A	SIGNAL	7.3	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	29.3	C	SIGNAL	35.4	D
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	19.4	B	SIGNAL	22.5	C
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	13.5	B	SIGNAL	13.7	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	24.7	C	SIGNAL	25.6	C

Table 37: Intersection LOS under Existing Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	26.6	C	SIGNAL	29.5	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	7.8	A	SIGNAL	8.2	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	16.9	B	SIGNAL	18.7	B
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	22.6	C	SIGNAL	22.4	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	38.6	**D**	SIGNAL	38.5	**D**
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	21.0	C	SIGNAL	22.7	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	25.6	C	SIGNAL	25.9	C
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	24.2	C	SIGNAL	26.2	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	23.6	C	SIGNAL	23.8	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	27.9	C	SIGNAL	28.2	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	42.3	D	SIGNAL	45.9	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	11.7	B	SIGNAL	13.7	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	17.4	B	SIGNAL	18.3	B
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	20.3	C	SIGNAL	22.5	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	19.6	B	SIGNAL	19.6	B
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	30.7	C	SIGNAL	30.7	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	18.0	B	SIGNAL	18.2	B
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	12.6	B	SIGNAL	12.6	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	24.1	C	SIGNAL	25.2	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	18.6	B	SIGNAL	21.2	C
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	8.2	A	SIGNAL	10.3	B
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	27.6	C	SIGNAL	29.3	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	19.7	B	SIGNAL	39.0	D
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	3.7	A	SIGNAL	4.2	A
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	29.5	C	SIGNAL	29.6	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	6.7	A	SIGNAL	7.9	A
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	17.6	B	SIGNAL	19.0	B
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	10.3	B	SIGNAL	10.9	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	8.2	A	SIGNAL	8.3	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	14.8	B	SIGNAL	14.7	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	34.9	C	SIGNAL	40.5	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	36.5	D	SIGNAL	38.7	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	13.0	B	SIGNAL	13.5	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	28.0	C	SIGNAL	29.2	C
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	4.7	A	SIGNAL	5.6	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	12.2	B	AWS	13.4	B
IN-86	Central Ave/Chicago Ave	D	SIGNAL	23.1	C	SIGNAL	27.5	C
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	12.0	B	SIGNAL	12.6	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	35.2	D	SIGNAL	36.7	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	4.9	A	SIGNAL	4.9	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	30.7	C	SIGNAL	30.8	C
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	20.8	C	SIGNAL	20.9	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	11.1	B	SIGNAL	11.6	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	7.2	A	SIGNAL	7.6	A

Table 37: Intersection LOS under Existing Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	Existing Conditions			Existing Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	30.9	C	SIGNAL	33.2	C
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	65.9	**E**	SIGNAL	70.0	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	7.6	A	SIGNAL	8.7	A
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	18.9	B	SIGNAL	18.6	B
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	17.9	B	SIGNAL	17.7	B
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	15.1	B	SIGNAL	15.4	B
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	7.8	A	SIGNAL	12.5	B
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	34.7	C	SIGNAL	35.0	D
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	28.8	C	SIGNAL	28.8	C
IN-104	Perris Blvd/Morgan St	D	SIGNAL	6.7	A	SIGNAL	8.6	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	20.6	C	SIGNAL	20.2	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	23.0	C	SIGNAL	26.5	C
IN-107	Evans Rd/Rider St	C	SIGNAL	28.3	C	SIGNAL	27.6	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	14.0	B	SIGNAL	14.9	B
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	10.1	B	AWS	10.7	B
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	22.6	C	SIGNAL	22.6	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	C	CSS	20.6	C	CSS	27.3	**D**
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	20.8	C	CSS	25.1	**D**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	30.7	**D**	CSS	48.8	**E**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	48.2	**E**	CSS	70.4	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	20.8	C	SIGNAL	21.1	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	18.0	C	AWS	20.9	C
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	12.8	B	SIGNAL	11.9	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	5.6	A	SIGNAL	6.4	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	23.9	C	AWS	98.1	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	60.2	**F**	AWS	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	80.5	**F**	AWS	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	11.5	B	CSS	14.6	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	9.0	A	AWS	10.1	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 38: Existing Plus Build-out Intersection Impacts and Mitigations

ID	Study Intersection	LOS Standard	Determination of Impact					Existing Plus Build-out & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	Traffic Control	AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS			Delay	LOS	Delay	LOS	
IN-10	Redlands Blvd/Locust Ave	C	D	F	E	F	Yes	SIGNAL	7.1	A	12.1	A	Signalize. Add 1 EB LT and 1 WB LT.
IN-13	Redlands Blvd/SR-60 WB ramps	D	E	E	F	F	Yes	SIGNAL	15.6	B	16.0	B	Signalize. Add 1 NB RT.
IN-20	Oliver Str/Alessandro Blvd	C	D	F	B	C	Yes	AWS	18.4	C	12.3	B	Change to AWS.
IN-27	Redlands Blvd/Cactus Ave	C	B	F	A	F	Yes	SIGNAL	17.4	B	18.5	B	Signalize. Add 1 EB LT, 1 WB LT.
IN-28	Moreno Beach Dr/John Kennedy Dr	D	B	C	B	F	Yes	SIGNAL	16.2	B	18.4	B	Add 1 WB LT Lane.
IN-36	Moreno Beach Drive & Ironwood Avenue	D	D	E	D	D	Yes	SIGNAL	42.1	D	41.3	D	Add 1 NB RT lane.
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	D	D	E	F	Yes	SIGNAL	18.9	B	26.3	C	Add 1 EB RT lane.
IN-53	Lasselle Str/Cactus Ave	C	D	D	D	D	Yes	SIGNAL	38.7	D	33.4	C	Add 1 WB LT, 1 NB LT, 1 SB LT, Add overlap phase for NB and EB RT.
IN-94	Arlington Ave/Victoria Ave	D	D	E	C	C	Yes	SIGNAL	54.9	D	33.2	C	Add WB LT lane
IN-95	Alessandro Blvd/Chicago Ave	D	D	D	E	E	Yes	SIGNAL	39.7	D	54.3	D	Add NB LT lane; adjust signal timings.
IN-122	Bridge St/Ramona Expy	C	C	D	C	D	Yes	SIGNAL	6.9	A	7.3	A	Signalize.
IN-123	Gilman Springs Rd/Bridge Str	C	D	E	C	D	Yes	SIGNAL	6.7	A	4.8	A	Signalize.
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	D	F	D	E	Yes	SIGNAL	7.5	A	7.2	A	Signalize.
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	D	E	E	F	Yes	SIGNAL	6.5	A	6.3	A	Signalize.
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	F	F	C	F	Yes	SIGNAL	41.5	D	16.8	B	Signalize.
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	F	F	F	F	Yes	SIGNAL	16.2	B	15.0	B	Signalize.
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	F	F	F	F	Yes	SIGNAL	8.6	A	5.9	A	Signalize. Add 1 EB RT. Also add EB RT overlap phase.

Indicates that the LOS exceeds the target leve "LT" and "RT" denote left turn and right turn respectively

Notes: "CSS" means cross-street is stop-controlled "NB" and "SB" denote northbound and southbound respectively

"AWS" means all-way stop "EB" and "WB" denote eastbound and westbound respectively

As shown in Table 38, there are 17 study intersections where the project would have a significant impact. Twelve of these intersections already exceed the threshold of significance under Existing Conditions and another five would exceed the threshold of significance with the addition of the project. These intersections are:

Exceed Threshold of Significance Under Both Existing Conditions and Existing Plus Build-out Conditions

- Redlands Blvd./Locust Ave.
- Redlands Blvd./SR-60 WB ramps
- Oliver St./Alessandro Blvd.
- Moreno Beach Dr./SR-60 EB Ramps
- Lasselle St./Cactus Ave.
- Alessandro Blvd./Chicago Ave.
- Gilman Springs Rd./Bridge St.
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd.
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd.
- San Timoteo Canyon Rd./Alessandro Rd.
- San Timoteo Canyon Rd./Live Oak Canyon Rd.
- Redlands Blvd./San Timoteo Canyon Rd.

Exceed Threshold of Significance Under Existing Plus Build-out Conditions (but not under Existing No-Project Conditions)

- Redlands Blvd./Cactus Ave.
- Moreno Beach Dr./John Kennedy Dr.
- Moreno Beach Dr./Ironwood Ave.
- Arlington Ave./Victoria Ave.
- Bridge St./Ramona Expy.

In each case, a change in the traffic control mechanism, or the addition of lanes, or both, would reduce the impact of the project to a less-than-significant level.

The mitigation measures shown in Table 38 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

C. FREEWAY SEGMENT LOS, IMPACTS, AND MITIGATIONS

Freeway Mainline Basic Sections

Table 39 compares the LOS for freeway mainline sections for the Existing and Existing Plus Build-out scenarios. Details of the LOS calculations for freeways under Existing Plus Build-out conditions can be found in Appendix K. Table 40 identifies the ten basic freeway sections where the project has a significant impact. Eight of these sections would be deficient under both Existing and Existing Plus Build-out conditions, namely:

Northbound or Eastbound

- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- I-215 from SR-74/Case Rd. to Redlands Ave.

Southbound or Westbound

- SR-60 from I-215 to Day St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- I-215 from SR-74/Case Rd. to Redlands Ave.
- I-215 from Baseline Rd. to Highland Ave./SR-210

Two additional sections were found to be deficient under Plus Build-out conditions, namely:

Eastbound

- SR-91 from Central Ave. to 14th St.

Westbound

- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.

Table 40 also identifies the mitigation measures needed to reduce the impact to a less-than-significant level. In each case adding a mixed-flow lane[49] would bring the LOS to "D" or better. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS,

[49] A "mixed-flow lane" is the most common type of freeway lane. The term is used to distinguish them from carpool lanes, truck lanes, etc.

Table 39: Existing Plus Build-out Freeway Mainline LOS

ID	Freeway	Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	6,024	24.5	C	7,822	33.0	D	6,340	26.7	D	7,720	32.8	D
F-3	SR-60	Ramona Ave to Central Ave	5,687	22.8	C	9,400	47.3	F	6,020	24.9	C	9,280	46.9	F
F-4	SR-60	Central Ave to Mountain Ave	6,339	26.2	D	9,338	46.6	F	6,690	28.7	D	9,230	46.3	F
F-5	SR-60	Mountain Ave to Euclid Ave	6,205	25.4	C	6,664	26.1	D	6,560	28.0	D	6,540	25.9	C
F-6	SR-60	Euclid Ave to Grove Ave	7,650	34.7	D	9,091	43.8	E	8,010	38.4	E	8,950	43.2	E
F-7	SR-60	Grove Ave to Vineyard Ave	6,923	29.6	D	9,400	47.3	F	7,290	32.5	D	9,260	46.7	F
F-8	SR-60	Vineyard Ave to Archibald Ave	6,823	28.7	D	9,400	47.3	F	7,180	31.8	D	9,240	46.5	F
F-9	SR-60	Archibald Ave to Haven Ave	6,268	25.6	C	6,471	25.1	C	6,650	28.3	D	6,290	24.7	C
F-10	SR-60	Haven Ave to Milliken Ave	6,096	19.1	C	6,864	20.6	C	6,480	20.7	C	6,670	20.3	C
F-11	SR-60	Milliken Ave to I-15	4,234	16.5	B	4,529	16.9	B	4,580	18.3	C	4,350	16.5	B
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	2,593	10.2	A	2,910	10.8	A	3,030	12.4	B	2,670	10.3	A
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	3,026	11.9	B	3,968	14.8	B	3,490	14.2	B	3,770	14.5	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	2,596	10.2	A	3,061	11.4	B	3,060	12.5	B	2,870	11.1	B
F-15	SR-60	Pedley Rd to Pyrite St	2,813	11.1	B	3,334	12.4	B	3,320	13.5	B	3,030	11.7	B
F-16	SR-60	Pyrite St to Valley Way	3,348	13.2	B	3,642	13.6	B	3,860	15.7	B	3,320	12.8	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,398	23.7	C	4,252	21.4	C	4,920	28.3	D	3,950	20.3	C
F-18	SR-60	Rubidoux Blvd to Market St	4,943	27.6	D	4,706	24.3	C	5,490	33.5	D	4,510	23.7	C
F-19	SR-60	Market St to Main St	4,498	24.4	C	7,050	47.8	F	5,040	29.3	D	6,850	46.7	F
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	5,865	24.6	C	8,976	45.7	F	6,600	34.2	D	8,760	50.9	F
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	4,332	16.9	B	6,795	26.6	D	4,950	20.4	C	6,710	27.2	D
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	2,702	21.6	C	3,713	30.2	D	3,330	32.0	D	3,820	34.6	D
F-30	SR-60	Heacock St to Perris Blvd	2,349	18.6	C	3,355	26.1	D	3,220	30.3	D	3,480	30.2	D
F-31	SR-60	Perris Blvd to Nason St	1,812	14.3	B	2,344	17.4	B	2,750	25.0	C	2,540	20.9	C
F-32	SR-60	Nason St to Moreno Beach Dr	1,619	12.8	B	2,038	15.1	B	2,420	21.7	C	2,260	18.6	C
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,326	10.5	A	1,397	10.4	A	2,140	19.3	C	1,750	14.8	B
F-34	SR-60	Redlands Blvd to Theodore St	1,614	12.7	B	1,920	14.2	B	2,590	23.1	C	2,380	19.6	C
F-35	SR-60	Theodore St to Gilman Springs Rd	1,521	12.0	B	1,915	14.2	B	1,550	12.7	B	1,830	14.0	B
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	1,213	11.2	B	1,484	12.3	B	1,180	12.2	B	1,680	15.6	B
F-37	SR-60	Jack Rabbit Trail to I-10	1,215	9.6	A	1,482	11.0	A	1,180	9.5	A	1,680	12.7	B
F-39	SR-91	I-15 to McKinley St	5,914	22.6	C	9,400	53.3	F	6,120	23.8	C	9,310	52.6	F
F-40	SR-91	McKinley St to Pierce St	5,382	29.1	D	5,427	31.4	D	5,610	31.5	D	5,320	30.9	D
F-41	SR-91	Pierce St to Magnolia Ave	4,888	25.5	C	4,922	27.2	D	5,110	27.6	D	4,820	26.8	D
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	4,585	23.5	C	4,939	27.3	D	4,790	25.3	C	4,860	27.1	D
F-44	SR-91	Tyler St to Van Buren Blvd	5,704	21.7	C	5,851	23.5	C	5,890	22.8	C	5,780	23.4	C

Table 39: Existing Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,841	22.3	C	4,999	19.6	C	6,010	23.3	C	4,940	19.6	C
F-46	SR-91	Adam St to Madison St	6,531	26.1	D	4,742	18.7	C	6,690	27.3	D	4,700	18.8	C
F-47	SR-91	Madison St to Arlington Ave	5,879	22.8	C	4,530	17.9	B	6,020	23.8	C	4,500	17.9	B
F-49	SR-91	Central Ave to 14th St	6,021	34.8	D	5,391	30.8	D	6,100	36.2	E	5,410	31.5	D
F-51	SR-91	University Ave to Spruce St	7,244	22.1	C	6,394	20.0	C	7,300	22.5	C	6,420	20.2	C
F-66	I-215	Scott Rd to Newport Rd	2,739	22.0	C	3,285	25.8	C	2,660	21.4	C	3,280	25.9	C
F-68	I-215	Newport Rd to McCall Blvd	1,900	15.0	B	2,047	15.3	B	1,840	14.7	B	2,040	15.4	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,457	19.5	C	3,293	25.8	C	2,360	18.8	C	3,290	26.0	C
F-70	I-215	Ethanac Rd to SR-74	3,787	34.5	D	3,150	24.4	C	3,690	33.3	D	3,160	24.7	C
F-71	I-215	SR-74 to Redlands Ave	3,350	28.5	D	4,181	37.4	E	3,240	27.3	D	4,230	38.6	E
F-74	I-215	Columbia Ave to Center St	5,587	33.5	D	5,150	27.3	D	5,520	33.1	D	5,290	28.6	D
F-75	I-215	Center St to La Cadena Dr	5,474	32.4	D	5,034	26.5	D	5,410	32.0	D	5,160	27.6	D
F-76	I-215	La Cadena Dr to Barton Rd	5,341	31.2	D	5,164	27.5	D	5,260	30.7	D	5,290	28.6	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,738	35.1	E	5,533	30.3	D	5,640	34.0	D	5,680	31.8	D
F-78	I-215	Mt. Vernon Ave to I-10	5,582	22.5	C	5,420	20.5	C	5,450	21.9	C	5,580	21.3	C
F-80	I-215	Auto Plaza Dr to Mill St	4,319	17.1	B	4,533	17.0	B	4,190	16.6	B	4,620	17.4	B
F-83	I-215	Baseline Rd to Highland Ave	3,023	24.8	C	3,355	26.5	D	2,920	23.9	C	3,440	27.6	D
F-52	I-10	SR-60 to Beaumont Ave	3,037	11.9	B	4,252	16.4	B	3,050	12.0	B	4,380	17.0	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	3,087	12.1	B	4,322	16.7	B	3,070	12.0	B	4,400	17.1	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	3,236	12.6	B	4,531	17.5	B	3,200	12.6	B	4,610	17.9	B
F-55	I-10	Highland Springs Ave to Sunset Ave	3,112	12.2	B	4,357	16.8	B	3,060	12.0	B	4,420	17.2	B
F-56	I-10	Sunset Ave to 22nd St	3,037	11.9	B	4,252	16.4	B	2,970	11.7	B	4,310	16.7	B
F-57	I-10	22nd St to 8th St	2,987	11.7	B	4,182	16.2	B	2,920	11.5	B	4,240	16.5	B
F-58	I-10	8th St to Hargrave St	2,987	11.7	B	4,182	16.2	B	2,910	11.4	B	4,240	16.5	B
F-59	I-10	Hargrave St to Fields Rd	2,689	10.5	A	3,764	14.5	B	2,600	10.2	A	3,820	14.8	B
F-60	I-10	Fields Rd to Morongo Trail	2,564	10.0	A	3,590	13.9	B	2,480	9.7	A	3,650	14.2	B
F-61	I-10	Morongo Trail to Main St	2,265	8.8	A	3,172	12.3	B	2,190	8.6	A	3,230	12.5	B
F-62	I-10	Main St to Haugen-Lehmann Way	2,265	8.8	A	3,172	12.3	B	2,180	8.6	A	3,230	12.5	B
F-64	I-10	SR-111 to Tipton Rd	1,967	7.7	A	2,753	10.6	A	1,890	7.4	A	2,810	10.9	A
F-65	I-10	Tipton Rd to SR-62	1,967	7.7	A	2,753	10.6	A	1,920	7.5	A	2,810	10.9	A

Indicates that the LOS exceeds the target level

Table 39: Existing Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,762	41.4	E	6,381	25.6	C	8,590	40.2	E	6,580	27.1	D
F-3	SR-60	Ramona Ave to Central Ave	8,283	37.1	E	5,925	23.4	C	8,080	35.8	E	6,140	24.9	C
F-4	SR-60	Central Ave to Mountain Ave	6,336	24.7	C	6,076	24.1	C	6,120	24.0	C	6,300	25.7	C
F-5	SR-60	Mountain Ave to Euclid Ave	6,259	24.4	C	6,495	26.3	D	6,060	23.7	C	6,710	27.8	D
F-6	SR-60	Euclid Ave to Grove Ave	6,461	25.4	C	6,302	25.2	C	6,260	24.7	C	6,520	26.9	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,274	24.3	C	6,699	27.4	D	6,050	23.5	C	6,930	29.1	D
F-8	SR-60	Vineyard Ave to Archibald Ave	7,658	32.1	D	6,245	25.0	C	7,400	30.9	D	6,490	26.7	D
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	5,804	17.4	B	5,698	17.5	B	5,510	16.7	B	5,960	18.6	C
F-11	SR-60	Milliken Ave to I-15	5,456	20.5	C	5,111	19.5	C	5,070	19.2	C	5,390	21.2	C
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,490	13.4	B	4,275	13.0	B	4,160	12.6	B	4,600	14.3	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,220	15.7	B	3,881	14.8	B	3,850	14.6	B	4,290	16.7	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,172	15.5	B	3,963	15.1	B	3,820	14.5	B	4,360	17.0	B
F-15	SR-60	Pedley Rd to Pyrite St	3,216	12.0	B	3,068	11.7	B	2,860	10.9	A	3,440	13.5	B
F-16	SR-60	Pyrite St to Valley Way	2,653	9.9	A	2,567	9.8	A	2,310	8.9	A	2,960	11.7	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,532	23.1	C	4,725	24.9	C	4,150	21.3	C	5,120	28.7	D
F-18	SR-60	Rubidoux Blvd to Market St	3,568	17.7	B	3,868	19.7	C	3,260	16.6	B	4,320	23.1	C
F-19	SR-60	Market St to Main St	5,631	30.9	D	5,109	27.6	D	5,290	28.8	D	5,540	32.4	D
F-20	SR-60	Main to SR-91	5,248	27.9	D	4,720	24.9	C	4,990	26.7	D	5,070	28.3	D
F-24	SR-60	Martin Luther King Blvd to Central Ave	7,050	30.6	D	5,800	24.1	C	6,800	31.5	D	6,420	31.6	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,461	31.1	D	6,376	25.6	C	7,140	29.9	D	7,030	30.8	D
F-27	SR-60	I-215 to Day St	7,050	47.9	F	3,093	15.9	B	7,000	50.0	F	3,530	19.5	C
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,013	23.1	C	3,254	26.5	D	2,980	24.3	C	3,770	36.9	E
F-30	SR-60	Heacock St to Perris Blvd	2,638	19.9	C	2,671	20.8	C	2,710	21.9	C	3,320	30.3	D
F-31	SR-60	Perris Blvd to Nason St	1,910	14.3	B	2,045	15.8	B	2,120	17.2	B	2,830	24.8	C
F-32	SR-60	Nason St to Moreno Beach Dr	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	988	7.4	A	1,336	10.3	A	1,330	11.3	B	2,070	18.1	C
F-34	SR-60	Redlands Blvd to Theodore St	1,193	8.9	A	1,498	11.6	B	1,660	13.8	B	2,300	19.4	C
F-35	SR-60	Theodore St to Gilman Springs Rd	1,183	8.9	A	1,393	10.8	A	1,100	8.6	A	1,510	12.3	B
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	837	7.0	A	1,002	9.1	A	1,070	10.9	A	980	10.7	A
F-37	SR-60	Jack Rabbit Trail to I-10	837	6.3	A	1,002	7.7	A	1,070	8.3	A	980	7.8	A
F-39	SR-91	I-15 to McKinley St	6,402	25.1	C	5,971	24.1	C	6,240	24.4	C	6,170	25.4	C
F-40	SR-91	McKinley St to Pierce St	4,788	25.0	C	5,183	29.3	D	4,620	24.2	C	5,370	31.4	D
F-41	SR-91	Pierce St to Magnolia Ave	4,629	23.9	C	7,050	53.3	F	4,470	23.2	C	7,230	58.8	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	4,894	25.7	C	7,050	53.3	F	4,740	25.0	C	7,210	58.4	F
F-43	SR-91	La Sierra Ave to Tyler St	4,467	22.9	C	5,167	29.2	D	4,290	22.1	C	5,330	31.0	D
F-44	SR-91	Tyler St to Van Buren Blvd	5,769	22.1	C	6,661	27.8	D	5,630	21.7	C	6,810	29.1	D

Table 39: Existing Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,342	20.2	C	6,401	26.3	D	5,230	20.0	C	6,560	27.6	D
F-46	SR-91	Adam St to Madison St	4,939	18.6	C	5,453	21.5	C	4,840	18.4	C	5,590	22.4	C
F-47	SR-91	Madison St to Arlington Ave	4,218	21.4	C	4,711	25.5	C	4,140	21.2	C	4,830	26.9	D
F-49	SR-91	Central Ave to 14th St	4,737	24.7	C	4,940	27.2	D	4,700	24.7	C	5,030	28.5	D
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,294	17.2	B	2,318	17.2	B	2,270	17.1	B	2,240	16.7	B
F-68	I-215	Newport Rd to McCall Blvd	2,528	19.0	C	3,111	23.7	C	2,530	19.1	C	3,040	23.2	C
F-69	I-215	McCall Blvd to Ethanac Rd	3,069	23.6	C	2,539	18.9	C	3,080	23.9	C	2,490	18.6	C
F-70	I-215	Ethanac Rd to SR-74	2,882	21.9	C	3,854	32.0	D	2,900	22.2	C	3,840	32.0	D
F-71	I-215	SR-74 to Redlands Ave	4,539	44.2	**E**	3,710	30.1	D	4,600	45.5	**F**	3,650	29.6	D
F-74	I-215	Columbia Ave to Center St	5,191	27.6	D	4,917	25.4	C	5,320	28.8	D	4,870	25.2	C
F-75	I-215	Center St to La Cadena Dr	5,541	30.4	D	5,235	27.6	D	5,690	31.9	D	5,180	27.4	D
F-76	I-215	La Cadena Dr to Barton Rd	5,414	29.4	D	5,196	27.3	D	5,530	30.5	D	5,160	27.2	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,435	29.5	D	5,256	27.7	D	5,550	30.7	D	5,210	27.6	D
F-78	I-215	Mt. Vernon Ave to I-10	5,776	22.0	C	5,606	21.0	C	5,900	22.7	C	5,550	20.8	C
F-80	I-215	Auto Plaza Dr to Mill St	4,022	15.1	B	4,090	15.2	B	4,120	15.5	B	4,000	14.9	B
F-83	I-215	Baseline Rd to Highland Ave	4,537	44.1	**E**	4,700	46.7	**F**	4,630	46.7	**F**	4,610	45.2	**F**
F-52	I-10	SR-60 to Beaumont Ave	4,288	18.1	C	3,675	13.8	B	4,340	18.5	C	3,730	14.0	B
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,358	18.4	C	3,736	14.0	B	4,430	18.8	C	3,750	14.1	B
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,569	19.4	C	3,916	14.7	B	4,630	19.8	C	3,910	14.7	B
F-55	I-10	Highland Springs Ave to Sunset Ave	4,393	18.6	C	3,766	14.1	B	4,460	19.0	C	3,750	14.1	B
F-56	I-10	Sunset Ave to 22nd St	4,288	18.1	C	3,675	13.8	B	4,350	18.5	C	3,640	13.7	B
F-57	I-10	22nd St to 8th St	4,218	17.8	B	3,615	13.5	B	4,280	18.2	C	3,580	13.5	B
F-58	I-10	8th St to Hargrave St	4,218	17.8	B	3,615	13.5	B	4,280	18.2	C	3,570	13.4	B
F-59	I-10	Hargrave St to Fields Rd	3,796	16.0	B	3,254	12.2	B	3,860	16.4	B	3,190	12.0	B
F-60	I-10	Fields Rd to Morongo Trail	3,620	15.3	B	3,103	11.6	B	3,680	15.6	B	3,040	11.4	B
F-61	I-10	Morongo Trail to Main St	3,198	13.5	B	2,741	10.3	A	3,260	13.8	B	2,680	10.1	A
F-62	I-10	Main St to Haugen-Lehmann Way	3,198	13.5	B	2,741	10.3	A	3,270	13.9	B	2,680	10.1	A
F-64	I-10	SR-111 to Tipton Rd	2,777	11.7	B	2,380	8.9	A	2,840	12.1	B	2,340	8.8	A
F-65	I-10	Tipton Rd to SR-62	2,777	11.7	B	2,380	8.9	A	2,840	12.1	B	2,340	8.8	A

Indicates that the LOS exceeds the target level

Table 40: Existing Plus Build-out Freeway Mainline Impacts and Mitigations

Northbound / Eastbound

ID	Freeway	Segment	Determination of Impact					Existing Plus Build-out & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-6	SR-60	Euclid Ave to Grove Ave	D	E	E	E	Yes	8,010	26.9	D	8,950	29.2	D	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	C	D	F	F	Yes	6,620	24.7	C	8,760	32.5	D	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	D	E	D	D	Yes	6,100	23.7	C	5,410	21.5	C	Add 1 mixed flow lane
F-71	I-215	SR-74 to Redlands Ave	D	D	E	E	Yes	3,240	17.1	B	4,230	21.5	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Southbound / Westbound

ID	Freeway	Segment	Determination of Impact					Existing Plus Build-out & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-27	SR-60	I-215 to Day St	F	F	B	C	Yes	7,000	29.1	D	3,530	14.6	B	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd/Frederick St to Heacock St	C	C	D	E	Yes	2,980	15.7	B	3,770	20.9	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	C	C	F	F	Yes	4,470	17.0	B	7,230	31.9	D	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sierra Ave	C	C	F	F	Yes	4,740	18.0	C	7,210	31.7	D	Add 1 mixed flow lane
F-71	I-215	SR-74 to Redlands Ave	E	F	D	D	Yes	4,600	23.6	C	3,650	18.1	C	Add 1 mixed flow lane
F-83	I-215	Baseline Rd to Highland Ave	E	F	F	F	Yes	4,630	23.9	C	4,610	23.5	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Freeway Weaving LOS

Table 41 compares the LOS for the study weaving sections under Existing and Existing Plus Build-out conditions. As shown in Table 41, there are six sections where the project would have a significant impact. Five of these sections would be deficient under both Existing and Existing Plus Build-out conditions, namely:

Northbound and Eastbound

- SR-60 from SR-91 to Blaine St./3rd St.
- SR-60 from Blaine St./3rd St. to University Ave.
- SR-91 from Arlington Ave. to Central Ave.

Southbound and Westbound

- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from 14th St. to University Ave.

An additional section was found to be deficient under Plus Build-out conditions: SR-60 Central Ave. to Fair Isle Dr./Box Springs Rd. (in the eastbound direction).

Table 42 shows that in every case the addition of a mixed-flow lane or a second off-ramp lane would reduce the impact of the WLC project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 41: Existing Plus Build-out Freeway Weaving Section LOS

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	5,985	24.0	C	8,616	35.7	**E**	6,300	26.0	C	8,500	35.6	**E**
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	5,418	25.8	C	7,050	33.6	D	5,890	29.0	D	6,910	33.6	D
W-21	SR-60	SR-91 to Blaine St/3rd St	3,885	14.8	B	9,400	39.0	**E**	4,590	18.8	B	9,270	39.4	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	3,919	18.7	B	7,050	37.4	**E**	4,520	25.4	C	6,930	39.3	**E**
W-23	SR-60	University Ave to Martin Luther King	4,528	20.4	C	5,932	25.7	C	5,170	24.8	C	5,760	25.6	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	3,856	14.5	B	7,840	32.4	D	4,700	20.8	C	7,820	35.0	**E**
W-27	SR-60	I-215 to Day St	2,988	10.6	B	4,704	18.8	B	3,870	17.7	B	4,810	19.5	B
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	2,995	12.8	B	4,749	20.7	C	3,710	16.9	B	4,730	21.3	C
W-32	SR-60	Moreno Beach Dr to Nason St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-42	SR-91	Magnolia Ave to La Sierra Ave	5,445	24.6	C	5,684	27.4	C	5,640	25.8	C	5,590	27.1	C
W-48	SR-91	Arlington Ave to Central Ave	7,050	35.3	**E**	4,073	19.6	B	7,220	36.9	**E**	4,080	19.9	B
W-50	SR-91	14th St to University Ave	4,643	21.8	C	4,441	21.9	C	4,690	22.3	C	4,460	22.1	C
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	6,260	34.4	D	5,548	28.0	C	6,230	34.7	D	5,670	29.4	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,400	16.3	B	4,147	14.5	B	4,270	15.9	B	4,240	15.1	B
W-81	I-215	Mill St to 2nd St	5,044	23.0	C	5,095	22.5	C	4,920	22.5	C	5,180	23.0	C
W-82	I-215	5th St to Baseline Rd	3,754	16.5	B	3,590	14.9	B	3,660	16.1	B	3,670	15.4	B
W-63	I-10	Haugen-Lehmann Way to SR-111	2,265	7.5	A	3,172	10.5	B	2,180	7.2	A	3,230	10.8	B

Indicates that the LOS exceeds the target level

Table 41: Existing Plus Build-out Freeway Weaving Section LOS (continued)

ID	Freeway	Weaving Segment	Existing Conditions						Existing Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	6,125	21.4	C	5,892	20.8	C	5,950	21.0	C	6,090	21.9	C
W-9	SR-60	Haven Ave to Archibald Ave	6,288	23.5	C	6,071	23.5	C	6,010	22.6	C	6,320	25.0	C
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	7,729	28.6	D	7,211	27.2	C	7,360	27.7	C	7,770	30.7	D
W-22	SR-60	Blaine St/3rd St to University Ave	5,714	20.1	C	6,204	23.0	C	5,360	20.3	C	6,820	27.9	C
W-23	SR-60	University Ave to Martin Luther King	5,601	28.0	C	5,876	28.0	C	5,300	26.9	C	6,440	32.9	D
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,050	37.0	E	6,026	29.3	D	6,860	38.1	E	6,500	35.2	E
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	4,700	31.0	D	4,197	27.2	C	4,580	30.9	D	4,760	33.4	D
W-32	SR-60	Moreno Beach Dr to Nason St	1,609	9.2	A	1,753	10.2	B	1,910	11.7	B	2,480	16.0	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	4,642	21.1	C	5,118	23.8	C	4,520	20.7	C	5,250	25.0	C
W-50	SR-91	14th St to University Ave	5,179	24.1	C	7,050	35.5	E	5,230	24.6	C	7,080	36.2	E
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	5,075	14.4	B	8,804	26.9	C	5,120	14.8	B	8,840	27.3	C
W-73	I-215	SR-60 to Columbia Ave	5,877	26.4	C	5,495	24.5	C	6,000	27.3	C	5,440	24.5	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,890	16.8	B	4,591	16.3	B	4,970	17.2	B	4,490	16.1	B
W-81	I-215	Mill St to 2nd St	4,442	19.6	B	4,380	19.4	B	4,540	20.1	C	4,290	19.0	B
W-82	I-215	5th St to Baseline Rd	3,607	15.6	B	3,481	15.1	B	3,710	16.2	B	3,400	14.8	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,198	11.8	B	2,741	10.3	B	3,270	12.2	B	2,680	10.1	B

Indicates that the LOS exceeds the target level

Table 42: Existing Plus Build-out Freeway Weaving Impacts and Mitigations

Northbound / Eastbound

ID	Freeway	Weaving Segment	Determination of Impact					Existing Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
W-21	SR-60	SR-91 to W Blaine St/3rd St	B	B	E	E	Yes	4,590	15.4	B	9,270	31.9	D	Add 1 mixed flow lane
W-22	SR-60	W Blaine St/3rd St to University Ave	B	C	E	E	Yes	4,520	19.9	B	6,930	30.5	D	Add 1 mixed flow lane
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	B	C	D	E	Yes	4,700	16.9	B	7,820	26.8	C	Add 1 mixed flow lane
W-48	SR-91	Arlington Ave to Central Ave	E	E	B	B	Yes	7,220	34.0	D	4,080	18.2	B	Add a second off-ramp lane

Indicates that the LOS exceeds the target level

Southbound / Westbound

ID	Freeway	Weaving Segment	Determination of Impact					Existing Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	E	E	D	E	Yes	6,860	29.6	D	6,500	27.3	C	Add 1 mixed flow lane
W-50	SR-91	14th St to University Ave	C	C	E	E	Yes	5,230	22.7	C	7,080	33.7	D	Add a second off-ramp lane

Indicates that the LOS exceeds the target level

Freeway Ramp LOS

Table 43 compares the freeway ramp level of service on SR-60 under Existing and Existing Plus Build-out conditions. One study ramp, namely the SR-60 eastbound on-ramp from Central Ave. currently operates at LOS "F" in the PM peak hour and would also operate at LOS "F" under Existing Plus Build-out conditions, but with a higher traffic density. Adding a mixed-flow lane to the freeway would reduce the impact of the project to a less-than-significant level.

Table 44 shows the mitigation measures needed to reduce the impacts of the WLC to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 43: Existing Plus Build-out Freeway Ramp Level of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Existing Conditions								Existing Plus Build-out Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	4,110	242	16.9	B	5,678	906	26.5	C	4,740	350	20.9	C	5,480	1,300	29.6	D
R-2	SR-60 EB	On-Ramp from Central Ave	1	5,796	349	18.5	B	8,868	904	31.8	F	6,510	480	22.9	C	8,630	1,000	32.5	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,326	119	3.3	A	1,397	30	3.2	A	2,140	390	13.9	B	1,750	450	8.6	A
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,207	26	12.9	B	1,367	25	13.6	B	1,750	80	20.1	C	1,300	110	15.3	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	1,614	207	17.3	B	1,920	434	19.1	B	2,590	1,160	18.5	B	2,380	810	16.0	B
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	1,407	70	16.5	B	1,486	71	16.5	B	1,430	10	17.5	B	1,570	10	18.0	B
R-8	SR-60 EB	Direct On-Ramp from Theodore St	1	Does not Exist in this Scenario				Does not Exist in this Scenario				1,420	120	18.4	B	1,560	250	20.1	C
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	1	1,521	330	16.4	B	1,915	385	19.0	B	1,550	419	17.2	B	1,830	431	18.8	B
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,191	7	14.2	B	1,530	8	16.3	B	1,131	30	14.2	B	1,399	59	16.1	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	1	837	11	9.6	A	1,002	9	11.3	B	1,070	97	12.0	B	980	30	11.4	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	826	357	13.5	B	993	306	14.6	B	973	405	15.5	B	950	466	16.2	B
R-13	SR-60 WB	Off-Ramp to Theodore St	1	1,183	24	12.7	B	1,393	26	14.9	B	1,100	210	7.1	A	1,510	90	10.1	A
R-14	SR-60 WB	On-Ramp from Theodore St	1	1,159	34	12.1	B	1,367	131	14.8	B	890	740	17.1	B	1,420	850	22.8	C
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	1,193	49	12.8	B	1,498	38	15.9	B	1,660	100	18.7	B	2,300	60	25.2	C
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	1,144	329	14.3	B	1,460	361	17.4	B	1,560	350	19.3	B	2,240	590	28.0	C
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,050	384	32.6	D	6,026	439	28.5	D	6,860	400	32.5	D	6,500	450	31.8	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,050	474	21.0	C	5,800	337	15.9	B	6,800	510	20.8	C	6,420	370	19.5	B

Indicates that the LOS exceeds the target level

Table 44: Existing Plus Build-out Freeway Ramp Impacts and Mitigations

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Determination of Impact					Existing Plus Build-out & Mitigations								Mitigation Measures Required to Reduce Impact to Less-Than-Significant
				AM Peak Hour		PM Peak Hour			AM Peak Hour				PM Peak Hour				
				No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
R-2	SR-60 EB	On-Ramp from Central Ave	1	B	C	F	F	Yes	6,510	480	16.7	B	8,630	1,000	24.8	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

7. 2022 NO-PROJECT CONDITIONS

This chapter describes traffic conditions under the assumption that existing land uses plus other past, present, and reasonably foreseeable projects (both land development and roadway improvements) up to the year 2022 are implemented. Conditions on the WLC site were assumed to be unchanged from existing conditions. This scenario forms a basis of comparison for the 2022 Plus Phase 1 scenario that is discussed in the next chapter of this report. The 2022 scenarios are the "cumulative" scenarios in that they incorporate all known land development projects and all funded roadway projects.

A. 2022 NO-PROJECT TRAFFIC VOLUMES

The forecast turning movement volumes for this scenario are shown in Figure 50. Figure 16 is the key map for the Figure 50 sub-figures.

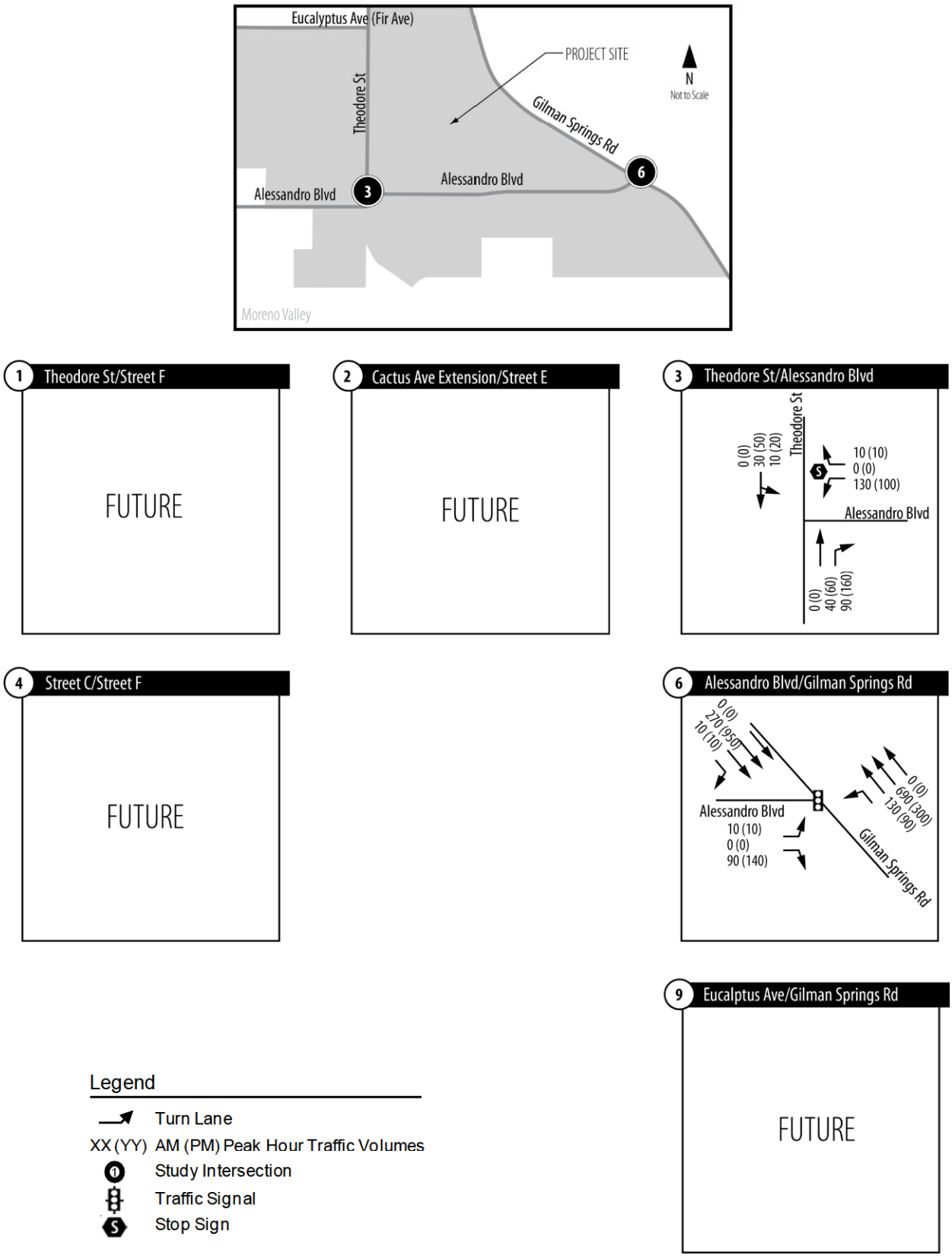


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions

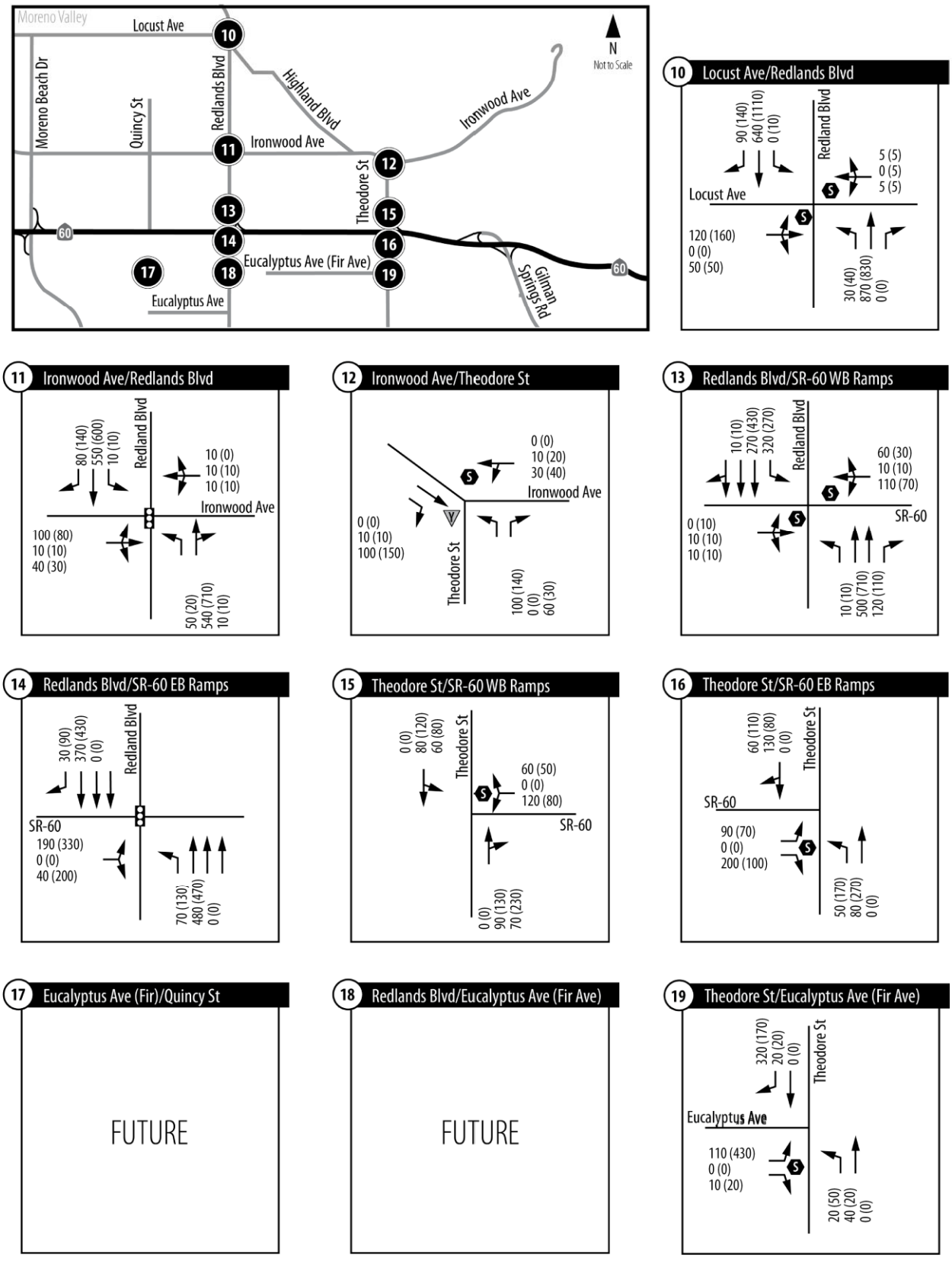


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (B)

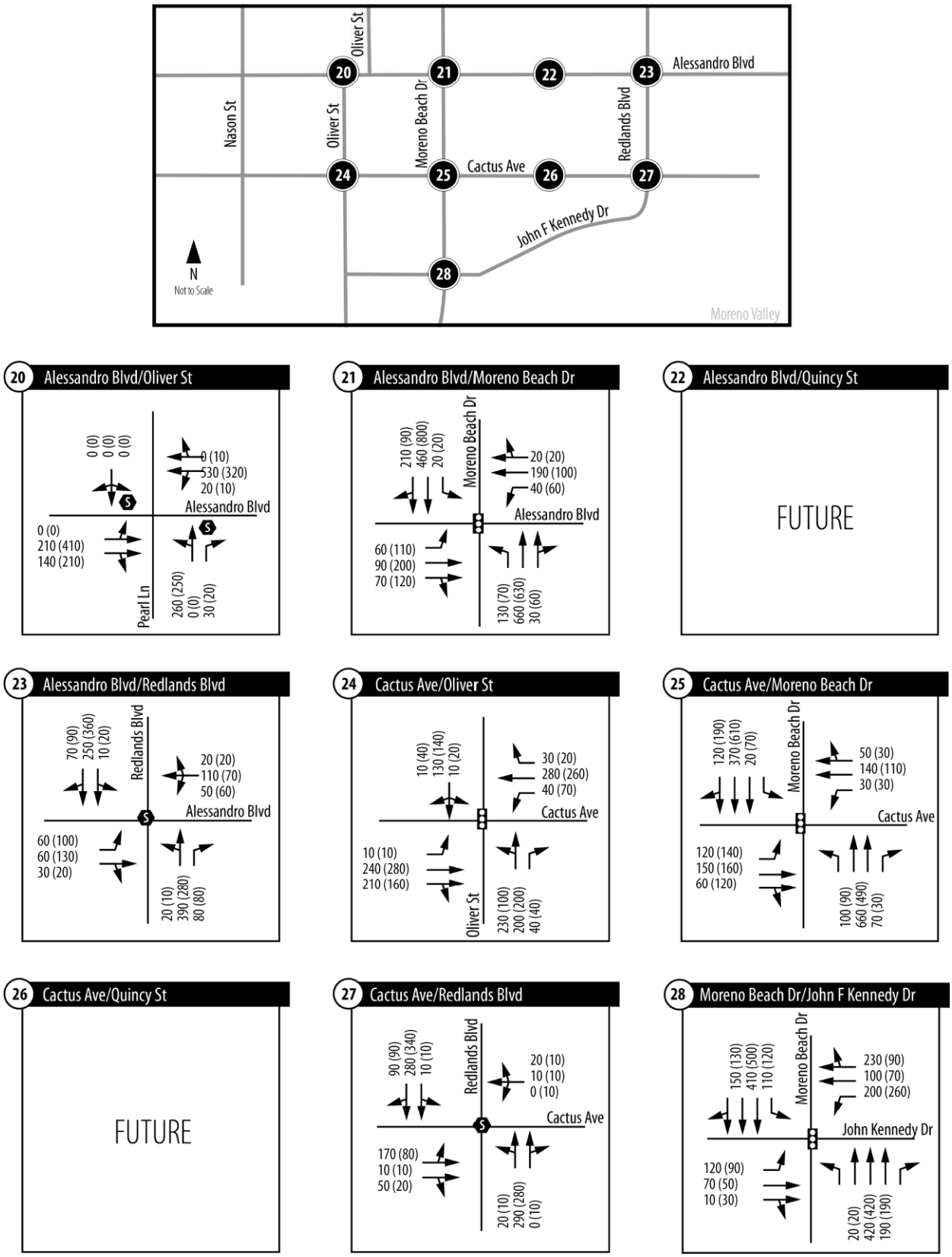


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (C)

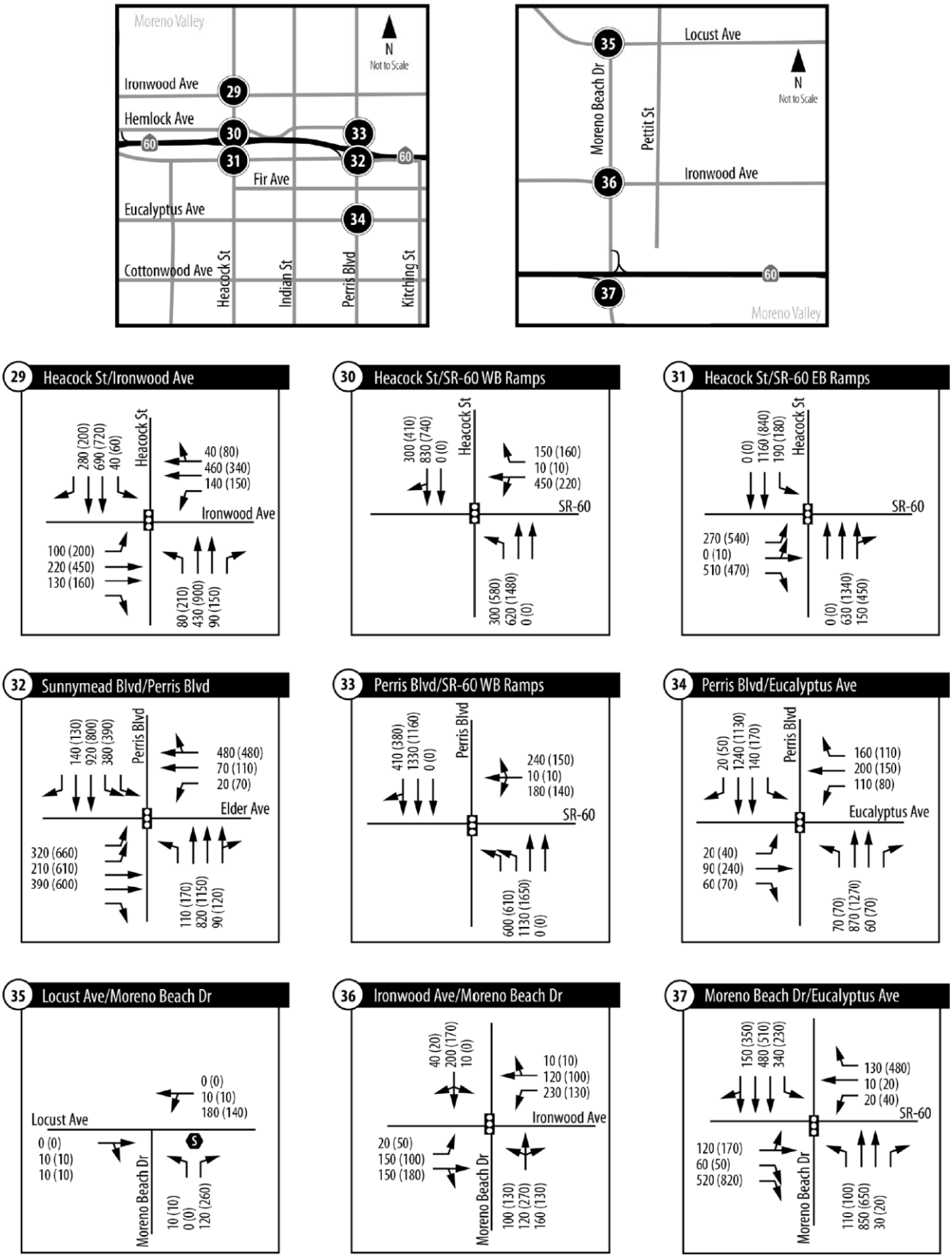


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (D)

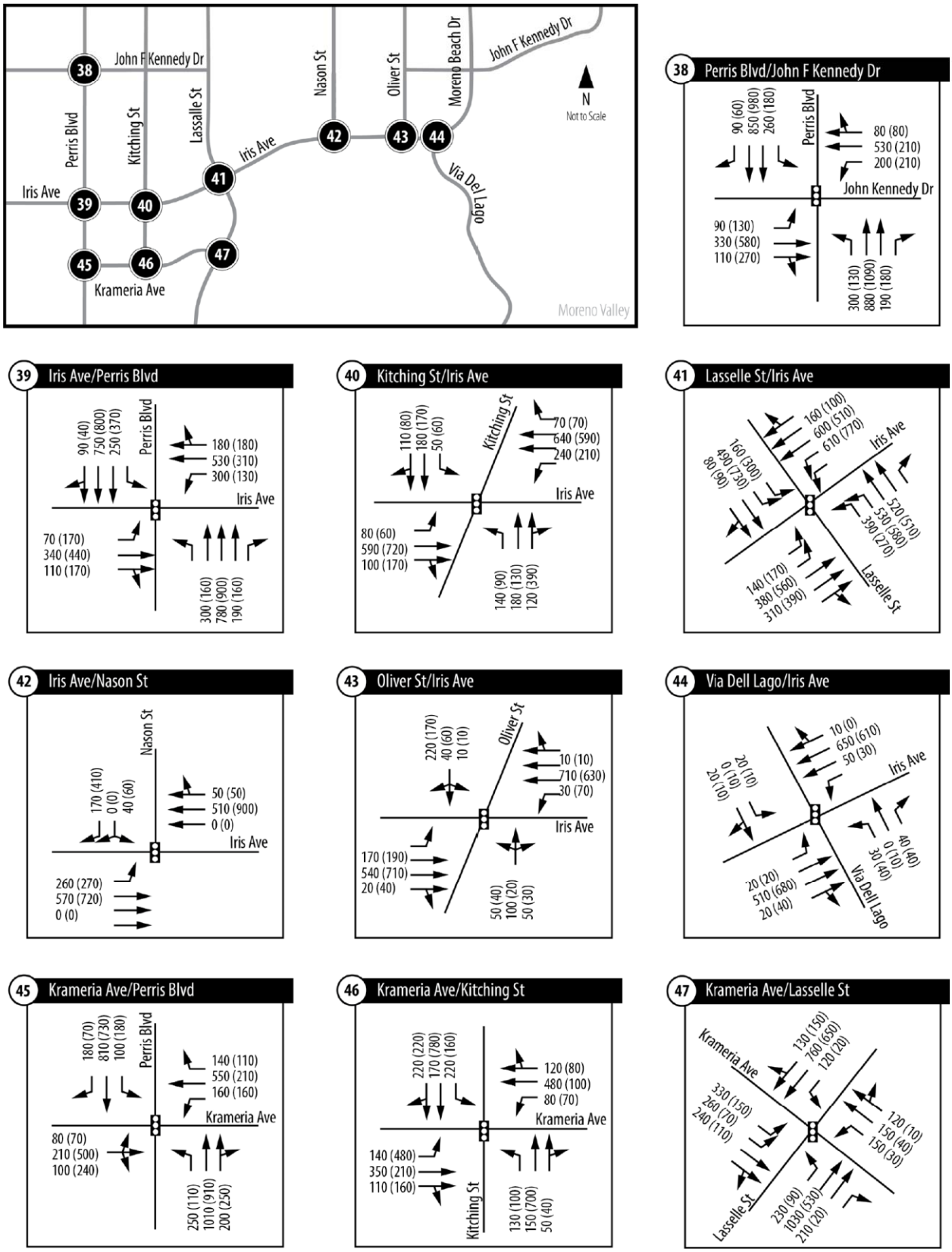


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (E)

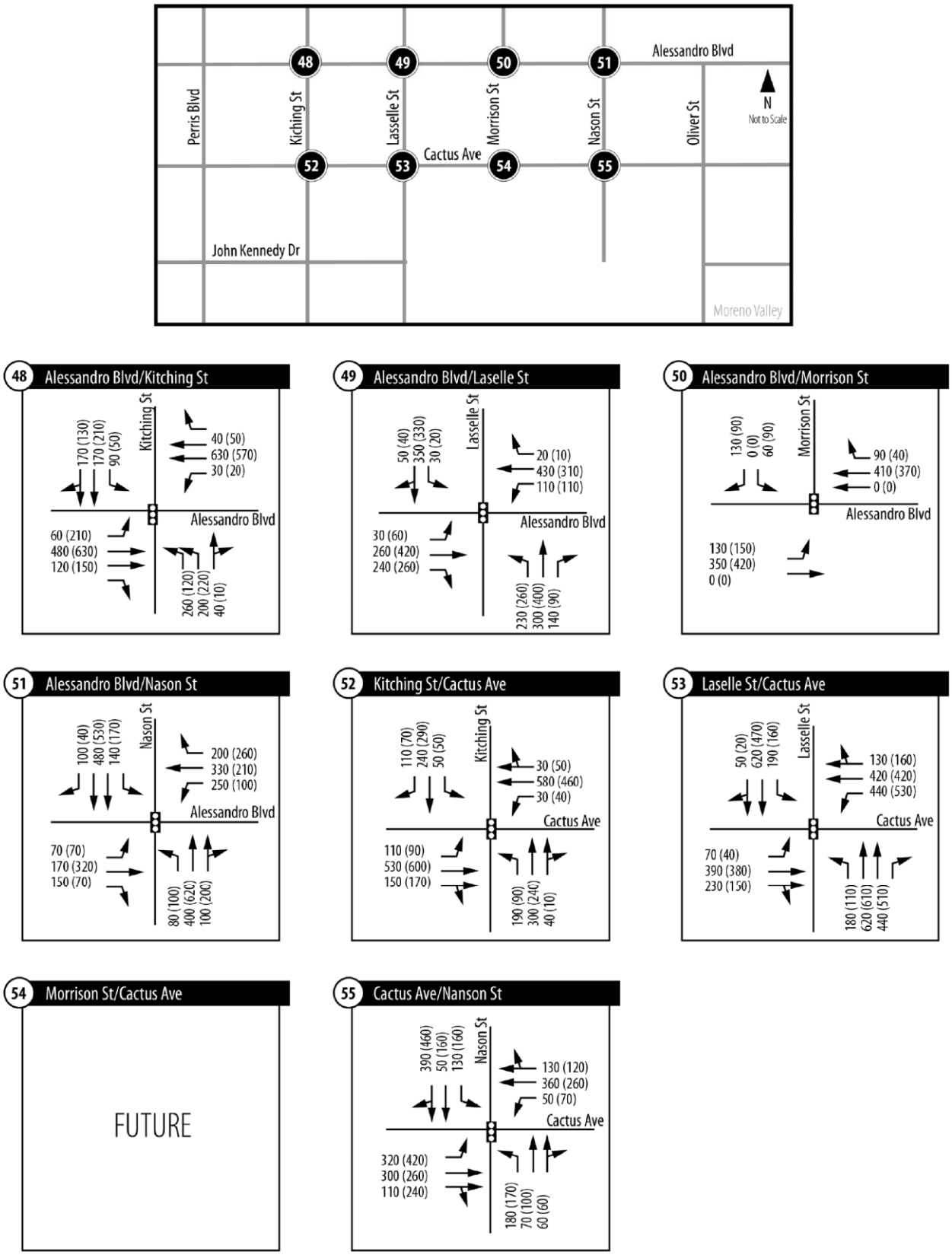


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (F)

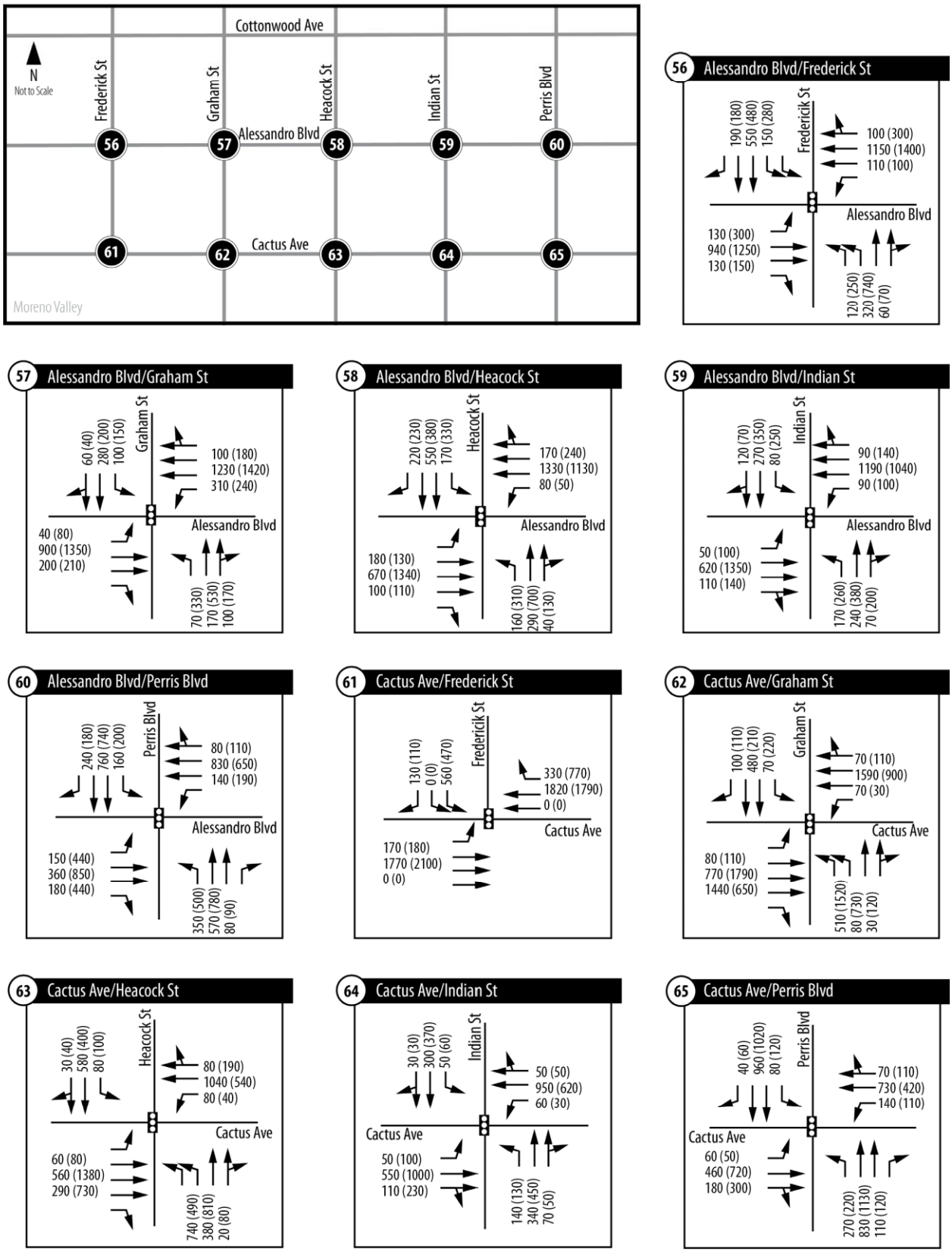


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (G)

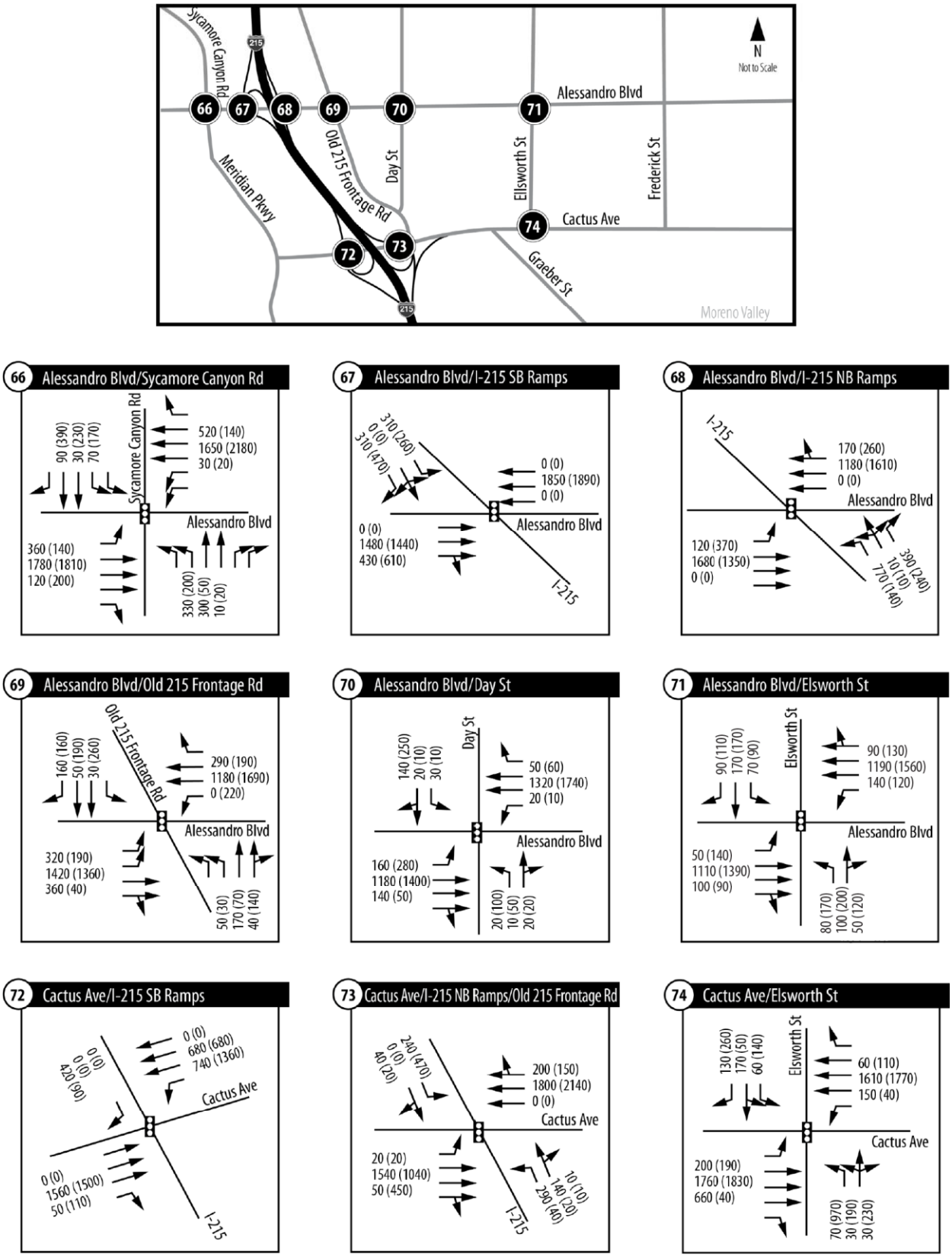


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (H)

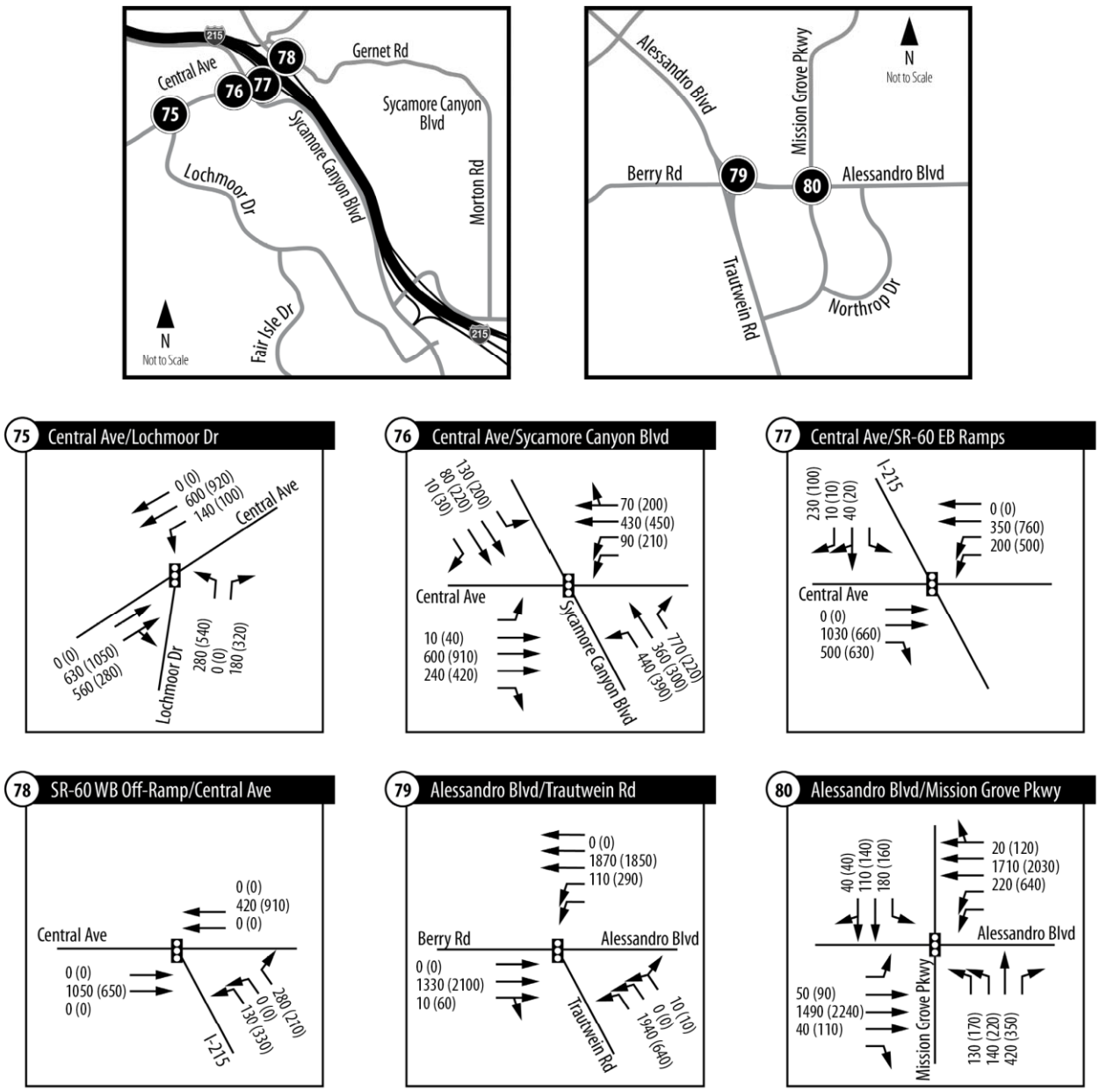


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (I)

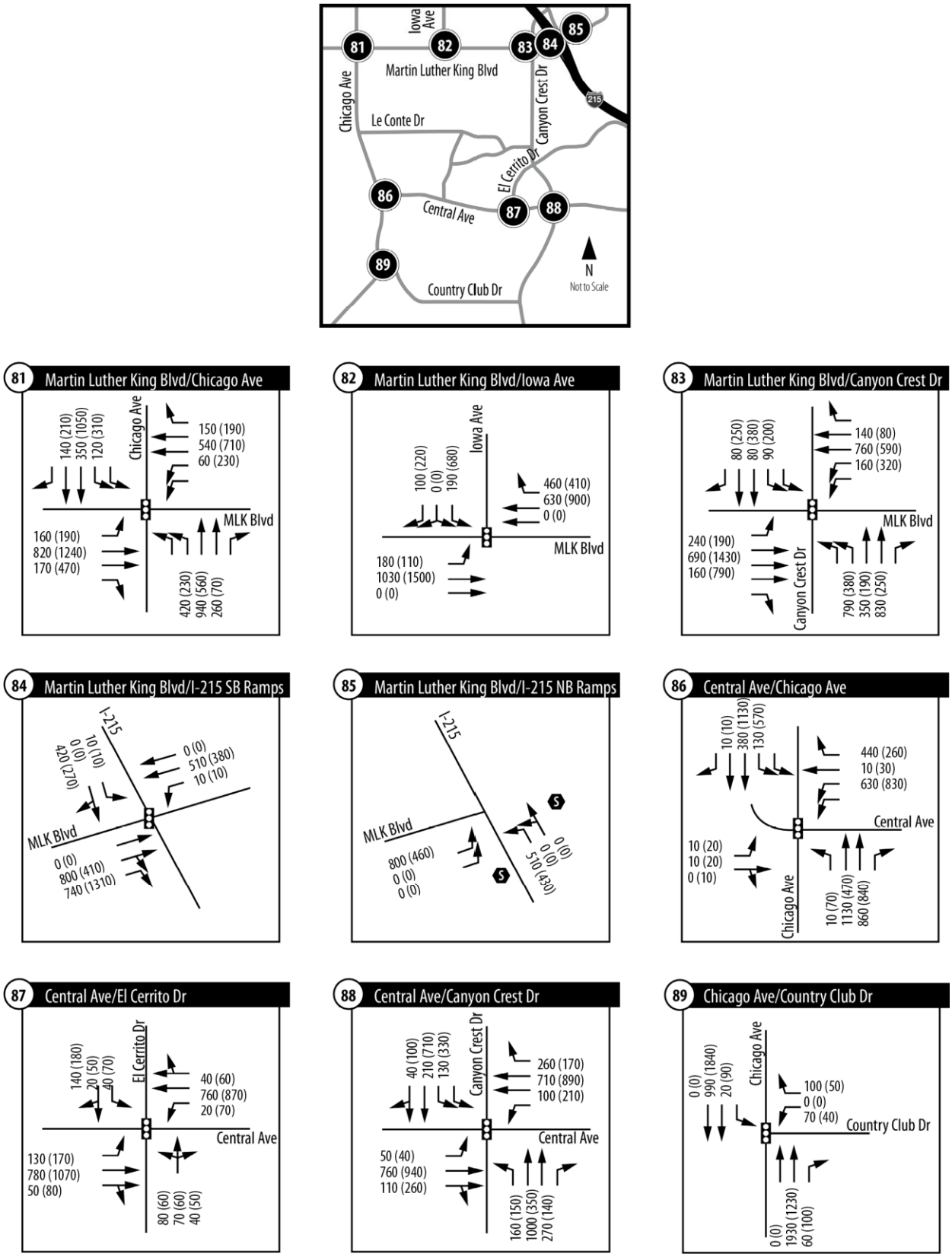


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (J)

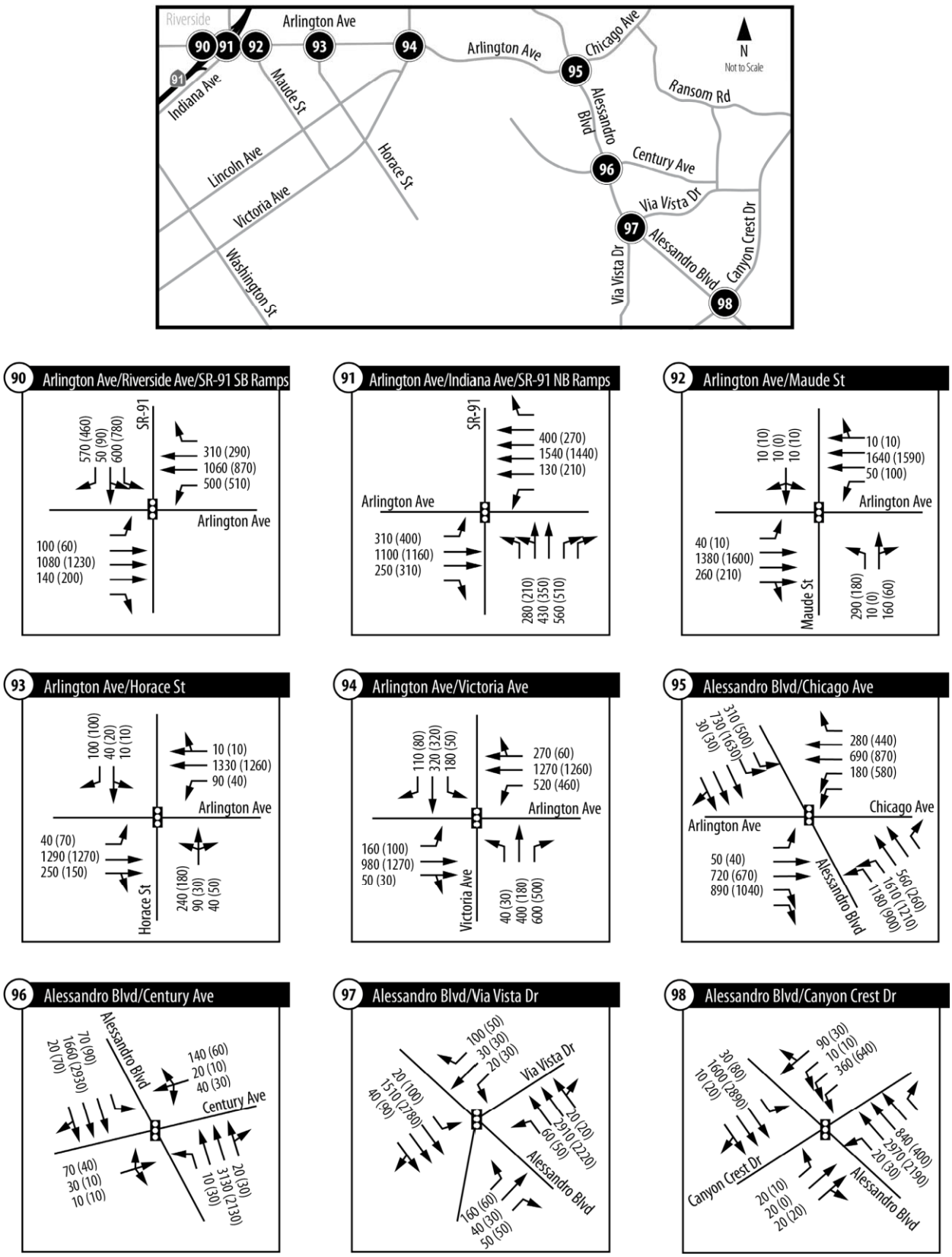


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (K)

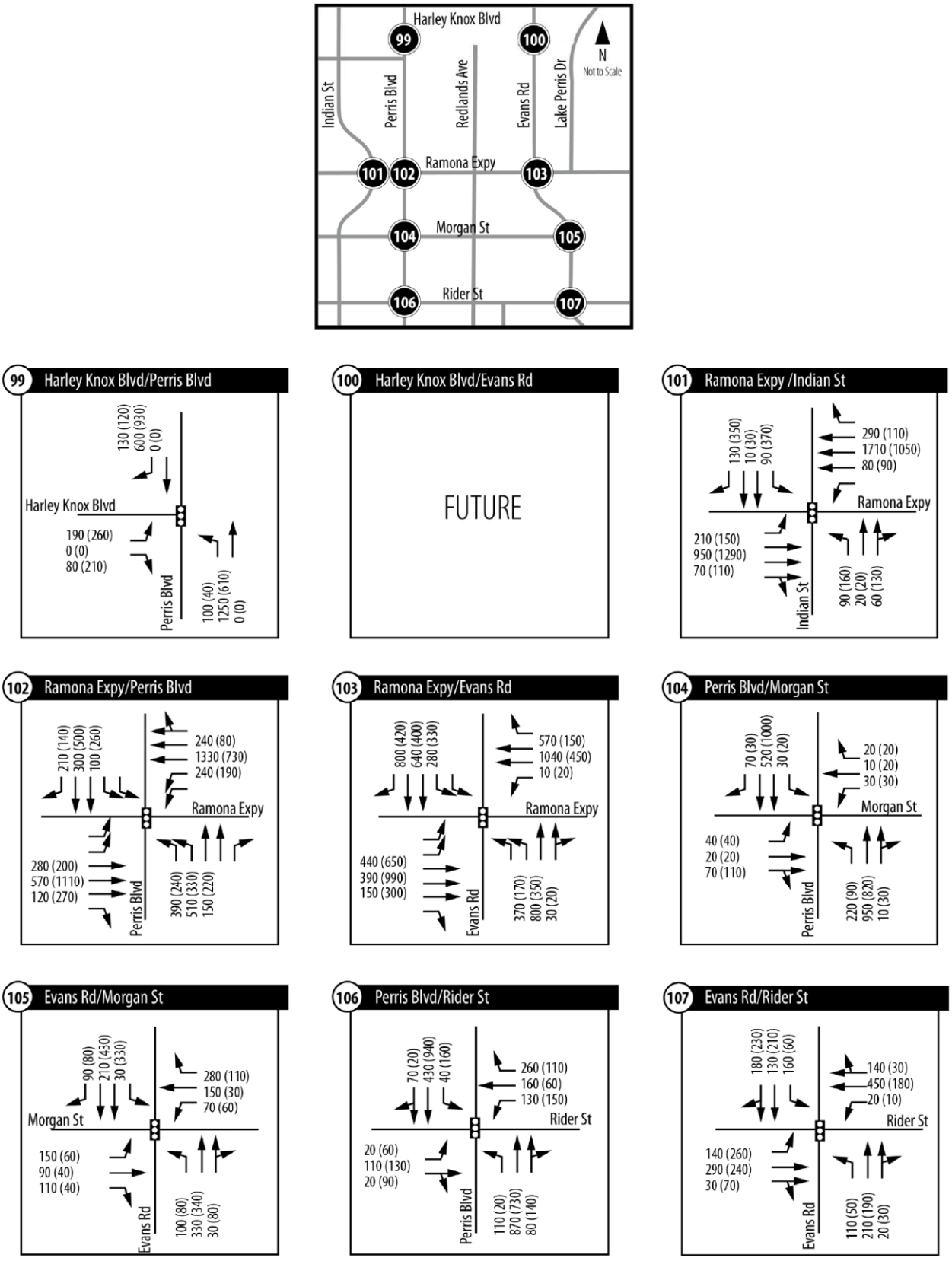


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (L)

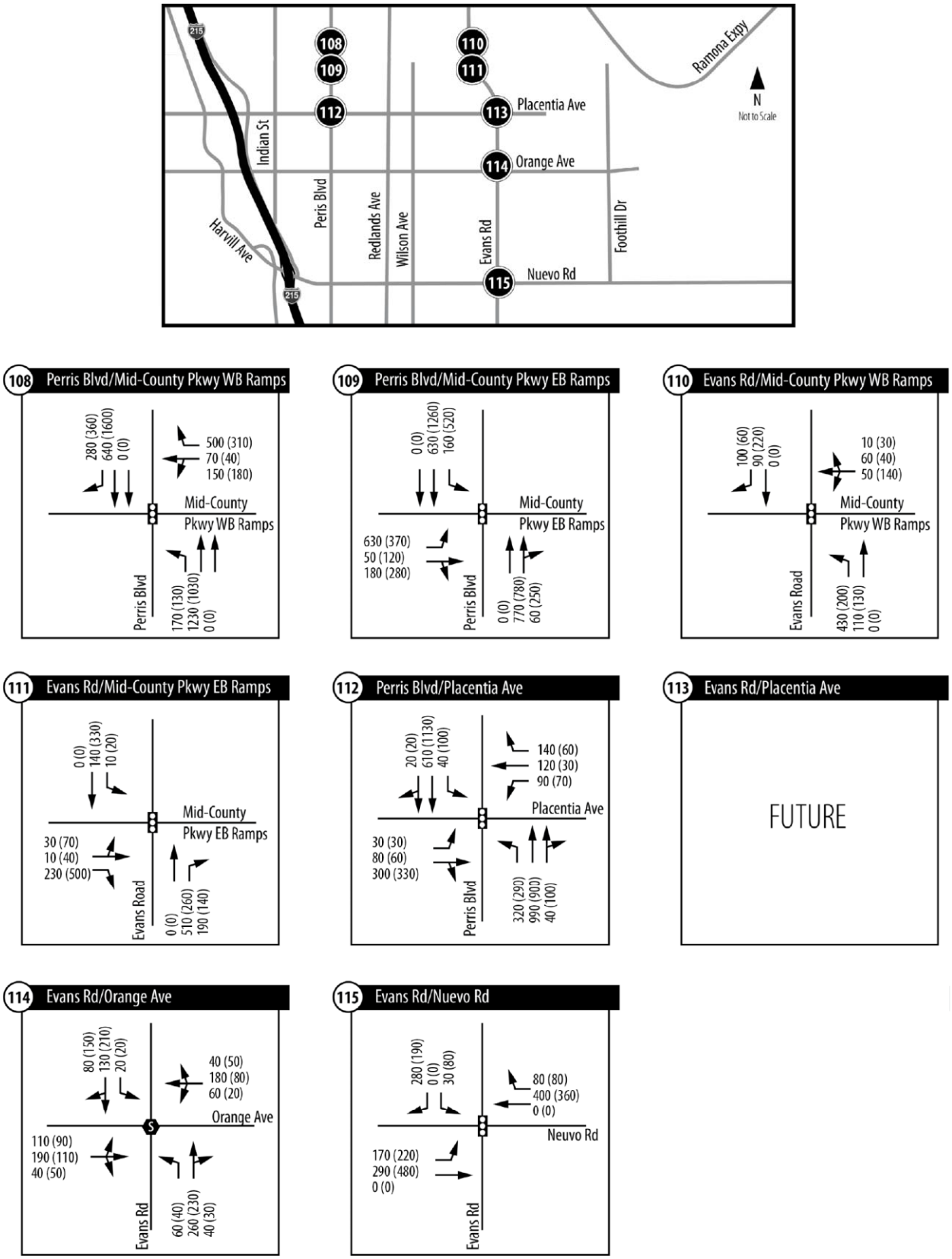


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (M)

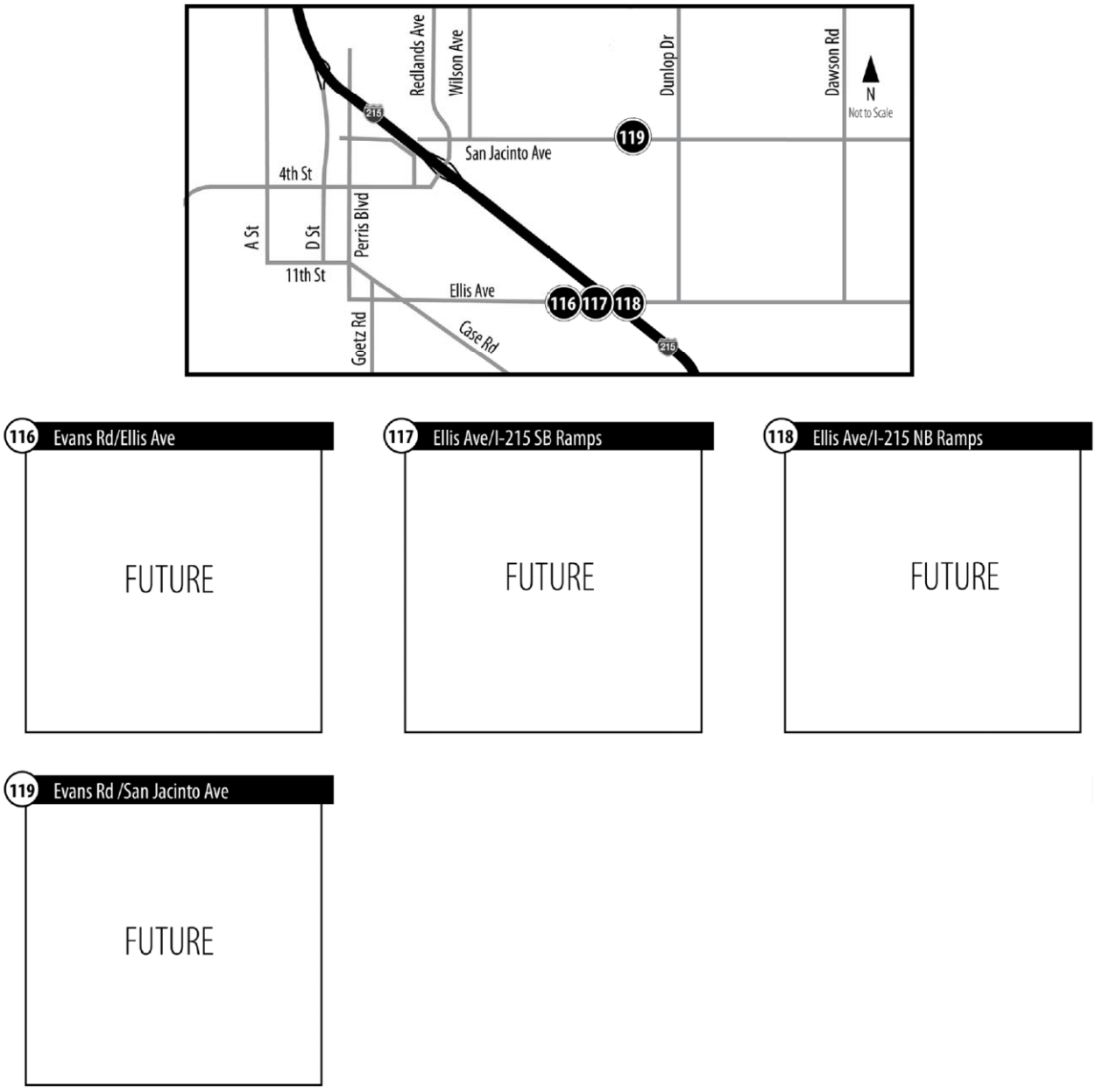


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (N)

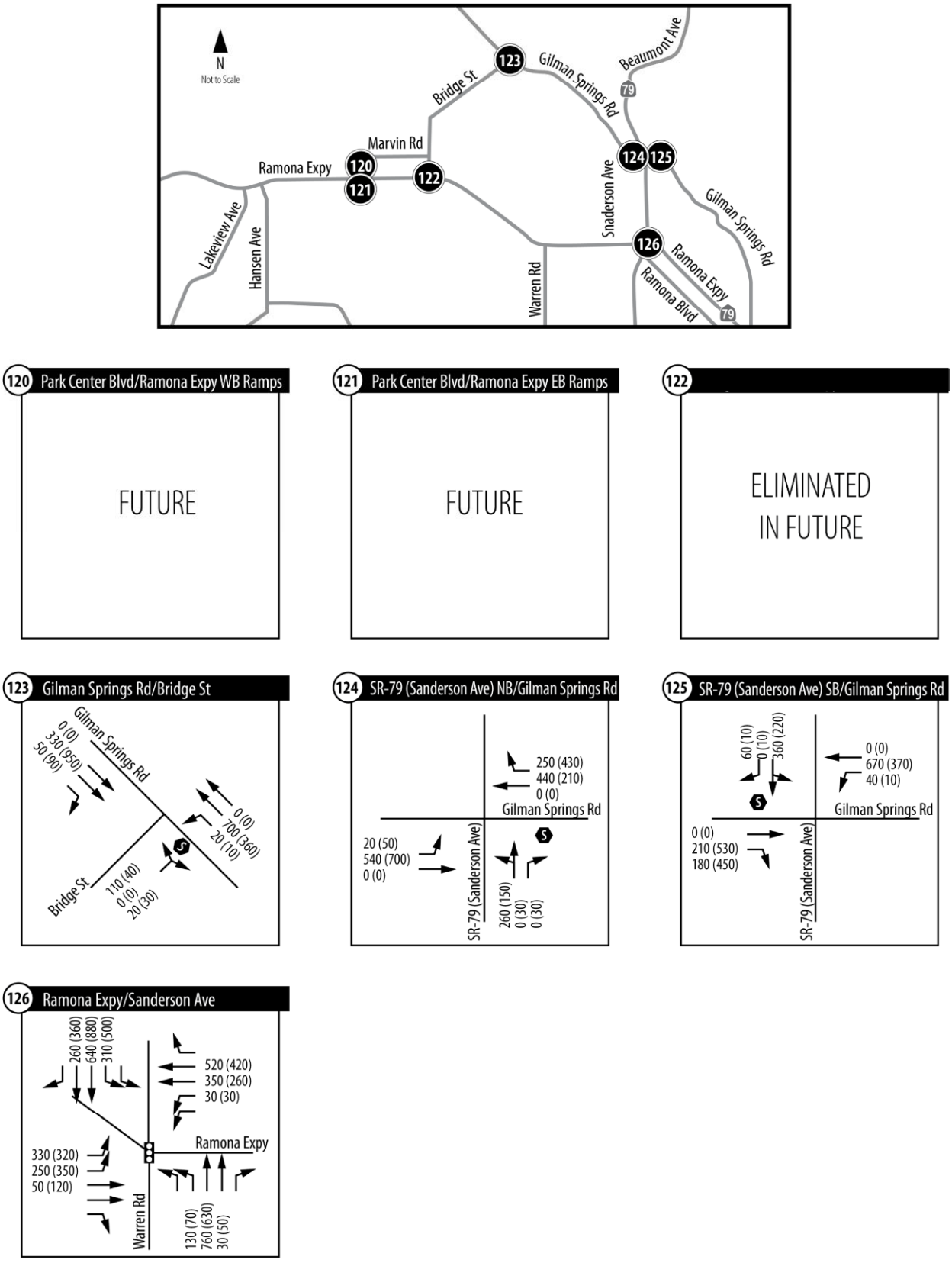


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (O)

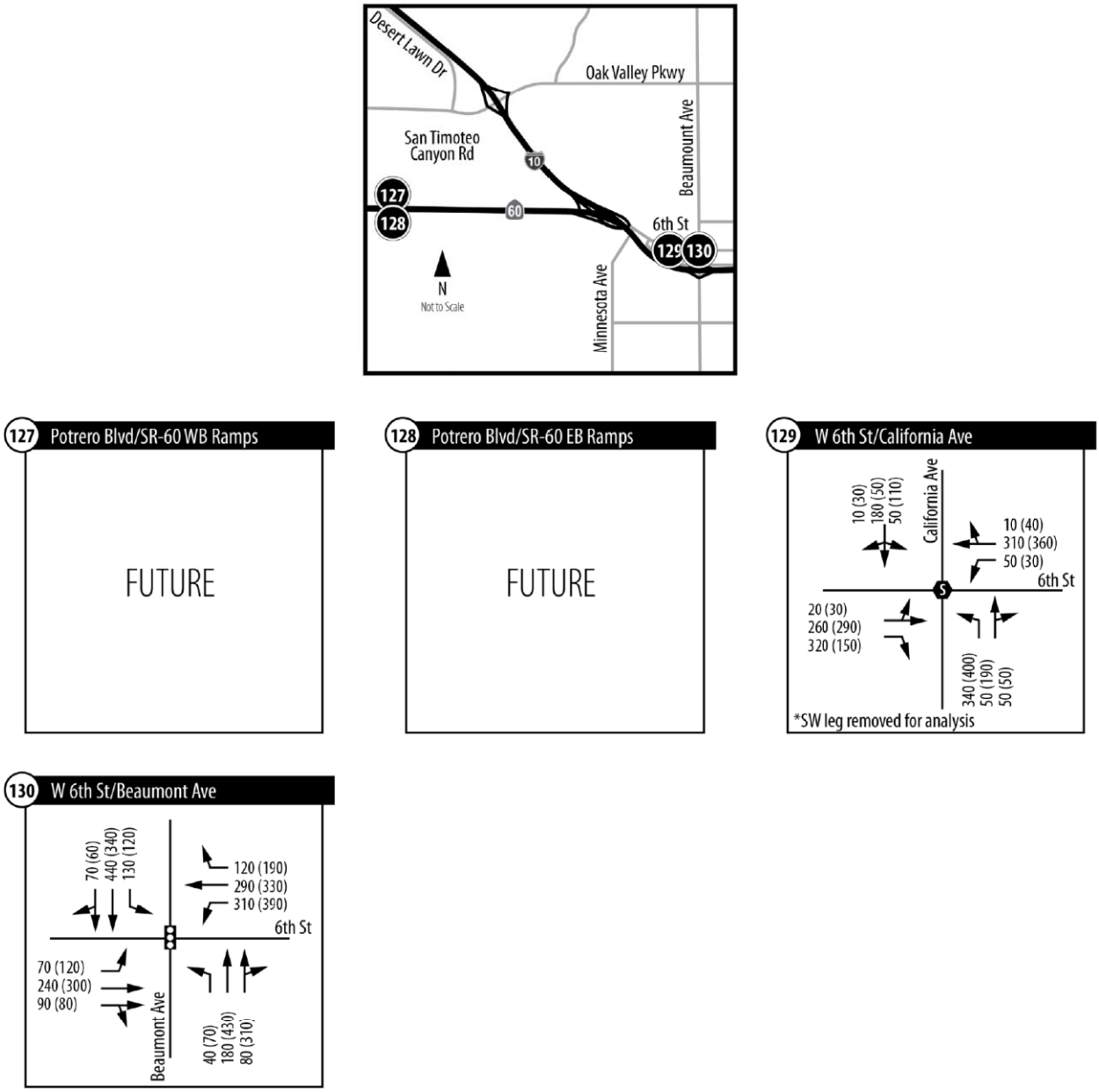


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (P)

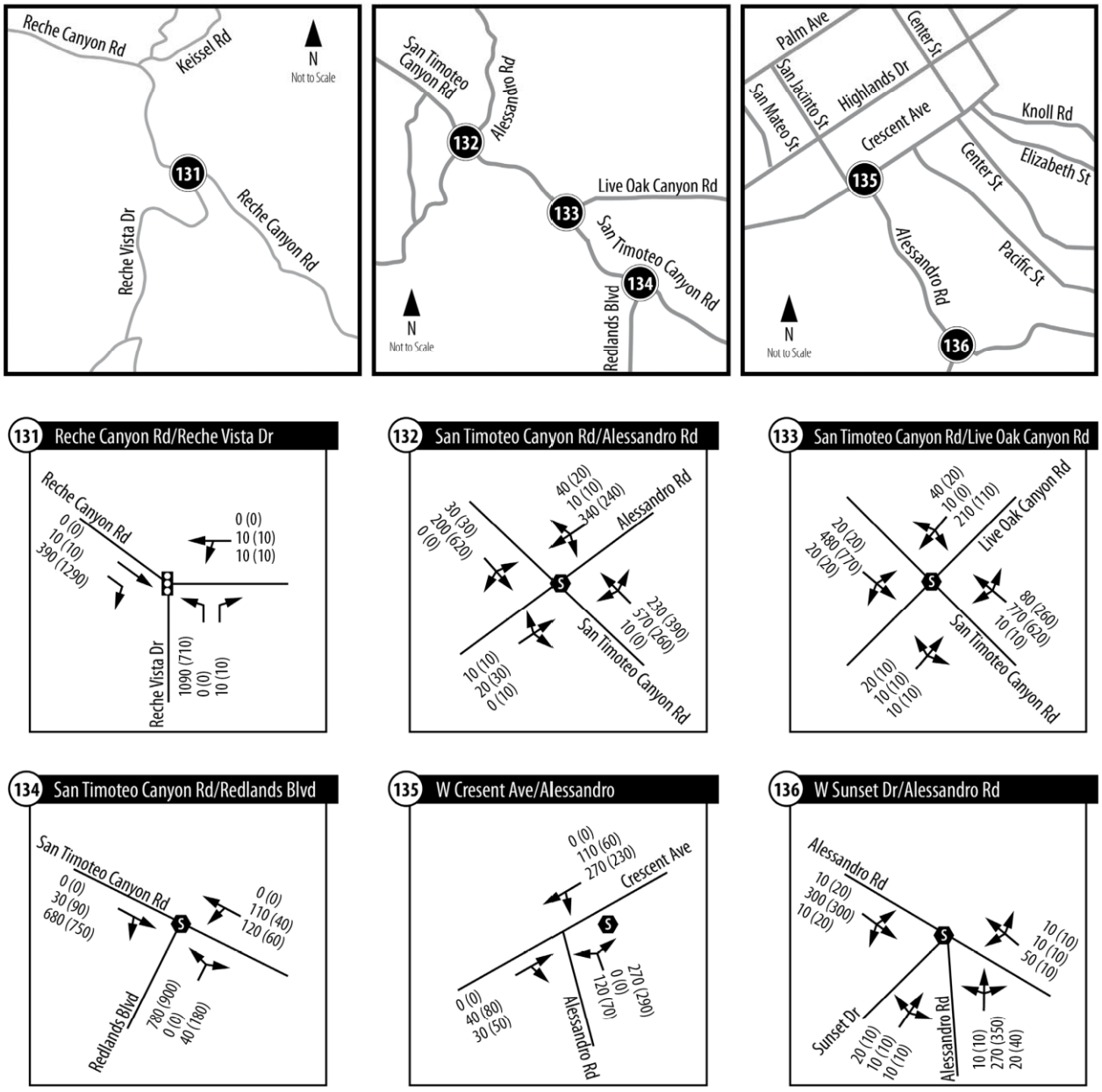


Figure 50: Turning Movement Volumes under 2022 No-Project Conditions (Q)

B. 2022 NO-PROJECT LEVEL OF SERVICE

Roadway Segment Analysis

Table 45 shows the LOS for study roadway segments under 2022 No-Project conditions.

Table 45: LOS of Study Road Segments under 2022 No-Project Conditions

	Roadway	From	To	LOS Standard*	Roadway Section**	Daily Volume	LOS
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	3,133	A
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	6,689	A
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U***	6,542	A
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road		
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	1,116	A
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	N/A	Future Road		
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	N/A	Future Road		
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	1,116	A
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	3,778	A
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	N/A	Future Road		
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	2,321	A
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,321	A
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	4U	4,796	A
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	2U	15,512	**F**
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	12,819	**F**
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	11,042	D
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	2U	8,416	B
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	2U	3,886	A
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	2U	8,583	B
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	2U***	472	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.
** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.
*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.
Indicates LOS exceeds the target level

In this scenario, Gilman Springs Rd. north and south of Alessandro exceed the LOS target set by General Plan policy, which also occurred under Existing Conditions.

Intersection LOS

Table 46 presents the LOS for the study intersections under 2022 No-Project conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix E. The number of intersections that

Table 46: 2022 No-Project Conditions at Study Intersections

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-1	Theodore St/Street F	-	N/A	Non-Existent		Non-Existent	
IN-2	Cactus Ave Extension/Street E	-	N/A	Non-Existent		Non-Existent	
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	10.0	A	10.3	B
IN-4	Alessandro Blvd (Street C)/Street F	-	N/A	Non-Existent		Non-Existent	
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	5.8	A	7.9	A
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	> 180.0	**F**	> 180.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	34.9	C	31.7	C
IN-12	Theodore Street/Ironwood Avenue	D	CSS	13.0	B	17.8	C
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	> 180.0	**F**	> 180.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	8.9	A	15.9	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	12.2	B	19.2	C
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	12.2	B	23.2	C
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	-	N/A	Non-Existent		Non-Existent	
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.8	A	41.7	**E**
IN-20	Oliver Str/Alessandro Blvd	C	CSS	81.3	**F**	67.7	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	17.6	B	18.5	B
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	30.2	**D**	14.1	B
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	32.5	C	25.7	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	18.5	B	18.9	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	13.4	B	9.5	A
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	19.8	B	18.9	B
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	30.9	C	36.9	D
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	33.7	C	47.5	D
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	21.1	C	24.7	C
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	29.9	C	39.2	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	31.8	C	21.7	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	27.7	C	33.4	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	9.2	A	9.6	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	90.2	**F**	51.0	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	88.7	**F**	37.8	D
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	50.8	D	53.5	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	54.0	D	38.6	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	28.9	C	23.9	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	32.8	C	68.7	**E**
IN-42	Nason Str/Iris Ave	C	SIGNAL	8.2	A	11.7	B
IN-43	Oliver Str/Iris Ave	D	SIGNAL	28.9	C	22.0	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	8.8	A	8.3	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	> 180.0	**F**	> 180.0	**F**
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	29.2	C	40.0	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	32.9	C	15.3	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.5	C	25.7	C

Table 46: 2022 No-Project Conditions at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	56.1	**E**	41.9	D
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	9.3	A	9.2	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	31.5	C	29.5	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	32.2	C	26.2	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	64.0	**E**	52.8	**D**
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	30.6	C	32.8	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	30.4	C	61.7	**E**
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	32.4	C	76.8	**E**
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	41.8	D	48.9	D
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	24.7	C	33.5	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	50.5	D	113.4	**F**
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	19.1	B	15.6	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	148.3	**F**	66.6	**E**
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	42.5	D	32.9	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	28.8	C	22.0	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	35.7	D	32.7	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	38.2	D	58.3	**E**
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	10.9	B	8.9	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	25.5	C	23.3	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	17.3	B	35.4	D
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	10.7	B	43.0	D
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	20.7	C	34.7	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	30.5	C	89.5	**F**
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	10.8	B	12.6	B
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	31.3	C	175.7	**F**
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	19.6	B	30.3	C
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	27.8	C	29.8	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	10.9	B	11.7	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.6	A	7.4	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	29.8	C	15.5	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	33.2	C	48.3	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	34.6	C	48.4	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	9.2	A	16.7	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	100.0	**F**	41.2	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	9.6	A	5.6	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	27.4	D	15.0	C
IN-86	Central Ave/Chicago Ave	D	SIGNAL	34.5	C	40.8	D
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	13.2	B	17.3	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	36.3	D	51.2	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	9.4	A	7.1	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	36.9	D	35.4	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	22.1	C	31.3	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	14.3	B	13.5	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	19.7	B	10.1	B

Table 46: 2022 No-Project Conditions at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	84.2	**F**	83.7	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	64.5	**E**	114.7	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	32.5	C	14.9	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	29.5	C	20.5	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	30.6	C	30.2	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	33.3	C	25.5	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	18.6	B	39.7	D
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	34.3	C	31.2	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	139.7	**F**	41.6	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	14.6	B	12.7	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	32.8	C	29.7	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	18.3	B	22.7	C
IN-107	Evans Rd/Rider St	C	SIGNAL	34.4	C	30.3	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	29.2	C	20.8	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	19.2	B	32.4	C
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	38.0	D	32.2	C
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	14.6	B	25.9	C
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	40.8	D	60.0	**E**
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	22.1	C	16.9	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	32.0	C	32.2	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	22.3	C	25.7	**D**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	> 180.0	**F**	108.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	> 180.0	**F**	123.3	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	35.7	D	24.4	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	31.8	**D**	55.0	**F**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	15.7	B	25.3	C
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	13.7	B	6.3	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	> 180.0	**F**	125.1	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	169.8	**F**	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	> 180.0	**F**	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	27.7	**D**	16.2	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.9	B	11.1	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

exceeded the LOS target rose from 12 under Existing Conditions to 31 under 2022 No-Project conditions due to population and employment growth. The intersections that were forecast to exceed the LOS target were:

- Redlands Blvd./Locust Ave. (AM, PM)
- Redlands Blvd./SR-60 WB ramps (AM, PM)
- Theodore Ave./Fir (Eucalyptus) Ave. (PM)
- Oliver St./Alessandro Blvd. (AM, PM)
- Redlands Blvd./Alessandro Blvd. (AM)
- Moreno Beach Dr./Ironwood Ave. (AM)
- Moreno Beach Dr./SR-60 EB Ramps (AM)
- Lasselle St./Iris Ave. (PM)
- Krameria Ave./Perris Blvd. (AM, PM)
- Lasselle St./Alessandro Blvd. (AM)
- Lasselle St./Cactus Ave. (AM, PM)
- Frederick St./Alessandro Blvd. (PM)
- Graham St./Alessandro Blvd. (PM)
- Perris Blvd./Alessandro Blvd. (PM)
- Graham St./Cactus Ave. (AM, PM)
- Alessandro Blvd./Sycamore Canyon Blvd. (PM)
- I-215 SB Ramps/Cactus Ave. (PM)
- Elsworth St./Cactus Ave. (PM)
- Martin Luther King Blvd./Canyon Crest Dr. (AM)
- Arlington Ave./Victoria Ave. (AM, PM)
- Alessandro Blvd./Chicago Ave. (AM, PM)
- Ramona Expwy./Evans Rd. (AM)
- Placentia Ave./Perris Blvd. (PM)
- Gilman Springs Rd./Bridge St. (AM)
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. (AM, PM)
- W 6th St./California Ave. (AM, PM)
- San Timoteo Canyon Rd./Alessandro Rd. (AM, PM)
- San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)
- W Crescent Ave./Alessandro Rd. (AM)

Freeway Mainline Basic Sections

Table 47 presents the results of the LOS analysis for freeway mainline sections. A total of 33 freeway mainline basic sections were forecast to exceed the target LOS of "D". In comparison, 17 sections in Existing No-Project conditions were forecast to exceed the LOS target. The sections that would exceed LOS "D" under 2022 No-Project conditions are:

North or Eastbound

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Central Ave. to Mountain Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Heacock St. to Perris Blvd.
- SR-91 from I-15 to McKinley St.
- SR-91 from Pierce St. to Magnolia Ave.
- I-215 from Columbia Ave. to Center St.
- I-215 from Iowa Ave./La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

South or Westbound

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Grove Ave to Vineyard Ave

- SR-60 from Valley Way to Rubidoux Blvd
- SR-60 from Market St. to Main St.
- SR-60 from Main St. to SR-91
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-91 from McKinley St. to Pierce St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- I-215 from Columbia Ave. to Center St.
- I-215 from Center St. to Iowa Ave./La Cadena Dr.
- I-215 from Iowa Ave./La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

Table 47: 2022 No-Project Freeway Mainline Level of Service

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	7,210	30.5	D	7,830	35.1	E	8,770	43.3	E	7,150	30.1	D
F-3	SR-60	Ramona Ave to Central Ave	6,850	28.2	D	9,380	51.4	F	8,290	38.7	E	6,750	27.7	D
F-4	SR-60	Central Ave to Mountain Ave	7,590	33.0	D	9,350	51.0	F	6,340	25.4	C	6,990	29.1	D
F-5	SR-60	Mountain Ave to Euclid Ave	7,520	32.5	D	6,690	27.5	D	6,260	25.0	C	7,440	32.0	D
F-6	SR-60	Euclid Ave to Grove Ave	8,990	45.8	F	9,280	50.0	F	6,470	26.1	D	7,310	31.1	D
F 7	SR 60	Grove Ave to Vineyard Ave	8,170	37.6	E	9,530	53.6	F	6,330	25.4	C	7,920	35.5	E
F-8	SR-60	Vineyard Ave to Archibald Ave	8,080	36.5	E	9,470	52.7	F	7,670	33.6	D	7,550	32.8	D
F-9	SR-60	Archibald Ave to Haven Ave	7,590	32.8	D	6,630	27.2	D	See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	7,400	23.2	C	7,040	22.1	C	5,850	18.0	B	7,110	22.3	C
F-11	SR-60	Milliken Ave to I-15	5,280	20.3	C	4,530	17.4	B	5,550	21.6	C	7,050	29.2	D
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,580	17.6	B	3,440	13.3	B	4,490	13.7	B	5,850	17.9	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	5,070	19.6	C	4,460	17.2	B	4,220	16.2	B	5,830	22.8	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley	4,600	17.7	B	3,560	13.8	B	4,240	16.3	B	5,850	22.9	C
F-15	SR-60	Pedley Rd to Pyrite St	4,620	17.8	B	3,710	14.4	B	3,290	12.6	B	5,010	19.2	C
F-16	SR-60	Pyrite St to Valley Way	5,190	20.1	C	3,990	15.5	B	2,740	10.6	A	4,510	17.2	B
F-17	SR-60	Valley Way to Rubidoux Blvd	6,280	39.4	E	4,530	24.1	C	4,630	24.4	C	6,530	42.2	E
F-18	SR-60	Rubidoux Blvd to Market St	6,920	48.7	F	4,950	27.2	D	3,630	18.6	C	5,660	32.5	D
F-19	SR-60	Market St to Main St	6,450	41.6	E	7,260	56.8	F	5,860	34.4	D	6,820	46.5	F
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			5,450	30.6	D	6,610	42.9	E
F-24	SR-60	Martin Luther King Blvd to Central Ave	8,440	41.5	E	9,140	53.5	F	7,060	23.7	C	7,680	25.5	C
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	6,450	25.7	C	7,270	30.8	D	7,390	31.9	D	8,510	40.3	E
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			7,250	54.3	F	3,880	20.0	C
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,520	29.2	D	4,200	39.3	E	3,460	28.5	D	3,860	34.0	D
F-30	SR-60	Heacock St to Perris Blvd	3,160	25.0	C	4,050	36.7	E	3,300	26.6	D	3,360	27.5	D
F-31	SR-60	Perris Blvd to Nason St	2,590	19.8	C	3,070	24.3	C	2,790	21.6	C	2,550	19.6	C
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,910	14.5	B	2,370	18.0	C	1,810	13.8	B	1,750	13.4	B
F-34	SR-60	Redlands Blvd to Theodore St	2,460	18.8	C	3,240	25.8	C	2,280	17.3	B	2,200	16.8	B
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	2,310	19.2	C	2,770	23.6	C	2,180	18.0	C	1,850	15.3	B
F-37	SR-60	Jack Rabbit Trail to I-10	2,070	15.8	B	2,820	21.8	C	2,190	16.7	B	1,690	12.9	B
F-39	SR-91	I-15 to McKinley St	7,190	22.3	C	10,400	38.6	E	7,280	30.9	D	7,330	31.0	D
F-40	SR-91	McKinley St to Pierce St	6,500	26.1	D	5,950	23.5	C	5,440	31.0	D	6,330	39.6	E
F-41	SR-91	Pierce St to Magnolia Ave	5,970	35.2	E	5,410	30.5	D	5,210	29.0	D	8,080	77.6	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			5,450	31.1	D	8,040	76.1	F
F-43	SR-91	La Sierra Ave to Tyler St	5,490	30.9	D	5,230	29.0	D	4,800	25.9	C	5,980	35.6	E
F-44	SR-91	Tyler St to Van Buren Blvd	6,600	26.6	D	5,980	23.6	C	6,170	24.7	C	7,420	31.6	D

Table 47: 2022 No-Project Freeway Mainline Level of Service (continued)

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	6,700	27.2	D	5,250	20.3	C	5,810	22.9	C	7,160	29.9	D
F-46	SR-91	Adam St to Madison St	7,310	31.4	D	4,970	19.4	C	5,420	21.2	C	6,210	24.5	C
F-47	SR-91	Madison St to Arlington Ave	6,710	27.6	D	4,970	19.4	C	4,780	25.8	C	5,550	31.2	D
F-49	SR-91	Central Ave to 14th St	5,910	34.9	D	5,070	27.7	D	4,340	16.8	B	4,530	17.3	B
F-51	SR-91	University Ave to Spruce St	8,270	26.6	D	7,700	24.2	C	See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	2,850	14.5	B	4,330	22.4	C	3,670	18.6	C	2,500	12.7	B
F-68	I-215	Newport Rd to McCall Blvd	2,100	10.8	A	3,140	15.9	B	3,820	19.6	C	3,520	18.0	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,750	14.0	B	4,380	22.7	C	4,380	22.8	C	2,950	15.0	B
F-70	I-215	Ethanac Rd to SR-74	4,200	21.7	C	4,100	21.0	C	4,110	21.2	C	4,250	21.9	C
F-71	I-215	SR-74 to Redlands Ave	3,490	17.7	B	4,800	25.4	C	5,730	33.1	D	3,860	19.7	C
F-74	I-215	Columbia Ave to Center St	6,090	36.8	E	6,030	36.2	E	6,390	40.0	E	5,330	29.6	D
F-75	I-215	Center St to La Cadena Dr	5,830	34.1	D	5,800	33.8	D	6,880	46.9	F	5,560	31.6	D
F-76	I-215	La Cadena Dr to Barton Rd	5,690	32.7	D	6,130	37.3	E	6,700	44.2	E	5,570	31.7	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,980	35.6	E	6,550	42.5	E	6,720	44.4	E	5,610	32.0	D
F-78	I-215	Mt. Vernon Ave to I-10	5,770	22.5	C	6,660	27.0	D	7,080	29.2	D	5,890	23.1	C
F-80	I-215	Auto Plaza Dr to Mill St	4,490	17.2	B	5,500	21.2	C	4,790	18.2	C	4,140	15.8	B
F-83	I-215	Baseline Rd to Highland Ave	3,030	15.4	B	4,060	20.8	C	5,280	29.0	D	4,700	24.9	C
F-52	I-10	SR-60 to Beaumont Ave	4,390	16.8	B	6,080	24.1	C	5,610	21.9	C	5,370	20.7	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,450	17.1	B	6,240	24.9	C	5,470	21.3	C	5,270	20.3	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,640	17.8	B	6,480	26.2	D	5,920	23.3	C	5,480	21.2	C
F-55	I-10	Highland Springs Ave to Sunset Ave	4,560	17.5	B	6,210	24.8	C	5,690	22.3	C	5,200	20.1	C
F-56	I-10	Sunset Ave to 22nd St	4,470	17.2	B	5,960	23.5	C	5,450	21.2	C	5,090	19.7	C
F-57	I-10	22nd St to 8th St	4,380	16.8	B	5,800	22.8	C	5,320	20.6	C	5,110	19.6	C
F-58	I-10	8th St to Hargrave St	4,370	16.8	B	5,730	22.4	C	5,250	20.3	C	5,250	20.2	C
F-59	I-10	Hargrave St to Fields Rd	4,100	15.8	B	5,350	20.8	C	4,810	18.5	C	5,020	19.3	C
F-60	I-10	Fields Rd to Morongo Trail	3,770	14.5	B	5,080	19.6	C	4,600	17.7	B	4,830	18.6	C
F-61	I-10	Morongo Trail to Main St	3,410	13.1	B	4,670	18.0	B	4,110	15.8	B	4,240	16.3	B
F 62	I 10	Main St to Haugen-Lehmann Way	3,280	12.6	B	4,720	18.1	C	4,230	16.3	B	4,300	16.5	B
F-64	I-10	SR-111 to Tipton Rd	2,950	11.3	B	4,140	15.9	B	3,680	14.1	B	3,760	14.4	B
F-65	I-10	Tipton Rd to SR-62	2,810	10.8	A	4,170	16.0	B	3,700	14.2	B	3,770	14.4	B

Indicates that the LOS exceeds the target level

Freeway Weaving LOS

Table 48 shows the weaving LOS under 2022 No-Project conditions. Six north- or east-bound sections and one south- or westbound sections would operate below LOS "D". These sections are:

North or Eastbound

- SR-60 from SR-71/ Garey Ave. to Reservoir St.
- SR-60 from Main St. to SR-91
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from Arlington Ave. to Central Ave.
- I-215 from SR-60 to Columbia Ave.

South or Westbound

- SR-60 from SR-91 to W. Blaine St./3rd St.

Table 48: 2022 No-Project Freeway Weaving Level of Service

ID	Freeway	Weaving Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	7,150	29.2	D	8,640	37.6	E	6,130	21.9	C	6,720	24.3	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			6,330	24.4	C	7,330	29.3	D
W-20	SR-60	Main St to SR-91	7,350	36.6	E	7,370	38.0	E	See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	6,010	24.2	C	9,760	42.3	E	7,720	29.4	D	9,290	36.9	E
W-22	SR-60	Blaine St/3rd St to University Ave	5,710	21.6	C	7,210	31.3	D	5,700	21.1	C	8,280	32.0	D
W-23	SR-60	University Ave to Martin Luther King	6,620	23.8	C	6,060	21.4	C	5,600	22.6	C	7,620	30.7	D
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	6,580	27.3	C	8,400	38.9	E	7,110	30.7	D	7,890	32.7	D
W-27	SR-60	I-215 to Day St	4,000	14.6	B	5,280	19.9	B	See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,890	16.6	B	5,130	23.2	C	4,970	34.3	D	4,860	32.7	D
W-32	SR-60	Moreno Beach Dr to Nason St	2,330	14.2	B	2,880	18.1	B	2,410	14.5	B	2,190	13.2	B
W-35	SR-60	Theodore St to Gilman Springs Rd	2,320	12.7	B	3,370	19.3	B	2,360	13.6	B	2,030	11.4	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,400	30.3	D	5,950	28.5	D	See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,220	39.0	E	3,680	17.9	B	4,510	21.2	C	5,050	24.1	C
W-50	SR-91	14th St to University Ave	5,030	25.1	C	4,810	24.6	C	5,090	19.6	B	7,020	27.9	C
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			5,020	14.7	B	8,850	26.7	C
W-73	I-215	SR-60 to Columbia Ave	6,840	37.8	E	6,540	35.8	E	7,040	33.4	D	6,110	28.8	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,610	16.8	B	5,210	19.0	B	5,830	20.8	C	4,870	18.0	B
W-81	I-215	Mill St to 2nd St	5,090	17.8	B	5,910	21.1	C	5,300	19.0	B	4,410	15.9	B
W-82	I-215	5th St to Baseline Rd	3,760	12.7	B	4,450	15.2	B	4,540	16.0	B	3,490	12.3	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,300	11.0	B	4,710	15.9	B	4,210	14.8	B	4,310	17.2	B

Indicates that the LOS exceeds the target level

Freeway Ramp LOS

Table 49 shows the level of service at study freeway ramps under 2022 No-Project conditions. One ramp was found to operate below the target LOS of "D", namely:

- SR-60 eastbound On-Ramp from Central Ave.

Details of the LOS calculations for freeways under 2022 No-Project Conditions can be found in Appendix L.

Table 49: 2022 No-Project Freeway Ramp Level of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	6,190	710	27.4	C	5,780	1,320	30.9	D
R-2	SR-60 EB	On-Ramp from Central Ave	1	8,170	710	28.8	D	9,010	1,120	35.1	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,910	220	8.3	A	2,370	520	12.5	B
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,690	90	17.1	B	1,850	210	19.4	B
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	1	2,460	250	24.5	C	3,240	150	31.7	D
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	2,210	110	23.1	C	3,090	270	31.7	D
R-8	SR-60 EB	Direct On-Ramp from Theodore St	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	2	2,320	330	14.5	B	3,370	650	21.0	C
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,990	270	14.7	B	2,720	140	19.8	B
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	2	2,210	230	13.8	B	1,880	190	11.8	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	1,980	380	15.5	B	1,690	310	12.6	B
R-13	SR-60 WB	Off-Ramp to Theodore St	1	2,360	180	12.4	B	2,030	120	9.3	A
R-14	SR-60 WB	On-Ramp from Theodore St	1	2,180	100	21.0	C	1,910	290	20.2	C
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	2,280	170	22.9	C	2,200	100	22.3	C
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	2,110	440	23.3	C	2,100	380	22.8	C
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,110	410	26.5	C	7,890	530	29.8	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,060	510	16.3	B	7,680	430	17.6	B

Indicates that the LOS exceeds the target level

8. 2022 PLUS PHASE 1 CONDITIONS

The analysis of 2022 Plus Phase 1 Conditions shows the effect of project-related traffic if the first phase of the WLC project were built and no other changes from the 2022 No-Project scenario occurred to the roadway system or land uses.

A. ROAD SEGMENT LOS, IMPACTS, AND MITIGATIONS

Table 50 compares the average daily traffic (ADT) volumes for study roadway segments to 2022 No-Project Conditions and to their threshold of significance under the City's General Plan policies. Under 2022 Plus Phase 1 Conditions three segments would exceed the threshold of significance set by General Plan policy, namely:

- Gilman Springs Rd. between SR-60 and Alessandro Blvd. would exceed the threshold of significance under both 2022 No-Project Conditions and under 2022 Plus Phase 1 Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS in the 2022 Plus Phase 1 Conditions.

- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. would exceed the threshold of significance under both 2022 No-Project Conditions and under 2022 Plus Phase 1 Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS in the 2022 Plus Phase 1 Conditions.

- Redlands Blvd. from Fir (future Eucalyptus) Ave. to the SR-60 eastbound ramps would exceed the threshold of significance under 2022 Plus Phase 1 Conditions. Widening the road from two lanes to four lanes would allow it to achieve the target LOS in the 2022 Plus Phase 1 Conditions.

In each case adding lanes would bring the LOS to the level required in the General Plan. The feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 50: 2022 Plus Phase 1 Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	2022 No-Project Conditions			2022 Plus Phase 1 Conditions			Project Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section*	Daily Volume	LOS			
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	3,133	A	2U	4,243	A			
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	6,689	A	6D	29,448	A			
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U***	6,542	A	4D	7,234	A			
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road			Future Road					
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	1,116	A	6D	30,318	A			
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	D	Future Road			4U	14,908	A			
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	D	Future Road			2U	2,242	A			
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	1,116	A	4D	11,017	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	3,778	A	4U	7,226	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	D	Future Road			4U	9,699	A			
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	2,321	A	4U	4,768	A			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	2,321	A	4U	4,347	A			
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	4U	4,796	A	4U	4,675	A	****		
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	2U	15,512	F	2U	16,492	F	Yes	Widen to 4 lanes	C
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	2U	12,819	F	2U	12,829	F	Yes	Widen to 4 lanes	C
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	11,042	D	2U	15,071	E	Yes	Widen to 4 lanes	A
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	2U	8,416	B	2U	6,575	A			
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	2U	3,886	A	2U	772	A			
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	2U	8,583	B	2U	4,755	A			
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	2U***	472	A	2U	9,699	C			

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Road currently has 2 lanes in one direction and 1 lane in the other. The capacity shown is based on the narrower direction.

**** Due to the severing of Alessandro Blvd. and the diversion of traffic to other routes, there is no need to widen this section beyond the current 2U configuration

Indicates LOS exceeds the target level

B. INTERSECTION LOS, IMPACTS, AND MITIGATIONS

Figure 51 shows the turning movement volumes under 2022 Plus Phase 1 conditions (see Figure 16 for the key map). Table 51 presents the LOS for the study intersections under the 2022 Plus Phase 1 conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix F. Table 52 identifies where impacts occur and mitigation measures that would reduce the impacts to a less-than-significant level.

As shown in Table 52, there are 34 study intersections where the project would have a significant impact. Twenty-eight of these intersections exceed the threshold of significance under 2022 No-Project conditions and six would exceed the threshold of significance with the addition of the project. These are:

Would Exceed Threshold of Significance Under Both 2022 No-Project Conditions and 2022 Plus Phase 1 Conditions

- Redlands Blvd./Locust Ave.
- Redlands Blvd./SR-60 WB ramps
- Oliver St./Alessandro Blvd.
- Moreno Beach Dr./Ironwood Ave.
- Moreno Beach Dr./SR-60 EB Ramps
- Lasselle St./Iris Ave.
- Krameria Ave./Perris Blvd.
- Lasselle St./Alessandro Blvd.
- Lasselle St./Cactus Ave.
- Frederick St./Alessandro Blvd.
- Graham St./Alessandro Blvd.
- Martin Luther King Blvd./Canyon Crest Dr.
- Perris Blvd./Alessandro Blvd.
- Graham St./Cactus Ave.
- Alessandro Blvd./Sycamore Canyon Blvd.
- Elsworth St./Cactus Ave.
- Arlington Ave./Victoria Ave.
- Alessandro Blvd./Chicago Ave.
- Ramona Expwy./Evans Rd.
- Placentia Ave./Perris Blvd.

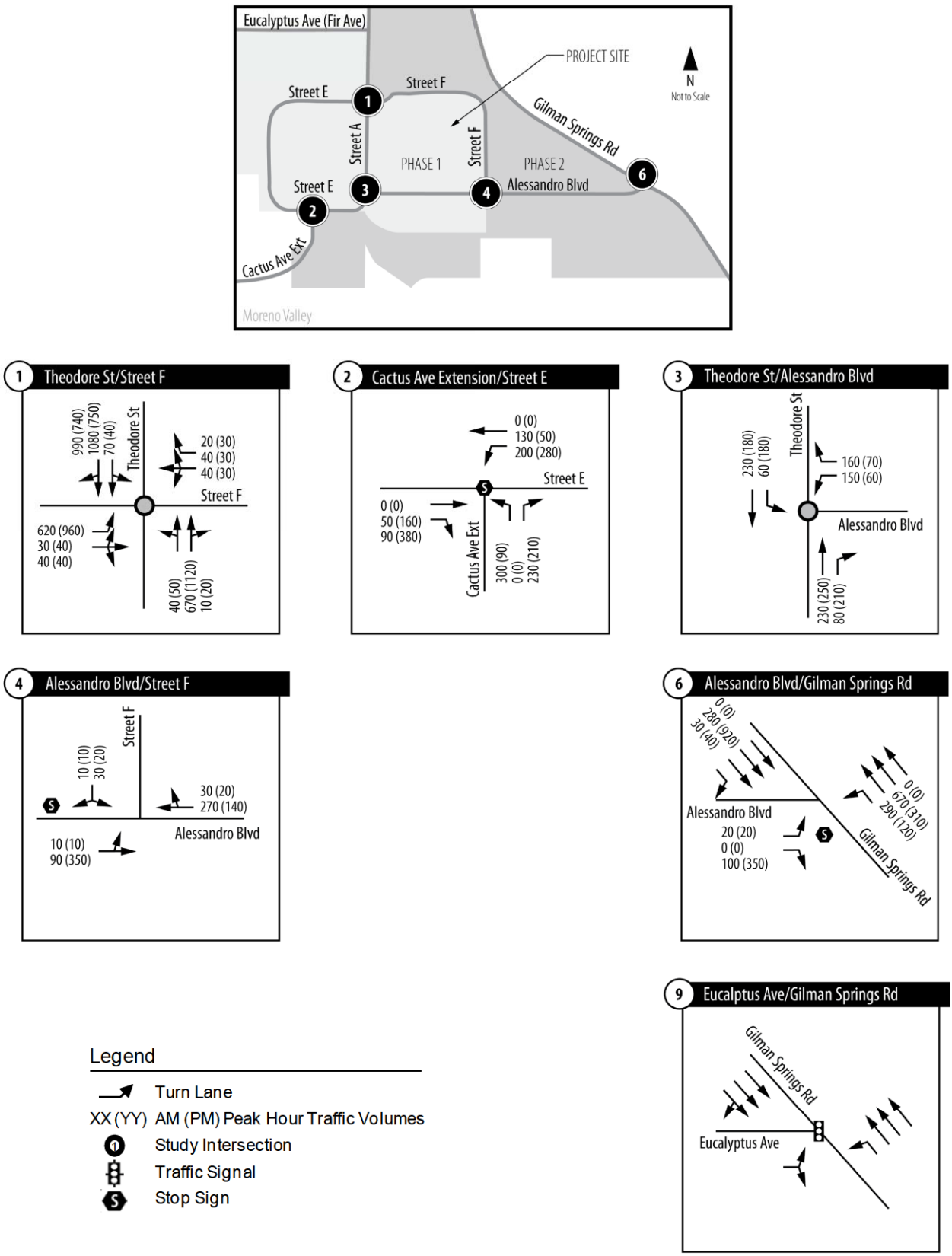


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions

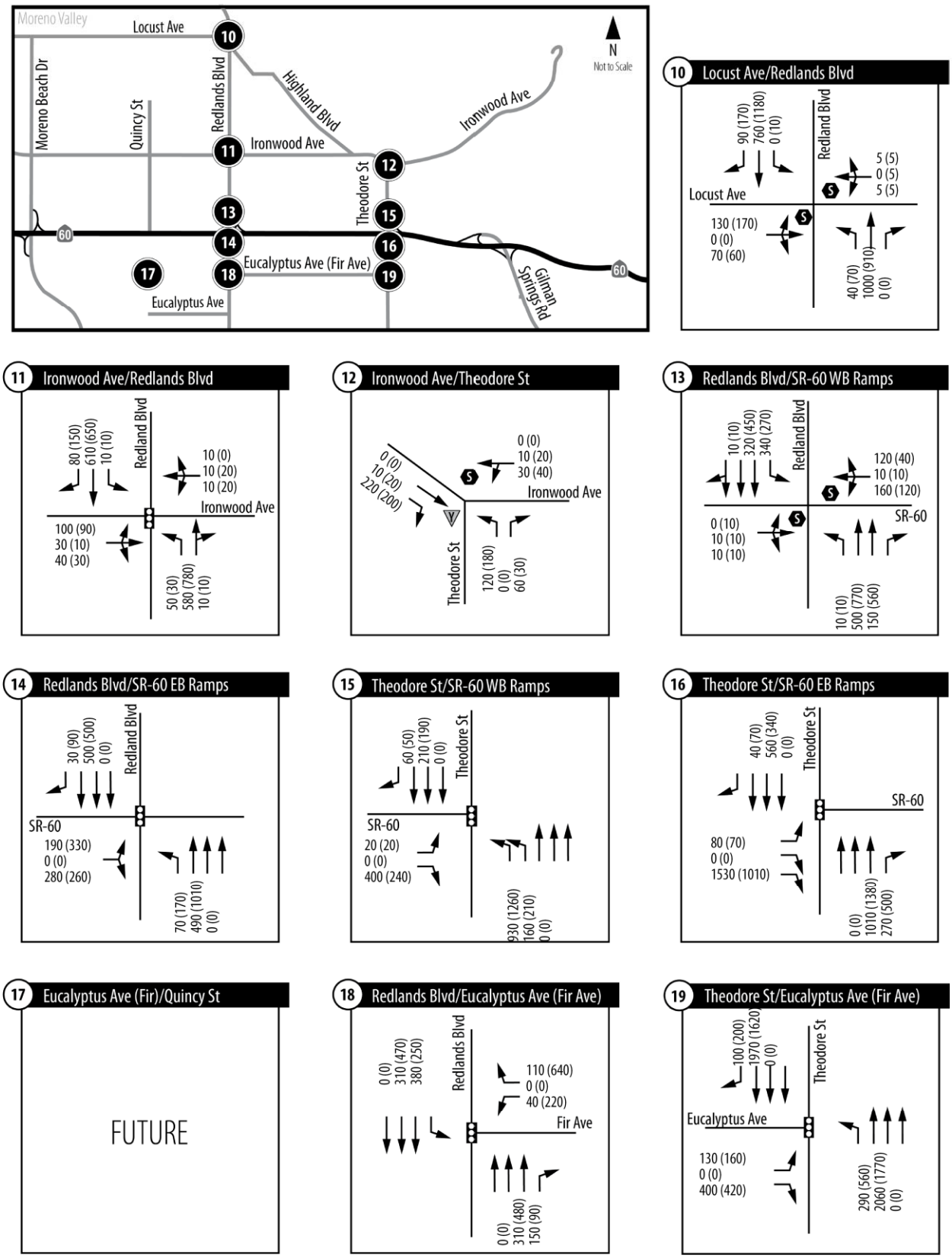


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (B)

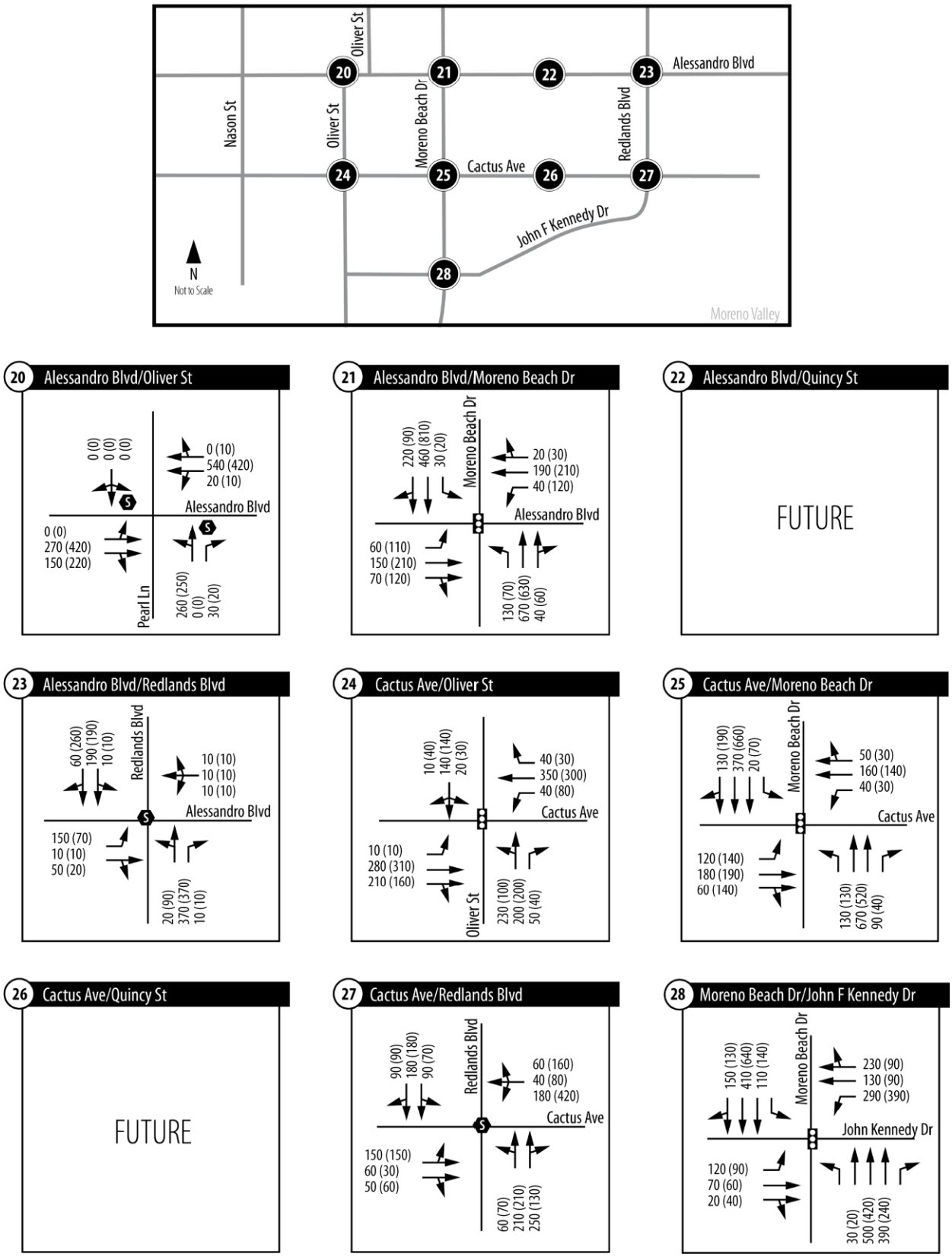


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (C)

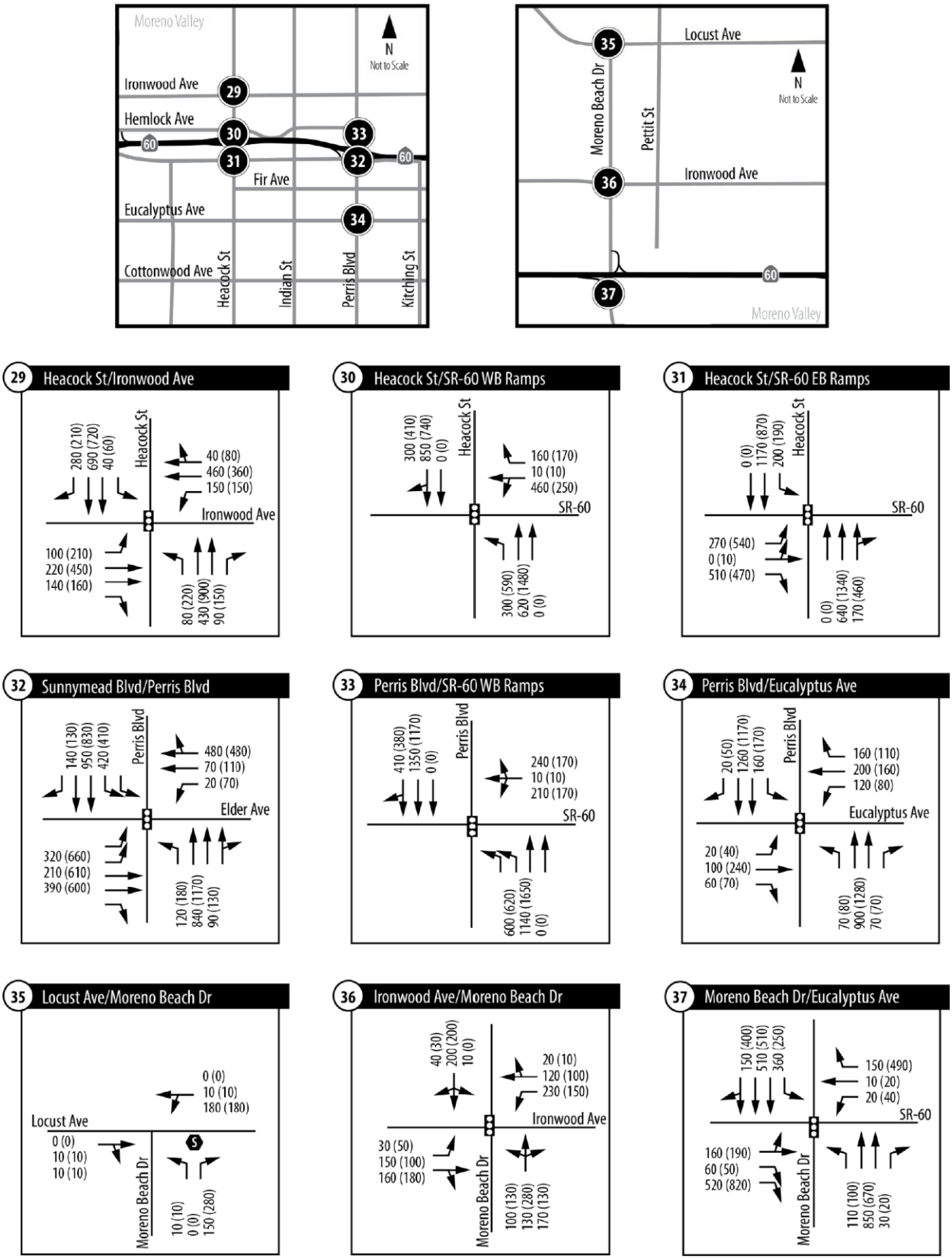


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (D)

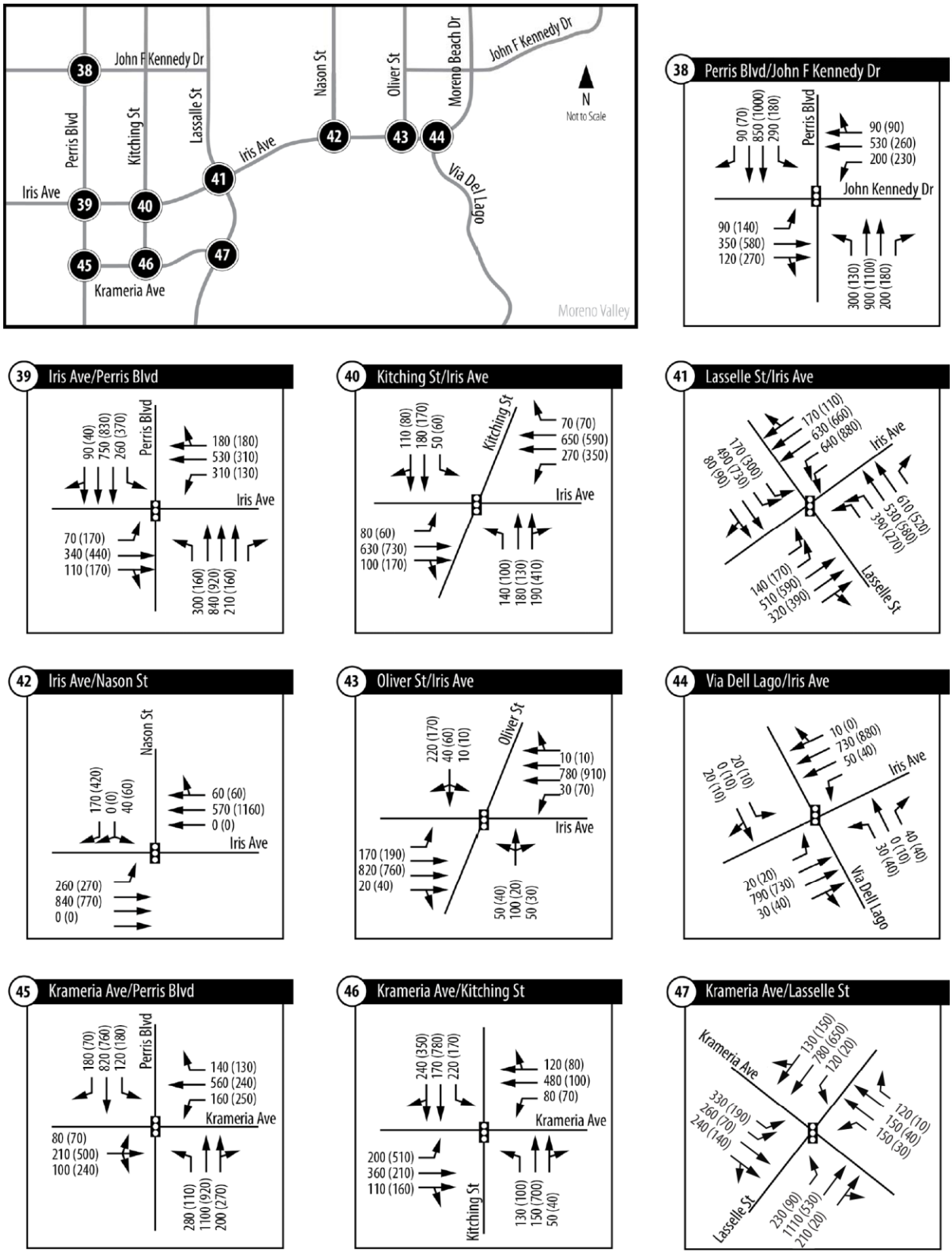


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (E)

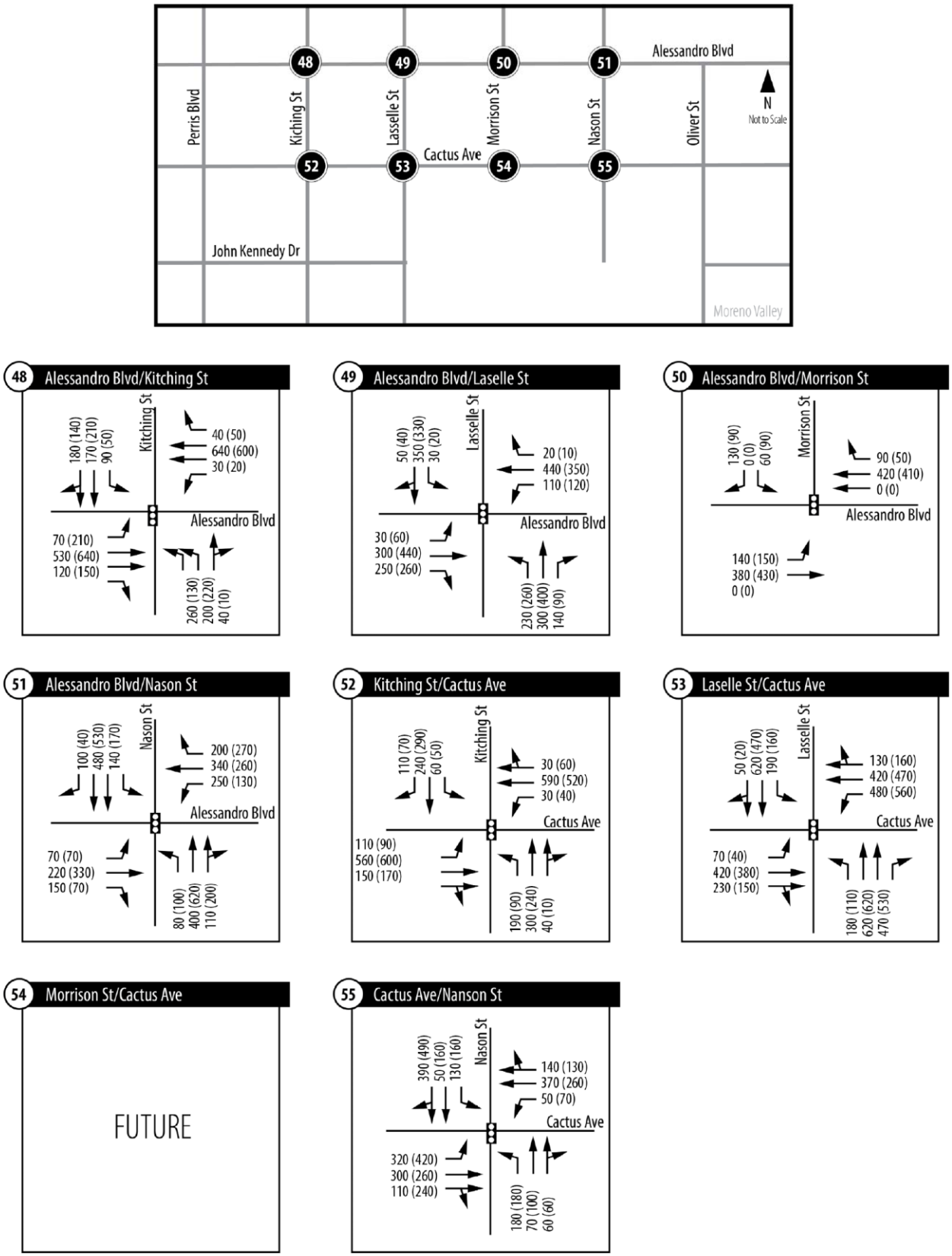


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (F)

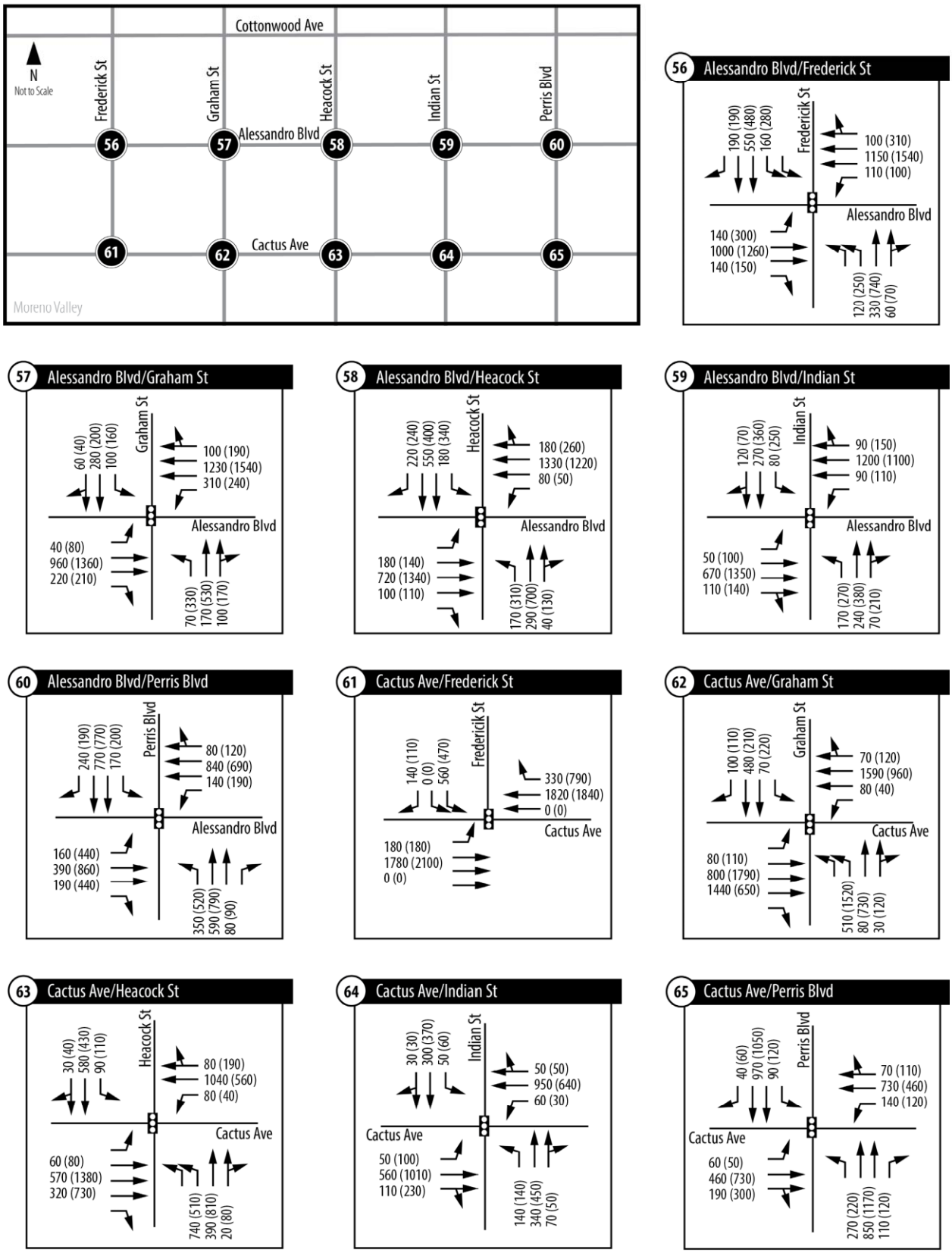


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (G)

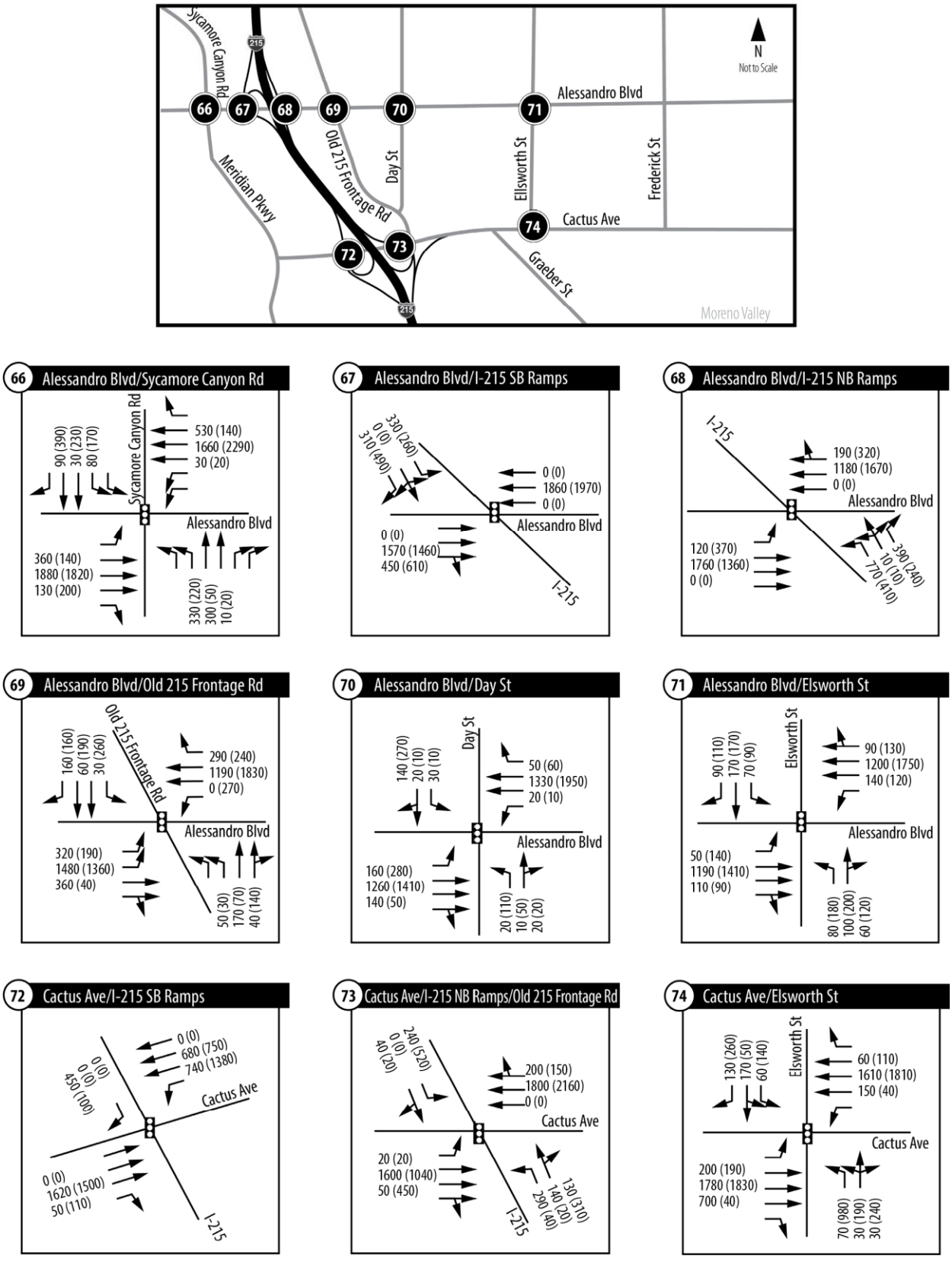


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (H)

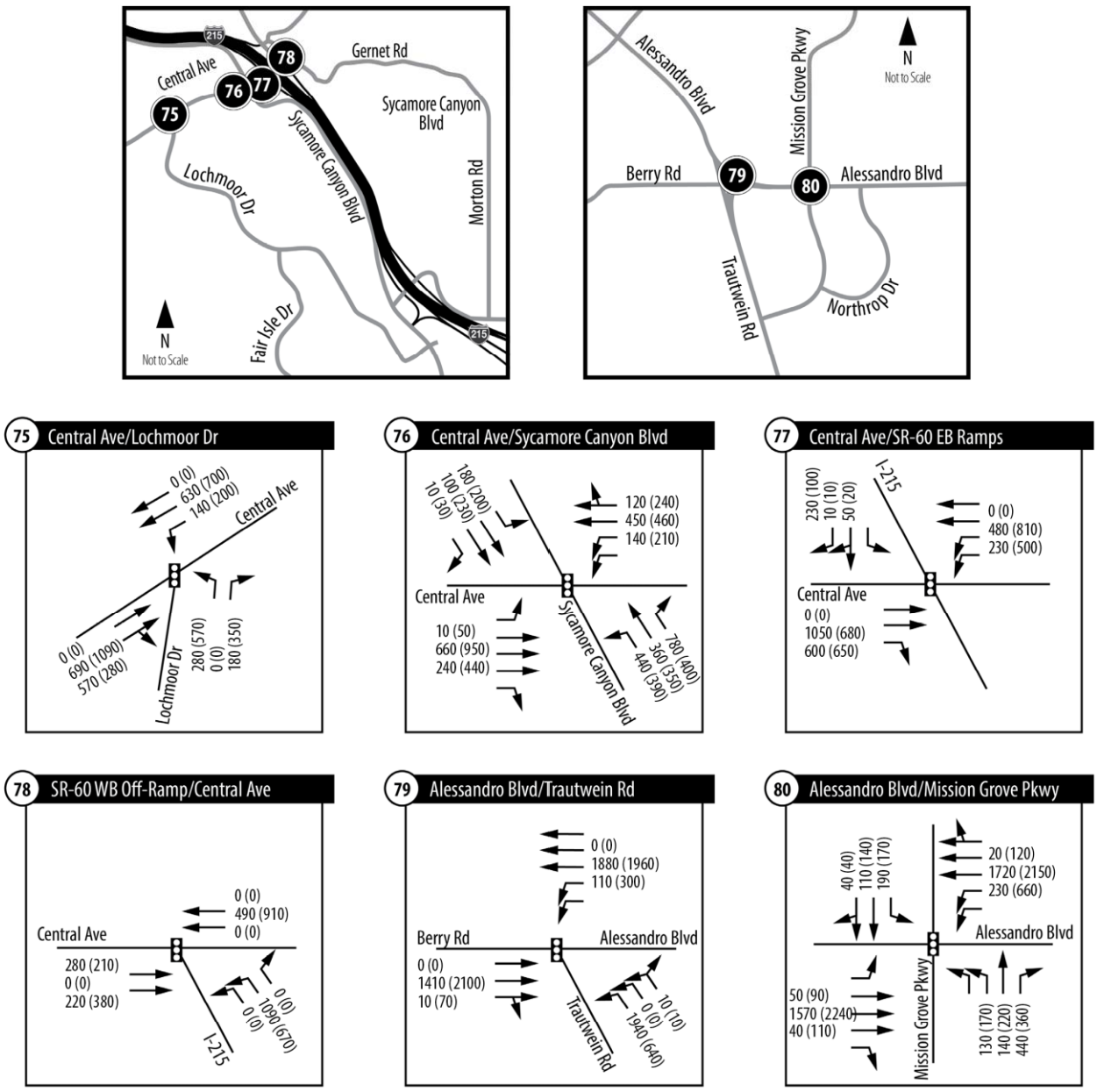


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (I)

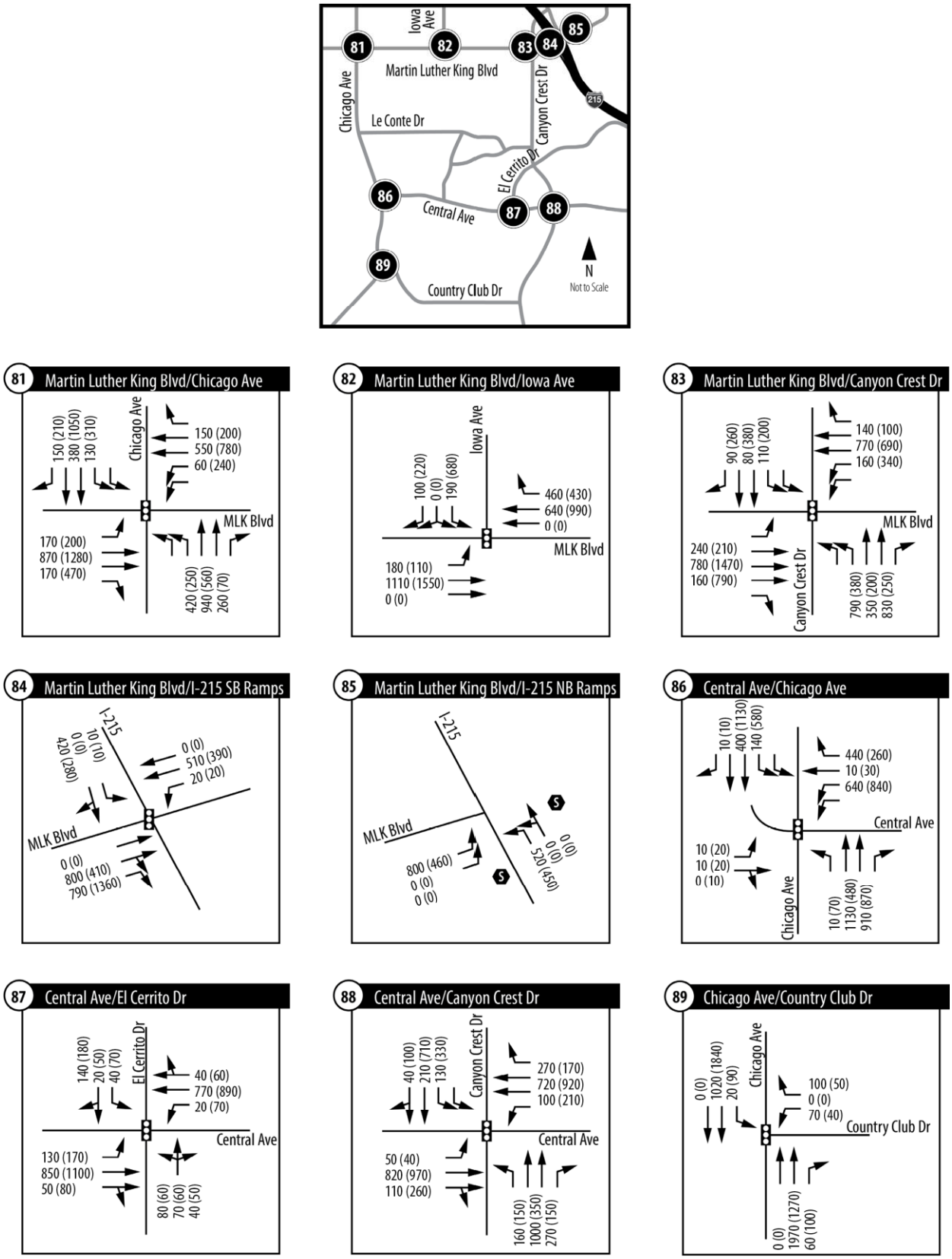


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (J)

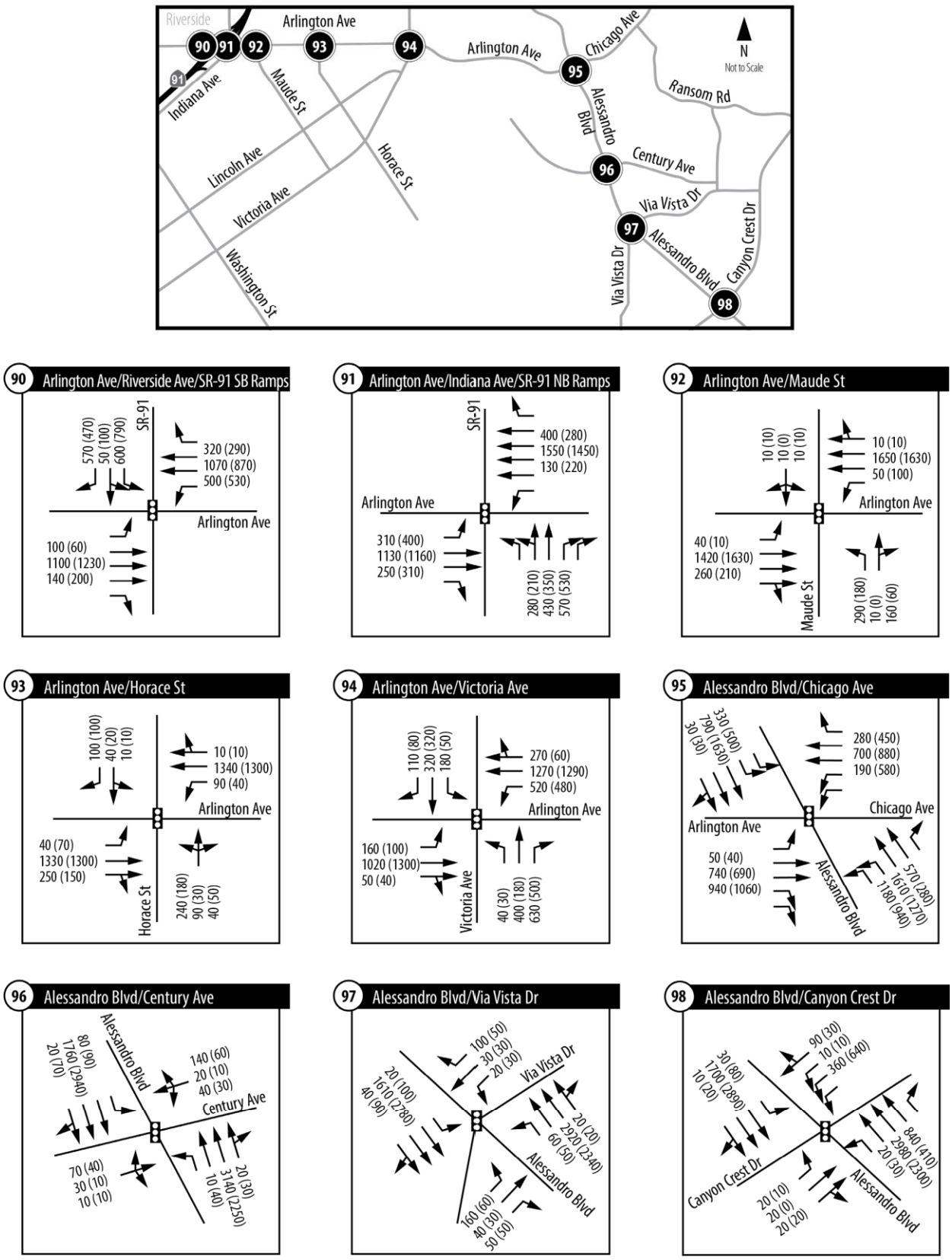


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (K)

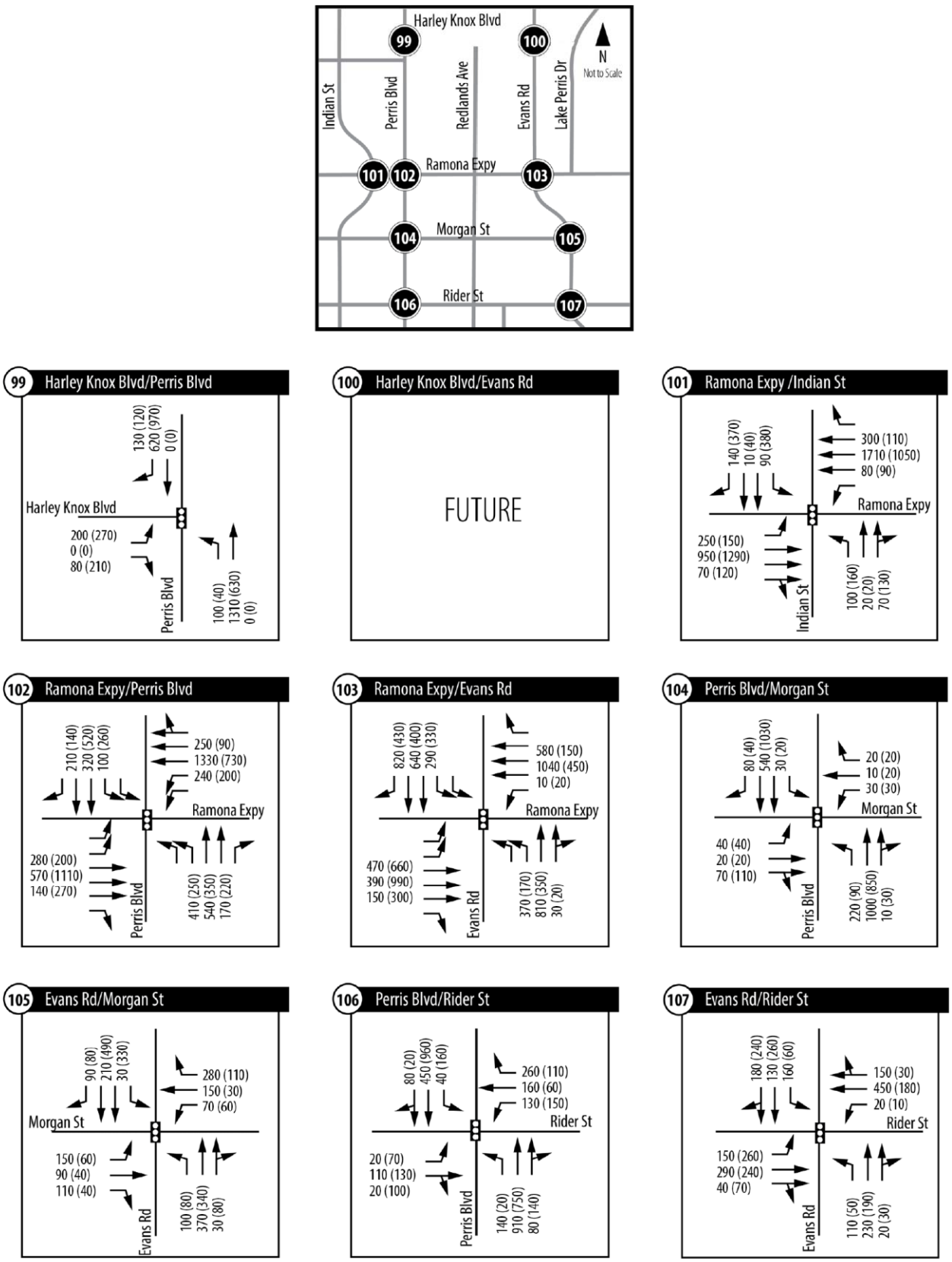


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (L)

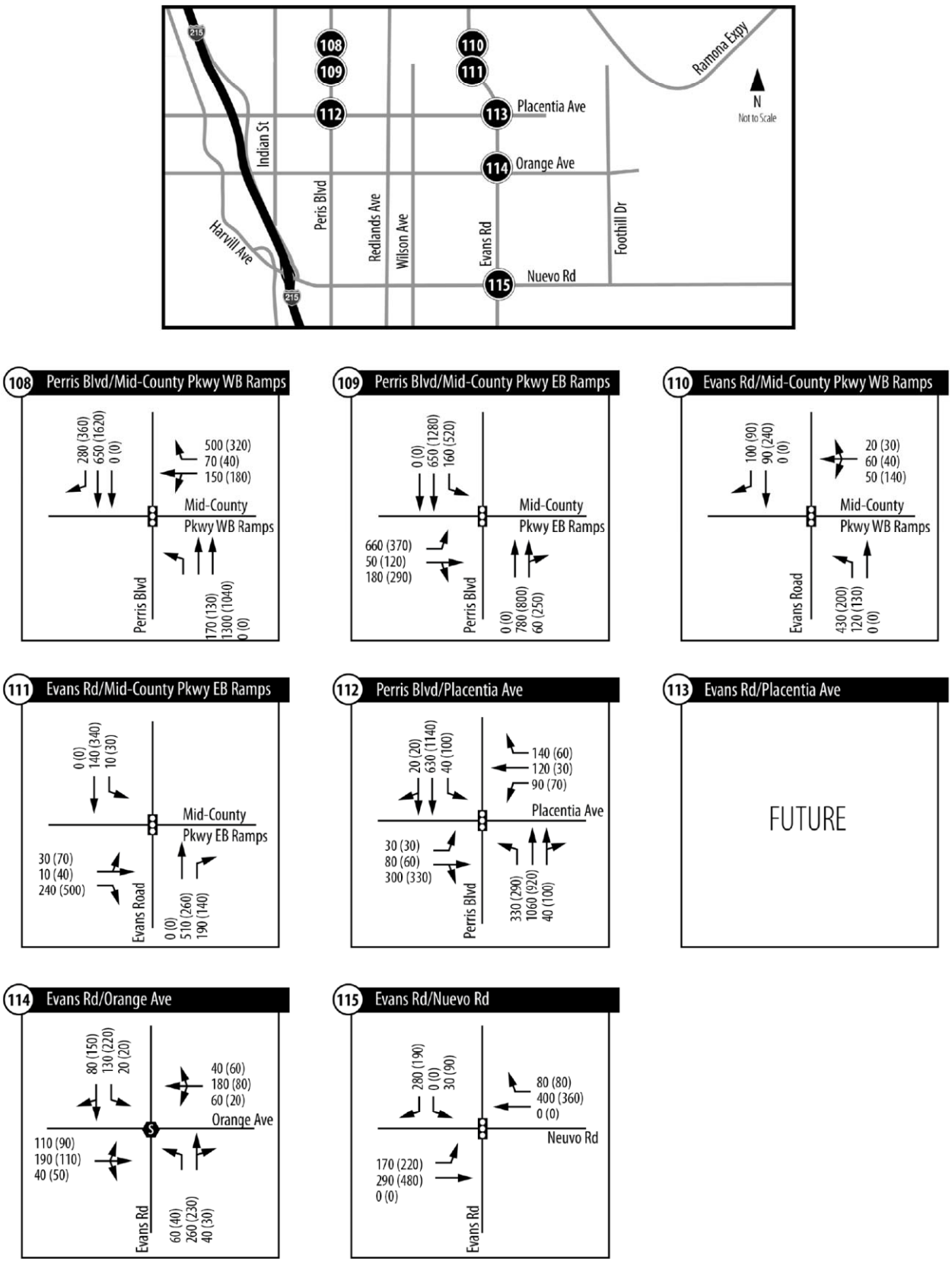
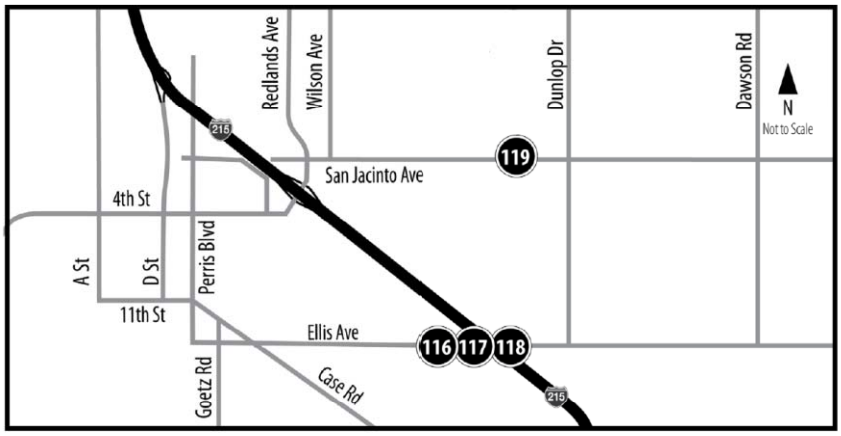


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (M)



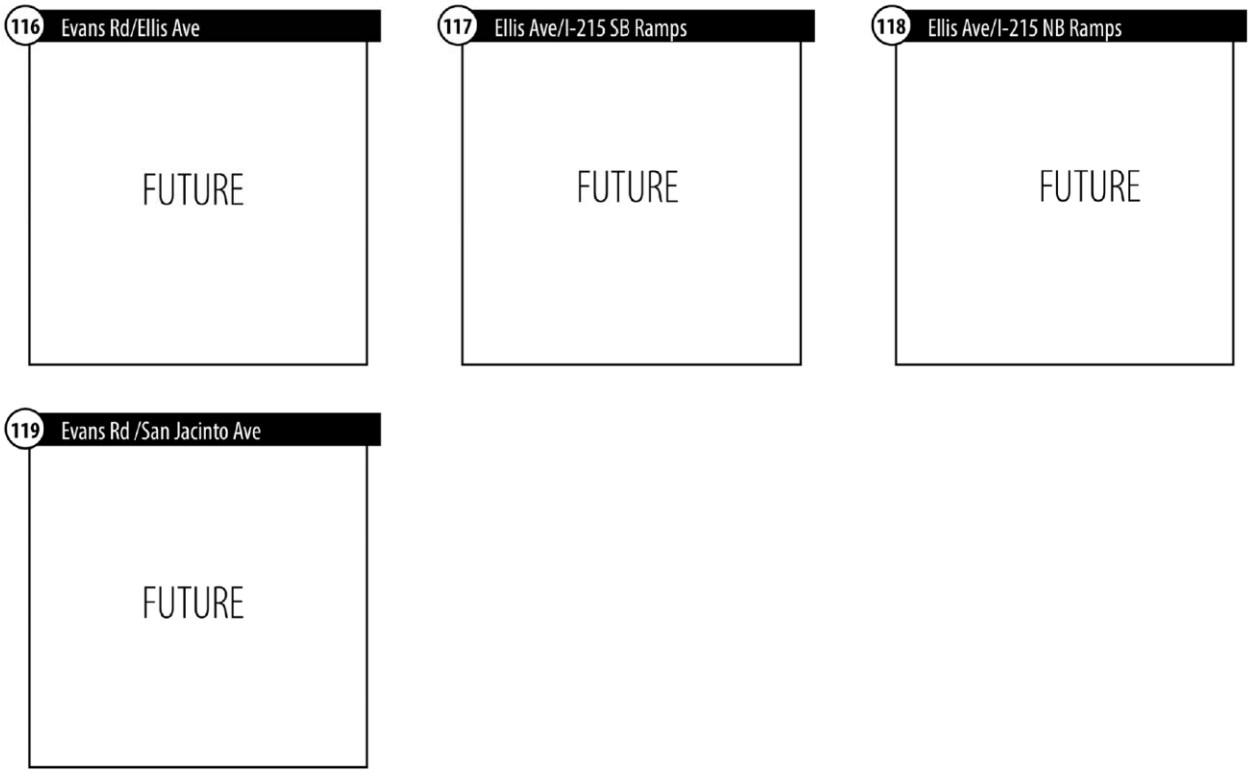


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (N)

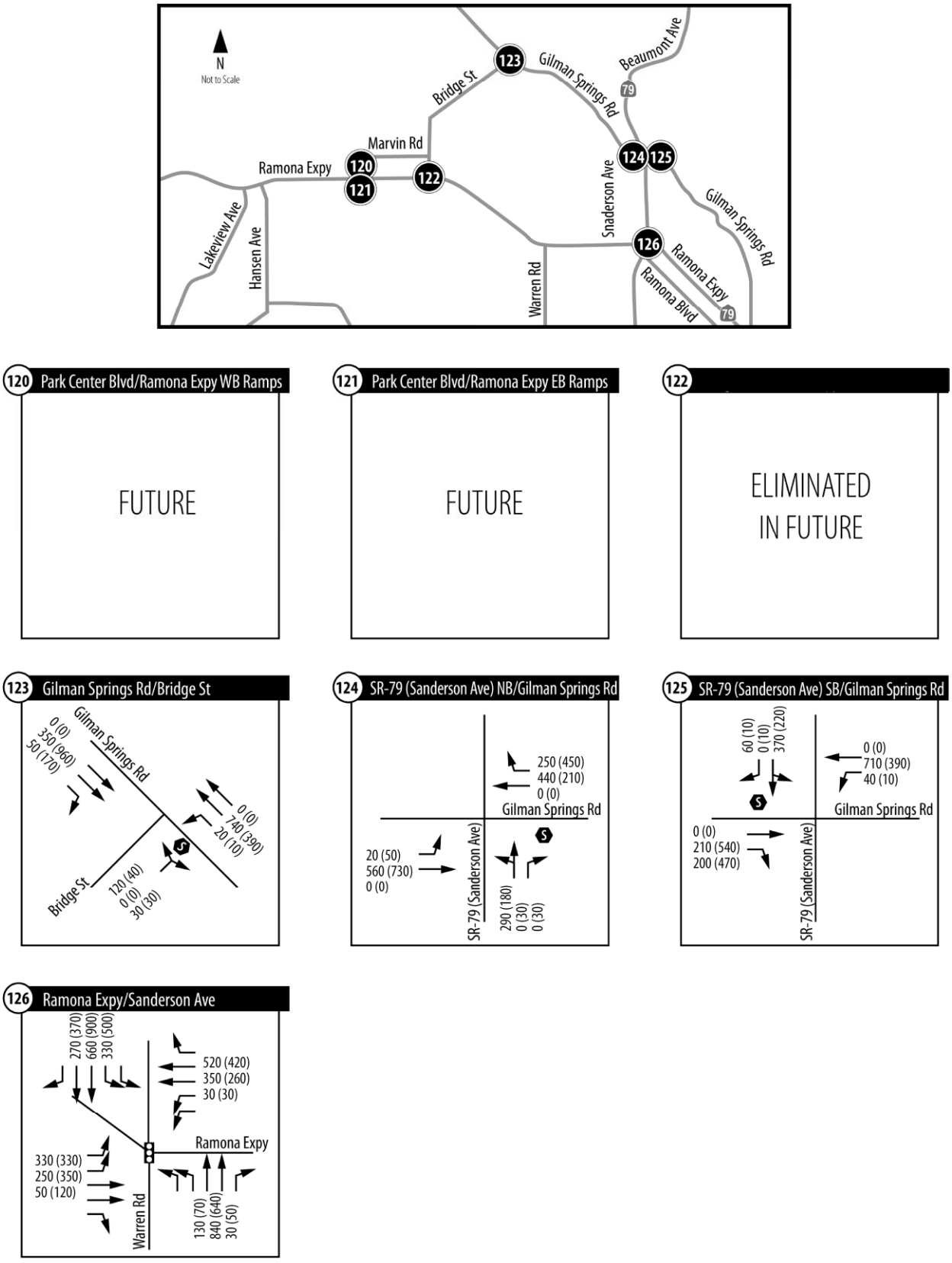
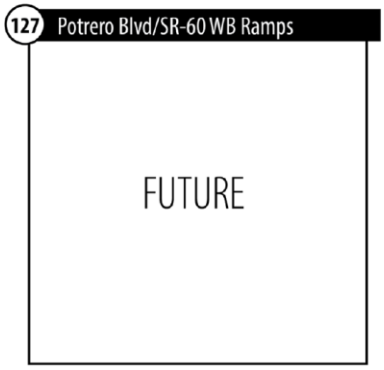
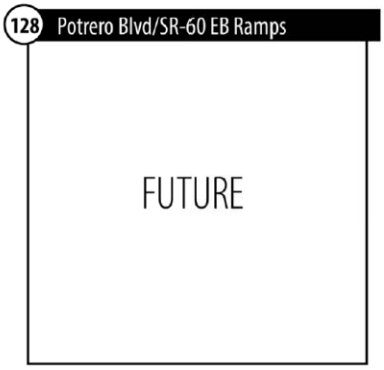
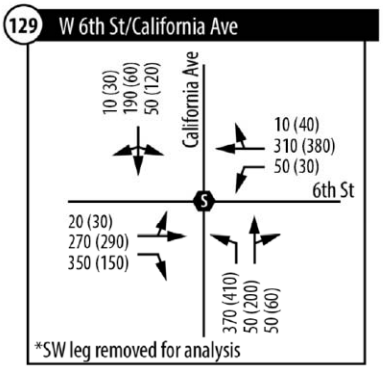


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (O)







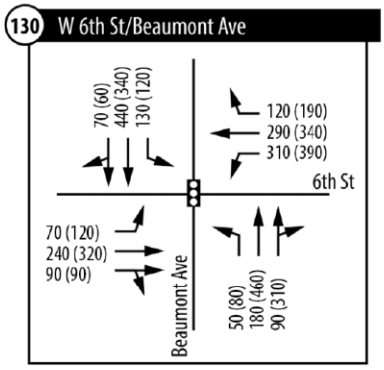


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (P)

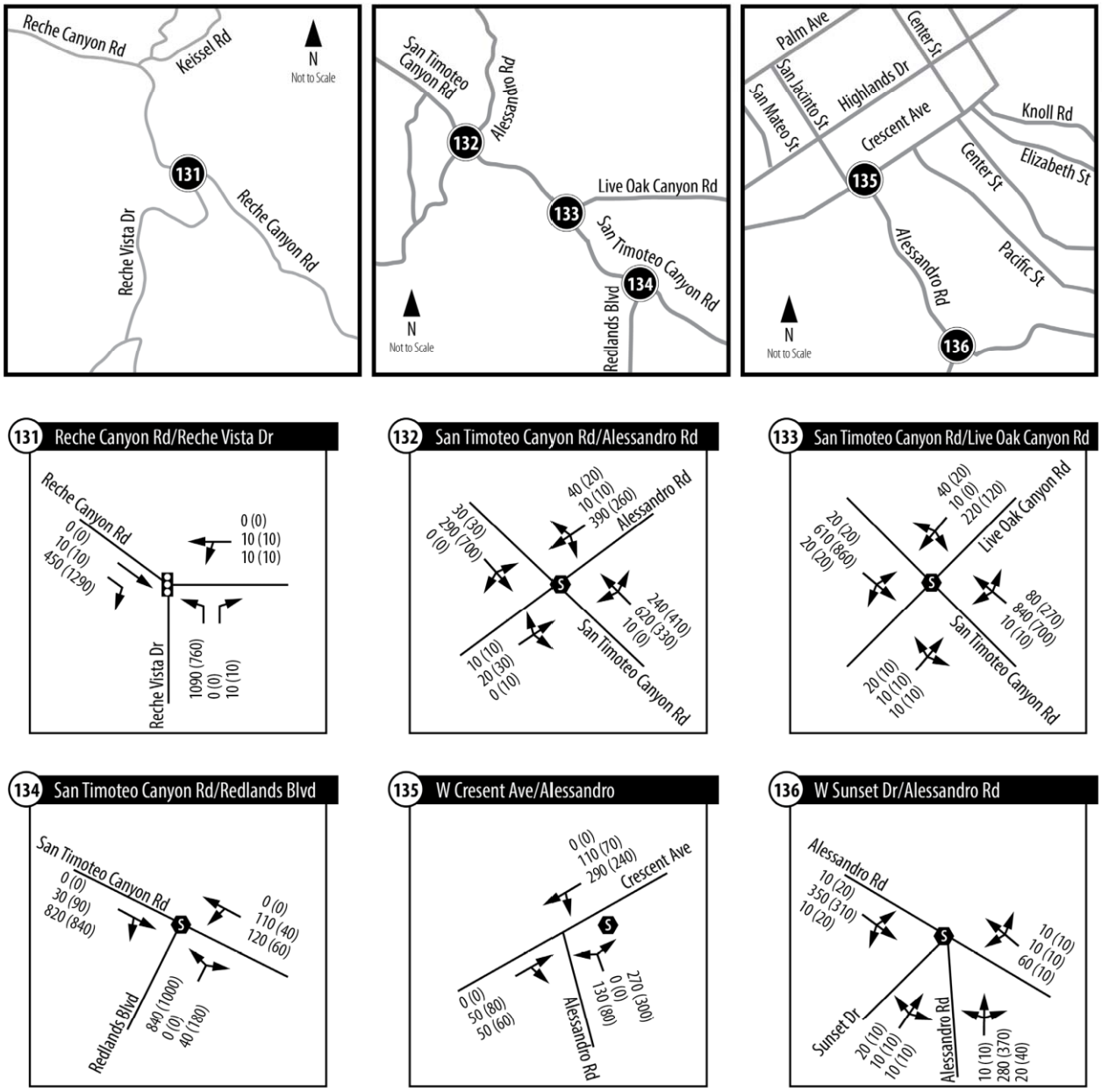


Figure 51: Turning Movement Volumes under 2022 Plus Phase 1 Conditions (Q)

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	9.8	A
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		CSS	12.7	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	10.0	A	RABT	8.0	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	11.5	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	5.8	A	SIGNAL	7.9	A
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	34.9	C	SIGNAL	31.9	C
IN-12	Theodore Street/Ironwood Avenue	D	CSS	13.0	B	CSS	17.9	C
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	8.9	A	SIGNAL	12.6	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	12.2	B	SIGNAL	14.0	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	12.2	B	SIGNAL	2.6	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	10.9	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	9.8	A	SIGNAL	13.6	B
IN-20	Oliver Str/Alessandro Blvd	C	CSS	81.3	**F**	CSS	129.7	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	17.6	B	SIGNAL	17.5	B
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	30.2	**D**	AWS	18.7	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	32.5	C	SIGNAL	37.0	D
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	18.5	B	SIGNAL	18.9	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	13.4	B	AWS	52.8	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	19.8	B	SIGNAL	29.0	C
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	30.9	C	SIGNAL	31.1	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	33.7	C	SIGNAL	34.7	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	21.1	C	SIGNAL	21.6	C
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	29.9	C	SIGNAL	30.2	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	31.8	C	SIGNAL	33.7	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	27.7	C	SIGNAL	28.8	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	9.2	A	CSS	9.3	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	90.2	**F**	SIGNAL	97.5	**F**
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	88.7	**F**	SIGNAL	102.3	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	50.8	D	SIGNAL	55.7	**E**
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	54.0	D	SIGNAL	55.5	**E**
IN-40	Kitching St/Iris Ave	C	SIGNAL	28.9	C	SIGNAL	30.5	C
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	32.8	C	SIGNAL	42.1	D
IN-42	Nason Str/Iris Ave	C	SIGNAL	8.2	A	SIGNAL	7.7	A
IN-43	Oliver Str/Iris Ave	D	SIGNAL	28.9	C	SIGNAL	28.2	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	8.8	A	SIGNAL	9.6	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	> 180.0	**F**	SIGNAL	> 180.0	**F**
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	29.2	C	SIGNAL	41.2	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	32.9	C	SIGNAL	33.6	C
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.5	C	SIGNAL	28.5	C

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	56.1	**E**	SIGNAL	57.6	**E**
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	9.3	A	SIGNAL	9.3	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	31.5	C	SIGNAL	32.3	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	32.2	C	SIGNAL	32.8	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	64.0	**E**	SIGNAL	69.7	**E**
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	30.6	C	SIGNAL	31.1	C
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	30.4	C	SIGNAL	30.7	C
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	32.4	C	SIGNAL	32.7	C
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	41.8	D	SIGNAL	43.3	D
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	24.7	C	SIGNAL	24.4	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	50.5	D	SIGNAL	51.5	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	19.1	B	SIGNAL	19.9	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	148.3	**F**	SIGNAL	154.7	**F**
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	42.5	D	SIGNAL	41.2	D
IN-64	Indian Str/Cactus Ave	C	SIGNAL	28.8	C	SIGNAL	28.9	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	35.7	D	SIGNAL	35.6	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	38.2	D	SIGNAL	36.8	D
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	10.9	B	SIGNAL	11.0	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	25.5	C	SIGNAL	25.7	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	17.3	B	SIGNAL	17.5	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	10.7	B	SIGNAL	10.7	B
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	20.7	C	SIGNAL	20.9	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	30.5	C	SIGNAL	31.8	C
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	10.8	B	SIGNAL	12.7	B
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	31.3	C	SIGNAL	31.2	C
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	19.6	B	SIGNAL	20.7	C
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	27.8	C	SIGNAL	32.6	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	10.9	B	SIGNAL	10.8	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.6	A	SIGNAL	7.1	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	29.8	C	SIGNAL	30.2	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	33.2	C	SIGNAL	36.0	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	34.6	C	SIGNAL	36.7	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	9.2	A	SIGNAL	9.3	A
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	100.0	**F**	SIGNAL	102.2	**F**
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	9.6	A	SIGNAL	9.8	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	27.4	D	AWS	28.0	D
IN-86	Central Ave/Chicago Ave	D	SIGNAL	34.5	C	SIGNAL	39.0	D
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	13.2	B	SIGNAL	13.2	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	36.3	D	SIGNAL	37.6	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	9.4	A	SIGNAL	9.8	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	36.9	D	SIGNAL	37.3	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	22.1	C	SIGNAL	22.1	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	14.3	B	SIGNAL	14.3	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	19.7	B	SIGNAL	21.6	C

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	84.2	**F**	SIGNAL	88.4	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	64.5	**E**	SIGNAL	69.8	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	32.5	C	SIGNAL	32.9	C
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	29.5	C	SIGNAL	29.9	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	30.6	C	SIGNAL	30.9	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	33.3	C	SIGNAL	43.8	D
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	18.6	B	SIGNAL	21.4	C
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	34.3	C	SIGNAL	36.0	D
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	139.7	**F**	SIGNAL	145.0	**F**
IN-104	Perris Blvd/Morgan St	D	SIGNAL	14.6	B	SIGNAL	14.4	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	32.8	C	SIGNAL	32.4	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	17.6	B	SIGNAL	18.4	B
IN-107	Evans Rd/Rider St	C	SIGNAL	34.4	C	SIGNAL	34.7	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	29.2	C	SIGNAL	30.1	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	19.2	B	SIGNAL	30.8	C
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	38.0	D	SIGNAL	37.9	D
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	14.6	B	SIGNAL	14.9	B
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	40.8	D	SIGNAL	41.7	D
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	22.1	C	AWS	22.1	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	32.0	C	SIGNAL	32.0	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		N/A	Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	22.3	C	CSS	25.4	**D**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	35.7	D	SIGNAL	40.6	D
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	31.8	**D**	AWS	40.9	**E**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	15.7	B	SIGNAL	16.0	B
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	13.7	B	SIGNAL	13.2	B
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	> 180.0	**F**	AWS	> 180.0	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	169.8	**F**	AWS	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	> 180.0	**F**	AWS	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	27.7	**D**	CSS	40.9	**E**
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.9	B	AWS	11.9	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	12.8	B
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		CSS	13.9	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	10.3	B	RABT	8.3	A
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		CSS	11.8	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	7.9	A	SIGNAL	10.9	B
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	31.7	C	SIGNAL	26.1	C
IN-12	Theodore Street/Ironwood Avenue	D	CSS	17.8	C	CSS	25.5	D
IN-13	Redlands Blvd/SR-60 WB ramps	D	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	15.9	B	SIGNAL	18.5	B
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	19.2	C	SIGNAL	17.4	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	23.2	C	SIGNAL	2.6	A
IN-17	Quincy Str/Fir Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	N/A	Non-Existent		SIGNAL	17	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	41.7	**E**	SIGNAL	37.9	D
IN-20	Oliver Str/Alessandro Blvd	C	CSS	67.7	**F**	CSS	98.9	**F**
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	18.5	B	SIGNAL	20.8	C
IN-22	Quincy Str/Alessandro Blvd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	14.1	B	AWS	15.8	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	25.7	C	SIGNAL	27.2	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	18.9	B	SIGNAL	19.7	B
IN-26	Quincy Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-27	Redlands Blvd/Cactus Ave	C	AWS	9.5	A	AWS	105.0	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	18.9	B	SIGNAL	44.7	D
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	36.9	D	SIGNAL	38.0	D
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	47.5	D	SIGNAL	49.5	D
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	24.7	C	SIGNAL	25.4	C
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	39.2	D	SIGNAL	39.3	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	21.7	C	SIGNAL	23.7	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	33.4	C	SIGNAL	34.1	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	9.6	A	CSS	9.8	A
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	51.0	D	SIGNAL	54.9	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	37.8	D	SIGNAL	45.5	D
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	53.5	D	SIGNAL	55.9	**E**
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	38.6	D	SIGNAL	38.4	D
IN-40	Kitching St/Iris Ave	C	SIGNAL	23.9	C	SIGNAL	49.8	D
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	68.7	**E**	SIGNAL	89.5	**F**
IN-42	Nason Str/Iris Ave	C	SIGNAL	11.7	B	SIGNAL	12.9	B
IN-43	Oliver Str/Iris Ave	D	SIGNAL	22.0	C	SIGNAL	23.0	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	8.3	A	SIGNAL	8.1	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	> 180.0	**F**	SIGNAL	> 180.0	**F**
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	40.0	D	SIGNAL	47.6	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	15.3	B	SIGNAL	15.7	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	25.7	C	SIGNAL	26.0	C

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	41.9	D	SIGNAL	42.9	D
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	9.2	A	SIGNAL	9.3	A
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	29.5	C	SIGNAL	31.5	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	26.2	C	SIGNAL	26.5	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	52.8	**D**	SIGNAL	56.6	**E**
IN-54	Morrison Str/Cactus Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-55	Nason Str/Cactus Ave	D	SIGNAL	32.8	C	SIGNAL	35.3	D
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	61.7	**E**	SIGNAL	74.8	**E**
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	76.8	**E**	SIGNAL	77.6	**E**
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	48.9	D	SIGNAL	59.7	**E**
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	33.5	C	SIGNAL	39.6	D
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	113.4	**F**	SIGNAL	120.7	**F**
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	15.6	B	SIGNAL	16.3	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	66.6	**E**	SIGNAL	69.9	**E**
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	32.9	C	SIGNAL	33.6	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	22.0	C	SIGNAL	22.1	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	32.7	C	SIGNAL	33.5	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	58.3	**E**	SIGNAL	76.7	**E**
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	8.9	A	SIGNAL	8.6	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	23.3	C	SIGNAL	33.5	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	35.4	D	SIGNAL	42.1	D
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	43.0	D	SIGNAL	76.5	**E**
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	34.7	C	SIGNAL	36.3	D
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	89.5	**F**	SIGNAL	89.5	**F**
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	12.6	B	SIGNAL	40.4	D
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	175.7	**F**	SIGNAL	> 180.0	**F**
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	30.3	C	SIGNAL	52.8	D
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	29.8	C	SIGNAL	31.1	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	11.7	B	SIGNAL	11.9	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	7.4	A	SIGNAL	7.8	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	15.5	B	SIGNAL	15.5	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	48.3	D	SIGNAL	50.0	D
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	48.4	D	SIGNAL	51.7	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	16.7	B	SIGNAL	17.5	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	41.2	D	SIGNAL	42.7	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	5.6	A	SIGNAL	5.7	A
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	15.0	C	AWS	15.6	C
IN-86	Central Ave/Chicago Ave	D	SIGNAL	40.8	D	SIGNAL	43.4	D
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	17.3	B	SIGNAL	17.6	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	51.2	D	SIGNAL	53.0	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	7.1	A	SIGNAL	7.0	A
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	35.4	D	SIGNAL	36.6	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	31.3	C	SIGNAL	31.3	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	13.5	B	SIGNAL	13.6	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	10.1	B	SIGNAL	10.3	B

Table 51: Intersection LOS under 2022 Plus Phase 1 Conditions (continued)

ID	Study Intersection	LOS Standard	2022 No-Project			2022 Plus Phase 1		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	83.7	**F**	SIGNAL	92.9	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	114.7	**F**	SIGNAL	121.2	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	14.9	B	SIGNAL	15.0	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	20.5	C	SIGNAL	20.9	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	30.2	C	SIGNAL	30.2	C
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	25.5	C	SIGNAL	28.4	C
IN-100	Harley Knox Blvd/Evan Rd	-	N/A	Non-Existent		N/A	Non-Existent	
IN-101	Ramona Expy/Indian St	E	SIGNAL	39.7	D	SIGNAL	41.8	D
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	31.2	C	SIGNAL	31.5	C
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	41.6	D	SIGNAL	45.1	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	12.7	B	SIGNAL	12.6	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	29.7	C	SIGNAL	29.0	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	22.7	C	SIGNAL	23.4	C
IN-107	Evans Rd/Rider St	C	SIGNAL	30.3	C	SIGNAL	30.0	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	20.8	C	SIGNAL	21.2	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	32.4	C	SIGNAL	34.6	C
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	32.2	C	SIGNAL	32.1	C
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	25.9	C	SIGNAL	26.3	C
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	60.0	**E**	SIGNAL	61.4	**E**
IN-113	Evans Rd/Placentia Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-114	Evans Rd/Orange Ave	C	AWS	16.9	C	AWS	17.7	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	32.2	C	SIGNAL	32.2	C
IN-116	Evans Rd/Ellis Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-117	Ellis Ave/I-215 SB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-118	Ellis Ave/SR-215 NB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-119	Evans Rd/San Jacinto Ave	-	N/A	Non-Existent		N/A	Non-Existent	
IN-120	Park Center Blvd/Ramona Expy WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-121	Park Center Blvd/Ramona Expy EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		N/A	Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	25.7	**D**	CSS	26.7	**D**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	108.0	**F**	CSS	> 180.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	123.3	**F**	CSS	145.4	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	24.4	C	SIGNAL	24.8	C
IN-127	Potrero Blvd/SR-60 WB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-128	Potrero Blvd/SR-60 EB Ramps	-	N/A	Non-Existent		N/A	Non-Existent	
IN-129	W 6th St/California Ave	C	AWS	55.0	**F**	AWS	64.0	**F**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	25.3	C	SIGNAL	28.0	C
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	6.3	A	SIGNAL	6.2	A
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	125.1	**F**	AWS	> 180.0	**F**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	> 180.0	**F**	AWS	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	> 180.0	**F**	AWS	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	16.2	C	CSS	18.5	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	11.1	B	AWS	11.5	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

- Gilman Springs Rd./Bridge St.
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd.
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd.
- W 6th St./California Ave.
- San Timoteo Canyon Rd./Alessandro Rd.
- San Timoteo Canyon Rd./Live Oak Canyon Rd.
- Redlands Blvd./San Timoteo Canyon Rd.
- W. Crescent Ave./Alessandro Rd.

Exceed Threshold of Significance Under 2022 Plus Phase 1 Conditions (only)

- Redlands Blvd./Cactus Ave.
- Kitching St./Iris Ave.
- Perris Blvd./John F. Kennedy Dr.
- Iris Ave./Perris Blvd.
- Heacock St./Alessandro Blvd.
- Day St./Alessandro Blvd.

The mitigation measures shown in Table 52 are those that would be needed to reduce the impact of the project to a less-than-significant level. The feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 52: 2022 Plus Phase 1 Intersection Impacts and Mitigations

ID	Study Intersection	LOS Standard	Determination of Impact					2022 Plus Phase 1 & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour				AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Traffic Control	Delay	LOS	Delay	LOS	
IN-10	Redlands Blvd/Locust Ave	C	F	F	F	F	Yes	SIGNAL	12.2	B	18.1	B	Signalize. Add EB and WB LT pockets. Add 1 SB TH lane.
IN-13	Redlands Blvd/SR-60 WB ramps	D	F	F	F	F	Yes	SIGNAL	19.2	B	14.4	B	Signalize. Add WB LT pocket.
IN-20	Oliver Str/Alessandro Blvd	C	F	F	F	F	Yes	AWS	16.8	C	16.3	C	Change to AWS.
IN-27	Redlands Blvd/Cactus Ave	C	B	F	A	F	Yes	SIGNAL	13.4	B	15.4	B	Signalize. Add 1 EB LT and 1 WB LT lanes.
IN-36	Moreno Beach Drive & Ironwood Avenue	D	F	F	D	D	Yes	SIGNAL	46.1	D	42.5	D	Change N/S from split to protected LT phasing. Add NB and SB LT pockets.
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	F	F	D	D	Yes	SIGNAL	40.7	D	33.0	C	Add 1 SB LT lane.
IN-38	Perris Blvd/John F. Kennedy Dr	D	D	E	D	E	Yes	SIGNAL	52.1	D	48.5	D	Add 1 WB LT lane.
IN-39	Iris Ave/Perris Blvd	D	D	E	D	D	Yes	SIGNAL	40.5	D	37.4	D	Add 1 WB LT lane.
IN-40	Kitching St/Iris Ave	C	C	C	C	D	Yes	SIGNAL	26.3	C	24.0	C	Add 1 WB LT lane.
IN-41	Lasselle Str/Iris Ave	D	C	D	E	F	Yes	SIGNAL	28.3	C	45.0	D	Add 1 WB LT lane (resulting 3 turn lanes), and 1 EB RT.
IN-45	Krameria Ave/Perris Blvd	D	F	F	F	F	Yes	SIGNAL	40.2	D	44.1	D	Add 1 NB LT and 1 NB RT lane, change SB from 1 LT, 1 TH, 1 RT to 1 LT, 2 THs and 1 RT, EB change from 1 lane to 1 LT and 1 TH and 1 RT lane. Change signal phasing for E/W from split phasing to include protected LT phases.
IN-49	Lasselle Str/Alessandro Blvd	D	E	E	D	D	Yes	SIGNAL	36.5	D	30.2	C	Add 1 NB LT lane.
IN-53	Lasselle Str/Cactus Ave	C	E	E	D	E	Yes	SIGNAL	40.0	D	34.7	C	Add 1 EB RT, 1 WB LT, 1 WB RT, 1 EB RT. 1 NB LT. 2 NB RTs, 1 SB LT. Add overlap phase for EB and NB RT.
IN-56	Frederick Str/Alessandro Blvd	D	C	C	E	E	Yes	SIGNAL	29.8	C	56.0	D	Add 1 EB LT lane . Reduce the median width and the width of EB RT lane.
IN-57	Graham Str/Alessandro Blvd	D	C	C	E	E	Yes	SIGNAL	32.4	C	55.1	D	Add 1 NB LT, 1 NB RT, and 1 WB RT lanes.
IN-58	Heacock Str/Alessandro Blvd	D	D	D	D	E	Yes	SIGNAL	39.2	D	48.5	D	Add 1 SB LT lane.
IN-60	Perris Blvd/Alessandro Blvd	D	D	D	F	F	Yes	SIGNAL	35.5	D	49.9	D	Add 1 NB LT, 1 SB LT, 1 WB LT,and 1 EB LT.
IN-62	Graham Str/Cactus Ave	D	F	F	E	E	Yes	SIGNAL	34.7	C	44.0	D	Add 1 EB RT and 1 NB LT lane.
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	D	D	E	E	Yes	SIGNAL	38.8	D	46.8	D	Add SB RT overlap.
IN-70	Day Str/Alessandro Blvd	D	B	B	D	E	Yes	SIGNAL	10.3	B	32.3	C	Add 1 EB LT lane.

Indicates that the LOS exceeds the target level

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout

"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively

Table 52: 2022 Plus Phase 1 Intersection Impacts and Mitigations (continued)

ID	Study Intersection	LOS Standard	Determination of Impact					2022 Plus Phase 1 & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour				AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Traffic Control	Delay	LOS	Delay	LOS	
IN-74	Elsworth Str/Cactus Ave	D	C	C	F	F	Yes	SIGNAL	27.2	C	78.9	E	Widen NB approach and change NB lane geometry from: 1 LT and 1 shared LT/TH/RT lanes to 3 LTs and 1 TH and 1 RT. Add 1 EB and WB TH lanes (to become 4 TH lanes).
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	F	F	D	D	Yes	SIGNAL	52.8	D	42.7	D	Add NB RT lane. NOTE: not an impact in 2035 due to redistributed volumes.
IN-94	Arlington Ave/Victoria Ave	D	F	F	F	F	Yes	SIGNAL	49.5	D	51.7	D	Add WB LT lane. Add WB RT lane. Adjust timings. NOTE: Mitigation measures are different than those suggeted for 2035. The projected SB LT volume is higher in 2022 than in 2035.
IN-95	Alessandro Blvd/Chicago Ave	D	E	E	F	F	Yes	SIGNAL	33.2	C	54.2	D	Add EB TH lane. Add WB LT lane. Add WB TH lane. Add NB LT lane. Add NB TH lane. Reconfigure SB approach to 1 LT, 3 THs and 1 shared TH/RT.
IN-103	Ramona Expy/Evans Rd	E	F	F	D	D	Yes	SIGNAL	63.1	E	41.1	D	Add 3rd WB TH lane. Already has 3 receiving lanes. Add 2nd SBR.
IN-112	Placentia Ave/Perris Blvd	D	D	D	E	E	Yes	SIGNAL	24.8	C	39.9	D	Add NB RT. Add EB RT and lengthen EB LT by approximately 100'.
IN-123	Gilman Springs Rd/Bridge Str	C	C	D	D	D	Yes	SIGNAL	14.5	B	17.1	C	Add a TWTL along the SB approach to offer a weave zone for EB LT.
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	F	F	F	F	Yes	SIGNAL	9.0	A	7.0	A	Signalize.
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	F	F	F	F	Yes	SIGNAL	12.8	B	6.5	A	Signalize.
IN-129	W 6th St/California Ave	C	D	E	F	F	Yes	SIGNAL	19.7	B	22.7	C	Signalize.
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	F	F	F	F	Yes	SIGNAL	37.8	D	15.9	B	Signalize. Add 1 WB RT. This intersection has planned widening by 2035, which would replace the turn lane.
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	F	F	F	F	Yes	SIGNAL	20.7	C	19.5	B	Signalize.
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	F	F	F	F	Yes	SIGNAL	12.5	B	16.1	C	Signalize. Add 1 EB RT. Also add EB RT overlap phase.
IN-135	W Crescent Ave/Alessandro Rd	C	D	E	C	C	Yes	SIGNAL	13.0	B	9.3	A	Signalize.

Indicates that the LOS exceeds the target level

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout
"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively

C. FREEWAY SEGMENT LOS, IMPACTS, AND MITIGATIONS

Freeway Mainline Basic Sections

Table 53 compares the LOS for freeway mainline sections for the 2022 No-Project and 2022 Plus Phase 1 scenarios. Details of the LOS calculations for freeways under 2022 Plus Build-out Conditions can be found in Appendix M. Table 54 identifies 33 basic freeway sections where the project has a significant impact and identifies measures that would reduce project impacts to a less-than-significant level. Twenty-nine of these 33 sections would operate worse than the target LOS under both 2022 No-Project and Plus Phase 1 conditions, namely:

Northbound or Eastbound Sections

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Central Ave. to Mountain Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Heacock St. to Perris Blvd.
- SR-91 from Pierce St. to Magnolia Ave.
- I-215 from Columbia Ave. to Center St.
- I-215 from Iowa Ave./La Cadena Dr to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

Southbound or Westbound Sections

- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Valley Way to Rubidoux Blvd.

- SR-60 from Market St. to Main St.
- SR-60 from Main St. to SR-91
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-91 from McKinley St. to Pierce St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- I-215 from Columbia Ave. to Center St.
- I-215 from Center St. to Iowa Ave./La Cadena Dr.
- I-215 from Iowa Ave./La Cadena Dr. to Barton Rd.
- I-215 from Barton Rd. to Mt. Vernon Ave.

There were four segments that would be deficient only under Plus Phase 1 conditions, namely:

Northbound or Eastbound Sections

- SR-91 from Central Ave. to 14th St.

Southbound or Westbound Sections

- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Heacock St. to Perris Blvd.

As shown in Table 54, three of these sections would operate at LOS "F" under 2022 No-Project conditions and would continue to do so under 2022 Plus Phase 1 conditions. Adding a mixed-flow lane would improve these sections to LOS "E" under 2022 Plus Phase 1 conditions. While this would not be sufficient to achieve the target LOS it would nevertheless be an improvement over 2022 No-Project conditions and so would reduce the impact of the WLC project to a less-than-significant level.

Table 53: 2022 Plus Phase 1 Freeway Mainline Level of Service

ID	Freeway	Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	7,210	30.5	D	7,830	35.1	E	7,400	32.0	D	7,810	35.3	E
F-3	SR-60	Ramona Ave to Central Ave	6,850	28.2	D	9,380	51.4	F	7,010	29.4	D	9,340	50.8	F
F-4	SR-60	Central Ave to Mountain Ave	7,590	33.0	D	9,350	51.0	F	7,750	34.5	D	9,320	51.2	F
F-5	SR-60	Mountain Ave to Euclid Ave	7,520	32.5	D	6,690	27.5	D	7,690	34.0	D	6,640	27.4	D
F-6	SR-60	Euclid Ave to Grove Ave	8,990	45.8	F	9,280	50.0	F	9,190	48.8	F	9,240	50.1	F
F-7	SR-60	Grove Ave to Vineyard Ave	8,170	37.6	E	9,530	53.6	F	8,370	39.7	E	9,480	52.8	F
F-8	SR-60	Vineyard Ave to Archibald Ave	8,080	36.5	E	9,470	52.7	F	8,280	38.6	E	9,410	52.5	F
F-9	SR-60	Archibald Ave to Haven Ave	7,590	32.8	D	6,630	27.2	D	7,810	34.7	D	6,560	27.0	D
F-10	SR-60	Haven Ave to Milliken Ave	7,400	23.2	C	7,040	22.1	C	7,630	24.2	C	6,950	21.9	C
F-11	SR-60	Milliken Ave to I-15	5,280	20.3	C	4,530	17.4	B	5,500	21.5	C	4,440	17.2	B
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,580	17.6	B	3,440	13.3	B	4,840	18.8	C	3,380	13.3	B
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	5,070	19.6	C	4,460	17.2	B	5,300	20.8	C	4,380	17.2	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,600	17.7	B	3,560	13.8	B	4,850	19.0	C	3,480	13.7	B
F-15	SR-60	Pedley Rd to Pyrite St	4,620	17.8	B	3,710	14.4	B	4,880	19.1	C	3,640	14.3	B
F-16	SR-60	Pyrite St to Valley Way	5,190	20.1	C	3,990	15.5	B	5,460	21.5	C	3,910	15.3	B
F-17	SR-60	Valley Way to Rubidoux Blvd	6,280	39.4	E	4,530	24.1	C	6,530	43.6	E	4,450	24.0	C
F-18	SR-60	Rubidoux Blvd to Market St	6,920	48.7	F	4,950	27.2	D	7,180	54.3	F	4,860	26.9	D
F-19	SR-60	Market St to Main St	6,450	41.6	E	7,260	56.8	F	6,810	48.0	F	7,230	56.9	F
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	8,440	41.5	E	9,140	53.5	F	8,980	53.0	F	9,210	59.2	F
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	6,450	25.7	C	7,270	30.8	D	6,900	29.0	D	7,320	31.7	D
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,520	29.2	D	4,200	39.3	E	3,930	37.2	E	4,170	41.0	E
F-30	SR-60	Heacock St to Perris Blvd	3,160	25.0	C	4,050	36.7	E	3,780	35.0	E	4,070	39.1	E
F-31	SR-60	Perris Blvd to Nason St	2,590	19.8	C	3,070	24.3	C	3,270	28.1	D	3,140	26.3	D
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,910	14.5	B	2,370	18.0	C	2,780	23.4	C	2,540	20.7	C
F-34	SR-60	Redlands Blvd to Theodore St	2,460	18.8	C	3,240	25.8	C	3,300	28.9	D	3,350	28.7	D
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	2,310	19.2	C	2,770	23.6	C	2,240	18.6	C	2,780	23.6	C
F-37	SR-60	Jack Rabbit Trail to I-10	2,070	15.8	B	2,820	21.8	C	2,040	15.7	B	2,850	22.3	C
F-39	SR-91	I-15 to McKinley St	7,190	22.3	C	10,400	38.6	E	7,330	22.9	C	10,350	38.6	E
F-40	SR-91	McKinley St to Pierce St	6,500	26.1	D	5,950	23.5	C	6,620	26.8	D	5,900	23.4	C
F-41	SR-91	Pierce St to Magnolia Ave	5,970	35.2	E	5,410	30.5	D	6,070	36.6	E	5,350	30.2	D
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	5,490	30.9	D	5,230	29.0	D	5,600	32.2	D	5,200	29.0	D
F-44	SR-91	Tyler St to Van Buren Blvd	6,600	26.6	D	5,980	23.6	C	6,700	27.4	D	5,950	23.6	C

Table 53: 2022 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	6,700	27.2	D	5,250	20.3	C	6,780	27.8	D	5,220	20.3	C
F-46	SR-91	Adam St to Madison St	7,310	31.4	D	4,970	19.4	C	7,380	32.1	D	4,940	19.3	C
F-47	SR-91	Madison St to Arlington Ave	6,710	27.6	D	4,970	19.4	C	6,770	28.2	D	4,950	19.4	C
F-49	SR-91	Central Ave to 14th St	5,910	34.9	D	5,070	27.7	D	5,940	35.5	E	5,070	27.7	D
F-51	SR-91	University Ave to Spruce St	8,270	26.6	D	7,700	24.2	C	8,350	27.1	D	7,700	24.4	C
F-66	I-215	Scott Rd to Newport Rd	2,850	14.5	B	4,330	22.4	C	2,830	14.5	B	4,330	22.4	C
F-68	I-215	Newport Rd to McCall Blvd	2,100	10.8	A	3,140	15.9	B	2,090	10.7	A	3,120	15.8	B
F-69	I-215	McCall Blvd to Ethanac Rd	2,750	14.0	B	4,380	22.7	C	2,730	14.0	B	4,360	22.7	C
F-70	I-215	Ethanac Rd to SR-74	4,200	21.7	C	4,100	21.0	C	4,170	21.6	C	4,080	21.0	C
F-71	I-215	SR-74 to Redlands Ave	3,490	17.7	B	4,800	25.4	C	3,470	17.7	B	4,780	25.5	C
F-74	I-215	Columbia Ave to Center St	6,090	36.8	E	6,030	36.2	E	6,060	36.5	E	6,060	36.5	E
F-75	I-215	Center St to La Cadena Dr	5,830	34.1	D	5,800	33.8	D	5,810	33.9	D	5,840	34.2	D
F-76	I-215	La Cadena Dr to Barton Rd	5,690	32.7	D	6,130	37.3	E	5,680	32.7	D	6,190	38.0	E
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,980	35.6	E	6,550	42.5	E	5,960	35.4	E	6,610	43.3	E
F-78	I-215	Mt. Vernon Ave to I-10	5,770	22.5	C	6,660	27.0	D	5,740	22.4	C	6,750	27.5	D
F-80	I-215	Auto Plaza Dr to Mill St	4,490	17.2	B	5,500	21.2	C	4,440	17.0	B	5,530	21.4	C
F-83	I-215	Baseline Rd to Highland Ave	3,030	15.4	B	4,060	20.8	C	3,020	15.4	B	4,110	21.2	C
F-52	I-10	SR-60 to Beaumont Ave	4,390	16.8	B	6,080	24.1	C	4,360	16.8	B	6,080	24.1	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	4,450	17.1	B	6,240	24.9	C	4,430	17.0	B	6,260	25.0	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	4,640	17.8	B	6,480	26.2	D	4,620	17.8	B	6,510	26.3	D
F-55	I-10	Highland Springs Ave to Sunset Ave	4,560	17.5	B	6,210	24.8	C	4,530	17.4	B	6,240	24.9	C
F-56	I-10	Sunset Ave to 22nd St	4,470	17.2	B	5,960	23.5	C	4,430	17.0	B	5,990	23.7	C
F-57	I-10	22nd St to 8th St	4,380	16.8	B	5,800	22.8	C	4,340	16.7	B	5,840	23.0	C
F-58	I-10	8th St to Hargrave St	4,370	16.8	B	5,730	22.4	C	4,330	16.6	B	5,770	22.6	C
F-59	I-10	Hargrave St to Fields Rd	4,100	15.8	B	5,350	20.8	C	4,040	15.5	B	5,390	20.9	C
F-60	I-10	Fields Rd to Morongo Trail	3,770	14.5	B	5,080	19.6	C	3,720	14.3	B	5,130	19.8	C
F-61	I-10	Morongo Trail to Main St	3,410	13.1	B	4,670	18.0	B	3,360	12.9	B	4,710	18.1	C
F-62	I-10	Main St to Haugen-Lehmann Way	3,280	12.6	B	4,720	18.1	C	3,230	12.4	B	4,770	18.3	C
F-64	I-10	SR-111 to Tipton Rd	2,950	11.3	B	4,140	15.9	B	2,900	11.1	B	4,180	16.1	B
F-65	I-10	Tipton Rd to SR-62	2,810	10.8	A	4,170	16.0	B	2,780	10.7	A	4,220	16.2	B

Indicates that the LOS exceeds the target level

Table 53: 2022 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,770	43.3	E	7,150	30.1	D	8,690	43.0	E	7,260	31.0	D
F-3	SR-60	Ramona Ave to Central Ave	8,290	38.7	E	6,750	27.7	D	8,210	38.3	E	6,860	28.5	D
F-4	SR-60	Central Ave to Mountain Ave	6,340	25.4	C	6,990	29.1	D	6,260	25.2	C	7,100	30.0	D
F-5	SR-60	Mountain Ave to Euclid Ave	6,260	25.0	C	7,440	32.0	D	6,190	24.8	C	7,560	33.1	D
F-6	SR-60	Euclid Ave to Grove Ave	6,470	26.1	D	7,310	31.1	D	6,390	25.9	C	7,420	32.1	D
F-7	SR-60	Grove Ave to Vineyard Ave	6,330	25.4	C	7,920	35.5	E	6,250	25.1	C	8,060	37.0	E
F-8	SR-60	Vineyard Ave to Archibald Ave	7,670	33.6	D	7,550	32.8	D	7,580	33.2	D	7,680	34.0	D
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	5,850	18.0	B	7,110	22.3	C	5,740	17.7	B	7,270	23.0	C
F-11	SR-60	Milliken Ave to I-15	5,550	21.6	C	7,050	29.2	D	5,430	21.2	C	7,230	30.6	D
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,490	13.7	B	5,850	17.9	B	4,360	13.4	B	6,080	18.7	C
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,220	16.2	B	5,830	22.8	C	4,110	15.9	B	6,050	24.0	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,240	16.3	B	5,850	22.9	C	4,130	15.9	B	6,130	24.4	C
F-15	SR-60	Pedley Rd to Pyrite St	3,290	12.6	B	5,010	19.2	C	3,150	12.2	B	5,260	20.5	C
F-16	SR-60	Pyrite St to Valley Way	2,740	10.6	A	4,510	17.2	B	2,620	10.2	A	4,740	18.3	C
F-17	SR-60	Valley Way to Rubidoux Blvd	4,630	24.4	C	6,530	42.2	E	4,510	23.9	C	6,810	46.9	F
F-18	SR-60	Rubidoux Blvd to Market St	3,630	18.6	C	5,660	32.5	D	3,520	18.2	C	5,940	35.5	E
F-19	SR-60	Market St to Main St	5,860	34.4	D	6,820	46.5	F	5,680	32.9	D	7,090	51.8	F
F-20	SR-60	Main to SR-91	5,450	30.6	D	6,610	42.9	E	5,290	29.7	D	6,880	48.0	F
F-24	SR-60	Martin Luther King Blvd to Central Ave	7,060	23.7	C	7,680	25.5	C	7,000	24.3	C	8,050	28.7	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,390	31.9	D	8,510	40.3	E	7,310	31.8	D	8,900	45.8	F
F-27	SR-60	I-215 to Day St	7,250	54.3	F	3,880	20.0	C	7,210	55.7	F	4,210	22.8	C
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,460	28.5	D	3,860	34.0	D	3,460	29.5	D	4,320	45.2	F
F-30	SR-60	Heacock St to Perris Blvd	3,300	26.6	D	3,360	27.5	D	3,370	28.4	D	3,900	36.7	E
F-31	SR-60	Perris Blvd to Nason St	2,790	21.6	C	2,550	19.6	C	2,900	23.4	C	3,210	27.4	D
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	1,810	13.8	B	1,750	13.4	B	2,060	16.5	B	2,620	21.7	C
F-34	SR-60	Redlands Blvd to Theodore St	2,280	17.3	B	2,200	16.8	B	2,580	20.7	C	2,920	24.2	C
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	2,180	18.0	C	1,850	15.3	B	2,250	20.6	C	1,770	14.6	B
F-37	SR-60	Jack Rabbit Trail to I-10	2,190	16.7	B	1,690	12.9	B	2,290	17.6	B	1,660	12.9	B
F-39	SR-91	I-15 to McKinley St	7,280	30.9	D	7,330	31.0	D	7,230	30.8	D	7,400	31.5	D
F-40	SR-91	McKinley St to Pierce St	5,440	31.0	D	6,330	39.6	E	5,400	30.6	D	6,400	40.9	E
F-41	SR-91	Pierce St to Magnolia Ave	5,210	29.0	D	8,080	77.6	F	5,180	28.8	D	8,150	80.4	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	5,450	31.1	D	8,040	76.1	F	5,410	30.7	D	8,120	80.9	F
F-43	SR-91	La Sierra Ave to Tyler St	4,800	25.9	C	5,980	35.6	E	4,760	25.8	C	6,050	36.7	E
F-44	SR-91	Tyler St to Van Buren Blvd	6,170	24.7	C	7,420	31.6	D	6,170	24.7	C	7,490	32.3	D

Table 53: 2022 Plus Phase 1 Freeway Mainline Level of Service (Continued)

ID	Freeway	Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	5,810	22.9	C	7,160	29.9	D	5,810	22.9	C	7,230	30.6	D
F-46	SR-91	Adam St to Madison St	5,420	21.2	C	6,210	24.5	C	5,420	21.2	C	6,280	25.0	C
F-47	SR-91	Madison St to Arlington Ave	4,780	25.8	C	5,550	31.2	D	4,790	26.0	D	5,610	32.0	D
F-49	SR-91	Central Ave to 14th St	4,340	16.8	B	4,530	17.3	B	4,310	16.7	B	4,570	17.6	B
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Newport Rd	3,670	18.6	C	2,500	12.7	B	3,640	18.5	C	2,520	12.8	B
F-68	I-215	Newport Rd to McCall Blvd	3,820	19.6	C	3,520	18.0	B	3,790	19.4	C	3,520	18.0	B
F-69	I-215	McCall Blvd to Ethanac Rd	4,380	22.8	C	2,950	15.0	B	4,360	22.7	C	2,940	15.0	B
F-70	I-215	Ethanac Rd to SR-74	4,110	21.2	C	4,250	21.9	C	4,100	21.1	C	4,250	22.0	C
F-71	I-215	SR-74 to Redlands Ave	5,730	33.1	D	3,860	19.7	C	5,730	33.1	D	3,870	19.8	C
F-74	I-215	Columbia Ave to Center St	6,390	40.0	E	5,330	29.6	D	6,420	40.8	E	5,310	29.4	D
F-75	I-215	Center St to La Cadena Dr	6,880	46.9	F	5,560	31.6	D	6,920	48.1	F	5,540	31.4	D
F-76	I-215	La Cadena Dr to Barton Rd	6,700	44.2	E	5,570	31.7	D	6,750	45.4	F	5,550	31.5	D
F-77	I-215	Barton Rd to Mt. Vernon Ave	6,720	44.4	E	5,610	32.0	D	6,770	45.7	F	5,580	31.7	D
F-78	I-215	Mt. Vernon Ave to I-10	7,080	29.2	D	5,890	23.1	C	7,150	29.9	D	5,870	23.0	C
F-80	I-215	Auto Plaza Dr to Mill St	4,790	18.2	C	4,140	15.8	B	4,810	18.4	C	4,120	15.8	B
F-83	I-215	Baseline Rd to Highland Ave	5,280	29.0	D	4,700	24.9	C	5,330	29.6	D	4,700	24.9	C
F-52	I-10	SR-60 to Beaumont Ave	5,610	21.9	C	5,370	20.7	C	5,620	21.9	C	5,380	20.9	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	5,470	21.3	C	5,270	20.3	C	5,510	21.5	C	5,260	20.4	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	5,920	23.3	C	5,480	21.2	C	5,960	23.5	C	5,430	21.1	C
F-55	I-10	Highland Springs Ave to Sunset Ave	5,690	22.3	C	5,200	20.1	C	5,740	22.6	C	5,180	20.0	C
F-56	I-10	Sunset Ave to 22nd St	5,450	21.2	C	5,090	19.7	C	5,490	21.5	C	5,080	19.6	C
F-57	I-10	22nd St to 8th St	5,320	20.6	C	5,110	19.6	C	5,370	20.9	C	5,110	19.7	C
F-58	I-10	8th St to Hargrave St	5,250	20.3	C	5,250	20.2	C	5,300	20.6	C	5,230	20.2	C
F-59	I-10	Hargrave St to Fields Rd	4,810	18.5	C	5,020	19.3	C	4,860	18.8	C	4,980	19.2	C
F-60	I-10	Fields Rd to Morongo Trail	4,600	17.7	B	4,830	18.6	C	4,650	18.0	B	4,790	18.4	C
F-61	I-10	Morongo Trail to Main St	4,110	15.8	B	4,240	16.3	B	4,170	16.1	B	4,210	16.2	B
F-62	I-10	Main St to Haugen-Lehmann Way	4,230	16.3	B	4,300	16.5	B	4,290	16.6	B	4,270	16.4	B
F-64	I-10	SR-111 to Tipton Rd	3,680	14.1	B	3,760	14.4	B	3,740	14.4	B	3,750	14.4	B
F-65	I-10	Tipton Rd to SR-62	3,700	14.2	B	3,770	14.4	B	3,760	14.5	B	3,750	14.4	B

Indicates that the LOS exceeds the target level

Table 54: 2022 Plus Phase 1 Freeway Mainline Impacts and Mitigations

ID	Freeway	Segment	Northbound / Eastbound											
			Determination of Impact					2022 Plus Phase 1 & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS		Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-2	SR-60	Reservoir St to Ramona Ave	D	D	E	E	Yes	7,400	23.5	C	7,810	25.3	C	Add 1 mixed flow lane
F-4	SR-60	Central Ave to Mountain Ave	D	D	F	F	Yes	7,750	24.9	C	9,320	32.6	D	Add 1 mixed flow lane
F-6	SR-60	Euclid Ave to Grove Ave	F	F	F	F	Yes	9,190	31.6	D	9,240	32.2	D	Add 1 mixed flow lane
F-7	SR-60	Grove Ave to Vineyard Ave	E	E	F	F	Yes	8,370	27.6	D	9,480	33.3	D	Add 1 mixed flow lane
F-8	SR-60	Vineyard Ave to Archibald Ave	E	E	F	F	Yes	8,280	27.0	D	9,410	33.1	D	Add 1 mixed flow lane
F-17	SR-60	Valley Way to Rubidoux Blvd	E	E	C	C	Yes	6,530	26.8	D	4,450	17.4	B	Add 1 mixed flow lane
F-18	SR-60	Rubidoux Blvd to Market St	F	F	D	D	Yes	7,180	30.5	D	4,860	19.1	C	Add 1 mixed flow lane
F-19	SR-60	Market St to Main St	E	F	F	F	Yes	6,810	28.4	D	7,230	31.3	D	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	E	F	F	F	Yes	8,980	33.3	D	9,210	35.6	E	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd/Frederick St to	D	E	E	E	Yes	3,930	21.1	C	4,170	22.3	C	Add 1 mixed flow lane
F-30	SR-60	Heacock St to Perris Blvd	C	E	E	E	Yes	3,780	20.3	C	4,070	21.7	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	E	E	D	D	Yes	6,070	23.9	C	5,350	20.9	C	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	D	E	D	D	Yes	5,940	23.4	C	5,070	19.6	C	Add 1 mixed flow lane
F-74	I-215	Columbia Ave to Center St	E	E	E	E	Yes	6,060	23.9	C	6,060	23.9	C	Add 1 mixed flow lane
F-76	I-215	La Cadena Dr to Barton Rd	D	D	E	E	Yes	5,680	22.1	C	6,190	24.5	C	Add 1 mixed flow lane
F-77	I-215	Barton Rd to Mt. Vernon Ave	E	E	E	E	Yes	5,960	23.4	C	6,610	26.7	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Table 54: 2022 Plus Phase 1 Freeway Mainline Impacts and Mitigations (continued)

ID	Freeway	Segment	Southbound / Westbound											
			Determination of Impact					2022 Plus Phase 1 & Mitigations						Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour		Project Impact?	AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS		Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	
F-7	SR-60	Grove Ave to Vineyard Ave	C	C	E	E	Yes	6,250	19.4	C	8,060	26.2	D	Add 1 mixed flow lane
F-17	SR-60	Valley Way to Rubidoux Blvd	C	C	E	F	Yes	4,510	17.4	B	6,810	28.0	D	Add 1 mixed flow lane
F-18	SR-60	Rubidoux Blvd to Market St	C	C	D	E	Yes	3,520	13.7	B	5,940	23.4	C	Add 1 mixed flow lane
F-19	SR-60	Market St to Main St	D	D	F	F	Yes	5,680	22.2	C	7,090	29.7	D	Add 1 mixed flow lane
F-20	SR-60	Main to SR-91	D	D	E	F	Yes	5,290	20.6	C	6,880	28.4	D	Add 1 mixed flow lane
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	D	D	E	F	Yes	7,310	23.4	C	8,900	30.3	D	Add 1 mixed flow lane
F-27	SR-60	I-215 to Day St	F	F	C	C	Yes	7,210	30.9	D	4,210	16.7	B	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd/Frederick St to	D	D	D	F	Yes	3,460	18.1	C	4,320	23.5	C	Add 1 mixed flow lane
F-30	SR-60	Heacock St to Perris Blvd	D	D	D	E	Yes	3,370	17.6	B	3,900	20.9	C	Add 1 mixed flow lane
F-40	SR-91	McKinley St to Pierce St	D	D	E	E	Yes	5,400	21.1	C	6,400	25.7	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	D	D	F	F	Yes	5,180	20.1	C	8,150	37.1	E	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sierra Ave	D	D	F	F	Yes	5,410	21.1	C	8,120	37.2	E	Add 1 mixed flow lane
F-43	SR-91	La Sierra Ave to Tyler St	C	C	E	E	Yes	4,760	18.5	C	6,050	24.0	C	Add 1 mixed flow lane
F-74	I-215	Columbia Ave to Center St	E	E	D	D	Yes	6,420	25.7	C	5,310	20.5	C	Add 1 mixed flow lane
F-75	I-215	Center St to La Cadena Dr	F	F	D	D	Yes	6,920	28.5	D	5,540	21.5	C	Add 1 mixed flow lane
F-76	I-215	La Cadena Dr to Barton Rd	E	F	D	D	Yes	6,750	27.5	D	5,550	21.5	C	Add 1 mixed flow lane
F-77	I-215	Barton Rd to Mt. Vernon Ave	E	F	D	D	Yes	6,770	27.6	D	5,580	21.6	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Freeway Weaving LOS

Table 55 compares the LOS for study weaving sections under 2022 No-Project and 2022 Plus Phase 1 conditions. As shown in the table, there are 10 sections where the project would have a significant impact. Seven of these 10 sections would be deficient under both 2022 No-Project and Plus Phase 1 conditions, namely:

Northbound or Eastbound

- SR-60 from SR-71/S. Garey Ave. to Reservoir St.
- SR-60 from Main St. to SR-91
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from Arlington Ave. to Central Ave.
- I-215 from SR-60 to Columbia Ave.

Southbound or Westbound

- SR-60 from SR-91 to W. Blaine St/3rd St.

There were three segments that would be deficient only under Plus Phase 1 conditions, namely:

Southbound or Westbound:

- SR-60 from Blaine St/3rd St. to University Ave.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-60 from Day St. to Pigeon Pass Rd./Frederick St.

Table 55: 2022 Plus Phase 1 Freeway Weaving Section LOS

ID	Freeway	Weaving Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	7,150	29.2	D	8,640	37.6	**E**	7,340	30.5	D	8,620	37.7	**E**
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	7,350	36.6	**E**	7,370	38.0	**E**	7,620	38.5	**E**	7,380	38.2	**E**
W-21	SR-60	SR-91 to Blaine St/3rd St	6,010	24.2	C	9,760	42.3	**E**	6,440	26.7	C	9,720	42.6	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	5,710	21.6	C	7,210	31.3	D	6,140	25.0	C	7,250	32.5	D
W-23	SR-60	University Ave to Martin Luther King	6,620	23.8	C	6,060	21.4	C	7,140	26.3	C	6,130	22.0	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	6,580	27.3	C	8,400	38.9	**E**	7,240	32.8	D	8,360	39.7	**E**
W-27	SR-60	I-215 to Day St	4,000	14.6	B	5,280	19.9	B	4,650	19.0	B	5,320	21.1	C
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,890	16.6	B	5,130	23.2	C	4,350	19.3	B	5,120	23.6	C
W-32	SR-60	Moreno Beach Dr to Nason St	2,330	14.2	B	2,880	18.1	B	2,960	19.1	B	2,940	19.0	B
W-35	SR-60	Theodore St to Gilman Springs Rd	2,320	12.7	B	3,370	19.3	B	2,350	13.5	B	3,280	19.4	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,400	30.3	D	5,950	28.5	D	6,550	31.1	D	5,920	28.5	D
W-48	SR-91	Arlington Ave to Central Ave	7,220	39.0	**E**	3,680	17.9	B	7,300	39.9	**E**	3,660	17.8	B
W-50	SR-91	14th St to University Ave	5,030	25.1	C	4,810	24.6	C	5,100	25.7	C	4,840	24.9	C
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	6,840	37.8	**E**	6,540	35.8	**E**	6,810	37.7	**E**	6,580	36.4	**E**
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,610	16.8	B	5,210	19.0	B	4,590	16.8	B	5,250	19.3	B
W-81	I-215	Mill St to 2nd St	5,090	17.8	B	5,910	21.1	C	5,070	17.7	B	5,940	21.3	C
W-82	I-215	5th St to Baseline Rd	3,760	12.7	B	4,450	15.2	B	3,750	12.7	B	4,490	15.4	B
W-63	I-10	Haugen-Lehmann Way to SR-111	3,300	11.0	B	4,710	15.9	B	3,260	10.9	B	4,760	16.1	B

Indicates that the LOS exceeds the target level

Table 55: 2022 Plus Phase 1 Freeway Weaving Section LOS (continued)

ID	Freeway	Weaving Segment	2022 No-Project Conditions						2022 Plus Phase 1 Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	6,130	21.9	C	6,720	24.3	C	6,060	21.7	C	6,850	25.0	C
W-9	SR-60	Haven Ave to Archibald Ave	6,330	24.4	C	7,330	29.3	D	6,230	24.1	C	7,480	30.1	D
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	7,720	29.4	D	9,290	36.9	**E**	7,640	29.4	D	9,670	39.1	**E**
W-22	SR-60	Blaine St/3rd St to University Ave	5,700	21.1	C	8,280	32.0	D	5,620	21.3	C	8,670	35.2	**E**
W-23	SR-60	University Ave to Martin Luther King	5,600	22.6	C	7,620	30.7	D	5,500	22.3	C	7,980	32.8	D
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,110	30.7	D	7,890	32.7	D	7,120	31.3	D	8,330	36.1	**E**
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	4,970	34.3	D	4,860	32.7	D	4,950	34.7	D	5,270	37.1	**E**
W-32	SR-60	Moreno Beach Dr to Nason St	2,410	14.5	B	2,190	13.2	B	2,560	15.8	B	2,840	18.2	B
W-35	SR-60	Theodore St to Gilman Springs Rd	2,360	13.6	B	2,030	11.4	B	2,310	13.5	B	1,980	11.8	B
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	4,510	21.2	C	5,050	24.1	C	4,510	21.3	C	5,120	24.6	C
W-50	SR-91	14th St to University Ave	5,090	19.6	B	7,020	27.9	C	5,070	19.5	B	7,010	28.1	D
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	5,020	14.7	B	8,850	26.7	C	5,010	14.7	B	8,850	26.9	C
W-73	I-215	SR-60 to Columbia Ave	7,040	33.4	D	6,110	28.8	D	7,070	33.7	D	6,070	28.6	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	5,830	20.8	C	4,870	18.0	B	5,850	20.9	C	4,830	17.9	B
W-81	I-215	Mill St to 2nd St	5,300	19.0	B	4,410	15.9	B	5,330	19.2	B	4,390	15.8	B
W-82	I-215	5th St to Baseline Rd	4,540	16.0	B	3,490	12.3	B	4,570	16.1	B	3,470	12.2	B
W-63	I-10	Haugen-Lehmann Way to SR-111	4,210	14.8	B	4,310	17.2	B	4,280	15.2	B	4,280	17.1	B

Indicates that the LOS exceeds the target level

Table 56 identifies mitigation measures that would reduce the impact of the WLC project to a less-than-significant level. These mitigation measures may not all be feasible due physical and financial constraints, and may not be desirable as a matter of public policy. Chapter 11 analyses the mitigation measures in greater detail and discusses options for funding those that are feasible.

Freeway Ramp LOS

Table 57 compares the freeway ramp level of service on SR-60 under 2022 No-Project and 2022 Plus Phase 1 conditions. As shown in the table, only the SR-60 eastbound On-Ramp from Central Ave would have a significant impact with the project. This location would operate below LOS "D" under both 2022 No Project and Plus Phase 1 conditions. Table 58 shows the mitigation measures needed to reduce the impacts of the WLC to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 56: 2022 Plus Phase 1 Freeway Weaving Impacts and Mitigations

			Northbound / Eastbound											
			Determination of Impact					2022 Plus Phase 1 & Mitigations						
								AM Peak Hour			PM Peak Hour			
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS								
W-1	SR-60	SR-71/Garey Ave to Reservoir St	D	D	**E**	**E**	Yes	7,340	24.8	C	8,620	30.5	D	Add 1 mixed flow lane
W-20	SR-60	Main St to SR-91	**E**	**E**	**E**	**E**	Yes	7,620	29.9	D	7,380	29.6	D	Add 1 mixed flow lane
W-21	SR-60	SR-91 to Blaine St/3rd St	C	C	**E**	**E**	Yes	6,440	21.8	C	9,720	34.4	D	Add 1 mixed flow lane
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	C	D	**E**	**E**	Yes	7,240	26.5	C	8,360	31.8	D	Add 1 mixed flow lane
W-48	SR-91	Arlington Ave to Central Ave	**E**	**E**	B	B	Yes	7,300	35.2	**E**	3,660	16.3	B	Add a second off-ramp lane
W-73	I-215	SR-60 to Columbia Ave	**E**	**E**	**E**	**E**	Yes	6,810	36.6	**E**	6,580	35.1	**E**	Add a second off-ramp lane

Indicates that the LOS exceeds the target level

			Southbound / Westbound											
			Determination of Impact					2022 Plus Phase 1 & Mitigations						
								AM Peak Hour			PM Peak Hour			
ID	Freeway	Weaving Segment	AM Peak Hour		PM Peak Hour		Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS								
W-21	SR-60	SR-91 to Blaine St/3rd St	D	D	**E**	**E**	Yes	7,640	24.0	C	9,670	31.7	D	Add 1 mixed flow lane
W-22	SR-60	Blaine St/3rd St to University Ave	C	C	D	**E**	Yes	5,620	17.5	B	8,670	28.6	D	Add 1 mixed flow lane
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	D	D	D	**E**	Yes	7,120	25.4	C	8,330	29.1	D	Add 1 mixed flow lane
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	D	D	D	**E**	Yes	4,950	25.3	C	5,270	26.9	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Table 57: 2022 Plus Phase 1 Freeway Ramp LOS

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	2022 No-Project Conditions								2022 Plus Phase 1 Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	6,190	710	27.4	C	5,780	1,320	30.9	D	6,710	740	29.7	D	5,840	1,340	31.5	D
R-2	SR-60 EB	On-Ramp from Central Ave	1	8,170	710	28.8	D	9,010	1,120	35.1	F	8,700	820	31.9	F	9,080	1,120	35.6	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	1,910	220	8.3	A	2,370	520	12.5	B	2,780	430	18.2	B	2,540	560	15.4	B
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	1,690	90	17.1	B	1,850	210	19.4	B	2,350	90	24.1	C	1,980	250	21.7	C
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-6	SR-60 EB	Off-Ramp to Theodore St	2	2,460	250	24.5	C	3,240	150	31.7	D	3,300	910	21.9	C	3,350	540	21.8	C
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	2,210	110	23.1	C	3,090	270	31.7	D	2,390	40	25.4	C	2,810	70	28.8	D
R-8	SR-60 EB	Direct On-Ramp from Theodore St	1	Does not Exist in this Scenario				Does not Exist in this Scenario				2,350	200	18.6	B	2,740	410	23.3	C
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	2	2,320	330	14.5	B	3,370	650	21.0	C	2,350	432	14.9	B	3,280	537	20.7	C
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	1,990	270	14.7	B	2,720	140	19.8	B	1,918	288	14.5	B	2,743	211	20.8	C
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	2	2,210	230	13.8	B	1,880	190	11.8	B	2,250	326	14.7	B	1,770	233	11.7	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	1,980	380	15.5	B	1,690	310	12.6	B	1,924	406	16.2	B	1,537	452	13.5	B
R-13	SR-60 WB	Off-Ramp to Theodore St	2	2,360	180	12.4	B	2,030	120	9.3	A	2,310	310	14.6	B	1,980	170	12.6	B
R-14	SR-60 WB	On-Ramp from Theodore St	1	2,180	100	21.0	C	1,910	290	20.2	C	2,000	560	24.1	C	1,810	790	24.7	C
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	2,280	170	22.9	C	2,200	100	22.3	C	2,580	250	26.7	C	2,920	160	30.2	D
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	2,110	440	23.3	C	2,100	380	22.8	C	2,330	470	26.3	C	2,760	700	32.3	D
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	0	Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario				Does not Exist in this Scenario			
R-18	SR-60 WB	Off-Ramp to Central Ave	2	7,110	410	26.5	C	7,890	530	29.8	D	7,120	480	27.3	C	8,330	540	31.8	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	7,060	510	16.3	B	7,680	430	17.6	B	7,000	520	16.4	B	8,050	430	19.2	B

Indicates that the LOS exceeds the target level

Table 58: 2022 Plus Phase 1 Freeway Ramp Impacts and Mitigations

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Determination of Impact					2022 Plus Phase 1 & Mitigations								Mitigation Measures Required to Reduce Impact to Less-Than-Significant
				AM Peak Hour		PM Peak Hour			AM Peak Hour				PM Peak Hour				
				No-Project LOS	Plus Phase 1 LOS	No-Project LOS	Plus Phase 1 LOS	Project Impact?	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
R-2	SR-60 EB	On-Ramp from Central Ave	1	D	F	F	F	Yes	8,700	820	24.1	C	9,080	1,120	27.8	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

9. 2035 NO-PROJECT CONDITIONS

This chapter describes traffic conditions under the assumption that existing land uses plus other past, present, and reasonably foreseeable projects (both land development and roadway improvements) up to the year 2035 are implemented. Within the City of Moreno Valley full build-out of the General Plan was assumed, except for the project site which was assumed to be unchanged from existing conditions. This scenario forms a basis of comparison for the 2035 Plus Build-out scenario.

A. 2035 NO-PROJECT TRAFFIC VOLUMES

The forecast turning movement volumes for this scenario are shown in Figure 52. Figure 16 is the key map for the Figure 52 sub-figures.

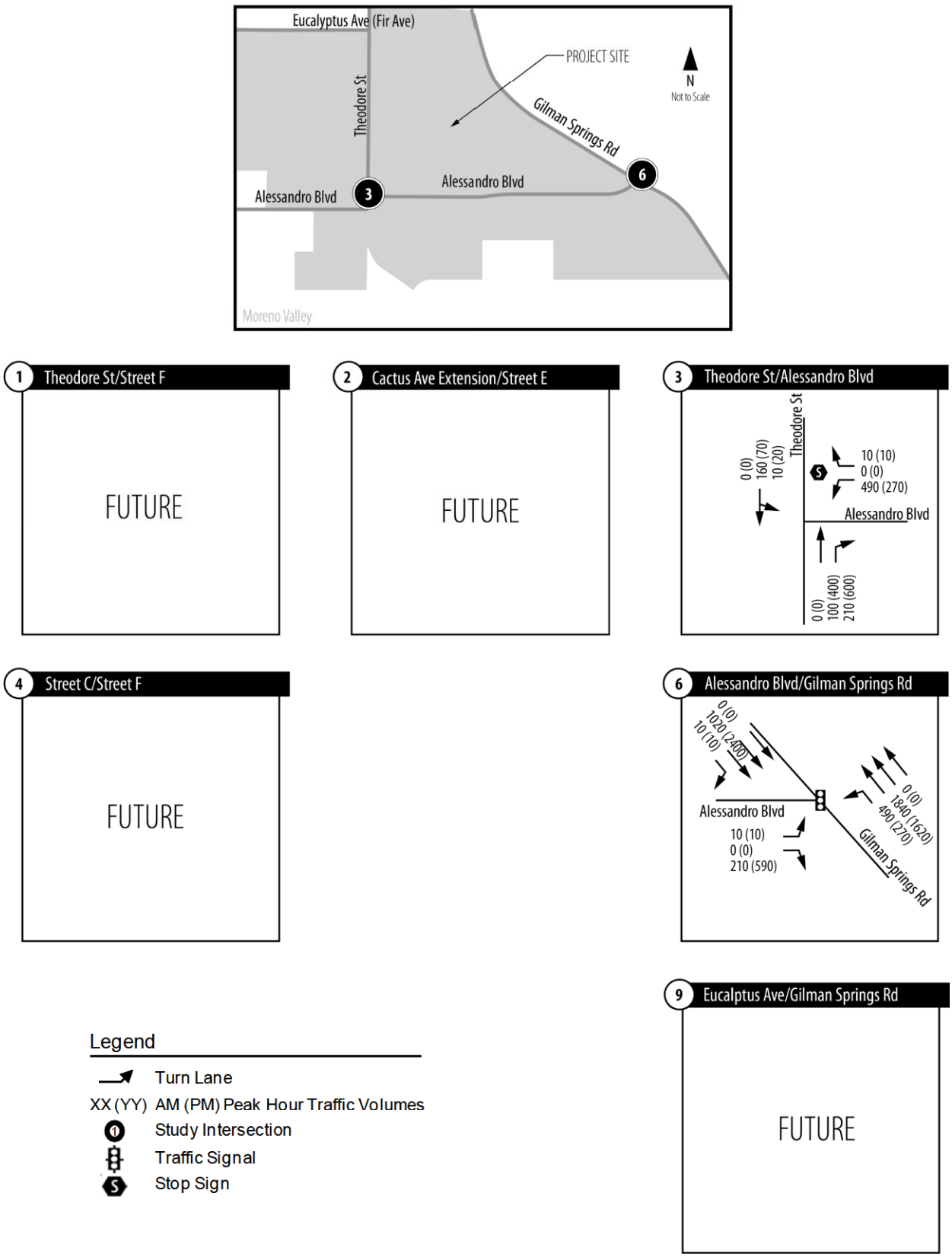


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions

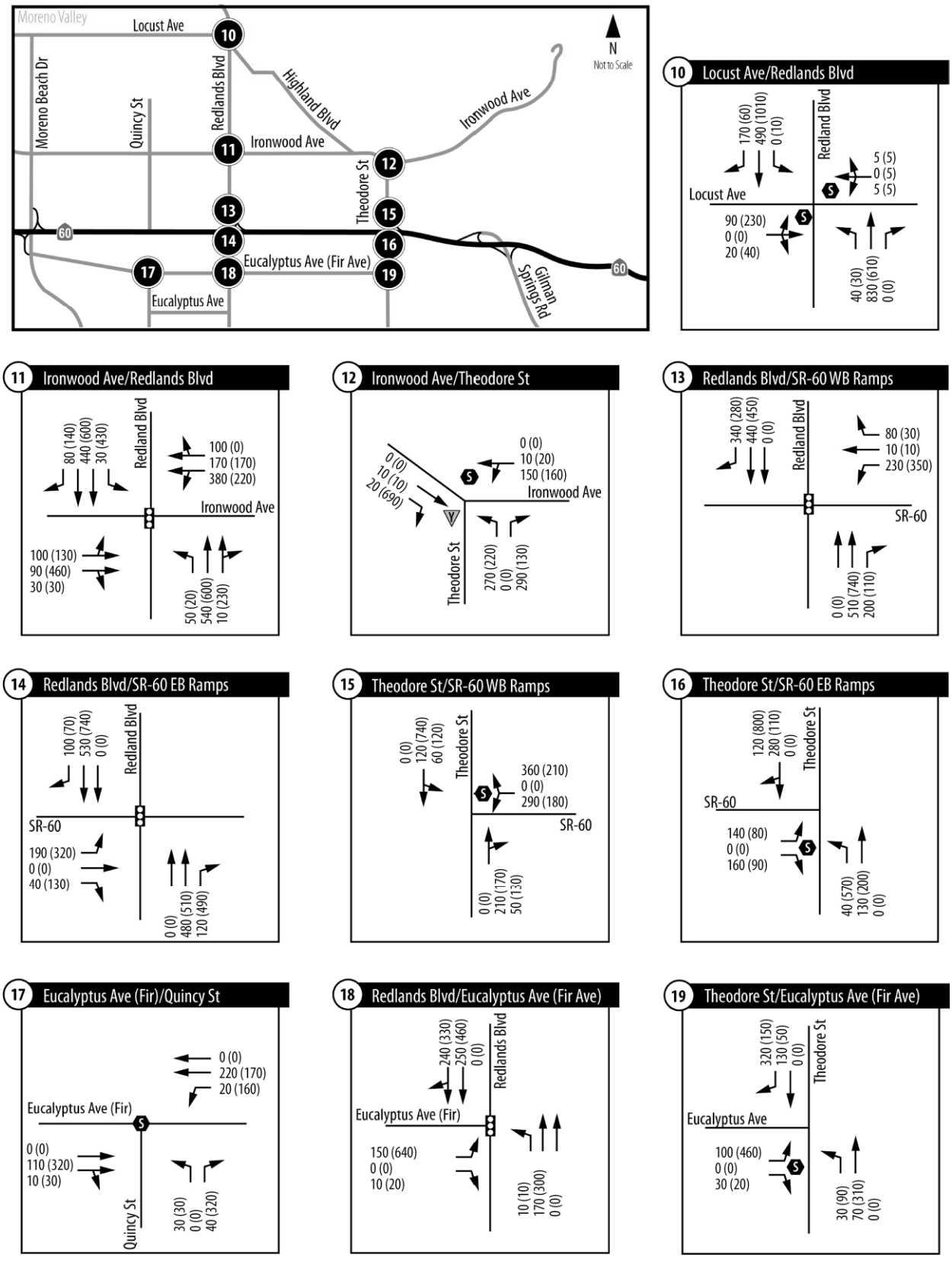


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (B)

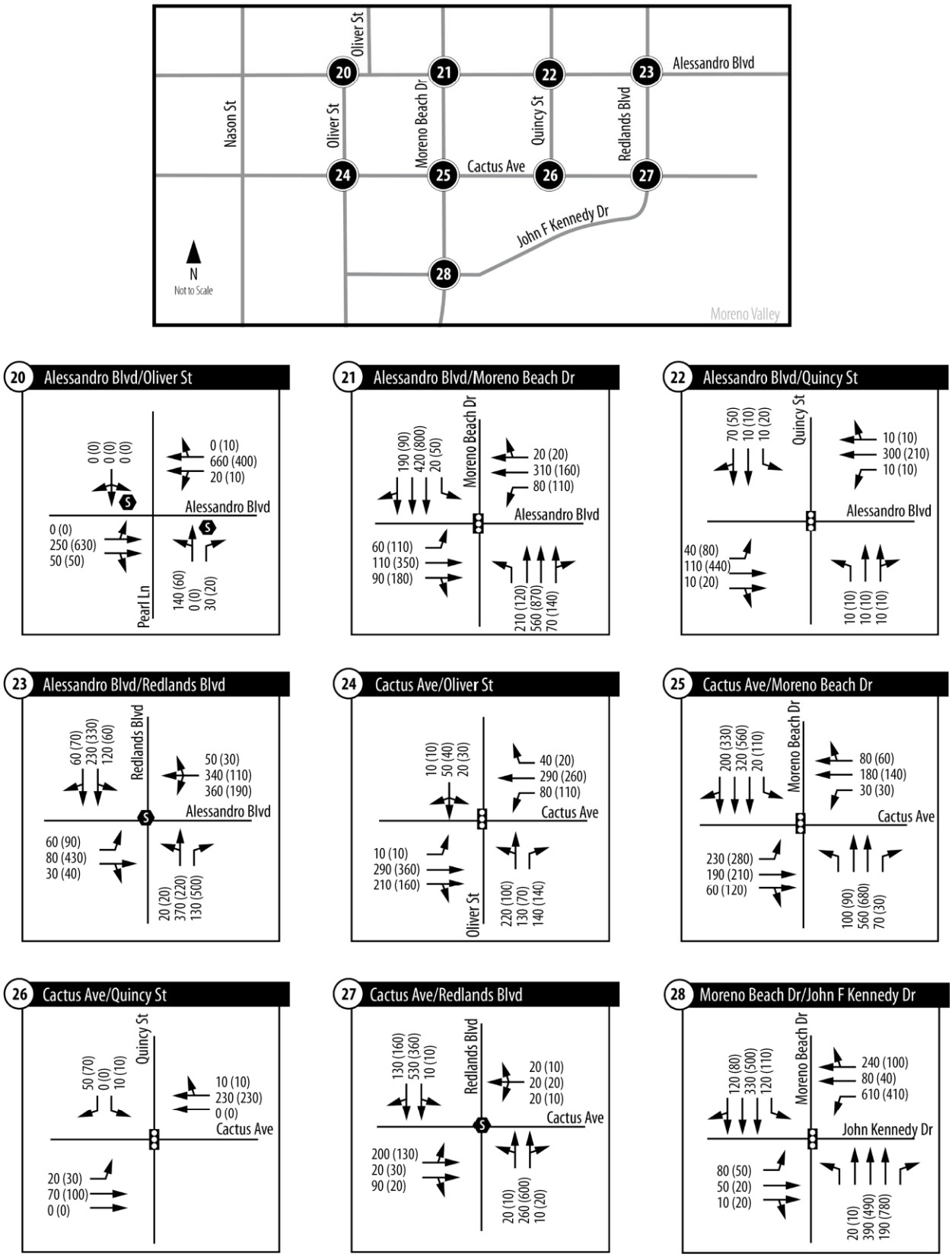


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (C)

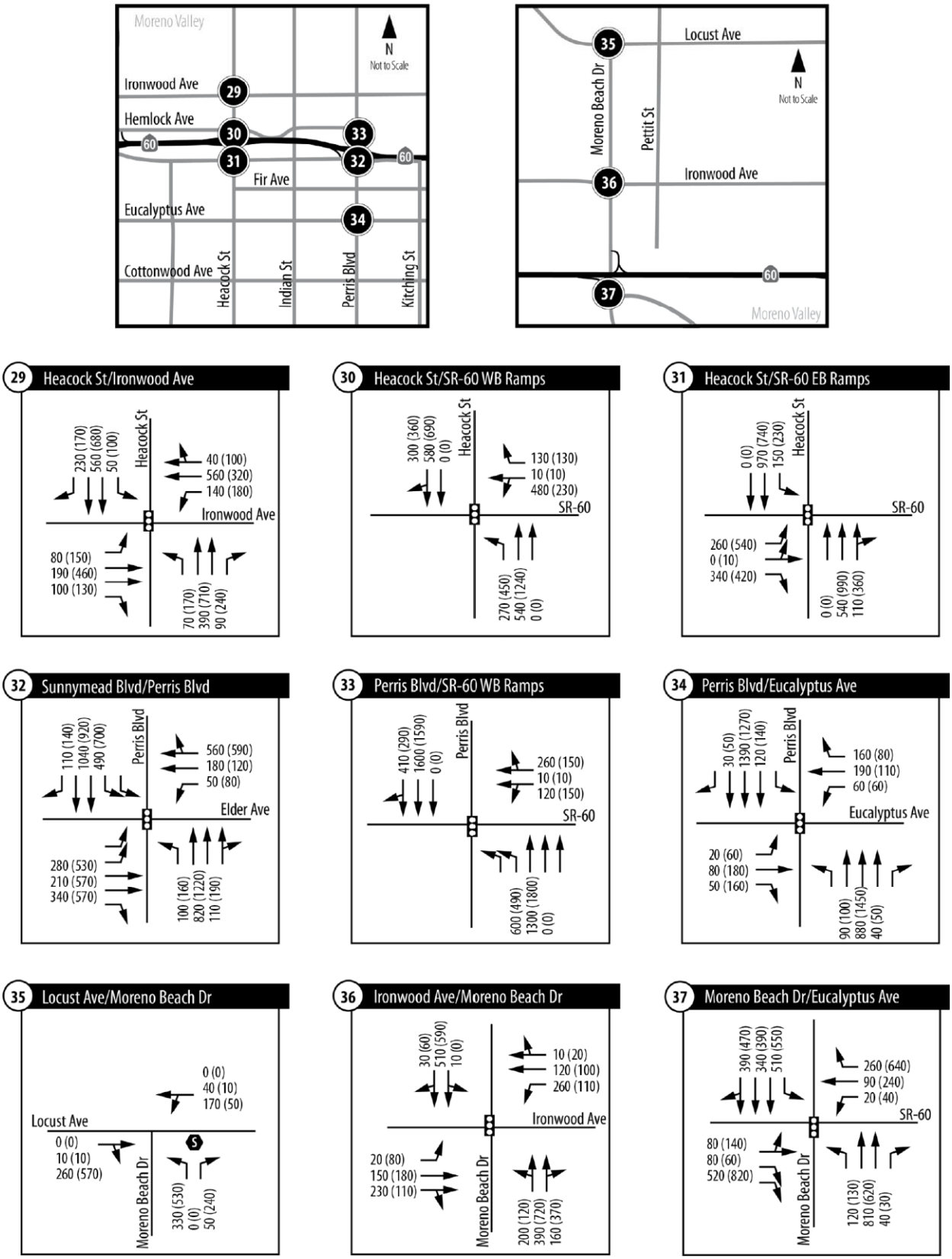


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (D)

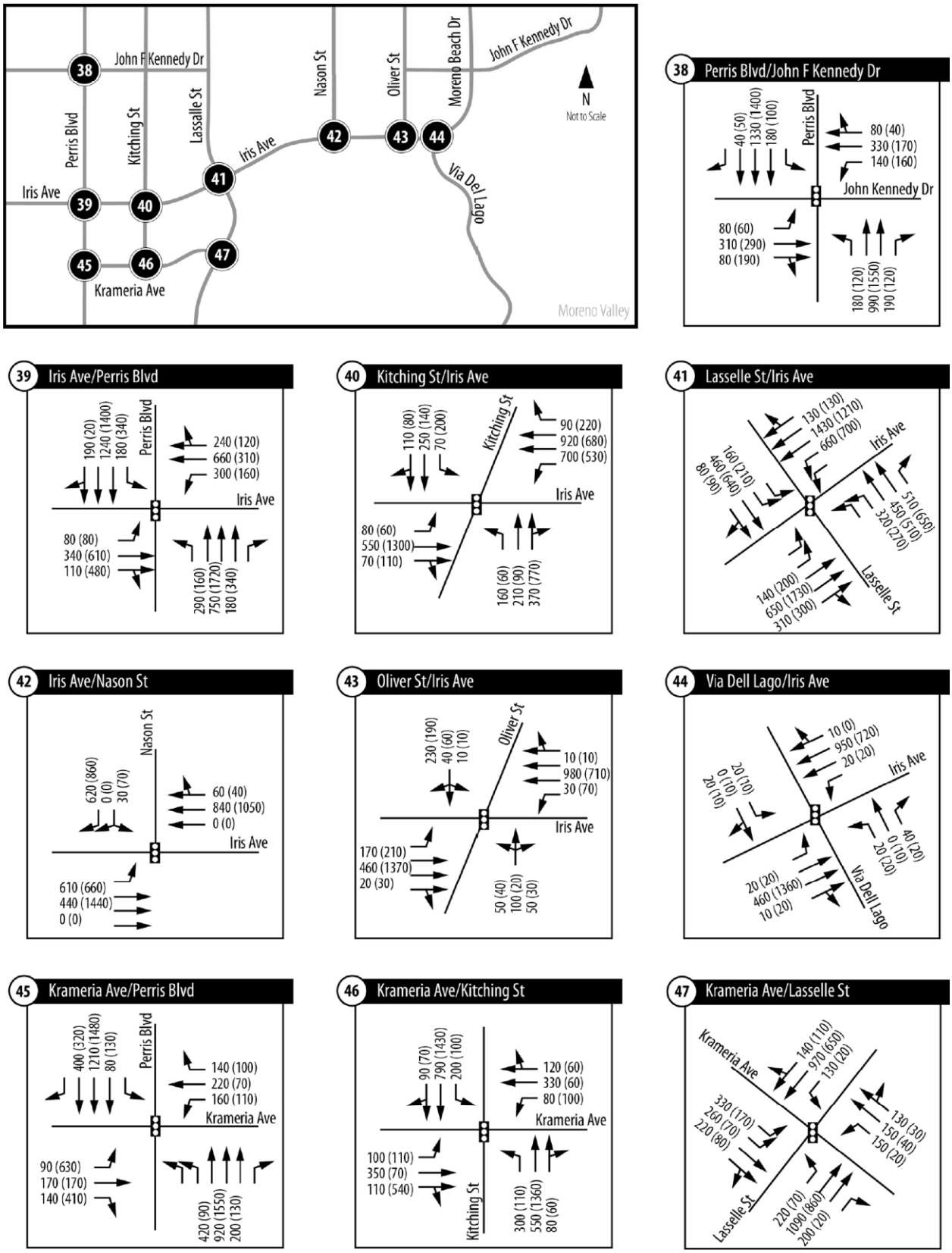


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (E)

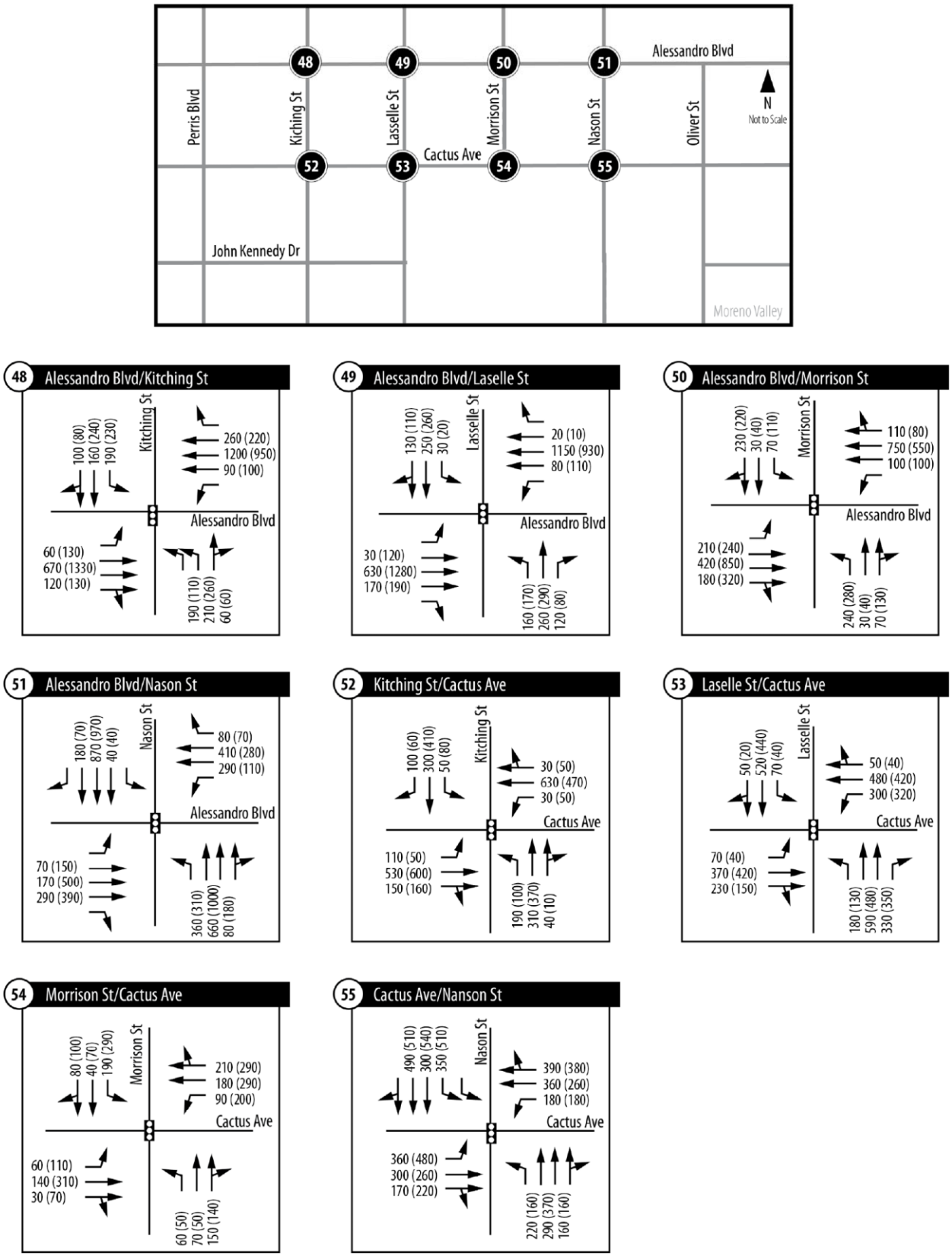


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (F)

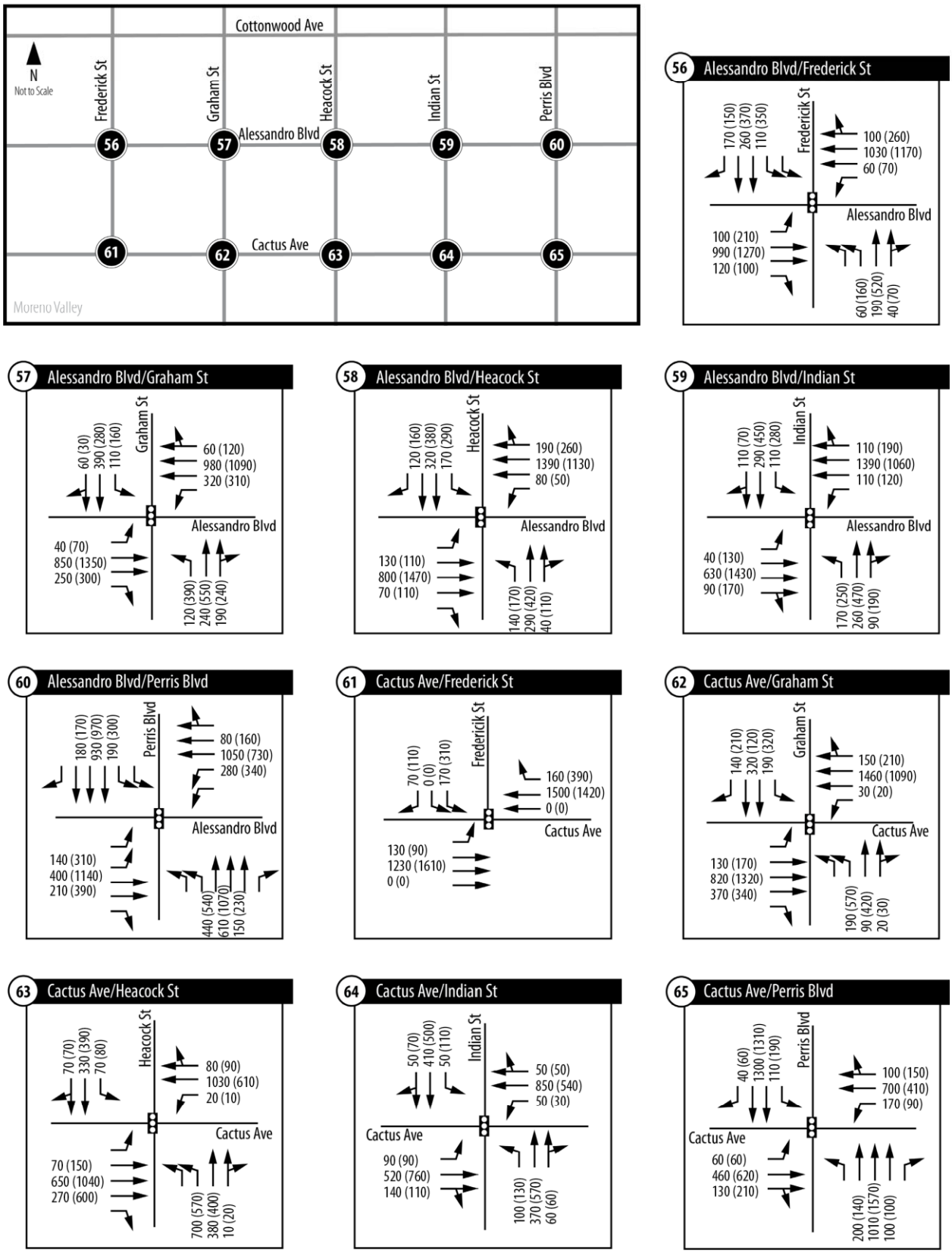


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (G)

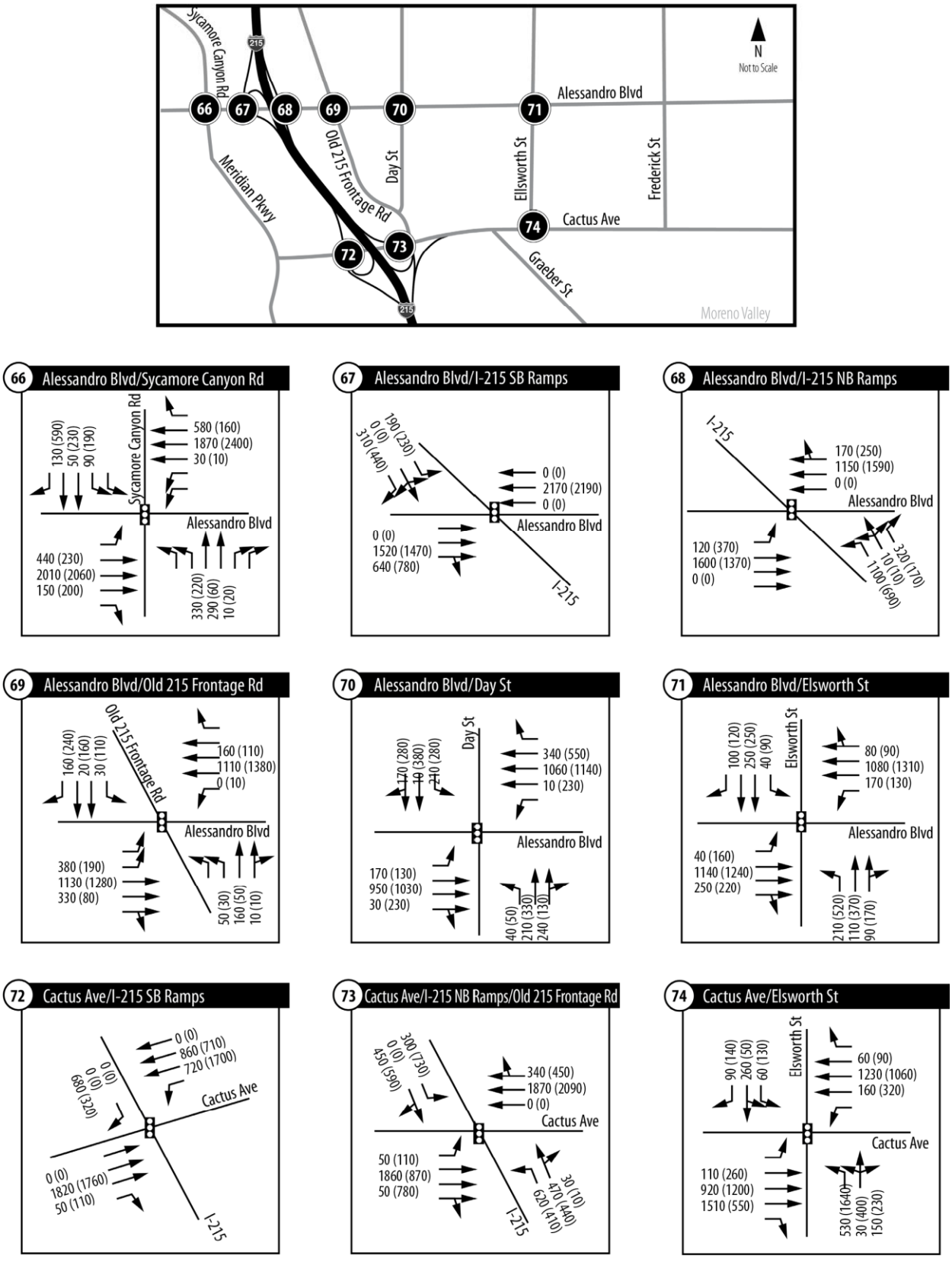


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (H)

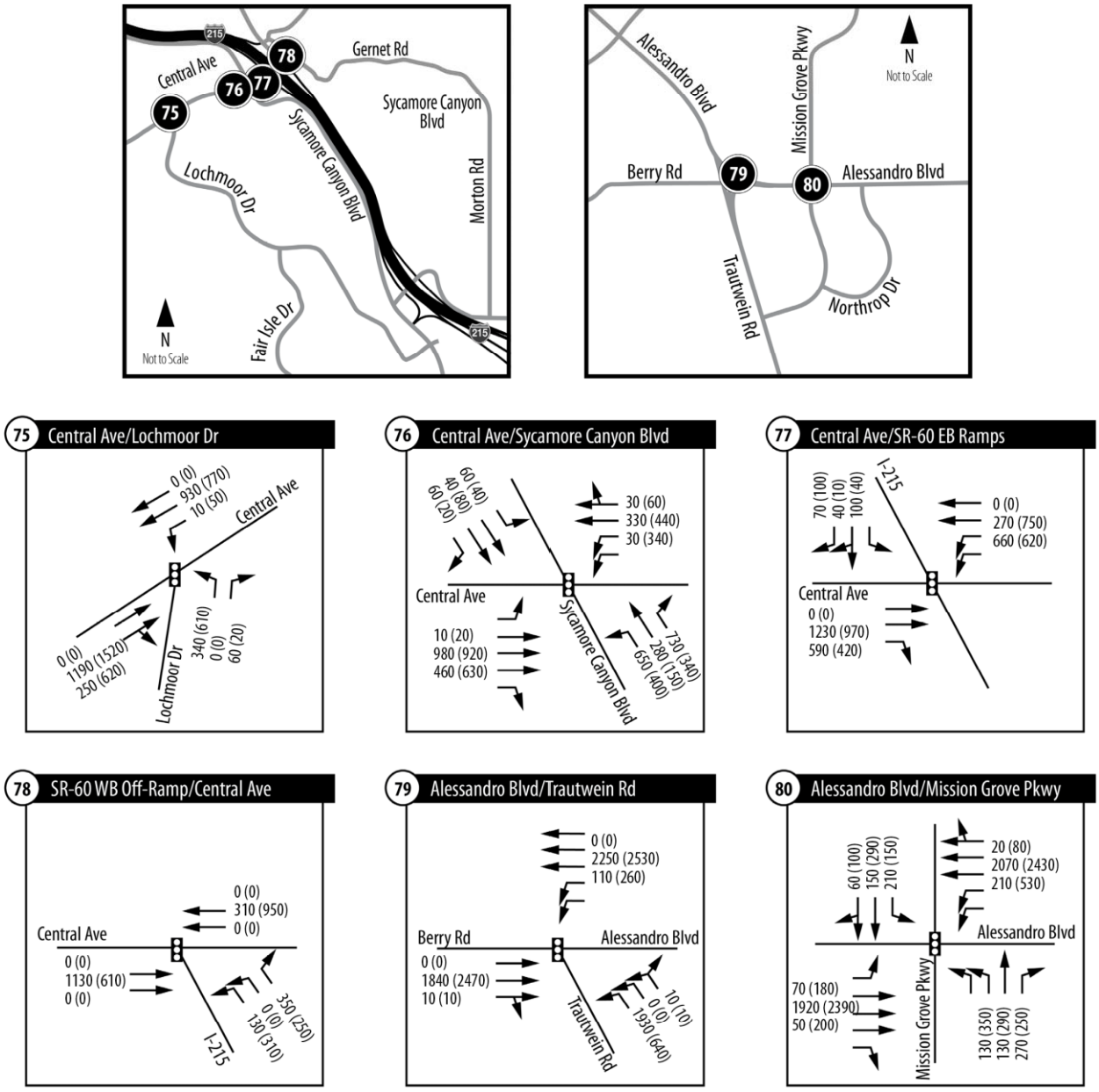


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (I)

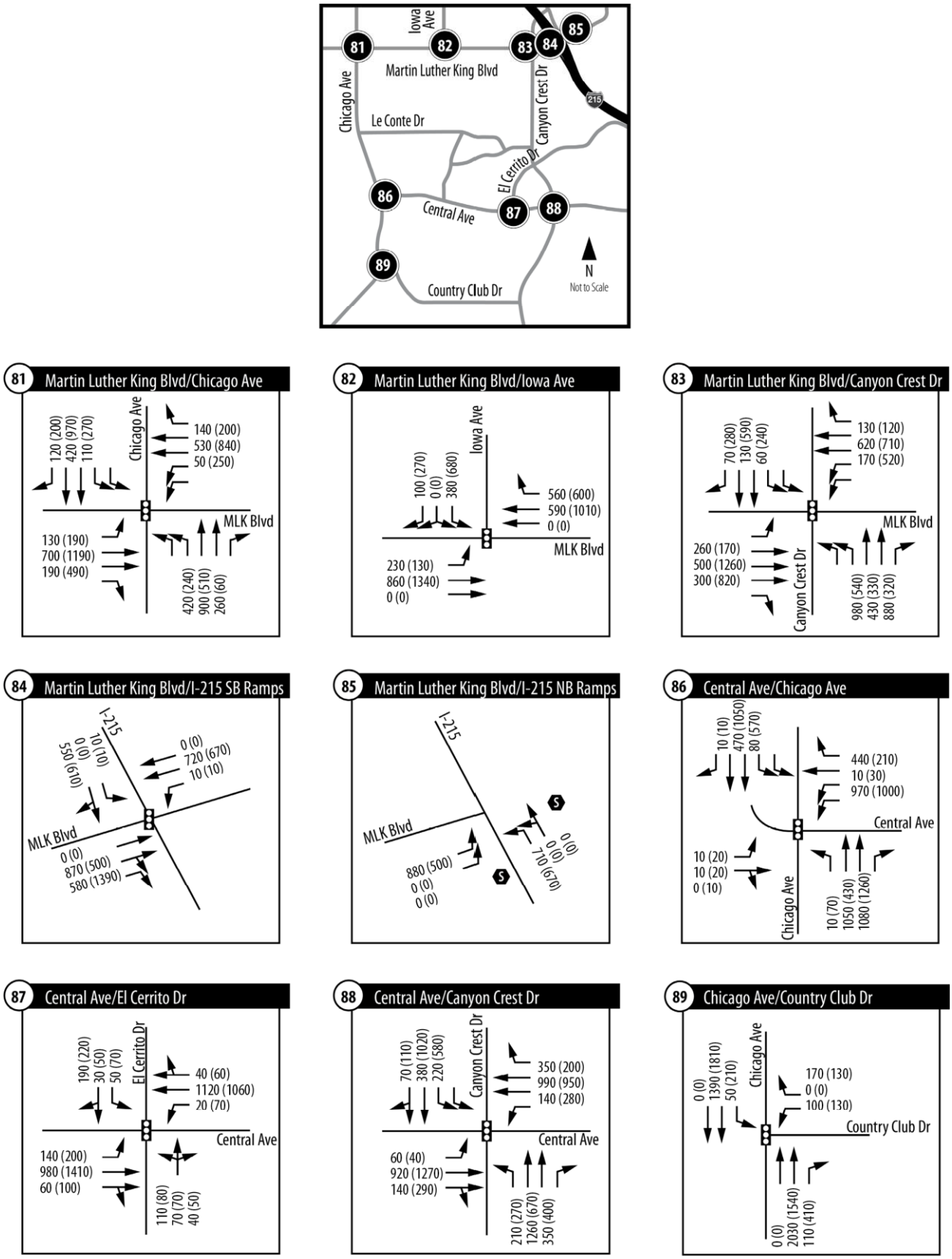


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (J)

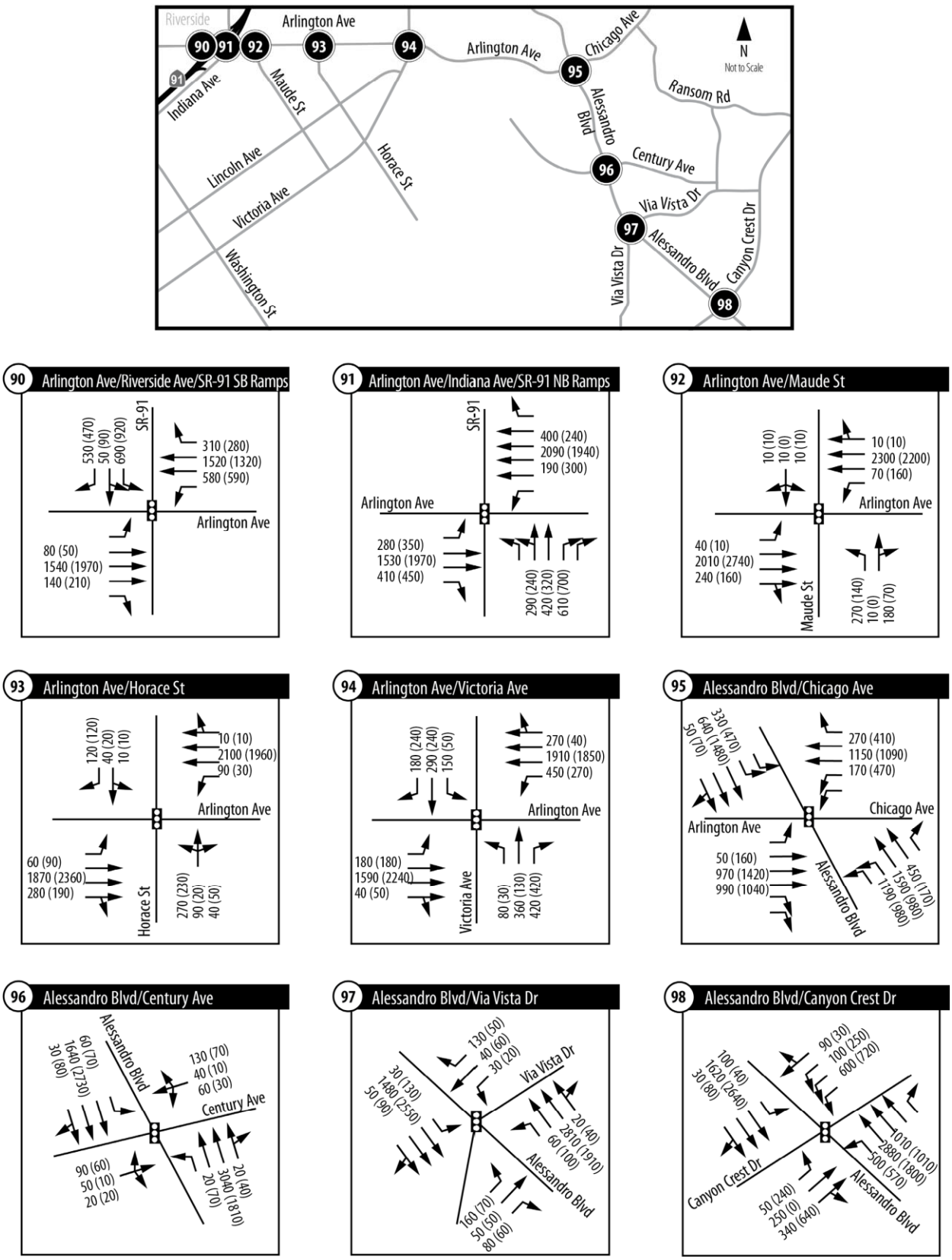


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (K)

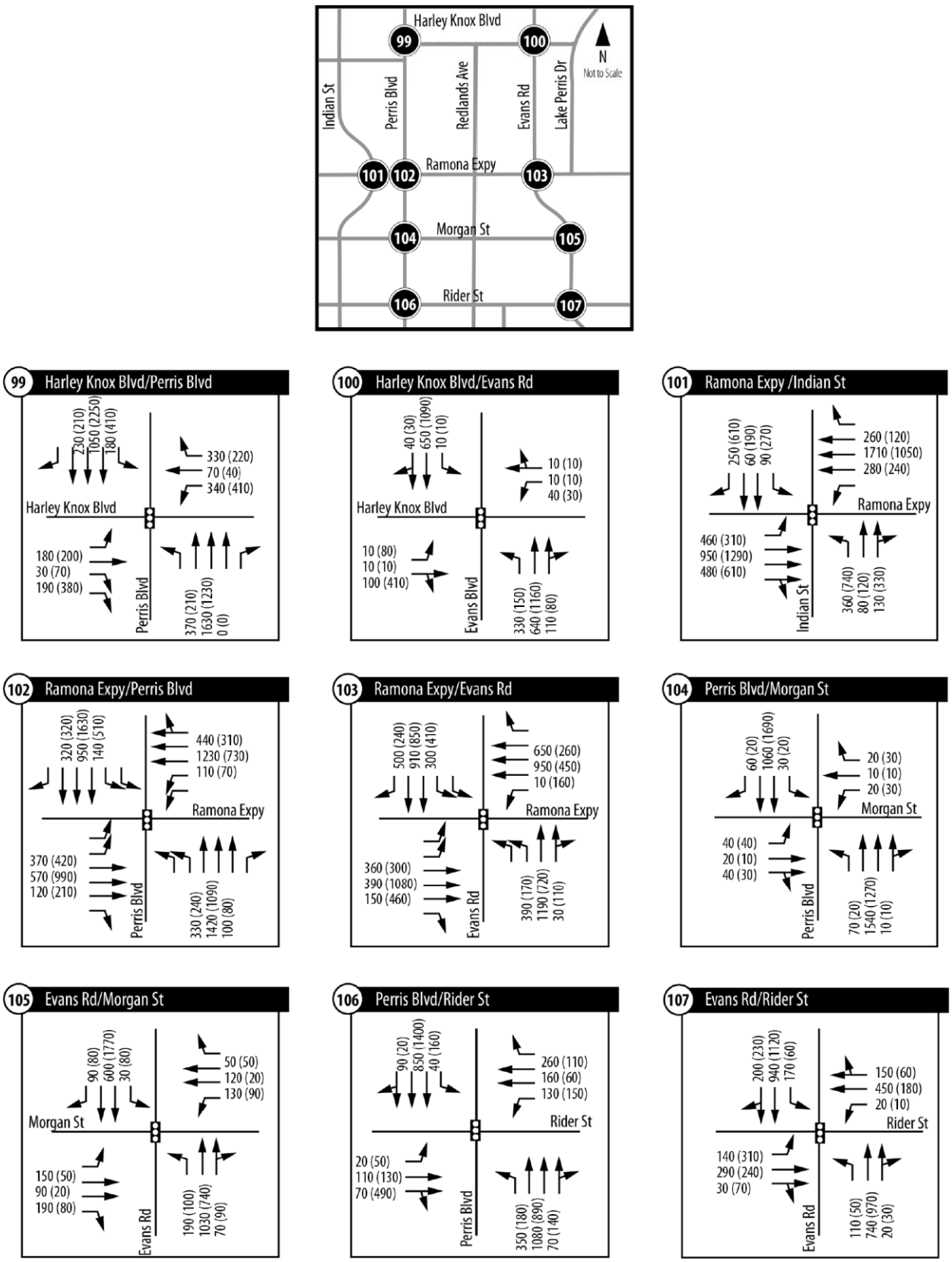


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (L)

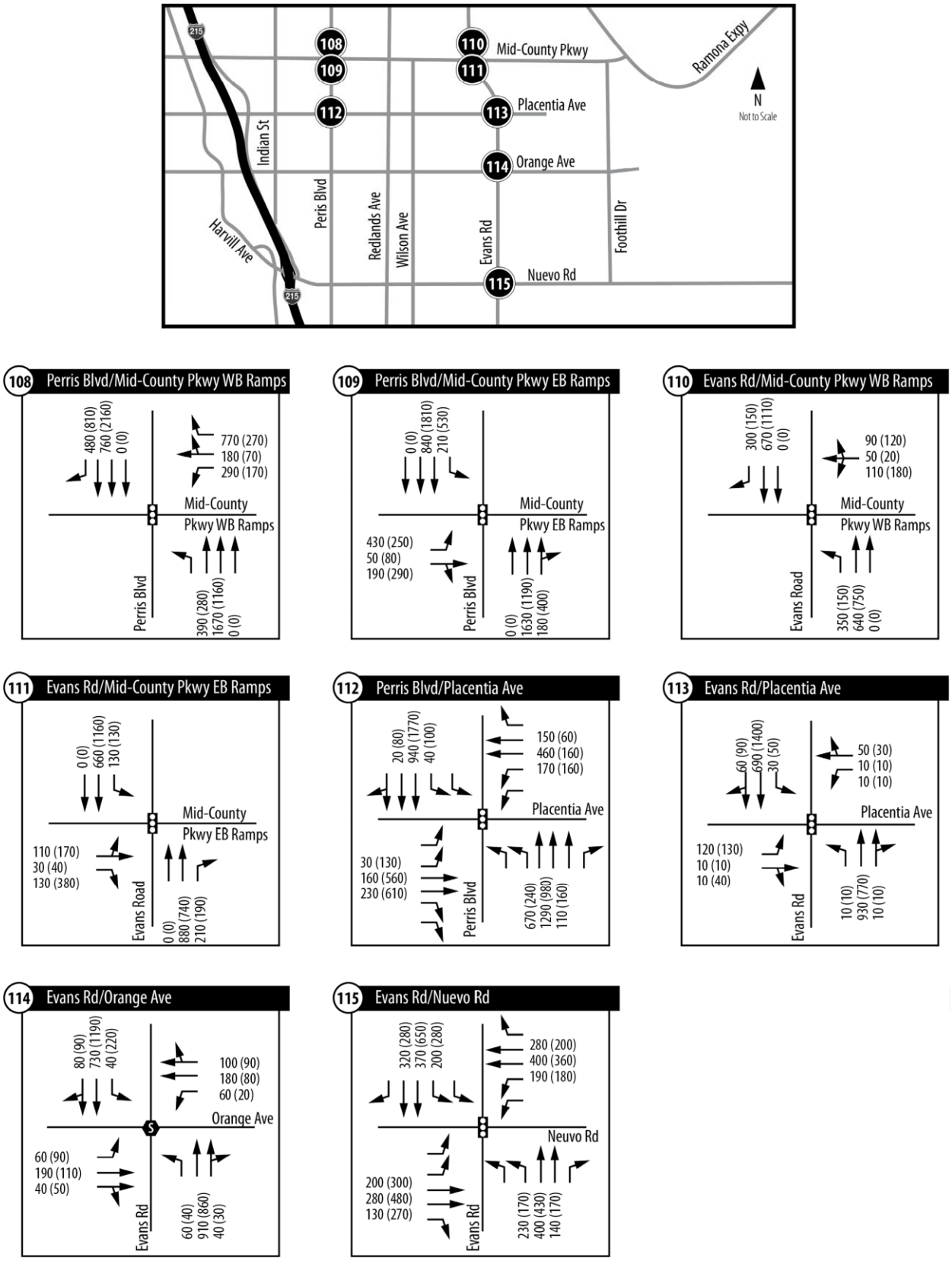


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (M)

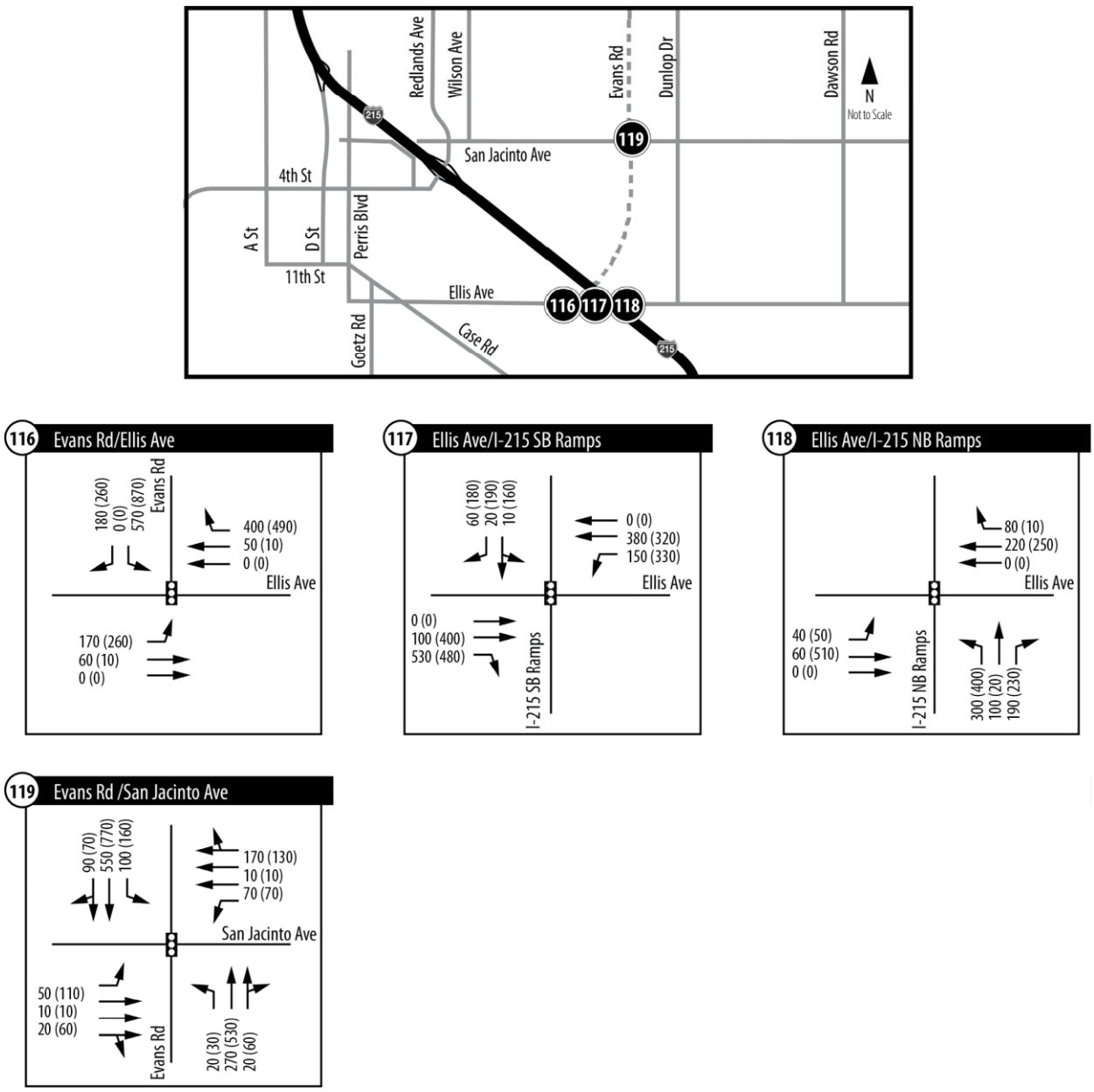


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (N)

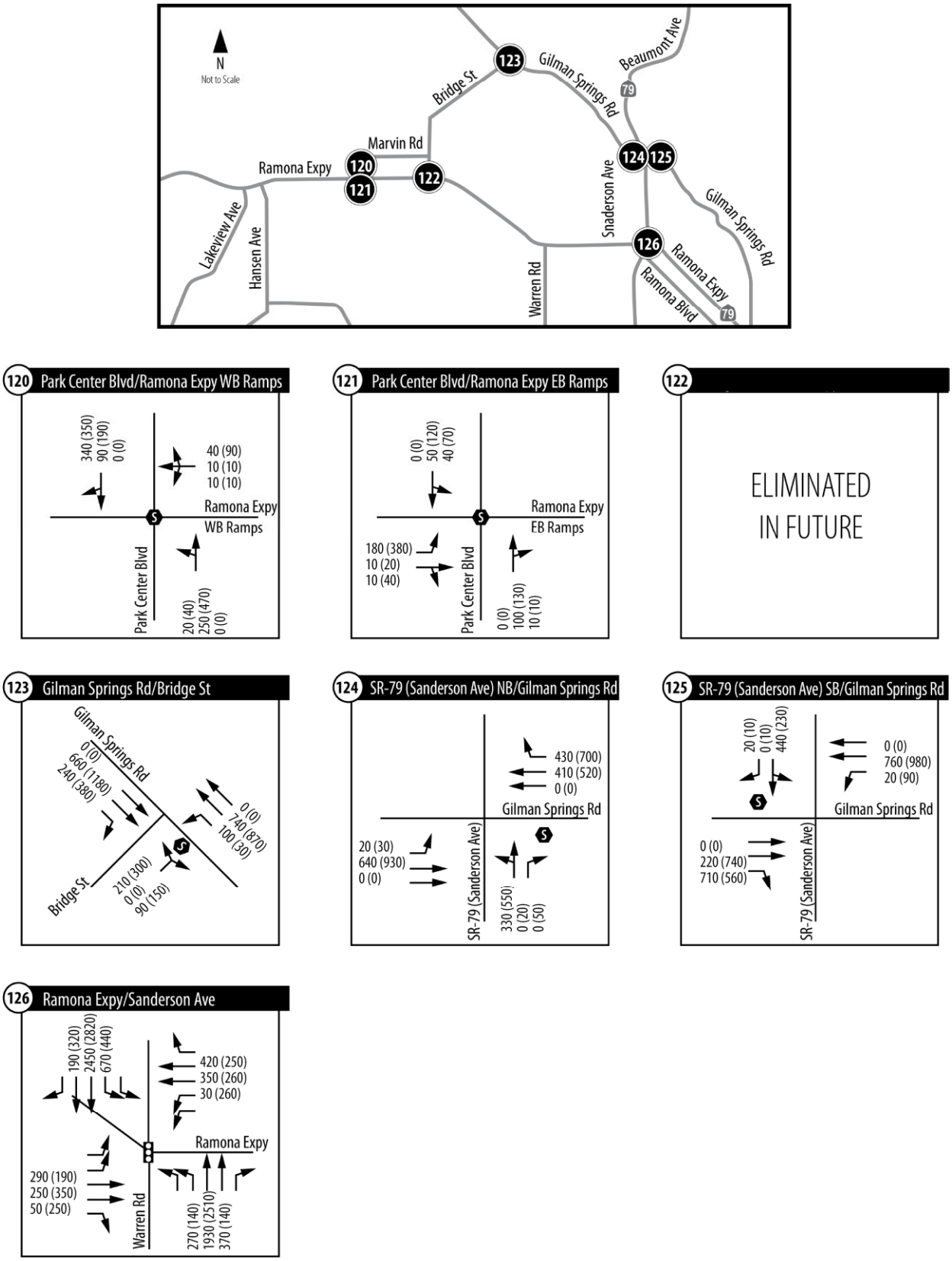


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (O)

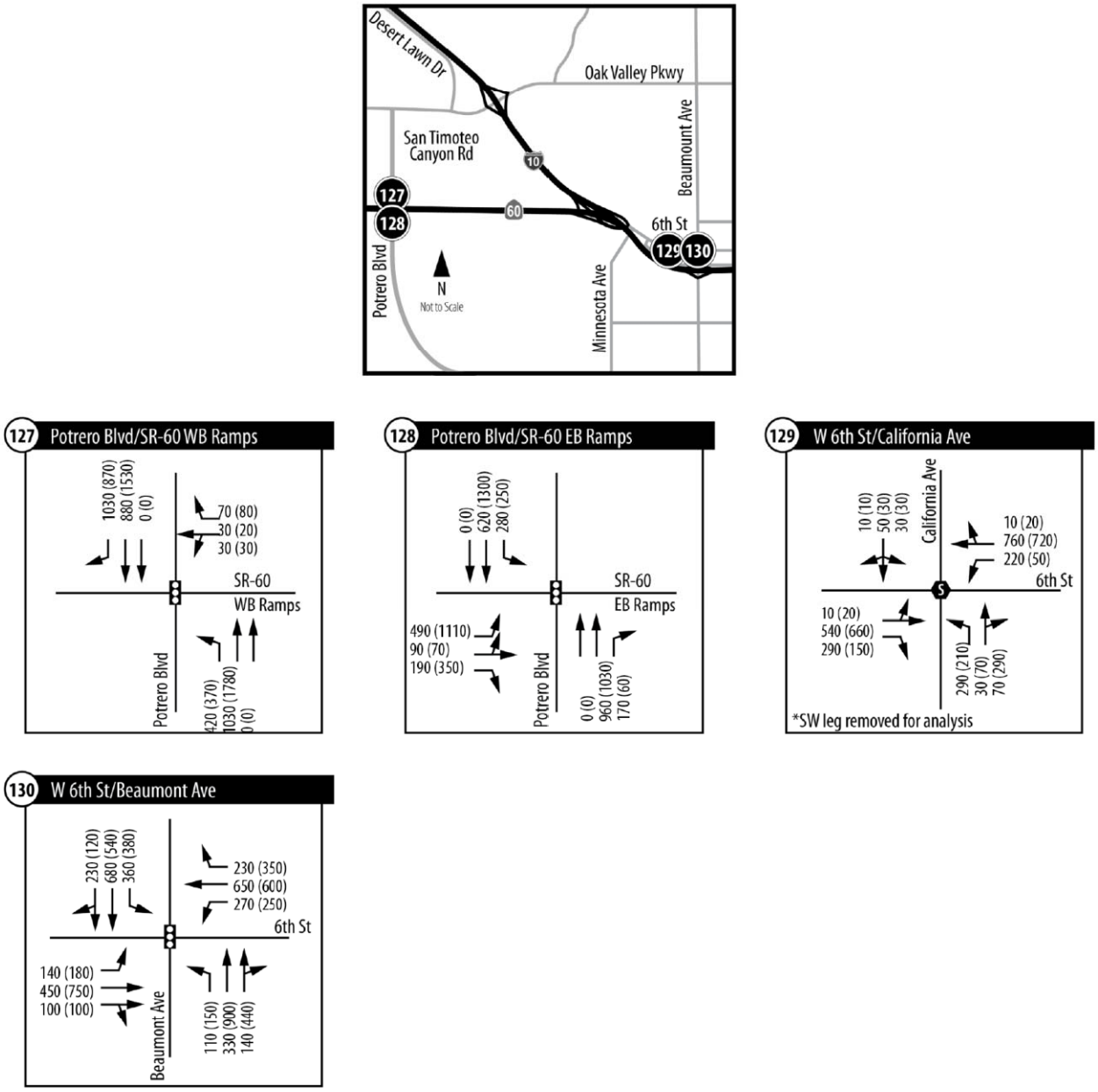


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (P)

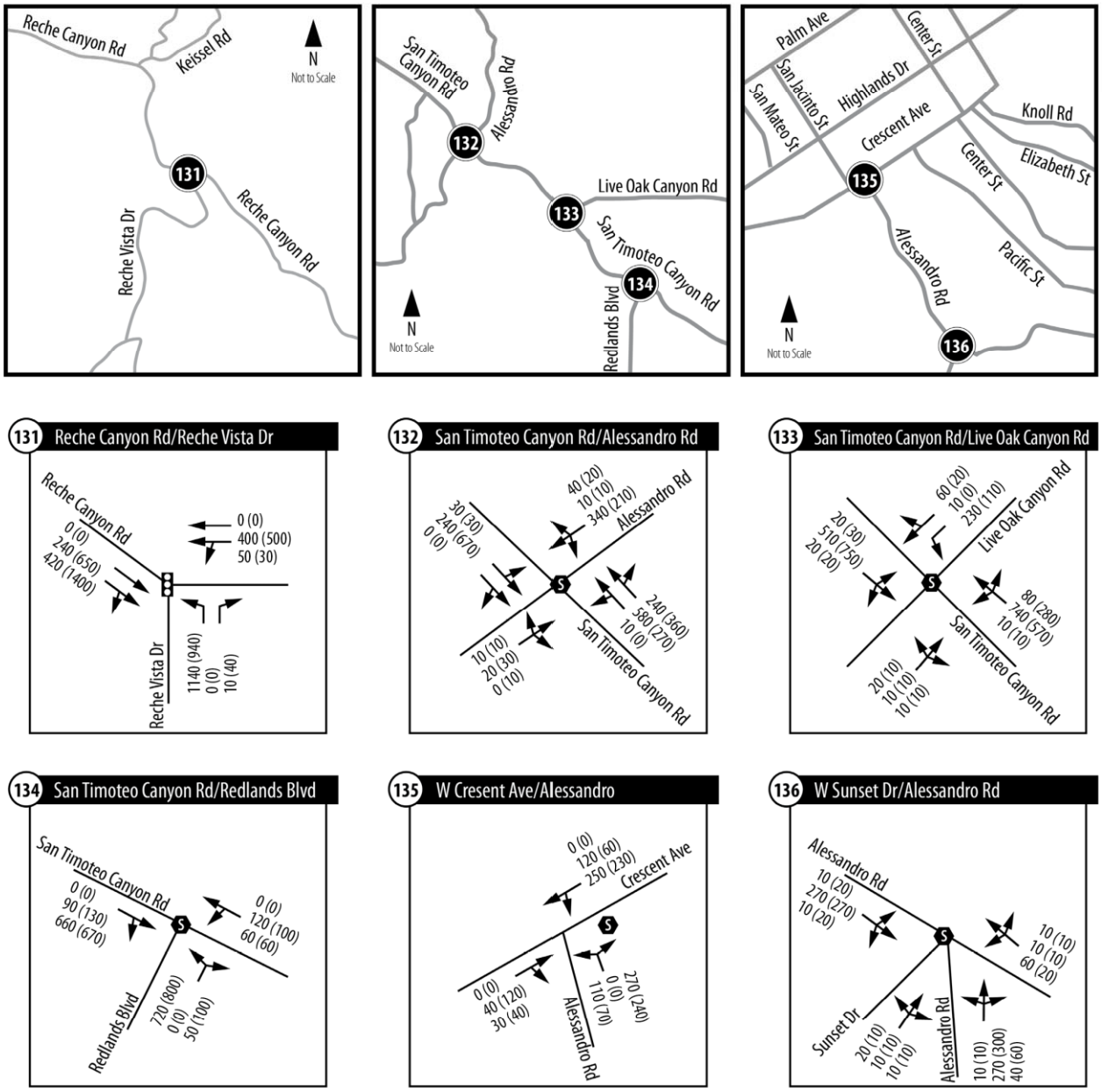


Figure 52: Turning Movement Volumes under 2035 No-Project Conditions (Q)

B. 2035 NO-PROJECT LEVEL OF SERVICE

Roadway Segment Analysis

Table 59 shows the LOS for study roadway segments under 2035 No-Project conditions.

Table 59: LOS of Study Road Segments under 2035 No-Project Conditions

	Roadway	From	To	LOS Standard*	Roadway Section**	Daily Volume	LOS
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	9,774	C
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	8,726	B
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U	6,847	A
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road		
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	3,295	A
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	N/A	Future Road		
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	N/A	Future Road		
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	3,437	A
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	10,854	D
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	N/A	Future Road		
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	7,437	A
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	7,437	A
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	4U	6,373	A
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	6D	49,434	D
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	6D	41,537	C
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	4U	13,411	A
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	4U	7,665	A
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	4U	11,038	A
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	4U	11,511	A
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	4U	1,144	A

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways

Indicates volume-to-capcity (V/C) ratio greater than 1.00

In this scenario Gilman Springs Rd. and Redlands Blvd. are assumed to have been widened in accordance with General Plan policy to six and four lanes respectively. Under these conditions all study street segments would be within the target LOS.

Intersection LOS

Table 60 presents the LOS for the study intersections under 2035 No-Project conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix G. The number of intersections that would exceed the target LOS rose from 12 under Existing Conditions to 32 under 2022 No-Project Conditions to 36 under 2035 No-Project Conditions due to population and employment growth. The intersections that would operate exceed the target LOS are:

- Theodore St./Ironwood Ave. (PM)
- Theodore St./SR-60 WB ramps (AM, PM)
- Theodore St./SR-60 EB ramps (PM)

- Theodore Ave./Fir (Eucalyptus) Ave. (PM)
- Redlands Blvd./Alessandro Blvd. (AM, PM)
- Moreno Beach Dr./Locust Ave. (AM, PM)
- Moreno Beach Dr./SR-60 EB Ramps (AM, PM)
- Iris Ave./Perris Blvd. (AM, PM)
- Kitching St./Iris Ave. (AM, PM)
- Lasselle St./Iris Ave. (PM)
- Lasselle St./Cactus Ave. (AM)
- Graham St./Alessandro Blvd. (PM)
- Indian St./Cactus Ave. (PM)
- Alessandro Blvd./Sycamore Canyon Blvd. (PM)
- I-215 SB Ramps/Cactus Ave. (PM)
- I-215 NB Ramps/Cactus Ave. (AM, PM)
- Elsworth St./Cactus Ave. (AM, PM)
- Central Ave./Lochmoor Dr. (PM)
- Alessandro Blvd./Mission Grove Pkwy. (PM)
- Martin Luther King Blvd./I-215 NB Ramps (AM)
- Central Ave./Chicago Ave. (PM)
- Central Ave./Canyon Crest Dr. (PM)
- Arlington Ave./Riverside Ave./SR-91 SB Ramps (PM)
- Arlington Ave./Victoria Ave. (AM, PM)
- Alessandro Blvd./Chicago Ave. (AM, PM)
- Alessandro Blvd./Canyon Crest Dr. (AM, PM)
- Ramona Expwy./Indian St. (AM, PM)
- Evans Rd./Rider St. (AM)
- Gilman Springs Rd./Bridge St. (AM, PM)
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. (AM, PM)

- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. (AM, PM)
- W 6th St./California Ave. (AM, PM)
- W 6th St./Beaumont Ave. (AM, PM)
- Reche Canyon Rd./Reche Vista Rd. (AM, PM)
- San Timoteo Canyon Rd./Live Oak Canyon Rd. (AM, PM)
- Redlands Blvd./San Timoteo Canyon Rd. (AM, PM)

Table 60: 2035 No-Project Conditions at Study Intersections

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-1	Theodore St/Street F	-	N/A	Non-Existent		Non-Existent	
IN-2	Cactus Ave Extension/Street E	-	N/A	Non-Existent		Non-Existent	
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	20.9	C	19.6	C
IN-4	Alessandro Blvd (Street C)/Street F	-	N/A	Non-Existent		Non-Existent	
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	11.7	B	37.7	D
IN-9	Gilman Springs Rd/Eucalytpus Ave	-	N/A	Non-Existent		Non-Existent	
IN-10	Redlands Blvd/Locust Ave	C	SIGNAL	5.4	A	16.6	B
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	45.0	D	48.2	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	22.9	C	> 180.0	**F**
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	5.7	A	7.5	A
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	5.1	A	7.3	A
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	62.2	**F**	173.7	**F**
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	13.5	B	> 180.0	**F**
IN-17	Quincy Str/Fir Ave	D	CSS	9.6	A	12.6	B
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	SIGNAL	7.2	A	15.6	B
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	10.5	B	68.9	**F**
IN-20	Oliver Str/Alessandro Blvd	C	CSS	20.0	C	21.6	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	17.3	B	20.2	C
IN-22	Quincy Str/Alessandro Blvd	C	SIGNAL	4.2	A	3.7	A
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	137.4	**F**	74.7	**F**
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	22.3	C	20.2	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	20.3	C	29.7	C
IN-26	Quincy Str/Cactus Ave	C	SIGNAL	3.9	A	3.7	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	14.3	B	13.5	B
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	23.5	C	16.6	B
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	31.6	C	35.2	D
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	30.5	C	23.1	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	12.3	B	19.4	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	31.8	C	39.7	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	22.5	C	17.1	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	21.8	C	24.7	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	29.4	**D**	37.9	**E**
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	46.6	D	50.4	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	113.9	**F**	155.8	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	28.8	C	31.6	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	58.6	**E**	63.8	**E**
IN-40	Kitching St/Iris Ave	C	SIGNAL	65.8	**E**	126.3	**F**
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	35.0	C	79.2	**E**
IN-42	Nason Str/Iris Ave	C	SIGNAL	18.5	B	21.7	C
IN-43	Oliver Str/Iris Ave	D	SIGNAL	24.5	C	25.1	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	7.0	A	7.2	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	27.8	C	52.6	D
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	35.3	D	41.7	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	32.2	C	14.5	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	26.5	C	28.1	C

Table 60: 2035 No-Project Conditions at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	19.8	B	23.7	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	25.5	C	26.2	C
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	31.1	C	28.3	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	30.7	C	28.5	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	38.5	**D**	34.8	C
IN-54	Morrison Str/Cactus Ave	D	SIGNAL	6.1	A	8.6	A
IN-55	Nason Str/Cactus Ave	D	SIGNAL	36.1	D	47.6	D
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	19.2	B	34.5	C
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	35.6	D	88.9	**F**
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	29.6	D	29.5	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	21.7	C	37.1	D
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	32.8	C	41.4	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	9.7	A	12.5	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	22.7	C	42.1	D
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	31.6	C	27.2	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	32.6	C	36.3	**D**
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	39.2	D	32.5	C
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	37.5	D	81.2	**F**
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.6	A	11.5	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	21.9	C	32.8	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	15.1	B	16.4	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	22.6	C	28.2	C
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	28.4	C	52.4	D
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	37.6	D	144.8	**F**
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	71.1	**E**	122.6	**F**
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	> 180.0	**F**	> 180.0	**F**
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	16.2	B	77.5	**E**
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	28.6	C	26.8	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	18.1	B	12.4	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.7	A	7.0	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	32.2	C	16.1	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	28.0	C	73.7	**E**
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	27.0	C	41.5	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	11.3	B	14.8	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	40.2	D	52.4	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	11.2	B	12.2	B
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	45.1	**E**	20.7	C
IN-86	Central Ave/Chicago Ave	D	SIGNAL	46.8	D	79.0	**E**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	17.6	B	20.0	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	45.4	D	106.3	**F**
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	11.2	B	12.9	B
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	38.4	D	68.0	**E**
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	20.5	C	26.8	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	14.1	B	10.7	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	37.4	D	25.5	C

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 60: 2035 No-Project Conditions at Study Intersections (continued)

ID	Study Intersection	LOS Standard	Traffic Control	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	124.5	**F**	87.2	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	57.4	**E**	111.2	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	19.2	B	11.8	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	17.9	B	22.2	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	56.6	**E**	131.0	**F**
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	33.5	C	48.0	D
IN-100	Harley Knox Blvd/Evan Rd	D	SIGNAL	16.1	B	23.8	C
IN-101	Ramona Expy/Indian St	E	SIGNAL	110.4	**F**	> 180.0	**F**
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	49.2	D	58.5	E
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	60.6	E	46.2	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	11.9	B	9.9	A
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.1	C	21.8	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	23.4	C	30.1	C
IN-107	Evans Rd/Rider St	C	SIGNAL	36.3	**D**	34.5	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	32.7	C	22.6	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	28.3	C	36.2	D
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	25.7	C	21.3	C
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	18.1	B	24.9	C
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	29.3	C	34.2	C
IN-113	Evans Rd/Placentia Ave	D	SIGNAL	7.3	A	7.4	A
IN-114	Evans Rd/Orange Ave	C	SIGNAL	25.5	C	25.3	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	31.8	C	31.2	C
IN-116	Evans Rd/Ellis Ave	D	SIGNAL	12.7	B	13.6	B
IN-117	Ellis Ave/I-215 SB Ramps	E	SIGNAL	26.5	C	28.3	C
IN-118	Ellis Ave/SR-215 NB Ramps	E	SIGNAL	22.2	C	34.3	C
IN-119	Evans Rd/San Jacinto Ave	D	SIGNAL	21.1	C	22.7	C
IN-120	Park Center Blvd/Ramona Expy WB Ramps	D	CSS	11.8	B	15.3	C
IN-121	Park Center Blvd/Ramona Expy EB Ramps	D	CSS	11.6	B	23.1	C
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	> 180.0	**F**	> 180.0	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	> 180.0	**F**	> 180.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	> 180.0	**F**	> 180.0	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	43.9	D	39.9	D
IN-127	Potrero Blvd/SR-60 WB Ramps	D	SIGNAL	21.3	C	15.3	B
IN-128	Potrero Blvd/SR-60 EB Ramps	D	SIGNAL	20.3	C	31.3	C
IN-129	W 6th St/California Ave	C	AWS	146.4	**F**	178.3	**F**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	35.5	**D**	94.4	**F**
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	42.2	**D**	100.9	**F**
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	26.4	D	22.2	C
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	127.6	**F**	127.7	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	140.5	**F**	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	17.6	C	14.7	B
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.2	B	10.4	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Freeway Mainline Basic Sections

Table 61 presents the results of the LOS analysis for freeway mainline sections. A total of 57 freeway mainline basic sections were forecast to exceed the target LOS of "D", up from 33 under 2022 No-Project conditions, and 17 under Existing No-Project conditions due to employment and population growth. The sections that would exceed the target LOS would be:

North or Eastbound

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Central Ave. to Mountain Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Archibald Ave. to Haven Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Heacock St. to Perris Blvd.
- SR-60 from Redlands Blvd. to Theodore St.
- SR-60 from Gilman Springs Rd. to Jack Rabbit Trail
- SR-60 from Jack Rabbit Trail to Potrero Blvd.
- SR-91 from I-15 to McKinley St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Adam St. to Madison St.

- SR-91 from Central Ave. to 14th St.
- I-10 from SR-60 to Beaumont Ave.
- I-10 from Beaumont Ave. to Pennsylvania Ave.
- I-10 from Pennsylvania Ave. to Highland Springs
- I-10 from Highland Springs Ave. to Sunset Ave.
- I-10 from S. Hargrave St. to Field Rd.
- I-10 from Morongo Trail to Main St.
- I-215 from Scott Rd. to Garbani Rd.
- I-215 from SR-74 to Ellis Ave.
- I-215 from Ellis Ave. to Redlands Ave.

South or Westbound

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Market St. to Main St.
- SR-60 from Main St. to SR-91
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-60 from Pigeon Pass Rd. to Heacock St.
- SR-60 from Redlands Blvd. to Theodore St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Tyler St. to Van Buren Blvd.

- SR-91 from Madison St. to Indiana Ave.
- I-10 from SR-60 to Beaumont Ave.
- I-10 from Pennsylvania Ave. to Highland Springs Ave.
- I-10 from Highland Springs Ave. to Sunset Ave.
- I-10 from S. 8th St. to S. Hargrave St.
- I-215 from Ethanac Rd. to SR-74
- I-215 from SR-74 to Ellis Ave.
- I-215 from Ellis Ave. to Redlands Ave.
- I-215 from Center St. to Iowa Ave./La Cadena Dr.
- I-215 from Baseline Rd. to Highland Ave.

Table 61: 2035 No-Project Freeway Mainline Level of Service

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,560	41.2	E	8,750	43.6	E	8,770	43.3	E	7,840	34.6	D
F-3	SR-60	Ramona Ave to Central Ave	8,190	37.8	E	10,230	66.5	F	8,080	37.2	E	7,720	33.7	D
F-4	SR-60	Central Ave to Mountain Ave	8,900	44.8	E	10,210	66.0	F	6,340	25.4	C	7,580	32.7	D
F-5	SR-60	Mountain Ave to Euclid Ave	8,780	43.4	E	7,590	33.3	D	6,230	25.2	C	8,250	37.9	E
F-6	SR-60	Euclid Ave to Grove Ave	9,920	59.3	F	9,680	56.0	F	6,470	26.1	D	7,950	35.5	E
F-7	SR-60	Grove Ave to Vineyard Ave	9,210	48.5	F	10,050	62.7	F	6,280	25.0	C	8,150	37.1	E
F-8	SR-60	Vineyard Ave to Archibald Ave	9,080	46.3	F	10,210	66.0	F	7,660	33.3	D	7,640	33.1	D
F-9	SR-60	Archibald Ave to Haven Ave	8,430	39.5	E	7,330	31.5	D	See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	8,430	27.5	D	8,110	26.4	D	6,510	20.3	C	7,970	25.6	C
F-11	SR-60	Milliken Ave to I-15	5,160	19.8	C	4,530	17.4	B	5,460	21.0	C	7,180	29.8	D
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,140	15.9	B	2,740	10.6	A	4,840	14.9	B	6,360	19.4	C
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,950	19.1	C	4,170	16.1	B	4,220	16.1	B	5,620	21.6	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,380	16.8	B	3,150	12.2	B	4,140	15.9	B	5,660	21.8	C
F-15	SR-60	Pedley Rd to Pyrite St	4,620	17.8	B	3,610	13.9	B	3,260	12.5	B	4,820	18.3	C
F-16	SR-60	Pyrite St to Valley Way	5,060	19.5	C	3,880	15.0	B	2,470	9.5	A	3,930	14.9	B
F-17	SR-60	Valley Way to Rubidoux Blvd	6,160	38.0	E	3,850	19.9	C	4,560	24.1	C	6,360	39.6	E
F-18	SR-60	Rubidoux Blvd to Market St	6,490	42.1	E	4,210	22.2	C	3,410	17.5	B	5,120	27.7	D
F-19	SR-60	Market St to Main St	6,020	36.4	E	6,620	44.9	E	5,530	31.5	D	6,280	38.7	E
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			5,320	29.7	D	6,310	39.0	E
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,500	59.8	F	9,860	70.8	F	8,330	30.8	D	8,980	33.3	D
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	6,090	24.2	C	5,790	22.9	C	7,500	33.2	D	8,970	46.6	F
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			7,050	50.4	F	3,590	18.6	C
F-29	SR-60	Pigeon Pass Rd to Heacock St	3,330	27.3	D	4,120	38.2	E	3,650	31.3	D	3,910	35.0	E
F-30	SR-60	Heacock St to Perris Blvd	3,020	24.1	C	4,200	39.6	E	3,560	30.1	D	3,410	28.3	D
F-31	SR-60	Perris Blvd to Nason St	2,670	20.9	C	3,520	29.4	D	3,330	27.3	D	2,780	21.9	C
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	2,480	19.2	C	3,130	25.0	C	3,150	25.2	C	2,680	20.9	C
F-34	SR-60	Redlands Blvd to Theodore St	3,200	25.9	C	4,500	45.4	F	4,010	36.3	E	3,530	29.7	D
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	2,420	20.1	C	4,430	53.0	F	3,350	30.5	D	2,920	25.2	C
F-37	SR-60	Jack Rabbit Trail to Potrero Blvd	2,500	19.5	C	4,750	51.8	F	3,690	31.6	D	3,010	24.0	C
F-38	SR-60	Potrero Blvd to I-10	2,300	17.8	B	3,620	30.6	D	2,360	18.2	C	1,930	15.0	B
F-39	SR-91	I-15 to McKinley St	8,140	26.3	D	11,870	52.4	F	8,590	28.6	D	8,630	28.6	D
F-40	SR-91	McKinley St to Pierce St	6,990	29.1	D	6,910	29.0	D	6,550	26.9	D	7,440	32.0	D
F-41	SR-91	Pierce St to Magnolia Ave	6,430	41.3	E	6,360	41.2	E	6,260	39.9	E	9,000	144.5	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			6,130	38.3	E	8,600	107.0	F
F-43	SR-91	La Sierra Ave to Tyler St	6,170	38.1	E	6,250	39.8	E	5,460	31.4	D	6,390	40.8	E
F-44	SR-91	Tyler St to Van Buren Blvd	7,250	30.7	D	6,950	29.2	D	6,880	28.8	D	7,970	35.9	E

Table 61: 2035 No-Project Freeway Mainline Level of Service (continued)

ID	Freeway	Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	7,270	30.8	D	6,290	25.5	C	6,590	27.1	D	7,720	34.0	D
F-46	SR-91	Adam St to Madison St	7,980	36.6	**E**	6,030	24.3	C	6,270	25.4	C	6,970	29.0	D
F-47	SR-91	Madison St to Arlington Ave	7,000	29.6	D	5,390	21.4	C	5,540	32.1	D	6,290	39.5	**E**
F-49	SR-91	Central Ave to 14th St	6,400	40.9	**E**	5,730	33.4	D	5,290	20.8	C	5,460	21.2	C
F-51	SR-91	University Ave to Spruce St	8,160	26.4	D	7,420	23.4	C	See Weaving Analysis			See Weaving Analysis		
F 66	I 215	Scott Rd to Garbani Rd	3,350	17.2	B	6,010	36.0	**E**	5,470	30.8	D	4,160	21.5	C
F-84	I-215	Garbani Rd to Newport Rd	3,150	16.1	B	5,680	32.9	D	4,950	26.6	D	4,040	20.9	C
F-68	I-215	Newport Rd to McCall Blvd	2,910	15.0	B	4,610	24.4	C	5,020	27.2	D	5,240	28.9	D
F-69	I-215	McCall Blvd to Ethanac Rd	3,530	18.1	C	5,570	31.9	D	5,400	30.4	D	4,800	25.6	C
F-70	I-215	Ethanac Rd to SR-74	5,240	29.1	D	5,650	32.6	D	5,390	30.3	D	6,220	38.3	**E**
F-71	I-215	SR-74 to Ellis Ave	5,200	28.7	D	6,760	46.1	**F**	7,170	53.3	**F**	5,980	35.6	**E**
F-85	I-215	Ellis Ave to Redlands Ave	4,820	25.9	C	6,200	38.4	**E**	6,560	43.1	**E**	5,490	31.2	D
F-74	I-215	Columbia Ave to Center St	4,110	21.6	C	3,350	17.5	B	5,000	27.4	D	3,680	19.1	C
F-75	I-215	Center St to La Cadena Dr	4,940	26.9	D	4,270	22.7	C	5,970	35.8	**E**	4,690	25.1	C
F-76	I-215	La Cadena Dr to Barton Rd	4,880	26.5	D	4,310	22.8	C	5,060	27.8	D	3,780	19.7	C
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,320	29.9	D	4,700	25.4	C	5,540	31.6	D	4,210	22.2	C
F-78	I-215	Mt. Vernon Ave to I-10	5,110	19.8	C	5,720	22.5	C	6,480	26.2	D	5,210	20.3	C
F-80	I-215	Auto Plaza Dr to Mill St	4,680	18.0	B	5,980	23.6	C	5,600	21.7	C	4,540	17.4	B
F-83	I-215	Baseline Rd to Highland Ave	3,260	16.8	B	4,890	26.4	D	6,910	48.0	**F**	5,450	30.8	D
F-52	I-10	SR-60 to Beaumont Ave	5,030	19.7	C	8,170	38.3	**E**	7,820	35.3	**E**	6,060	24.5	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	5,100	20.1	C	8,030	37.1	**E**	7,660	34.1	D	5,840	23.5	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	5,240	20.7	C	8,170	38.3	**E**	8,180	38.4	**E**	5,920	23.9	C
F-55	I-10	Highland Springs Ave to Sunset Ave	5,350	21.2	C	8,240	38.9	**E**	7,990	36.7	**E**	5,590	22.3	C
F-56	I-10	Sunset Ave to 22nd St	4,970	19.6	C	7,670	34.5	D	7,620	33.8	D	5,420	21.5	C
F-57	I-10	22nd St to 8th St	4,880	19.3	C	7,480	33.0	D	7,680	34.5	D	5,130	20.3	C
F-58	I-10	8th St to Hargrave St	5,000	19.7	C	7,770	34.9	D	7,790	35.4	**E**	5,370	21.4	C
F-59	I-10	Hargrave St to Fields Rd	4,770	18.8	C	7,970	36.9	**E**	7,610	34.0	D	5,000	19.8	C
F-60	I-10	Fields Rd to Morongo Trail	3,990	15.8	B	7,490	33.1	D	7,150	30.7	D	4,620	18.3	C
F-61	I-10	Morongo Trail to Main St	4,320	17.1	B	7,800	35.2	**E**	7,040	30.0	D	5,040	20.0	C
F-62	I-10	Main St to Haugen-Lehmann Way	4,080	16.1	B	7,530	33.1	D	7,070	30.2	D	4,410	17.4	B
F-64	I-10	SR-111 to Tipton Rd	3,660	14.5	B	7,320	31.7	D	6,420	26.2	D	4,860	19.2	C
F-65	I-10	Tipton Rd to SR-62	3,700	14.6	B	7,330	31.7	D	6,430	26.2	D	4,870	19.2	C

Indicates that the LOS exceeds the target level

Freeway Weaving LOS

Table 62 shows the weaving LOS under 2035 No-Project conditions. Seven north- or east-bound sections and six south- or westbound sections would operate below LOS "D". These sections are:

North or Eastbound

- SR-60 from SR-71/Garey Ave. to Reservoir St.
- SR-60 from Main St. to SR-91
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from W. Blaine St./3rd St. to University Ave.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-60 from Theodore St. to Gilman Springs Rd.
- SR-91 from Arlington Ave. to Central Ave.

South or Westbound

- SR-60 from Haven Ave. to Archibald Ave.
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from W. Blaine St./3rd St. to University Ave.
- SR-60 from University Ave. to Martin Luther King Blvd.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- I-10 from Haugen-Lehmann Way to SR-111

Table 62: 2035 No-Project Freeway Weaving Section Level of Service

ID	Freeway	Weaving Segment	Northbound / Eastbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	8,630	39.7	E	9,700	46.8	E	6,130	22.0	C	7,510	27.6	C
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			6,910	28.7	D	8,180	36.4	E
W-20	SR-60	Main St to SR-91	7,060	34.1	D	7,110	35.1	E	See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	7,280	32.4	D	10,640	>Capacity	F	8,490	33.7	D	9,970	40.9	E
W-22	SR-60	Blaine St/3rd St to University Ave	7,120	28.9	D	8,460	38.7	E	6,320	24.3	C	8,890	35.8	E
W-23	SR-60	University Ave to Martin Luther King	7,960	30.0	D	7,040	26.4	C	6,750	28.2	D	8,830	36.9	E
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,890	37.0	E	8,640	40.5	E	8,340	38.1	E	9,200	39.2	E
W-27	SR-60	I-215 to Day St	3,980	16.3	B	6,210	27.7	C	See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,760	16.2	B	5,660	26.5	C	4,790	33.5	D	4,790	32.4	D
W-32	SR-60	Moreno Beach Dr to Nason St	2,640	16.5	B	3,480	22.6	C	3,310	20.5	C	2,680	16.2	B
W-35	SR-60	Theodore St to Gilman Springs Rd	3,070	17.5	B	5,710	37.9	E	4,560	32.0	D	3,680	24.2	C
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,970	33.7	D	6,930	34.2	D	See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	7,620	41.0	E	4,370	21.3	C	5,160	24.9	C	5,760	27.4	C
W-50	SR-91	14th St to University Ave	5,310	26.4	C	5,060	26.1	C	6,070	23.7	C	8,010	33.0	D
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			6,500	20.6	C	10,130	32.5	D
W-73	I-215	SR-60 to Columbia Ave	5,330	28.4	D	4,610	24.6	C	6,660	33.8	D	5,570	28.2	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,590	16.9	B	5,640	20.9	C	6,200	22.5	C	4,950	18.8	B
W-81	I-215	Mill St to 2nd St	5,190	18.3	B	6,460	23.5	C	6,360	23.4	C	4,980	18.3	B
W-82	I-215	5th St to Baseline Rd	3,900	13.5	B	4,980	17.7	B	5,610	20.3	C	4,060	14.6	B
W-63	I-10	Haugen-Lehmann Way to SR-111	4,170	14.4	B	8,420	33.1	D	7,270	29.0	D	5,500	>Capacity	F

Indicates that the LOS exceeds the target level

Freeway Ramp LOS

Table 63 shows the level of service of study freeway ramps under 2035 No-Project conditions. Eight ramps would exceed the target LOS of "D", compared to one under 2022 No-Project and Existing No-Project conditions. This is due to population and employment growth outpacing the growth of highway capacity. The ramps that would exceed LOS "D" under 2035 No-Project conditions would be:

- SR-60 eastbound On-Ramp from Central Ave.
- SR-60 eastbound Off-Ramp to Theodore St.
- SR-60 eastbound Loop On-Ramp from Theodore St.
- SR-60 eastbound Off-Ramp to Gilman Spring Rd.
- SR-60 eastbound On-Ramp from Gilman Spring Rd.
- SR-60 westbound Off-Ramp to Theodore St.
- SR-60 westbound On-Ramp from Theodore St.
- SR-60 westbound Loop On-Ramp from Redlands Blvd.

Details of the LOS calculations for freeways under 2035 No-Project Conditions can be found in Appendix N.

Table 63: 2035 No-Project Freeway Ramp Level of Service

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	7,410	580	30.6	D	6,430	1,400	33.8	D
R-2	SR-60 EB	On-Ramp from Central Ave	1	7,890	1,220	32.2	F	8,630	970	32.9	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	2,480	220	13.8	B	3,130	440	19.7	B
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	2,260	90	22.1	C	2,690	60	25.4	C
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	1	2,350	110	19.9	B	2,750	480	26.0	C
R-6	SR-60 EB	Off-Ramp to Theodore St	1	3,200	270	25.0	C	4,500	150	36.7	F
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	2,930	150	22.0	C	4,350	1,350	42.9	F
R-8	SR-60 EB	Direct On-Ramp from Theodore St	0	Does not Exist in this Scenario				Does not Exist in this Scenario			
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	2	3,070	840	19.4	B	5,710	1,570	35.8	E
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	2,230	260	16.9	B	4,140	470	34.3	F
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	2	3,350	240	20.9	C	2,920	560	18.2	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	3,110	1,330	32.2	D	2,360	1,140	24.6	C
R-13	SR-60 WB	Off-Ramp to Theodore St	1	4,560	640	32.7	F	3,680	380	24.8	C
R-14	SR-60 WB	On-Ramp from Theodore St	1	3,920	90	35.5	E	3,300	230	31.5	D
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	4,010	310	32.4	D	3,530	370	28.1	D
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	3,700	200	36.5	E	3,160	110	31.4	D
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	1	3,900	350	34.7	D	3,270	280	29.0	D
R-18	SR-60 WB	Off-Ramp to Central Ave	2	8,340	480	32.0	D	9,200	540	35.0	D
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	8,330	710	32.5	D	8,980	660	34.1	D

Indicates that the LOS exceeds the target level

10. 2035 PLUS BUILD-OUT CONDITIONS

The analysis of 2035 Plus Build-out Conditions shows the effect of project-related traffic if the WLC project were built-out in full and no other changes from the 2035 No-Project scenario occurred to the roadway system of land uses.

A. ROAD SEGMENT LOS, IMPACTS, AND MITIGATIONS

Table 64 compares the LOS for study roadway segments under 2035 Plus Build-out Conditions to 2035 No-Project Conditions and to the target LOS under the City's General Plan policies. Under 2035 Plus Build-out Conditions traffic volumes on one segment would exceed the target LOS, namely:

- Gilman Springs Rd. from Alessandro Blvd. to Bridge St. would exceed the threshold of significance under 2035 Plus Build-out Conditions. Widening the road from six lanes to eight lanes would allow it to achieve the target under 2035 Plus Build-out Conditions. However, 6 lanes is the maximum planned for under the City of Moreno Valley General Plan and further widening may be undesirable from a public policy standpoint.

The feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 64: 2035 Plus Build-out Road Segment Impacts and Mitigations

	Roadway	From	To	LOS Standard*	2035 No-Project Conditions			2035 Plus Build-out Conditions			Project Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	LOS After Mitigation
					Roadway Section**	Daily Volume	LOS	Roadway Section*	Daily Volume	LOS			
S-1	Theodore Street (A)	SR-60 WB Ramps	Ironwood Avenue	D	2U	9,774	C	2U	10,267	D			
S-2	Theodore Street (A)	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	2U	8,726	B	6D	33,082	A			
S-3	Fir (Eucalyptus) Ave.	Redlands Blvd	Theodore Street (A)	D	2U	6,847	A	4D	10,513	A			
S-4	Eucalyptus Ave (B)	Theodore Street (A)	Gilman Springs Rd	N/A	Future Road			4D	6,565	A			
S-5	Theodore Street (A)	Fir (Eucalyptus) Ave.	Street E	D	2U	3,295	A	6D	35,374	B			
S-6	Street E	Theodore Street (A)	Cactus Ave Extension	N/A	Future Road			4U	13,862	A			
S-7	Street F	Theodore Street (A)	Alessandro Blvd (Street C)	N/A	Future Road			2U	5,009	A			
S-8	Theodore Street (A)	Fir (Eucalyptus) Ave.	Alessandro Blvd (Street C)	D	2U	3,437	A	4D	13,001	A			
S-9	Alessandro Blvd (Street E)	Merwin Street	Theodore Street (A)	D	2U	10,854	D	4U	13,486	A			
S-10	Cactus Ave Extension	Alessandro Blvd (Street E)	Cactus Ave.	N/A	Future Road			4U	17,423	B			
S-11	Alessandro Blvd (Street C)	Theodore Street (A)	Street F	D	2U	7,437	A	4U	14,680	A			
S-13	Alessandro Blvd (Street C)	Street F	Gilman Springs Rd	D	2U	7,437	A	4U	21,164	D			
S-14	Alessandro Blvd	Moreno Beach Drive	Redlands Blvd	D	4U	6,373	A	4U	5,416	A	***		
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	D	6D	49,434	D	6D	54,288	F	Yes	Widen to 8 lanes	C
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	D	6D	41,537	C	6D	47,958	D			
S-18	Redlands Blvd	SR-60 EB Ramps	Fir (Eucalyptus) Ave.	D	4U	13,411	A	4U	17,626	C			
S-19	Redlands Blvd	Fir (Eucalyptus) Ave.	Alessandro Blvd	C	4U	7,665	A	4U	5,037	A			
S-20	Alessandro Blvd	Redlands Blvd	Merwin Street	C	4U	11,038	A	4U	1,677	A	***		
S-21	Redlands Blvd	Alessandro Blvd	Cactus Ave.	C	4U	11,511	A	4U	5,653	A			
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	C	4U	1,144	A	4U	16,916	B			

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** Section is the number of lanes, with "U" for "undivided" and "D" for "Divided" roadways.

*** Due to the severing of Alessandro Blvd. and the diversion of traffic to other routes, there is no need to widen this section beyond the current 2U configuration

Indicates LOS exceeds the target level

B. INTERSECTION LOS, IMPACTS, AND MITIGATIONS

Figure 53 shows the turning movement volumes under 2035 Plus Build-out Conditions (see Figure 16 for the key map). Table 65 presents the LOS for the study intersections under the 2035 Plus Build-out Conditions in the AM and PM peak hours. Detailed worksheets are presented in Appendix H. Table 66 identifies where impacts occur and mitigation measures that would reduce the impacts to a less-than-significant level.

As shown in Table 66 there are 35 study intersections where the project would have a significant impact. Thirty of these intersections exceed the threshold of significance under 2035 No-Project Conditions and five would exceed the threshold of significance with the addition of the project. These intersections are:

Would Exceed Threshold of Significance Under Both 2035 No-Project Conditions and 2035 Plus Build-out Conditions

- Theodore St./Ironwood Ave.
- Moreno Beach Dr./Locust Ave.
- Moreno Beach Dr./SR-60 EB Ramps
- Iris Ave./Perris Blvd.
- Kitching St./Iris Ave.
- Lasselle Str./Iris Ave.
- Lasselle St./Cactus Ave.
- Graham St./Alessandro Blvd.
- Alessandro Blvd./Sycamore Canyon Blvd.
- I-215 NB Ramps/Cactus Ave.
- Elsworth St./Cactus Ave.
- Central Ave./Lochmoor Dr.
- Alessandro Blvd./Mission Grove Pkwy.
- Martin Luther King Blvd./I-215 NB Ramps
- Central Ave./Chicago Ave.
- Central Ave./Canyon Crest Dr.
- Arlington Ave./Riverside Ave./SR-91 SB Ramps
- Arlington Ave./Victoria Ave.
- Alessandro Blvd./Chicago Ave.
- Alessandro Blvd./Canyon Crest Dr.
- Ramona Expwy./Indian St.
- Evans Rd./Rider St.

- Gilman Springs Rd./Bridge St.
- SR-79 (Sanderson Ave.) NB/Gilman Springs Rd.
- SR-79 (Sanderson Ave.) SB/Gilman Springs Rd.
- W 6th St./California Ave.
- W 6th St./Beaumont Ave.
- Reche Canyon Rd./Reche Vista Dr.
- San Timoteo Canyon Rd./Live Oak Canyon Rd.
- Redlands Blvd./San Timoteo Canyon Rd.

Would Exceed Threshold of Significance Under 2035 Plus Build-out Conditions (only)

- Redlands Blvd./Ironwood Ave.
- Moreno Beach Dr./Cactus Ave.
- Redlands Blvd./Cactus Ave.
- Moreno Beach Dr./Ironwood Ave.
- San Timoteo Canyon Rd./Alessandro Rd.

The mitigation measures shown in Table 66 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

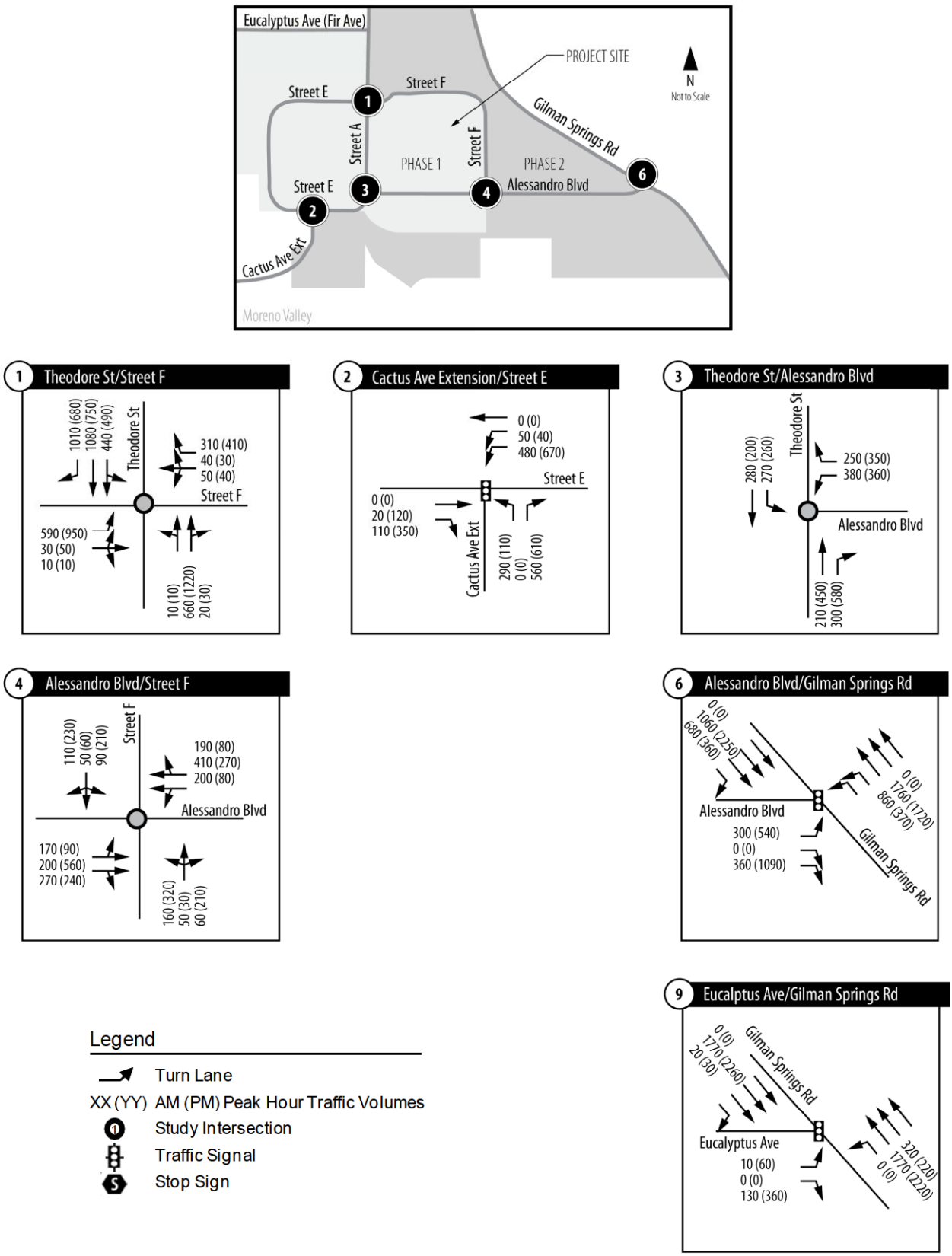


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions

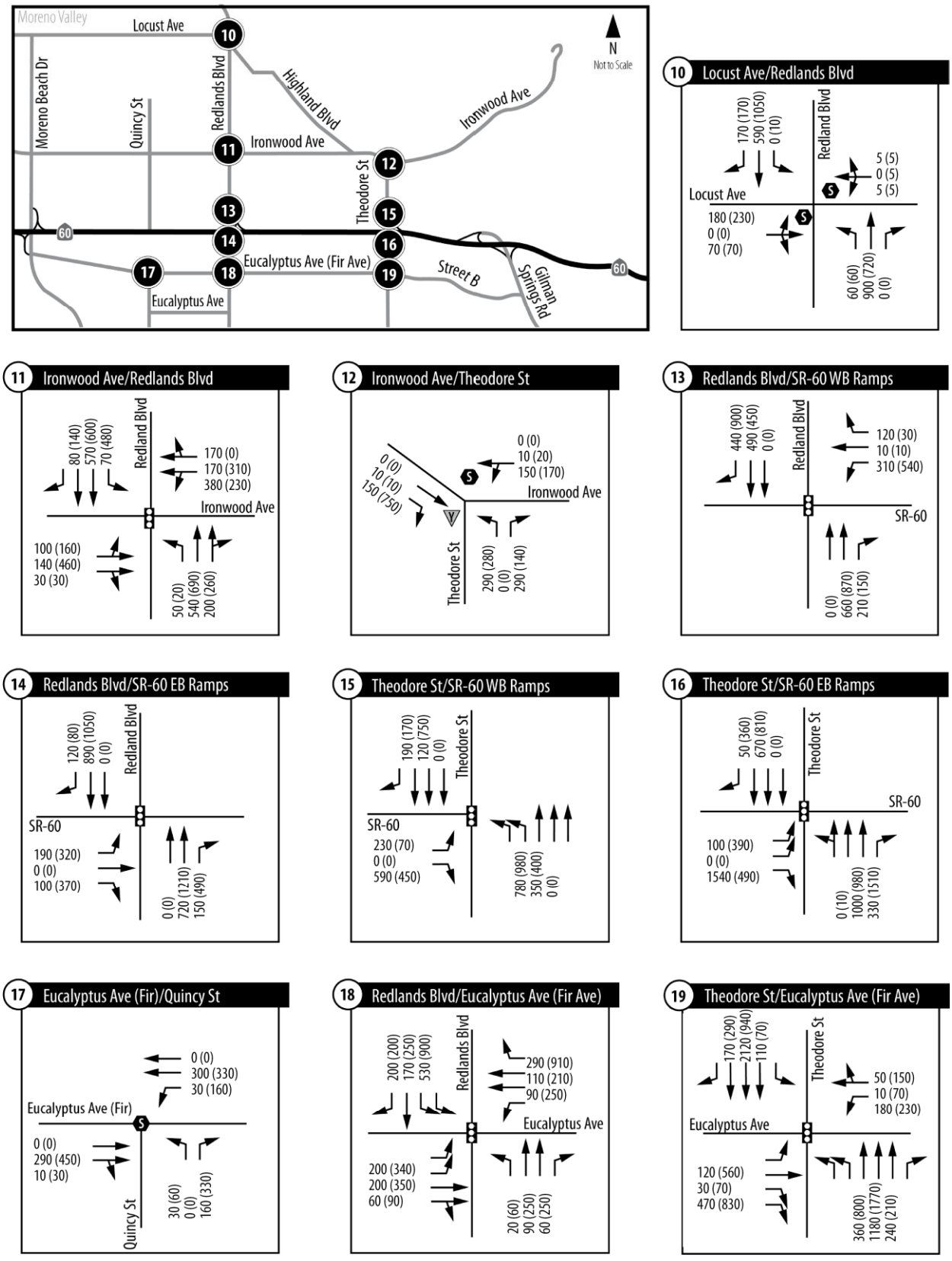


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (B)

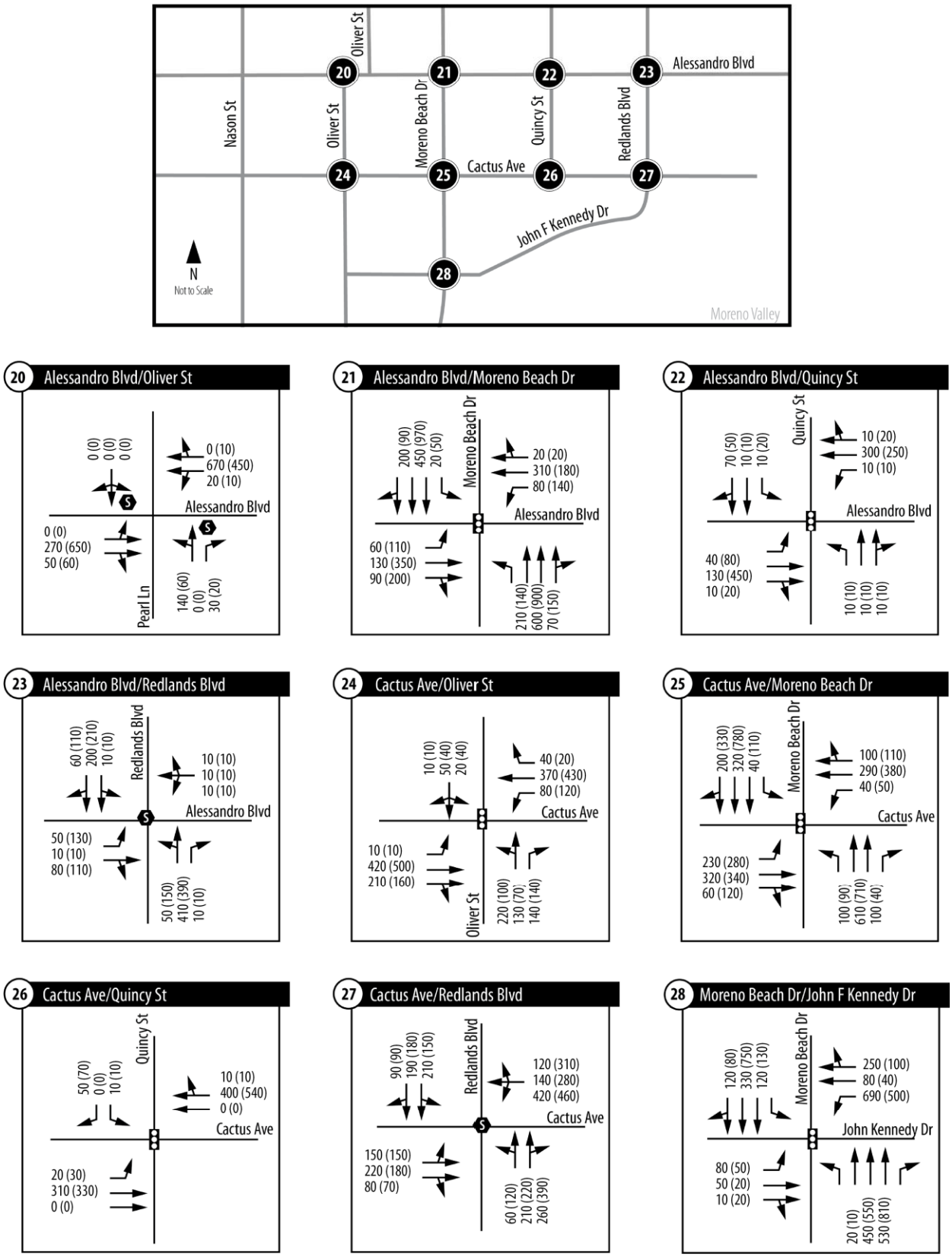


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (C)

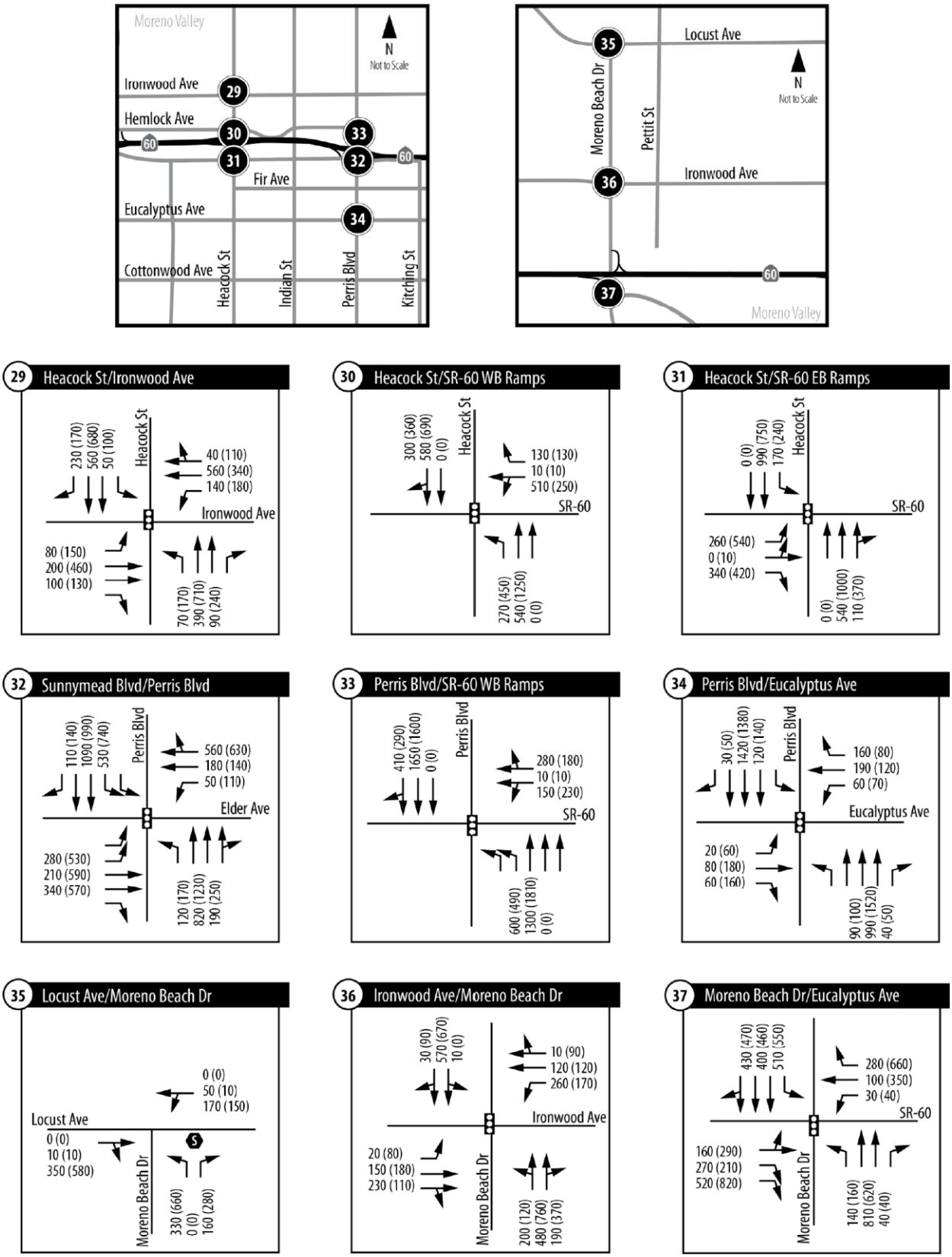


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (D)

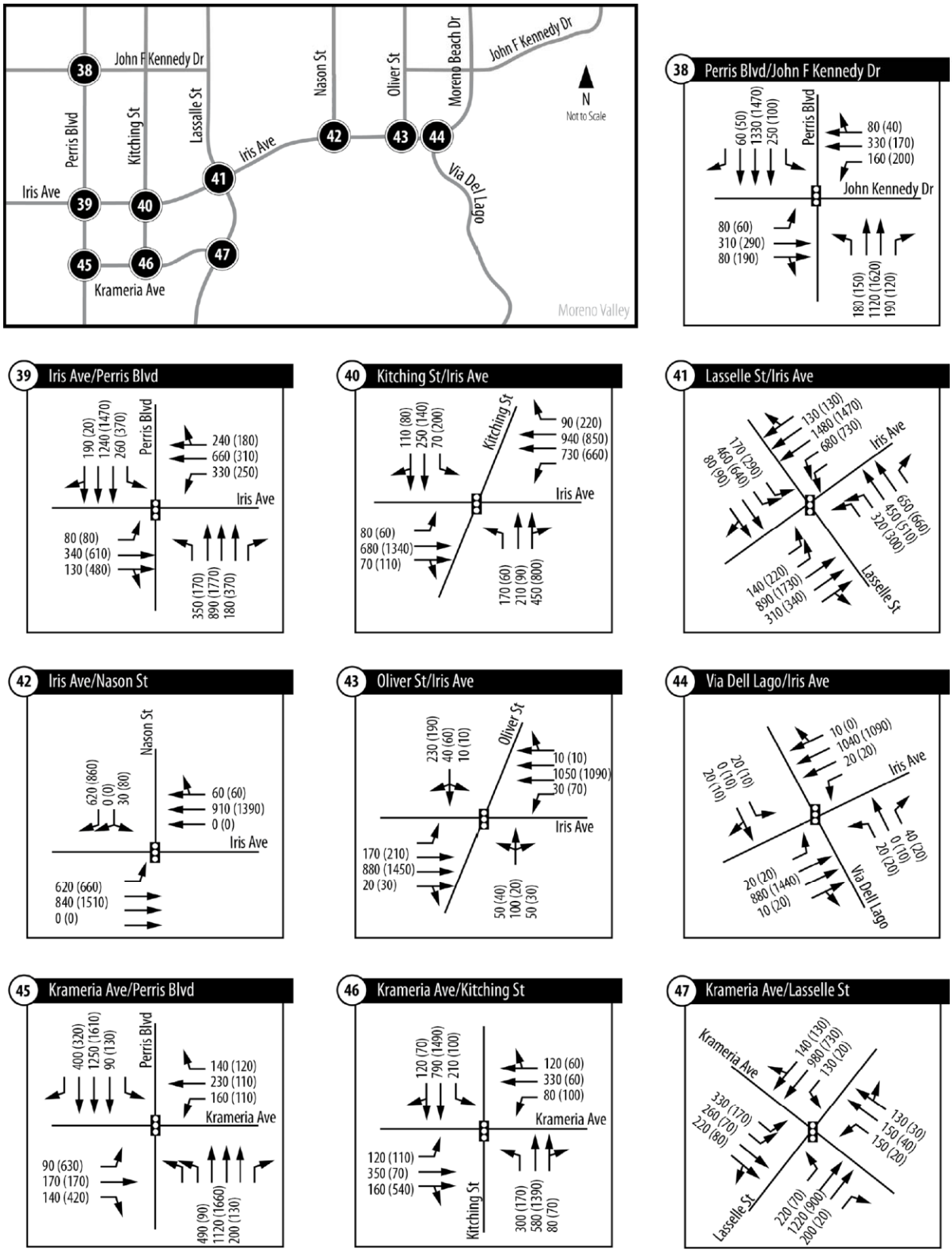


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (E)

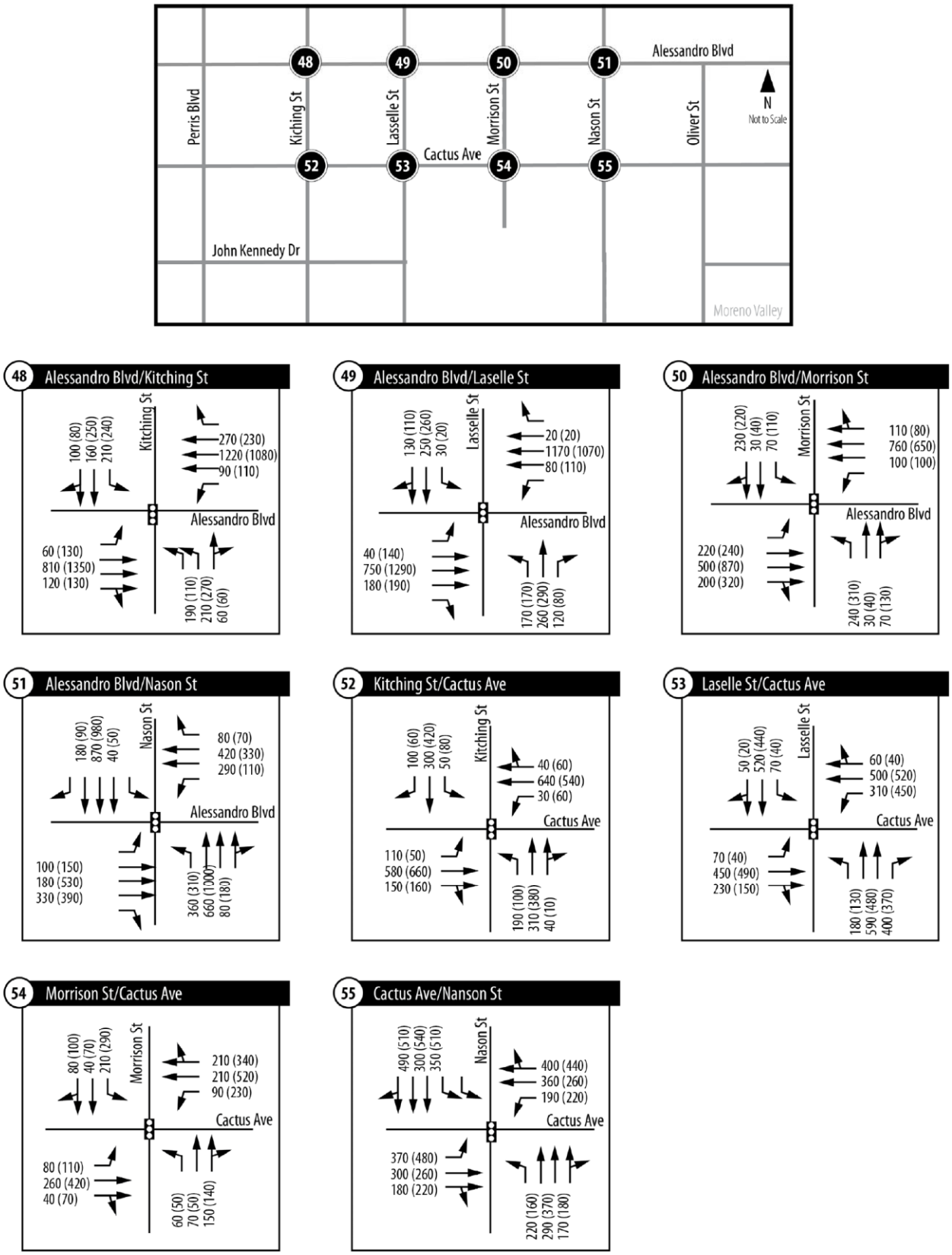


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (F)

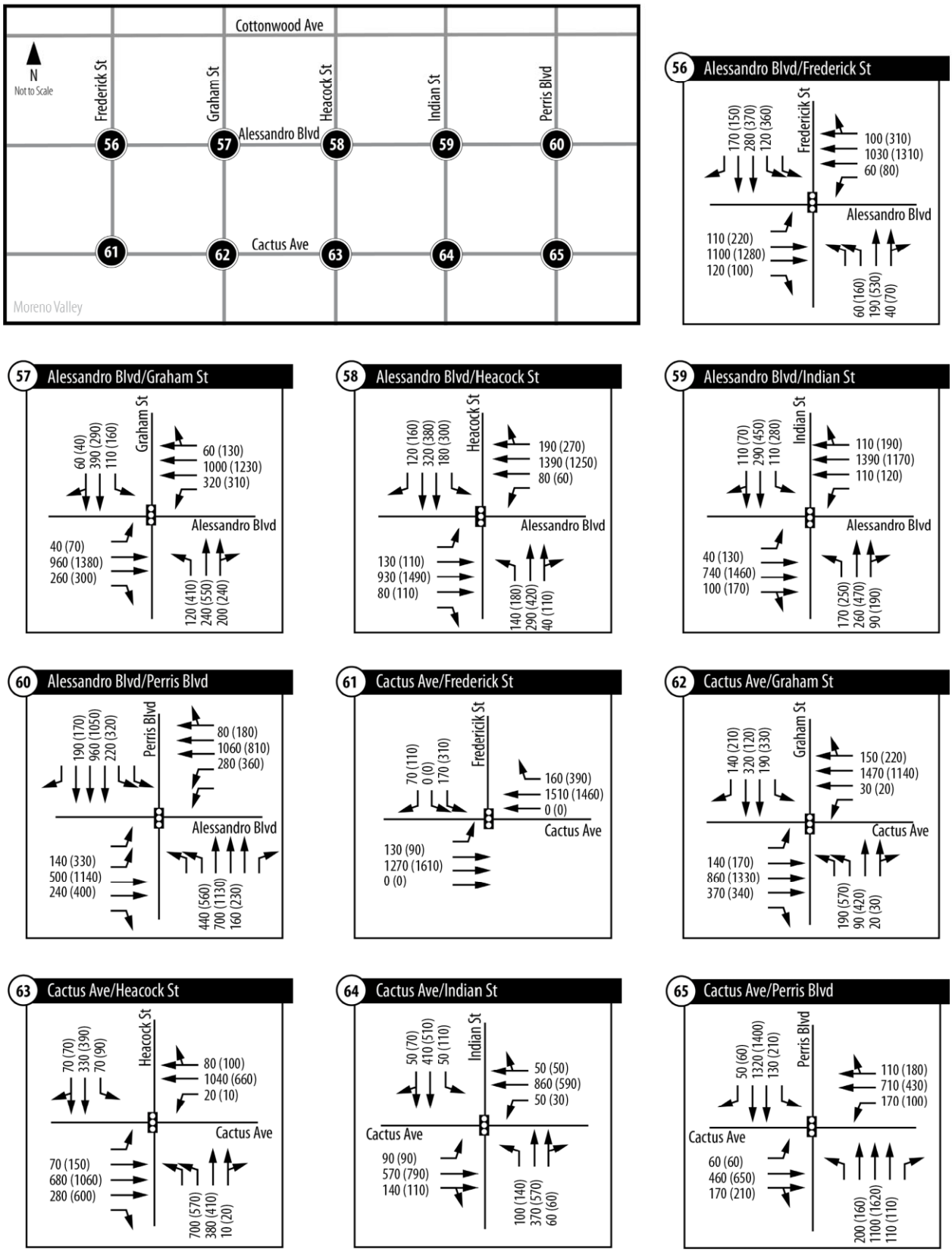


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (G)

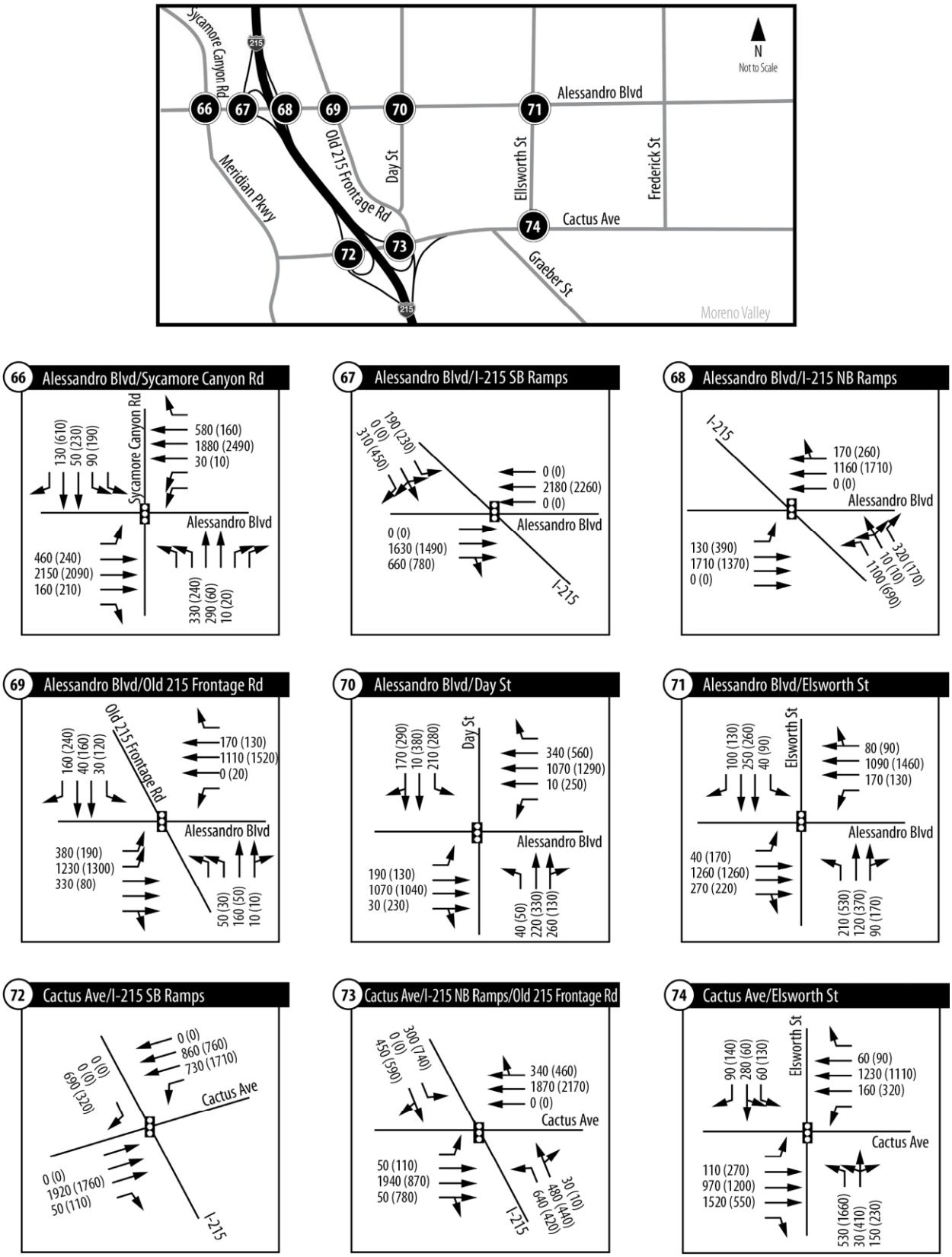


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (H)

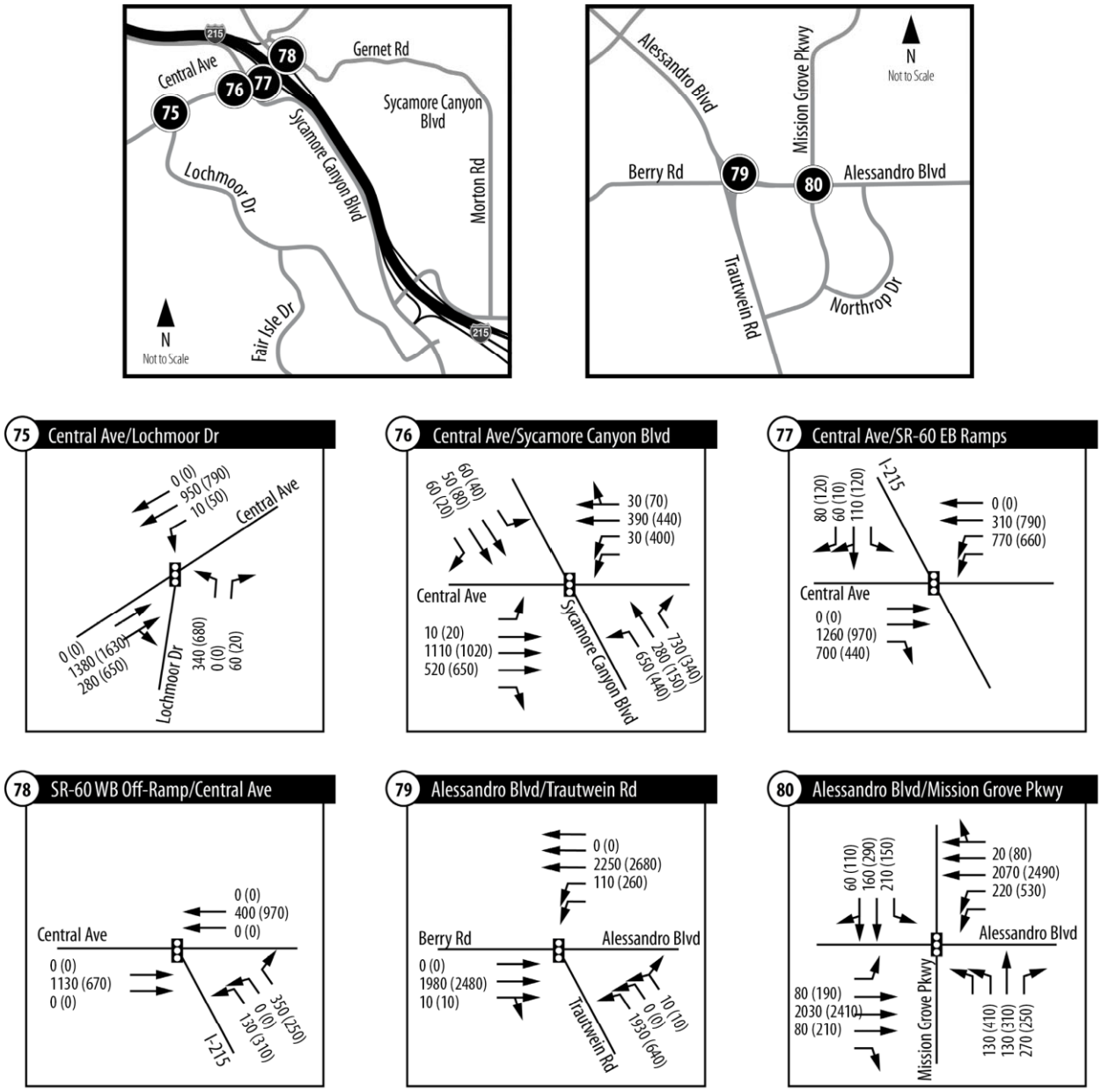


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (I)

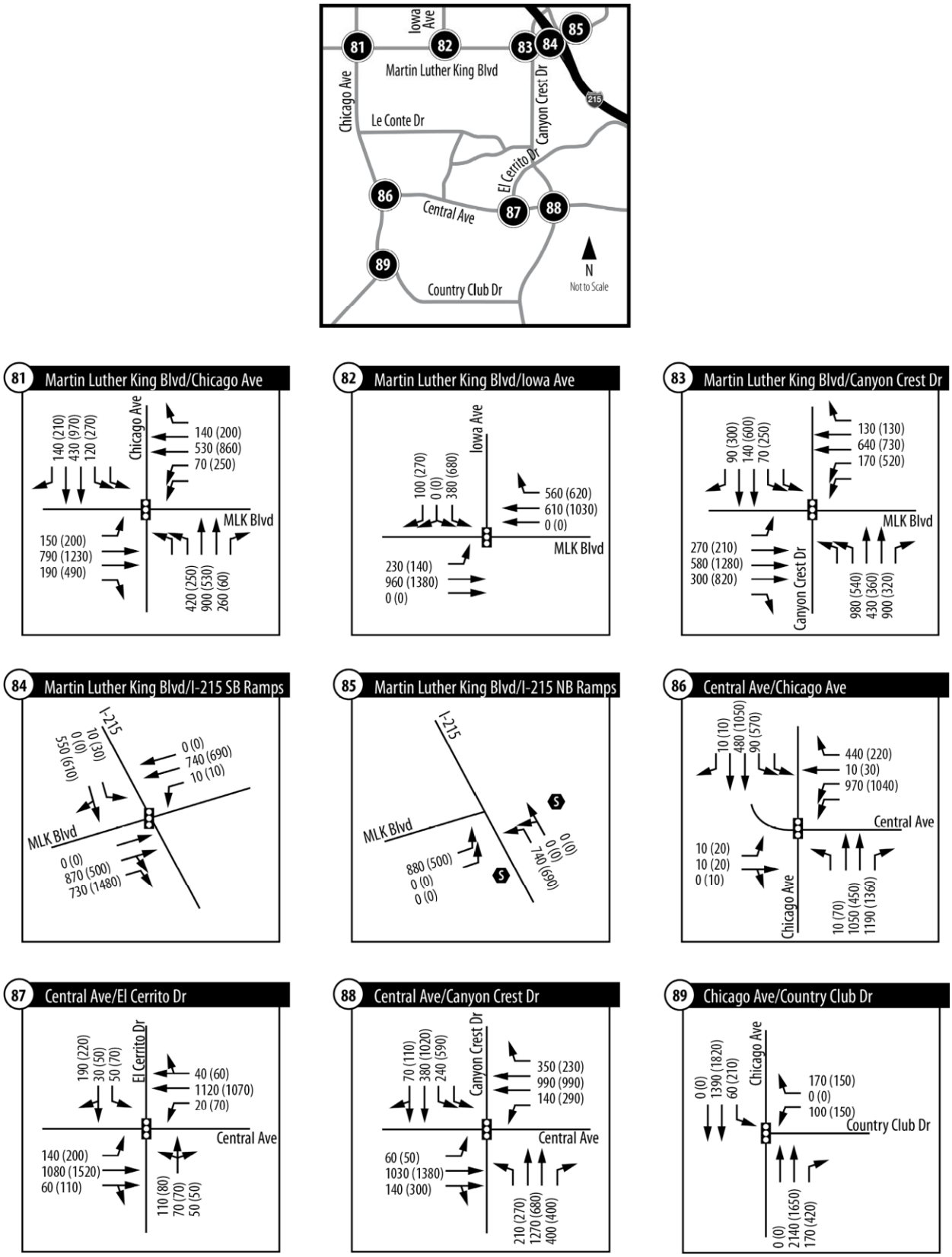


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (J)

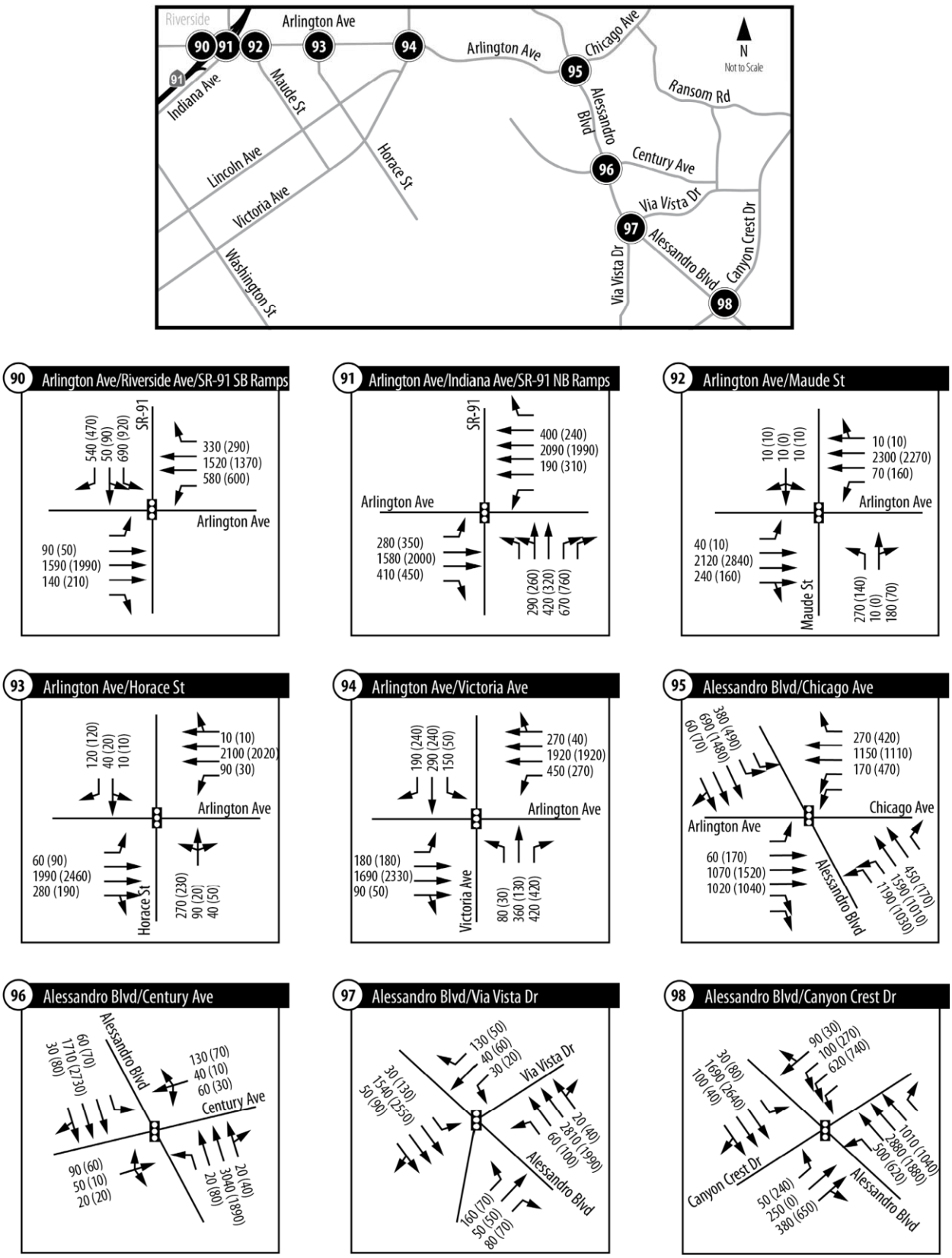


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (K)

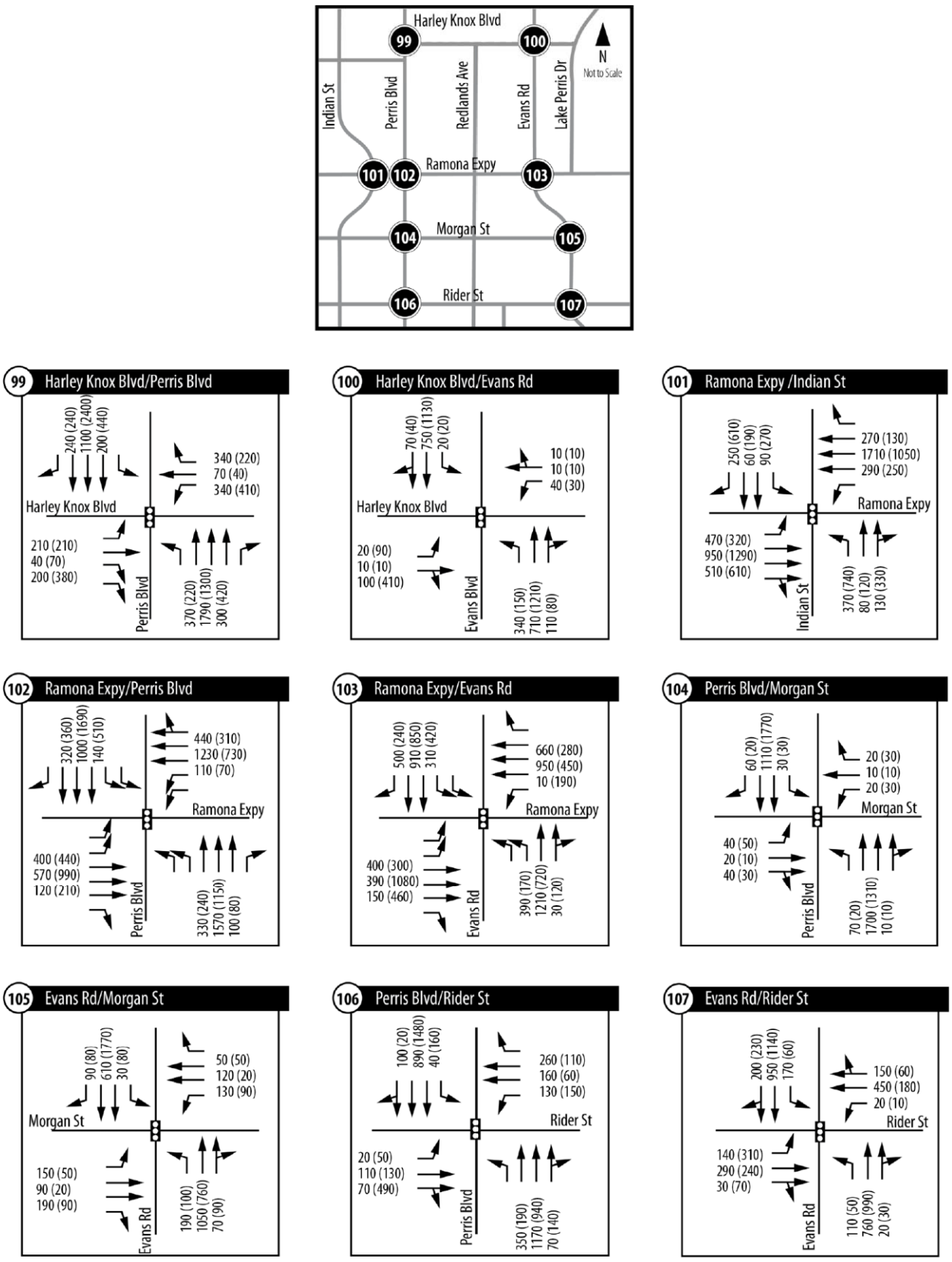


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (L)

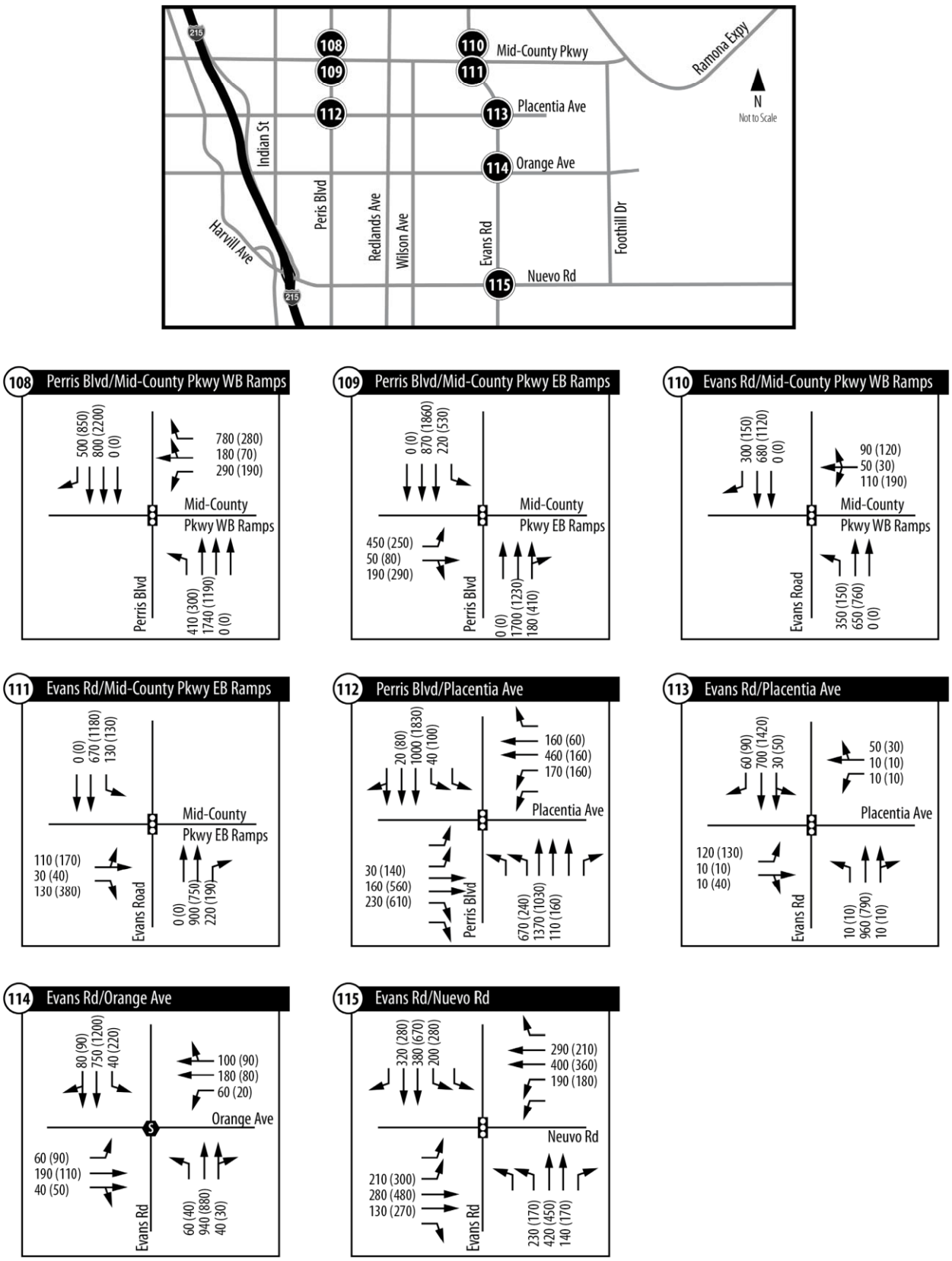


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (M)

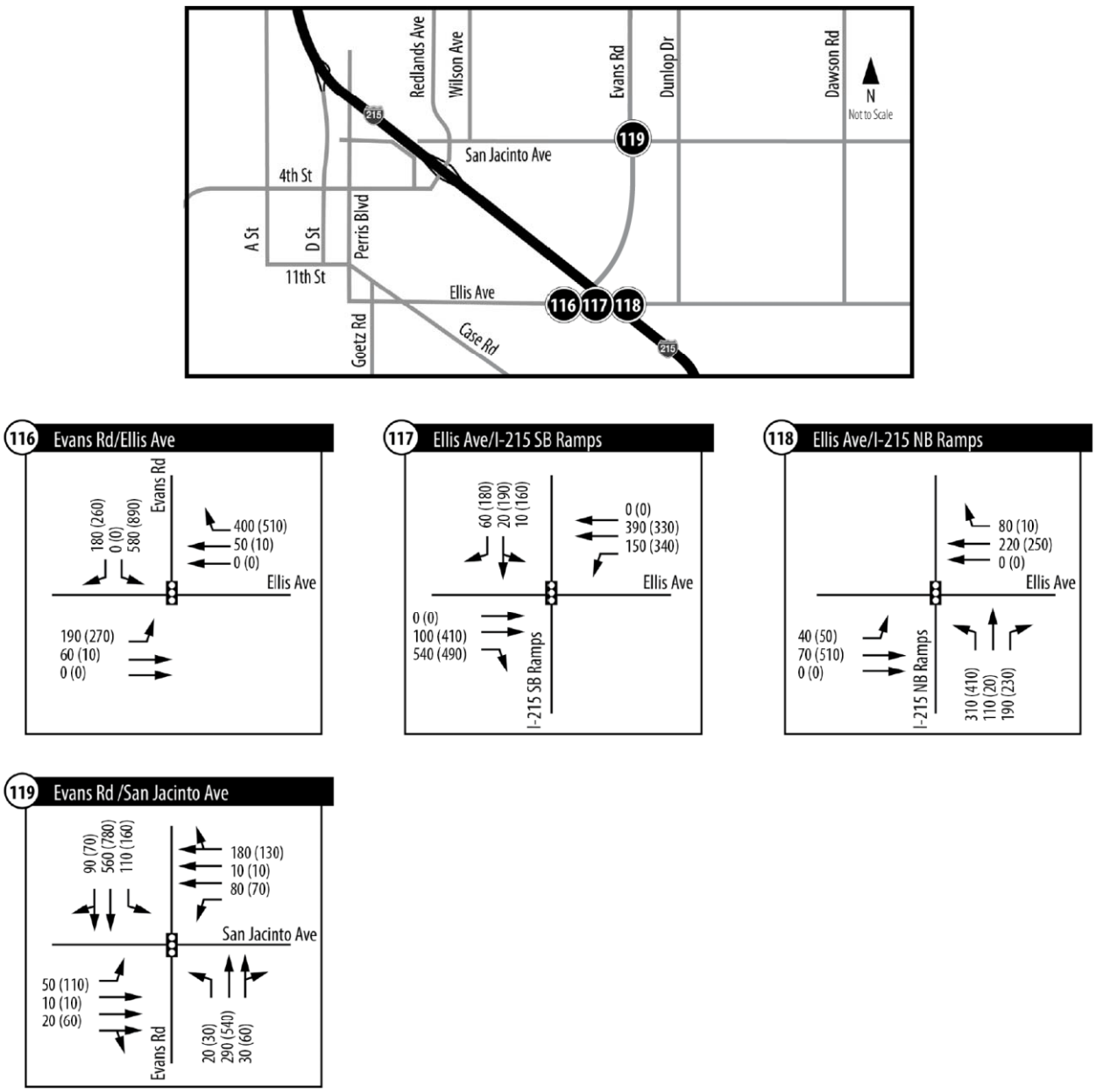


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (N)

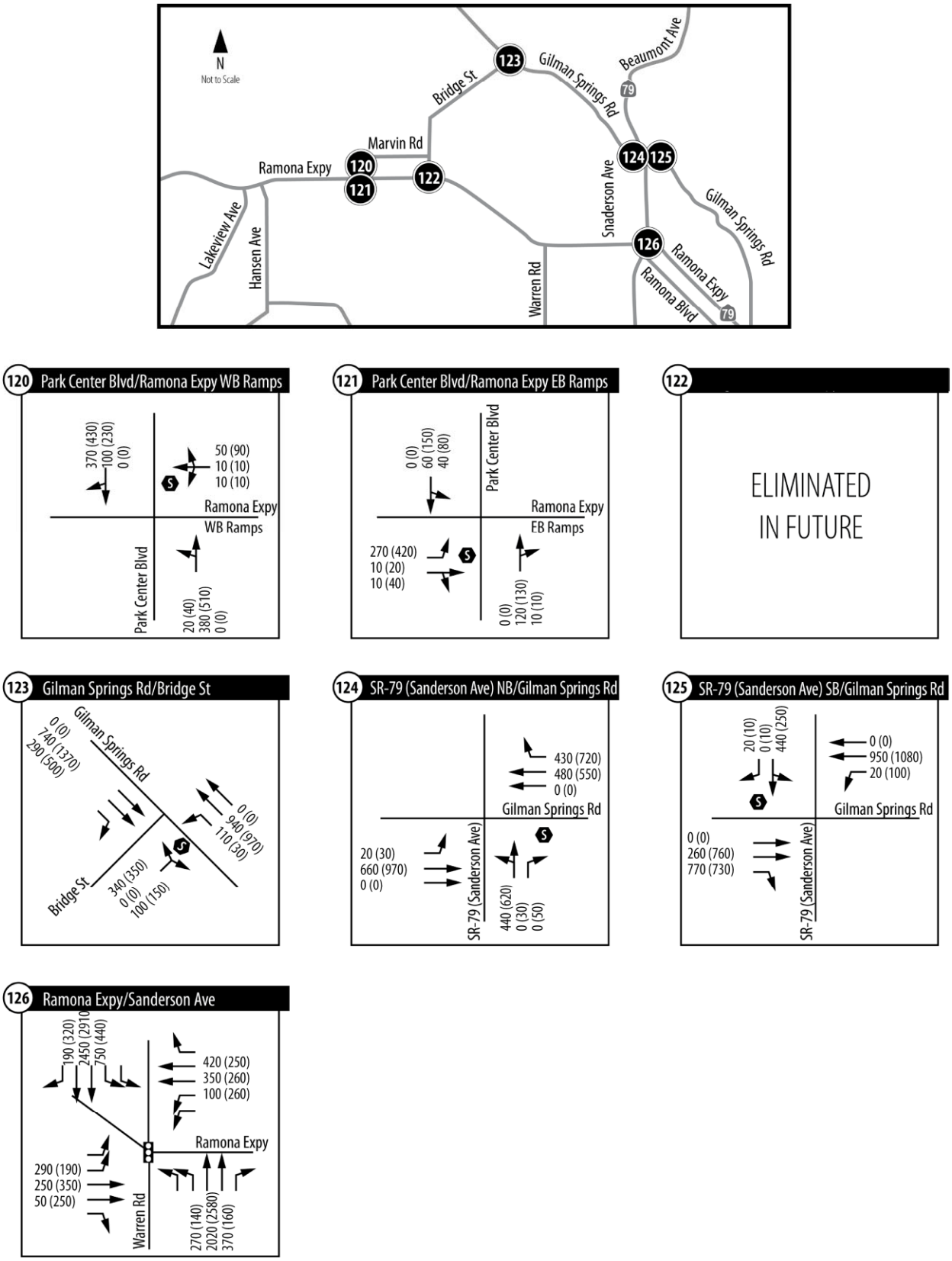


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (O)

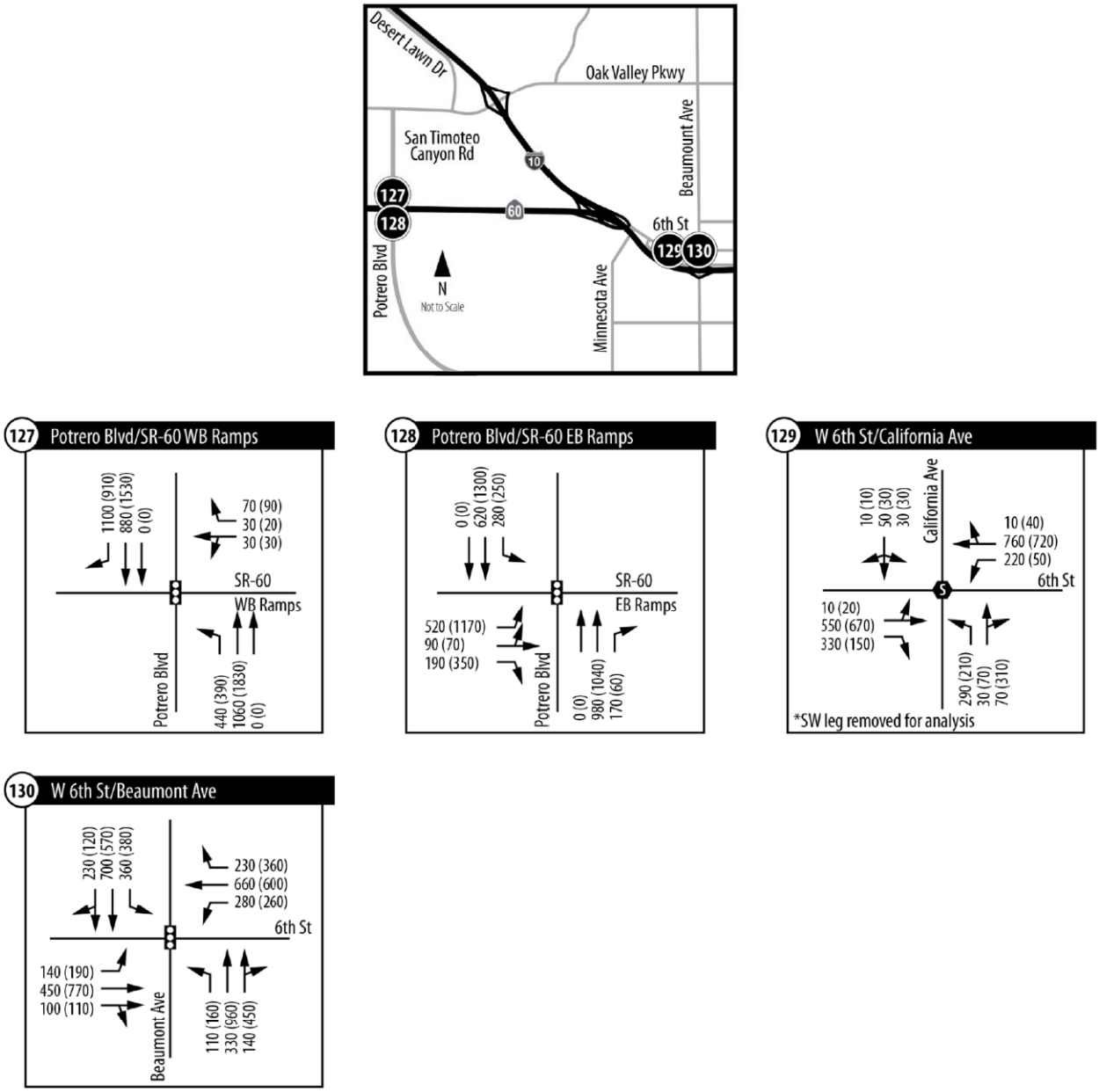


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (P)

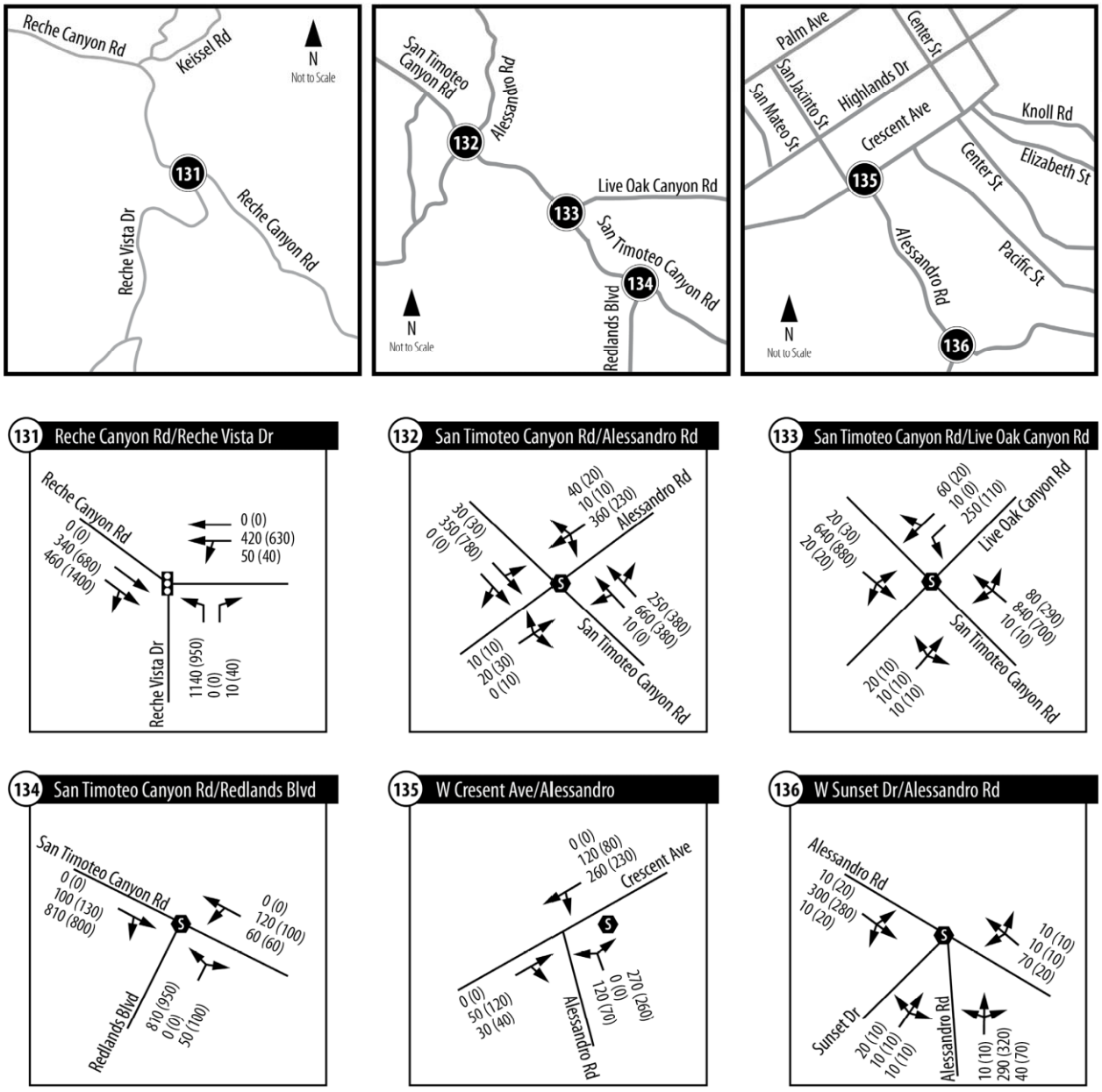


Figure 53: Turning Movement Volumes under 2035 Plus Build-out Conditions (Q)

Table 65: Intersection LOS under 2035 Plus Build-out Conditions

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	10.2	B
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	12.3	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	20.9	C	RABT	10.1	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	10.2	B
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	11.7	B	SIGNAL	44.3	D
IN-9	Gilman Springs Rd/Eucalytpus Ave	D	N/A	Non-Existent		SIGNAL	10.5	B
IN-10	Redlands Blvd/Locust Ave	C	SIGNAL	5.4	A	SIGNAL	10.7	B
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	45.0	D	SIGNAL	46.4	D
IN-12	Theodore Street/Ironwood Avenue	D	CSS	22.9	C	CSS	44.3	**E**
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	5.7	A	SIGNAL	6.7	A
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	5.1	A	SIGNAL	5.4	A
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	62.2	**F**	SIGNAL	14.1	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	13.5	B	SIGNAL	2.2	A
IN-17	Quincy Str/Fir Ave	D	CSS	9.6	A	CSS	10.6	B
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	SIGNAL	7.2	A	SIGNAL	21.8	C
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	10.5	B	SIGNAL	18.5	B
IN-20	Oliver Str/Alessandro Blvd	C	CSS	20.0	C	CSS	21.0	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	17.3	B	SIGNAL	17.4	B
IN-22	Quincy Str/Alessandro Blvd	C	SIGNAL	4.2	A	SIGNAL	4.2	A
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	137.4	**F**	AWS	13.4	B
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	22.3	C	SIGNAL	23.9	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	20.3	C	SIGNAL	22.0	C
IN-26	Quincy Str/Cactus Ave	C	SIGNAL	3.9	A	SIGNAL	3.5	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	14.3	B	AWS	128.4	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	23.5	C	SIGNAL	29.1	C
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	31.6	C	SIGNAL	31.6	C
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	30.5	C	SIGNAL	31.4	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	12.3	B	SIGNAL	12.7	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	31.8	C	SIGNAL	32.1	C
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	22.5	C	SIGNAL	24.0	C
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	21.8	C	SIGNAL	21.5	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	29.4	**D**	CSS	31.0	**D**
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	46.6	D	SIGNAL	52.9	D
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	113.9	**F**	SIGNAL	147.6	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	28.8	C	SIGNAL	33.5	C
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	58.6	**E**	SIGNAL	65.7	**E**
IN-40	Kitching St/Iris Ave	C	SIGNAL	65.8	**E**	SIGNAL	78.3	**E**
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	35.0	C	SIGNAL	38.7	D
IN-42	Nason Str/Iris Ave	C	SIGNAL	18.5	B	SIGNAL	17.1	B
IN-43	Oliver Str/Iris Ave	D	SIGNAL	24.5	C	SIGNAL	23.7	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	7.0	A	SIGNAL	6.8	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	27.8	C	SIGNAL	29.1	C
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	35.3	D	SIGNAL	37.4	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	32.2	C	SIGNAL	34.4	C
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	26.5	C	SIGNAL	26.7	C

Table 65: Intersection LOS under 2035 Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	19.8	B	SIGNAL	20.5	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	25.5	C	SIGNAL	25.6	C
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	31.1	C	SIGNAL	31.3	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	30.7	C	SIGNAL	30.5	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	38.5	**D**	SIGNAL	38.8	**D**
IN-54	Morrison Str/Cactus Ave	D	SIGNAL	6.1	A	SIGNAL	6.4	A
IN-55	Nason Str/Cactus Ave	D	SIGNAL	36.1	D	SIGNAL	36.6	D
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	19.2	B	SIGNAL	19.3	B
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	35.6	D	SIGNAL	35.6	D
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	29.6	D	SIGNAL	29.2	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	21.7	C	SIGNAL	21.3	C
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	32.8	C	SIGNAL	33.6	C
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	9.7	A	SIGNAL	9.6	A
IN-62	Graham Str/Cactus Ave	D	SIGNAL	22.7	C	SIGNAL	23.4	C
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	31.6	C	SIGNAL	31.9	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	32.6	C	SIGNAL	32.6	C
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	39.2	D	SIGNAL	38.8	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	37.5	D	SIGNAL	39.7	D
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	6.6	A	SIGNAL	6.7	A
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	21.9	C	SIGNAL	21.8	C
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	15.1	B	SIGNAL	15.0	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	22.6	C	SIGNAL	23.4	C
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	28.4	C	SIGNAL	29.5	C
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	37.6	D	SIGNAL	41.6	D
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	71.1	**E**	SIGNAL	75.5	**E**
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	> 180.0	**F**	SIGNAL	> 180.0	**F**
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	16.2	B	SIGNAL	18.5	B
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	28.6	C	SIGNAL	29.9	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	18.1	B	SIGNAL	23.1	C
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	6.7	A	SIGNAL	6.7	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	32.2	C	SIGNAL	34.3	C
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	28.0	C	SIGNAL	29.6	C
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	27.0	C	SIGNAL	28.2	C
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	11.3	B	SIGNAL	11.3	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	40.2	D	SIGNAL	43.2	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	11.2	B	SIGNAL	11.6	B
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	45.1	**E**	AWS	48.5	**E**
IN-86	Central Ave/Chicago Ave	D	SIGNAL	46.8	D	SIGNAL	60.7	**E**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	17.6	B	SIGNAL	17.8	B
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	45.4	D	SIGNAL	49.7	D
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	11.2	B	SIGNAL	11.7	B
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	38.4	D	SIGNAL	39.4	D
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	20.5	C	SIGNAL	20.8	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	14.1	B	SIGNAL	14.3	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	37.4	D	SIGNAL	38.8	D

Table 65: Intersection LOS under 2035 Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	AM Peak Hour		Traffic Control	AM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	124.5	**F**	SIGNAL	138.7	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	57.4	**E**	SIGNAL	64.9	**E**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	19.2	B	SIGNAL	19.1	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	17.9	B	SIGNAL	17.9	B
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	56.6	**E**	SIGNAL	60.6	**E**
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	33.5	C	SIGNAL	35.4	D
IN-100	Harley Knox Blvd/Evan Rd	D	SIGNAL	16.1	B	SIGNAL	16.6	B
IN-101	Ramona Expy/Indian St	E	SIGNAL	110.4	**F**	SIGNAL	112.0	**F**
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	49.2	D	SIGNAL	52.3	D
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	60.6	E	SIGNAL	66.1	E
IN-104	Perris Blvd/Morgan St	D	SIGNAL	11.9	B	SIGNAL	11.9	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	28.1	C	SIGNAL	28.1	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	23.4	C	SIGNAL	23.1	C
IN-107	Evans Rd/Rider St	C	SIGNAL	36.3	**D**	SIGNAL	36.5	**D**
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	32.7	C	SIGNAL	33.7	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	28.3	C	SIGNAL	29.8	C
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	25.7	C	SIGNAL	25.6	C
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	18.1	B	SIGNAL	18.1	B
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	29.3	C	SIGNAL	29.3	C
IN-113	Evans Rd/Placentia Ave	D	SIGNAL	7.3	A	SIGNAL	7.2	A
IN-114	Evans Rd/Orange Ave	C	SIGNAL	25.5	C	SIGNAL	25.4	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	31.8	C	SIGNAL	31.9	C
IN-116	Evans Rd/Ellis Ave	D	SIGNAL	12.7	B	SIGNAL	13.5	B
IN-117	Ellis Ave/I-215 SB Ramps	E	SIGNAL	26.5	C	SIGNAL	26.2	C
IN-118	Ellis Ave/SR-215 NB Ramps	E	SIGNAL	22.2	C	SIGNAL	21.9	C
IN-119	Evans Rd/San Jacinto Ave	D	SIGNAL	21.1	C	SIGNAL	21.5	C
IN-120	Park Center Blvd/Ramona Expy WB Ramps	D	CSS	11.8	B	CSS	13.3	B
IN-121	Park Center Blvd/Ramona Expy EB Ramps	D	CSS	11.6	B	CSS	13.5	B
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		N/A	Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	43.9	D	SIGNAL	48.4	D
IN-127	Potrero Blvd/SR-60 WB Ramps	D	SIGNAL	21.3	C	SIGNAL	27.0	C
IN-128	Potrero Blvd/SR-60 EB Ramps	D	SIGNAL	20.3	C	SIGNAL	21.1	C
IN-129	W 6th St/California Ave	C	AWS	146.4	**F**	AWS	148.1	**F**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	35.5	**D**	SIGNAL	36.7	**D**
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	42.2	**D**	SIGNAL	47.0	**D**
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	26.4	D	AWS	40.8	**E**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	127.6	**F**	AWS	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	140.5	**F**	AWS	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	17.6	C	CSS	19.9	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.2	B	AWS	10.7	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 65: Intersection LOS under 2035 Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-1	Theodore St/Street F	D	N/A	Non-Existent		RABT	53.0	D
IN-2	Cactus Ave Extension/Street E	D	N/A	Non-Existent		SIGNAL	15.2	B
IN-3	Theodore St/Alessandro (Str A/Str C/Str E)	D	CSS	19.6	C	RABT	10.2	B
IN-4	Alessandro Blvd (Street C)/Street F	D	N/A	Non-Existent		RABT	18.2	C
IN-6	Alessandro Blvd (Street C)/Gilman Springs Rd	D	SIGNAL	37.7	D	SIGNAL	36.7	D
IN-9	Gilman Springs Rd/Eucalytpus Ave	D	N/A	Non-Existent		SIGNAL	14.3	B
IN-10	Redlands Blvd/Locust Ave	C	SIGNAL	16.6	B	SIGNAL	20.3	C
IN-11	Redlands Blvd/Ironwood Ave	D	SIGNAL	48.2	D	SIGNAL	72.3	**E**
IN-12	Theodore Street/Ironwood Avenue	D	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-13	Redlands Blvd/SR-60 WB ramps	D	SIGNAL	7.5	A	SIGNAL	10.9	B
IN-14	Redlands Blvd/SR-60 EB ramps	D	SIGNAL	7.3	A	SIGNAL	10.0	A
IN-15	Theodore Str/SR-60 WB ramps	D	CSS	173.7	**F**	SIGNAL	17.0	B
IN-16	Theodore Str/SR-60 EB ramps	D	CSS	> 180.0	**F**	SIGNAL	31.2	C
IN-17	Quincy Str/Fir Ave	D	CSS	12.6	B	CSS	15.7	C
IN-18	Redlands Blvd/Eucalyptus Ave (Fir)	D	SIGNAL	15.6	B	SIGNAL	52.3	D
IN-19	Theodore St/Fir Ave (Eucalyptus)	D	CSS	68.9	**F**	SIGNAL	54.5	D
IN-20	Oliver Str/Alessandro Blvd	C	CSS	21.6	C	CSS	23.5	C
IN-21	Moreno Beach Dr/Alessandro Blvd	D	SIGNAL	20.2	C	SIGNAL	22.7	C
IN-22	Quincy Str/Alessandro Blvd	C	SIGNAL	3.7	A	SIGNAL	3.7	A
IN-23	Redlands Blvd/Alessandro Blvd	C	AWS	74.7	**F**	AWS	24.1	C
IN-24	Oliver Str/Cactus Ave	D	SIGNAL	20.2	C	SIGNAL	21.5	C
IN-25	Moreno Beach Dr/Cactus Ave	C	SIGNAL	29.7	C	SIGNAL	37.1	**D**
IN-26	Quincy Str/Cactus Ave	C	SIGNAL	3.7	A	SIGNAL	3.6	A
IN-27	Redlands Blvd/Cactus Ave	C	AWS	13.5	B	AWS	> 180.0	**F**
IN-28	Moreno Beach Dr/John Kennedy Dr	D	SIGNAL	16.6	B	SIGNAL	18.5	B
IN-29	Heacock Str/Ironwood Ave	D	SIGNAL	35.2	D	SIGNAL	35.5	D
IN-30	Heacock Str/SR-60 WB Ramps	D	SIGNAL	23.1	C	SIGNAL	24.0	C
IN-31	Heacock St/SR-60 EB Ramps	D	SIGNAL	19.4	B	SIGNAL	20.0	B
IN-32	Sunnymead Blvd & Perris Blvd	D	SIGNAL	39.7	D	SIGNAL	45.3	D
IN-33	Perris Blvd/SR-60 WB Ramps	D	SIGNAL	17.1	B	SIGNAL	19.5	B
IN-34	Perris Blvd/Eucalyptus Ave	D	SIGNAL	24.7	C	SIGNAL	24.6	C
IN-35	Moreno Beach Dr/Locust Ave	C	CSS	37.9	**E**	CSS	> 180.0	**F**
IN-36	Moreno Beach Drive & Ironwood Avenue	D	SIGNAL	50.4	D	SIGNAL	61.9	**E**
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	SIGNAL	155.8	**F**	SIGNAL	> 180.0	**F**
IN-38	Perris Blvd/John F. Kennedy Dr	D	SIGNAL	31.6	C	SIGNAL	37.3	D
IN-39	Iris Ave/Perris Blvd	D	SIGNAL	63.8	**E**	SIGNAL	80.4	**F**
IN-40	Kitching St/Iris Ave	C	SIGNAL	126.3	**F**	SIGNAL	169.8	**F**
IN-41	Lasselle Str/Iris Ave	D	SIGNAL	79.2	**E**	SIGNAL	89.5	**F**
IN-42	Nason Str/Iris Ave	C	SIGNAL	21.7	C	SIGNAL	32.8	C
IN-43	Oliver Str/Iris Ave	D	SIGNAL	25.1	C	SIGNAL	24.9	C
IN-44	Via Dell Lago/Iris Ave	C	SIGNAL	7.2	A	SIGNAL	6.6	A
IN-45	Krameria Ave/Perris Blvd	D	SIGNAL	52.6	D	SIGNAL	53.2	D
IN-46	Kitching Str/Krameria Ave	D	SIGNAL	41.7	D	SIGNAL	52.4	D
IN-47	Lasselle Str/Krameria Ave	D	SIGNAL	14.5	B	SIGNAL	15.8	B
IN-48	Kitching Str/Alessandro Blvd	D	SIGNAL	28.1	C	SIGNAL	29.3	C

Table 65: Intersection LOS under 2035 Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-49	Lasselle Str/Alessandro Blvd	D	SIGNAL	23.7	C	SIGNAL	24.3	C
IN-50	Morrison Str/Alessandro Blvd	D	SIGNAL	26.2	C	SIGNAL	26.8	C
IN-51	Nason Str/Alessandro Blvd	D	SIGNAL	28.3	C	SIGNAL	29.1	C
IN-52	Kitching Str/Cactus Ave	C	SIGNAL	28.5	C	SIGNAL	28.3	C
IN-53	Lasselle Str/Cactus Ave	C	SIGNAL	34.8	C	SIGNAL	38.2	**D**
IN-54	Morrison Str/Cactus Ave	D	SIGNAL	8.6	A	SIGNAL	9.7	A
IN-55	Nason Str/Cactus Ave	D	SIGNAL	47.6	D	SIGNAL	51.1	D
IN-56	Frederick Str/Alessandro Blvd	D	SIGNAL	34.5	C	SIGNAL	36.7	D
IN-57	Graham Str/Alessandro Blvd	D	SIGNAL	88.9	**F**	SIGNAL	93.7	**F**
IN-58	Heacock Str/Alessandro Blvd	D	SIGNAL	29.5	C	SIGNAL	30.5	C
IN-59	Indian Str/Alessandro Blvd	D	SIGNAL	37.1	D	SIGNAL	36.7	D
IN-60	Perris Blvd/Alessandro Blvd	D	SIGNAL	41.4	D	SIGNAL	44.5	D
IN-61	Frederick Str/Cactus Ave	D	SIGNAL	12.5	B	SIGNAL	13.0	B
IN-62	Graham Str/Cactus Ave	D	SIGNAL	42.1	D	SIGNAL	43.3	D
IN-63	Heacock Str/Cactus Ave	D	SIGNAL	27.2	C	SIGNAL	27.5	C
IN-64	Indian Str/Cactus Ave	C	SIGNAL	36.3	**D**	SIGNAL	36.3	**D**
IN-65	Perris Blvd/Cactus Ave	D	SIGNAL	32.5	C	SIGNAL	36.1	D
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	SIGNAL	81.2	**F**	SIGNAL	94.9	**F**
IN-67	I-215 SB Ramps/Alessandro Blvd	D	SIGNAL	11.5	B	SIGNAL	11.6	B
IN-68	I-215 NB Ramps/Alessandro Blvd	D	SIGNAL	32.8	C	SIGNAL	35.6	D
IN-69	Old 215 Frontage Rd/Alessandro Blvd	D	SIGNAL	16.4	B	SIGNAL	16.5	B
IN-70	Day Str/Alessandro Blvd	D	SIGNAL	28.2	C	SIGNAL	27.8	C
IN-71	Elsworth Str/Alessandro Blvd	D	SIGNAL	52.4	D	SIGNAL	53.6	D
IN-72	I-215 SB Ramps/Cactus Ave	D	SIGNAL	144.8	**F**	SIGNAL	144.8	**F**
IN-73	I-215 NB Ramps/Cactus Ave	D	SIGNAL	122.6	**F**	SIGNAL	133.6	**F**
IN-74	Elsworth Str/Cactus Ave	D	SIGNAL	> 180.0	**F**	SIGNAL	> 180.0	**F**
IN-75	Central Ave/Lochmoor Dr.	D	SIGNAL	77.5	**E**	SIGNAL	104.9	**F**
IN-76	Sycamore Canyon Blvd/Central Ave	D	SIGNAL	26.8	C	SIGNAL	29.7	C
IN-77	SR-60 EB Ramps/Central Ave	D	SIGNAL	12.4	B	SIGNAL	13.2	B
IN-78	SR-60 WB Ramps/Central Ave	D	SIGNAL	7.0	A	SIGNAL	6.9	A
IN-79	Alessandro Blvd/Trautwein Rd.	D	SIGNAL	16.1	B	SIGNAL	16.2	B
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	SIGNAL	73.7	**E**	SIGNAL	84.3	**F**
IN-81	Martin Luther King Blvd/Chicago Ave	D	SIGNAL	41.5	D	SIGNAL	43.5	D
IN-82	Martin Luther King Blvd/Iowa Ave	D	SIGNAL	14.8	B	SIGNAL	15.1	B
IN-83	Martin Luther King Blvd/Canyon Crest Dr	D	SIGNAL	52.4	D	SIGNAL	53.3	D
IN-84	Martin Luther King Blvd/I-215 SB Ramps	D	SIGNAL	12.2	B	SIGNAL	12.5	B
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	AWS	20.7	C	AWS	22.0	C
IN-86	Central Ave/Chicago Ave	D	SIGNAL	79.0	**E**	SIGNAL	102.9	**F**
IN-87	Central Ave/El Cerrito Dr	D	SIGNAL	20.0	B	SIGNAL	20.8	C
IN-88	Central Ave/Canyon Crest Dr	D	SIGNAL	106.3	**F**	SIGNAL	118.0	**F**
IN-89	Chicago Ave/Country Club Dr	D	SIGNAL	12.9	B	SIGNAL	14.4	B
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	SIGNAL	68.0	**E**	SIGNAL	69.8	**E**
IN-91	Arlington Ave/Indiana Ave/SR-91 NB Ramps	D	SIGNAL	26.8	C	SIGNAL	29.8	C
IN-92	Arlington Ave/Maude St	D	SIGNAL	10.7	B	SIGNAL	11.2	B
IN-93	Horace St/Arlington Ave	D	SIGNAL	25.5	C	SIGNAL	33.7	C

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 65: Intersection LOS under 2035 Plus Build-out Conditions (continued)

ID	Study Intersection	LOS Standard	2035 No-Project			2035 Plus Build-out		
			Traffic Control	PM Peak Hour		Traffic Control	PM Peak Hour	
				Delay	LOS		Delay	LOS
IN-94	Arlington Ave/Victoria Ave	D	SIGNAL	87.2	**F**	SIGNAL	97.9	**F**
IN-95	Alessandro Blvd/Chicago Ave	D	SIGNAL	111.2	**F**	SIGNAL	123.3	**F**
IN-96	Alessandro Blvd/Century Ave	D	SIGNAL	11.8	B	SIGNAL	12.3	B
IN-97	Alessandro Blvd/Via Vista Dr	D	SIGNAL	22.2	C	SIGNAL	22.0	C
IN-98	Alessandro Blvd/Canyon Crest Dr	D	SIGNAL	131.0	**F**	SIGNAL	142.1	**F**
IN-99	Harley Knox Blvd/Perris Blvd	D	SIGNAL	48.0	D	SIGNAL	51.9	D
IN-100	Harley Knox Blvd/Evan Rd	D	SIGNAL	23.8	C	SIGNAL	24.3	C
IN-101	Ramona Expy/Indian St	E	SIGNAL	> 180.0	**F**	SIGNAL	> 180.0	**F**
IN-102	Ramona Expy/Perris Blvd	E	SIGNAL	58.5	**E**	SIGNAL	60.9	**E**
IN-103	Ramona Expy/Evans Rd	E	SIGNAL	46.2	D	SIGNAL	49.2	D
IN-104	Perris Blvd/Morgan St	D	SIGNAL	9.9	A	SIGNAL	11.0	B
IN-105	Evans Rd/Morgan St	C	SIGNAL	21.8	C	SIGNAL	21.8	C
IN-106	Perris Blvd/Rider St	C	SIGNAL	30.1	C	SIGNAL	30.6	C
IN-107	Evans Rd/Rider St	C	SIGNAL	34.5	C	SIGNAL	34.6	C
IN-108	Perris Blvd/Mid-County Pkwy WB Ramps	D	SIGNAL	22.6	C	SIGNAL	25.3	C
IN-109	Perris Blvd/Mid-County Pkwy EB Ramps	D	SIGNAL	36.2	D	SIGNAL	38.4	D
IN-110	Evans Rd/Mid-County Pkwy WB Ramps	D	SIGNAL	21.3	C	SIGNAL	22.0	C
IN-111	Evans Rd/Mid-County Pkwy EB Ramps	D	SIGNAL	24.9	C	SIGNAL	24.9	C
IN-112	Placentia Ave/Perris Blvd	D	SIGNAL	34.2	C	SIGNAL	34.6	C
IN-113	Evans Rd/Placentia Ave	D	SIGNAL	7.4	A	SIGNAL	7.4	A
IN-114	Evans Rd/Orange Ave	C	SIGNAL	25.3	C	SIGNAL	25.2	C
IN-115	Evans Rd/Nuevo Rd	C	SIGNAL	31.2	C	SIGNAL	31.1	C
IN-116	Evans Rd/Ellis Ave	D	SIGNAL	13.6	B	SIGNAL	14.3	B
IN-117	Ellis Ave/I-215 SB Ramps	E	SIGNAL	28.3	C	SIGNAL	28.0	C
IN-118	Ellis Ave/SR-215 NB Ramps	E	SIGNAL	34.3	C	SIGNAL	35.0	C
IN-119	Evans Rd/San Jacinto Ave	D	SIGNAL	22.7	C	SIGNAL	22.6	C
IN-120	Park Center Blvd/Ramona Expy WB Ramps	D	CSS	15.3	C	CSS	16.9	C
IN-121	Park Center Blvd/Ramona Expy EB Ramps	D	CSS	23.1	C	CSS	34.9	D
IN-122	Bridge St/Ramona Expy	-	N/A	Non-Existent		N/A	Non-Existent	
IN-123	Gilman Springs Rd/Bridge Str	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	CSS	> 180.0	**F**	CSS	> 180.0	**F**
IN-126	Ramona Expy/Sanderson Ave	D	SIGNAL	39.9	D	SIGNAL	41.9	D
IN-127	Potrero Blvd/SR-60 WB Ramps	D	SIGNAL	15.3	B	SIGNAL	16.4	B
IN-128	Potrero Blvd/SR-60 EB Ramps	D	SIGNAL	31.3	C	SIGNAL	33.5	C
IN-129	W 6th St/California Ave	C	AWS	178.3	**F**	AWS	> 180.0	**F**
IN-130	W 6th St/Beaumont Ave	C	SIGNAL	94.4	**F**	SIGNAL	106.8	**F**
IN-131	Reche Canyon Rd/Reche Vista Dr	C	SIGNAL	100.9	**F**	SIGNAL	109.5	**F**
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	AWS	22.2	C	AWS	38.3	**E**
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	AWS	127.7	**F**	AWS	> 180.0	**F**
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	AWS	> 180.0	**F**	AWS	> 180.0	**F**
IN-135	W Crescent Ave/Alessandro Rd	C	CSS	14.7	B	CSS	15.1	C
IN-136	W Sunset Dr/Alessandro Rd	C	AWS	10.4	B	AWS	10.8	B

Notes:

"NB" and "SB" denote northbound and southbound respectively

"EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level

"CSS" means cross-street is stop-controlled

"AWS" means all-way stop

"RABT" means roundabout

Table 66: 2035 Plus Build-out Intersection Impacts and Mitigations

ID	Study Intersection	LOS Standard	Determination of Impact					2035 Plus Build-out & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour				AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Traffic Control	Delay	LOS	Delay	LOS	
IN-11	Redlands Blvd/Ironwood Ave	D	D	D	D	E	Yes	SIGNAL	46.5	D	46.5	D	Add 1 SB LT lane.
IN-12	Theodore Street/Ironwood Avenue	D	C	E	F	F	Yes	SIGNAL	6.6	A	7.4	A	Signalize.
IN-25	Moreno Beach Dr/Cactus Ave	C	C	C	C	D	Yes	SIGNAL	18.8	B	23.1	C	Add 1 EB LT lane.
IN-27	Redlands Blvd/Cactus Ave	C	B	F	B	F	Yes	SIGNAL	15.9	B	29.0	C	Signalize. Add 1 EB LT and 2 WB LT lanes.
IN-35	Moreno Beach Dr/Locust Ave	C	D	D	E	F	Yes	SIGNAL	7.6	A	18.1	B	Signalize. Add 1 WB LT lane.
IN-36	Moreno Beach Drive & Ironwood Avenue	D	D	D	D	E	Yes	SIGNAL	37.3	D	35.8	D	Change N/S from split to protected LT phase. Add NB and SB LT lanes.
IN-37	Moreno Beach Dr/SR-60 EB Ramps	D	F	F	F	F	Yes	SIGNAL	28.3	C	48.4	D	Change EB from 1 shared LT/TH to 1 LT and 1 TH. Add 1 SB LT lane. Change split phasing on E/W movement to protected LT phasing.
IN-39	Iris Ave/Perris Blvd	D	E	E	E	F	Yes	SIGNAL	51.1	D	47.1	D	Add 1 WB LT and 1 SB LT lane.
IN-40	Kitching St/Iris Ave	C	E	E	F	F	Yes	SIGNAL	29.1	C	27.6	C	Add 1 WB LT and change NB shared TH/RT to RT lane and add another RT lane. Provide overlap phase for NB RT. Add 1 EB TH lane.
IN-41	Lasselle Str/Iris Ave	D	C	D	E	F	Yes	SIGNAL	31.6	C	51.3	D	Add 1 WB LT lane (resulting 3 turn lanes), and 1 EB RT Need to widen Lasselle in the SB to have 3 receiving lanes.
IN-53	Lasselle Str/Cactus Ave	C	D	D	C	D	Yes	SIGNAL	37.9	D	33.6	C	Add 1 WB LT lane.
IN-57	Graham Str/Alessandro Blvd	D	D	D	F	F	Yes	SIGNAL	33.1	C	42.6	D	Add 1 NB LT and 1 WB LT lanes.
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	D	D	D	F	F	Yes	SIGNAL	23.7	C	52.9	D	Add SB RT overlap.
IN-73	I-215 NB Ramps/Cactus Ave	D	E	E	F	F	Yes	SIGNAL	17.7	B	47.2	D	Add 1 EB RT, 1 WB RT, 1 NB LT, and 1 SB LT lanes.
IN-74	Elsworth Str/Cactus Ave	D	F	F	F	F	Yes	SIGNAL	38.0	D	54.7	D	Widen NB approach and change NB lane geometry from: 1 LT and 1 shared LT/TH/RT lanes to 3 LTs and 1 TH and 1 RT. Add 1 WB LT and EB RT.

Indicates that the LOS exceeds the target level

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout

"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively

Table 66: 2035 Plus Build-out Intersection Impacts and Mitigations (continued)

ID	Study Intersection	LOS Standard	Determination of Impact					2035 Plus Build-out & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour				AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Traffic Control	Delay	LOS	Delay	LOS	
IN-75	Central Ave/Lochmoor Dr.	D	B	B	E	F	Yes	SIGNAL	12.2	B	45.5	D	Change NB approach to one LT and 1 shared LT/RT lane.
IN-80	Alessandro Blvd/Mission Grove Pkwy	D	C	C	E	F	Yes	SIGNAL	27.6	C	53.9	D	Add EB LT. Add WB LT. Add NB TH lane.
IN-85	Martin Luther King Blvd/I-215 NB Ramps	D	E	E	C	C	Yes	SIGNAL	10.1	B	7.8	A	Signalize.
IN-86	Central Ave/Chicago Ave	D	D	E	E	F	Yes	SIGNAL	20.8	C	42.1	D	Add NB RT overlap.
IN-88	Central Ave/Canyon Crest Dr	D	D	D	F	F	Yes	SIGNAL	41.5	D	54.2	D	Change EB approach to 1 LT, 2 THs and 1 RT. Add WB LT lane. Add NB LT lane. Change SB approach to 2 LTs, 2 THs and 1 RT. Adjust splits.
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	D	D	D	E	E	Yes	SIGNAL	34.0	C	52.2	D	Add SB LT lane.
IN-94	Arlington Ave/Victoria Ave	D	F	F	F	F	Yes	SIGNAL	54.2	D	39.8	D	Add EB TH lane. Add WB LT and RT. Adjust timings.
IN-95	Alessandro Blvd/Chicago Ave	D	E	E	F	F	Yes	SIGNAL	40.1	D	54.4	D	Add EB TH lane. Add WB LT lane. Add WB TH lane. Add NB LT lane. Reconfigure SB approach to 3 LTs, 3 THs and 1 RT.
IN-98	Alessandro Blvd/Canyon Crest Dr	D	E	E	F	F	Yes	SIGNAL	52.5	D	51.4	D	Reconfigure EB approach to 1 LT, 1 TH and 2 RTs. Add WB TH lane. Add NB LT and NB RT lane. Reconfigure SB approach to 1 LT, 3 THs and 1 shared TH/RT lane.
IN-101	Ramona Expy/Indian St	E	F	F	F	F	Yes	SIGNAL	77.6	E	56.2	E	Add 1 EB RT. Add 2nd NB LT and 1 NB RT. Provide signal phase overlap for all RTs.
IN-107	Evans Rd/Rider St	C	D	D	C	C	Yes	SIGNAL	34.7	C	30.5	C	Reconfigure SB approach to include 1 LT, 2 THs and 1 RT.
IN-123	Gilman Springs Rd/Bridge Str	C	F	F	F	F	Yes	SIGNAL	9.3	A	12.1	B	Signalize.
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	C	F	F	F	F	Yes	SIGNAL	8.9	A	14.5	B	Signalize.

Indicates that the LOS exceeds the target level

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout
"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively

Table 66: 2035 Plus Build-out Intersection Impacts and Mitigations (continued)

ID	Study Intersection	LOS Standard	Determination of Impact					2035 Plus Build-out & Mitigations					Mitigation Measures Required to Reduce Impact to Less-Than-Significant
			AM Peak Hour		PM Peak Hour				AM Peak Hour		PM Peak Hour		
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Traffic Control	Delay	LOS	Delay	LOS	
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	C	F	F	F	F	Yes	SIGNAL	10.2	B	7.5	A	Signalize.
IN-129	W 6th St/California Ave	C	F	F	F	F	Yes	SIGNAL	19.4	B	20.1	C	Signalize.
IN-130	W 6th St/Beaumont Ave	C	D	D	F	F	Yes	SIGNAL	29.6	C	34.9	C	Reconfigure EB approach to 2 LTs, 2 THs and 1 RT; change lefts to protected. Add 1 WB LT and 1 WB TH; change lefts to protected. Reconfigure NB approach to 1 LT, 2 THs and 1 RT. Add 1 SB LT.
IN-131	Reche Canyon Rd/Reche Vista Dr	C	D	D	F	F	Yes	SIGNAL	12.9	B	30.6	C	Adjust NB approach to a dedicated LT and a shared LT/RT lane.
IN-132	San Timoteo Canyon Rd/Alessandro Rd	D	D	E	C	E	Yes	SIGNAL	13.4	B	8.7	A	Signalize.
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	C	F	F	F	F	Yes	SIGNAL	16.7	B	10.3	B	Signalize.
IN-134	Redlands Blvd/San Timoteo Canyon Rd	C	F	F	F	F	Yes	SIGNAL	8.8	A	11.7	B	Signalize. Add 1 EB RT. Also add EB RT overlap phase.

Indicates that the LOS exceeds the target level

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
"RABT" means roundabout
"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively

C. FREEWAY SEGMENT LOS, IMPACTS, AND MITIGATIONS

Freeway Mainline Basic Sections

Table 67 compares the LOS for freeway mainline sections for the 2035 No-Project and 2035 Plus Build-out scenarios. Details of the LOS calculations for freeways under 2035 Plus Build-out Conditions can be found in Appendix O. Table 68 identifies the 52 basic freeway sections where the project has a significant impact and identifies measures that would reduce project impacts to a less-than-significant level. Forty-eight of the 52 sections would operate below LOS "D" under both 2035 No-Project conditions and 2035 Plus Build-out conditions, namely:

- Northbound or Eastbound SectionsSR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Ramona Ave. to Central Ave.
- SR-60 from Central Ave. to Mountain Ave
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Vineyard Ave. to Archibald Ave.
- SR-60 from Archibald Ave. to Haven Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Rubidoux Blvd. to Market St.
- SR-60 from Market St. to Main St.
- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Heacock St. to Perris Blvd.
- SR-60 from Gilman Springs Rd. to Jack Rabbit Trail
- SR-60 from Jack Rabbit Trail to Potrero Blvd.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Adam St. to Madison St.

- SR-91 from Central Ave. to 14th St.
- I-10 from SR-60 to Beaumont Ave.
- I-10 from Pennsylvania Ave. to Highland Springs Ave.
- I-10 from Highland Springs Ave. to Sunset Ave.
- I-10 from S. Hargrave St. to Field Rd.
- I-10 from Morongo Trail to Main St.

Southbound or Westbound Sections

- SR-60 from Reservoir St. to Ramona Ave.
- SR-60 from Mountain Ave. to Euclid Ave.
- SR-60 from Euclid Ave. to Grove Ave.
- SR-60 from Grove Ave. to Vineyard Ave.
- SR-60 from Valley Way to Rubidoux Blvd.
- SR-60 from Market St. to Main St.
- SR-60 from Main St. to SR-91
- SR-60 from Fair Isle Dr./Box Springs Rd. to I-215
- SR-60 from I-215 to Day St.
- SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.
- SR-60 from Redlands Blvd. to Theodore St.
- SR-91 from Pierce St. to Magnolia Ave.
- SR-91 from Magnolia Ave. to La Sierra Ave.
- SR-91 from La Sierra Ave. to Tyler St.
- SR-91 from Tyler St. to Van Buren Blvd.
- SR-91 from Madison St. to Arlington Ave.
- I-215 from SR-74 to Ellis Ave.
- I-215 from Center St. to Iowa Ave./La Cadena Dr.
- I-215 from Baseline Rd. to Highland Ave.
- I-10 from SR-60 to Beaumont Ave.

- I-10 from Pennsylvania Ave. to Highland Springs Ave.
- I-10 from Highland Springs Ave. to Sunset Ave.
- I-10 from S. 8th St. to S. Hargrave St.

Four sections were found to be deficient under Plus Build-out conditions only, namely:

Northbound or Eastbound Sections

- I-10 from 8th St. to Hargrave St.

Southbound or Westbound Sections

- SR-60 from Martin Luther King Blvd. to Central Ave.
- SR-60 from Heacock St. to Perris Blvd.
- SR-91 from Van Buren Blvd. to Adam St.

There are seven locations would operate at LOS "F" under 2035 No-Project conditions and would continue to do so under 2035 Plus Build-out conditions, and adding a mixed-flow lane would improve six sections to LOS "E" while one would still operate at LOS "F". While this is below the threshold of significance it would be an improvement over 2035 No-Project conditions and so would reduce the impact of the WLC project to a less-than-significant level.

The mitigation measures shown in Table 68 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other

tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 67: 2035 Plus Build-out Freeway Mainline LOS

ID	Freeway	Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,560	41.2	E	8,750	43.6	E	8,740	43.5	E	8,640	42.8	E
F-3	SR-60	Ramona Ave to Central Ave	8,190	37.8	E	10,230	66.5	F	8,370	39.7	E	10,140	65.6	F
F-4	SR-60	Central Ave to Mountain Ave	8,900	44.8	E	10,210	66.0	F	9,100	47.6	F	10,110	65.0	F
F-5	SR-60	Mountain Ave to Euclid Ave	8,780	43.4	E	7,590	33.3	D	8,990	46.3	F	7,480	33.0	D
F-6	SR-60	Euclid Ave to Grove Ave	9,920	59.3	F	9,680	56.0	F	10,120	64.1	F	9,580	55.1	F
F-7	SR-60	Grove Ave to Vineyard Ave	9,210	48.5	F	10,050	62.7	F	9,410	51.8	F	9,960	61.9	F
F-8	SR-60	Vineyard Ave to Archibald Ave	9,080	46.3	F	10,210	66.0	F	9,290	49.6	F	10,100	64.7	F
F-9	SR-60	Archibald Ave to Haven Ave	8,430	39.5	E	7,330	31.5	D	8,650	42.5	E	7,220	31.2	D
F-10	SR-60	Haven Ave to Milliken Ave	8,430	27.5	D	8,110	26.4	D	8,690	29.1	D	7,980	26.2	D
F-11	SR-60	Milliken Ave to I-15	5,160	19.8	C	4,530	17.4	B	5,420	21.3	C	4,460	17.4	B
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,140	15.9	B	2,740	10.6	A	4,380	17.1	B	2,640	10.5	A
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,950	19.1	C	4,170	16.1	B	5,190	20.4	C	3,990	15.7	B
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,380	16.8	B	3,150	12.2	B	4,650	18.2	C	2,970	11.7	B
F-15	SR-60	Pedley Rd to Pyrite St	4,620	17.8	B	3,610	13.9	B	4,870	19.0	C	3,400	13.4	B
F-16	SR-60	Pyrite St to Valley Way	5,060	19.5	C	3,880	15.0	B	5,310	20.9	C	3,650	14.4	B
F-17	SR-60	Valley Way to Rubidoux Blvd	6,160	38.0	E	3,850	19.9	C	6,410	42.3	E	3,790	20.1	C
F-18	SR-60	Rubidoux Blvd to Market St	6,490	42.1	E	4,210	22.2	C	6,710	46.8	F	4,140	22.2	C
F-19	SR-60	Market St to Main St	6,020	36.4	E	6,620	44.9	E	6,240	40.0	E	6,610	46.2	F
F-20	SR-60	Main to SR-91	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-24	SR-60	Martin Luther King Blvd to Central Ave	9,500	59.8	F	9,860	70.8	F	9,980	82.8	F	10,060	91.4	F
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	6,090	24.2	C	5,790	22.9	C	6,540	27.2	D	6,010	24.4	C
F-27	SR-60	I-215 to Day St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-29	SR-60	Pigeon Pass Rd St to Heacock St	3,330	27.3	D	4,120	38.2	E	3,590	33.6	D	4,110	41.4	E
F-30	SR-60	Heacock St to Perris Blvd	3,020	24.1	C	4,200	39.6	E	3,540	32.9	D	4,240	44.2	E
F-31	SR-60	Perris Blvd to Nason St	2,670	20.9	C	3,520	29.4	D	3,210	28.9	D	3,610	33.4	D
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	2,480	19.2	C	3,130	25.0	C	2,910	25.4	C	3,240	28.5	D
F-34	SR-60	Redlands Blvd to Theodore St	3,200	25.9	C	4,500	45.4	F	3,630	34.0	D	4,280	43.8	E
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	2,420	20.1	C	4,430	53.0	F	2,320	19.3	C	4,580	58.2	F
F-37	SR-60	Jack Rabbit Trail to Potrero Blvd	2,500	19.5	C	4,750	51.8	F	2,400	18.7	C	4,950	59.8	F
F-38	SR-60	Potrero Blvd to I-10	2,300	17.8	B	3,620	30.6	D	2,190	16.9	B	3,810	33.8	D
F-39	SR-91	I-15 to McKinley St	8,140	26.3	D	11,870	52.4	F	8,290	27.2	D	11,740	51.6	F
F-40	SR-91	McKinley St to Pierce St	6,990	29.1	D	6,910	29.0	D	7,110	30.1	D	6,870	29.0	D
F-41	SR-91	Pierce St to Magnolia Ave	6,430	41.3	E	6,360	41.2	E	6,550	43.9	E	6,310	41.0	E
F-42	SR-91	Magnolia Ave to La Sierra Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-43	SR-91	La Sierra Ave to Tyler St	6,170	38.1	E	6,250	39.8	E	6,250	39.8	E	6,210	39.7	E
F-44	SR-91	Tyler St to Van Buren Blvd	7,250	30.7	D	6,950	29.2	D	7,350	31.6	D	6,920	29.3	D

Table 67: 2035 Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	7,270	30.8	D	6,290	25.5	C	7,360	31.7	D	6,260	25.5	C
F-46	SR-91	Adam St to Madison St	7,980	36.6	E	6,030	24.3	C	8,060	38.0	E	6,000	24.4	C
F-47	SR-91	Madison St to Arlington Ave	7,000	29.6	D	5,390	21.4	C	7,030	30.2	D	5,370	21.4	C
F-49	SR-91	Central Ave to 14th St	6,400	40.9	E	5,730	33.4	D	6,410	41.5	E	5,580	32.2	D
F-51	SR-91	University Ave to Spruce St	8,160	26.4	D	7,420	23.4	C	8,110	26.2	D	7,290	22.9	C
F-66	I-215	Scott Rd to Garbani Rd	3,350	17.2	B	6,010	36.0	E	3,370	17.3	B	5,980	35.6	E
F-84	I-215	Garbani Rd to Newport Rd	3,150	16.1	B	5,680	32.9	D	3,200	16.5	B	5,650	32.6	D
F-68	I-215	Newport Rd to McCall Blvd	2,910	15.0	B	4,610	24.4	C	2,980	15.3	B	4,580	24.2	C
F-69	I-215	McCall Blvd to Ethanac Rd	3,530	18.1	C	5,570	31.9	D	3,600	18.5	C	5,540	31.6	D
F-70	I-215	Ethanac Rd to SR-74	5,240	29.1	D	5,650	32.6	D	5,290	29.5	D	5,610	32.3	D
F-71	I-215	SR-74 to Ellis Ave	5,200	28.7	D	6,760	46.1	F	5,200	28.7	D	6,740	45.8	F
F-85	I-215	Ellis Ave to Redlands Ave	4,820	25.9	C	6,200	38.4	E	4,840	26.0	D	6,170	38.1	E
F-74	I-215	Columbia Ave to Center St	4,110	21.6	C	3,350	17.5	B	4,090	21.4	C	3,410	17.8	B
F-75	I-215	Center St to La Cadena Dr	4,940	26.9	D	4,270	22.7	C	4,930	27.0	D	4,350	23.2	C
F-76	I-215	La Cadena Dr to Barton Rd	4,880	26.5	D	4,310	22.8	C	4,900	26.6	D	4,400	23.5	C
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,320	29.9	D	4,700	25.4	C	5,280	29.6	D	4,760	25.8	C
F-78	I-215	Mt. Vernon Ave to I-10	5,110	19.8	C	5,720	22.5	C	5,070	19.7	C	5,870	23.4	C
F-80	I-215	Auto Plaza Dr to Mill St	4,680	18.0	B	5,980	23.6	C	4,600	17.8	B	6,030	24.0	C
F-83	I-215	Baseline Rd to Highland Ave	3,260	16.8	B	4,890	26.4	D	3,250	16.7	B	5,000	27.4	D
F-52	I-10	SR-60 to Beaumont Ave	5,030	19.7	C	8,170	38.3	E	5,060	19.9	C	8,230	39.2	E
F-53	I-10	Beaumont Ave to Pennsylvania Ave	5,100	20.1	C	8,030	37.1	E	5,130	20.3	C	7,990	37.0	E
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	5,240	20.7	C	8,170	38.3	E	5,260	20.8	C	8,200	38.9	E
F-55	I-10	Highland Springs Ave to Sunset Ave	5,350	21.2	C	8,240	38.9	E	5,340	21.3	C	8,230	39.2	E
F-56	I-10	Sunset Ave to 22nd St	4,970	19.6	C	7,670	34.5	D	4,950	19.6	C	7,680	34.5	D
F-57	I-10	22nd St to 8th St	4,880	19.3	C	7,480	33.0	D	4,870	19.2	C	7,500	33.2	D
F-58	I-10	8th St to Hargrave St	5,000	19.7	C	7,770	34.9	D	4,970	19.7	C	7,810	35.5	E
F-59	I-10	Hargrave St to Fields Rd	4,770	18.8	C	7,970	36.9	E	4,730	18.6	C	8,020	37.3	E
F-60	I-10	Fields Rd to Morongo Trail	3,990	15.8	B	7,490	33.1	D	3,950	15.7	B	7,520	33.3	D
F-61	I-10	Morongo Trail to Main St	4,320	17.1	B	7,800	35.2	E	4,310	17.0	B	7,850	35.9	E
F-62	I-10	Main St to Haugen-Lehmann Way	4,080	16.1	B	7,530	33.1	D	4,060	16.1	B	7,600	33.9	D
F-64	I-10	SR-111 to Tipton Rd	3,660	14.5	B	7,320	31.7	D	3,640	14.4	B	7,420	32.6	D
F-65	I-10	Tipton Rd to SR-62	3,700	14.6	B	7,330	31.7	D	3,680	14.6	B	7,440	32.7	D

Indicates that the LOS exceeds the target level

Table 67: 2035 Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-2	SR-60	Reservoir St to Ramona Ave	8,770	43.3	E	7,840	34.6	D	8,670	42.7	E	7,920	35.8	E
F-3	SR-60	Ramona Ave to Central Ave	8,080	37.2	E	7,720	33.7	D	7,970	36.5	E	7,790	34.8	D
F-4	SR-60	Central Ave to Mountain Ave	6,340	25.4	C	7,580	32.7	D	6,260	25.2	C	7,630	33.6	D
F-5	SR-60	Mountain Ave to Euclid Ave	6,230	25.2	C	8,250	37.9	E	6,120	24.8	C	8,310	39.2	E
F-6	SR-60	Euclid Ave to Grove Ave	6,470	26.1	D	7,950	35.5	E	6,390	25.9	C	8,050	36.9	E
F-7	SR-60	Grove Ave to Vineyard Ave	6,280	25.0	C	8,150	37.1	E	6,200	24.7	C	8,240	38.6	E
F-8	SR-60	Vineyard Ave to Archibald Ave	7,660	33.3	D	7,640	33.1	D	7,570	32.9	D	7,720	34.3	D
F-9	SR-60	Archibald Ave to Haven Ave	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-10	SR-60	Haven Ave to Milliken Ave	6,510	20.3	C	7,970	25.6	C	6,380	19.9	C	8,100	26.3	D
F-11	SR-60	Milliken Ave to I-15	5,460	21.0	C	7,180	29.8	D	5,350	20.8	C	7,320	31.2	D
F-12	SR-60	I-15 to Etiwanda Ave/Van Buren Blvd	4,840	14.9	B	6,360	19.4	C	4,690	14.6	B	6,520	20.2	C
F-13	SR-60	Etiwanda Ave/Van Buren Blvd to Mission	4,220	16.1	B	5,620	21.6	C	4,080	15.8	B	5,790	22.9	C
F-14	SR-60	Mission Blvd/Country Village Rd to Pedley Rd	4,140	15.9	B	5,660	21.8	C	4,010	15.6	B	5,750	22.7	C
F-15	SR-60	Pedley Rd to Pyrite St	3,260	12.5	B	4,820	18.3	C	3,110	12.1	B	4,860	18.8	C
F-16	SR-60	Pyrite St to Valley Way	2,470	9.5	A	3,930	14.9	B	2,330	9.2	A	4,000	15.5	B
F-17	SR-60	Valley Way to Rubidoux Blvd	4,560	24.1	C	6,360	39.6	E	4,420	23.5	C	6,390	41.2	E
F-18	SR-60	Rubidoux Blvd to Market St	3,410	17.5	B	5,120	27.7	D	3,280	17.1	B	5,420	31.0	D
F-19	SR-60	Market St to Main St	5,530	31.5	D	6,280	38.7	E	5,400	30.8	D	6,430	41.7	E
F-20	SR-60	Main to SR-91	5,320	29.7	D	6,310	39.0	E	5,300	30.0	D	6,480	42.4	E
F-24	SR-60	Martin Luther King Blvd to Central Ave	8,330	30.8	D	8,980	33.3	D	8,240	31.6	D	9,380	39.7	E
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	7,500	33.2	D	8,970	46.6	F	7,420	33.6	D	9,250	52.1	F
F-27	SR-60	I-215 to Day St	7,050	50.4	F	3,590	18.6	C	7,080	53.6	F	3,810	20.8	C
F-29	SR-60	Pigeon Pass Rd St to Heacock St	3,650	31.3	D	3,910	35.0	E	3,590	32.1	D	4,120	42.4	E
F-30	SR-60	Heacock St to Perris Blvd	3,560	30.1	D	3,410	28.3	D	3,610	32.4	D	3,730	35.3	E
F-31	SR-60	Perris Blvd to Nason St	3,330	27.3	D	2,780	21.9	C	3,430	30.1	D	3,140	27.6	D
F-33	SR-60	Moreno Beach Dr to Redlands Blvd	3,150	25.2	C	2,680	20.9	C	3,270	28.1	D	3,010	26.1	D
F-34	SR-60	Redlands Blvd to Theodore St	4,010	36.3	E	3,530	29.7	D	4,290	44.0	E	3,780	35.0	E
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	3,350	30.5	D	2,920	25.2	C	3,450	31.9	D	2,680	23.5	C
F-37	SR-60	Jack Rabbit Trail to Potrero Blvd	3,690	31.6	D	3,010	24.0	C	3,840	34.3	D	2,820	22.4	C
F-38	SR-60	Potrero Blvd to I-10	2,360	18.2	C	1,930	15.0	B	2,450	19.3	C	1,810	14.1	B
F-39	SR-91	I-15 to McKinley St	8,590	28.6	D	8,630	28.6	D	8,430	28.0	D	8,850	29.8	D
F-40	SR-91	McKinley St to Pierce St	6,550	26.9	D	7,440	32.0	D	6,430	26.4	D	7,630	33.6	D
F-41	SR-91	Pierce St to Magnolia Ave	6,260	39.9	E	9,000	144.5	F	6,160	39.0	E	9,170	177.2	F
F-42	SR-91	Magnolia Ave to La Sierra Ave	6,130	38.3	E	8,600	107.0	F	6,050	37.7	E	8,720	119.7	F
F-43	SR-91	La Sierra Ave to Tyler St	5,460	31.4	D	6,390	40.8	E	5,380	30.9	D	6,510	43.3	E
F-44	SR-91	Tyler St to Van Buren Blvd	6,880	28.8	D	7,970	35.9	E	6,810	28.6	D	8,080	37.2	E

Table 67: 2035 Plus Build-out Freeway Mainline LOS (continued)

ID	Freeway	Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
F-45	SR-91	Van Buren Blvd to Adam St	6,590	27.1	D	7,720	34.0	D	6,540	27.0	D	7,830	35.1	**E**
F-46	SR-91	Adam St to Madison St	6,270	25.4	C	6,970	29.0	D	6,250	25.5	C	7,080	29.8	D
F-47	SR-91	Madison St to Arlington Ave	5,540	32.1	D	6,290	39.5	**E**	5,560	32.6	D	6,360	40.8	**E**
F-49	SR-91	Central Ave to 14th St	5,290	20.8	C	5,460	21.2	C	5,270	20.9	C	5,580	22.0	C
F-51	SR-91	University Ave to Spruce St	See Weaving Analysis			See Weaving Analysis			See Weaving Analysis			See Weaving Analysis		
F-66	I-215	Scott Rd to Garbani Rd	5,470	30.8	D	4,160	21.5	C	5,380	29.8	D	4,170	21.7	C
F-84	I-215	Garbani Rd to Newport Rd	4,950	26.6	D	4,040	20.9	C	4,880	26.1	D	4,030	20.9	C
F-68	I-215	Newport Rd to McCall Blvd	5,020	27.2	D	5,240	28.9	D	4,930	26.5	D	5,230	29.0	D
F-69	I-215	McCall Blvd to Ethanac Rd	5,400	30.4	D	4,800	25.6	C	5,330	29.6	D	4,790	25.7	C
F-70	I-215	Ethanac Rd to SR-74	5,390	30.3	D	6,220	38.3	**E**	5,320	29.5	D	6,220	38.3	**E**
F-71	I-215	SR-74 to Ellis Ave	7,170	53.3	**F**	5,980	35.6	**E**	7,110	51.5	**F**	6,000	35.8	**E**
F-85	I-215	Ellis Ave to Redlands Ave	6,560	43.1	**E**	5,490	31.2	D	6,510	42.0	**E**	5,510	31.4	D
F-74	I-215	Columbia Ave to Center St	5,000	27.4	D	3,680	19.1	C	4,970	27.2	D	3,680	19.2	C
F-75	I-215	Center St to La Cadena Dr	5,970	35.8	**E**	4,690	25.1	C	6,010	36.6	**E**	4,740	25.6	C
F-76	I-215	La Cadena Dr to Barton Rd	5,060	27.8	D	3,780	19.7	C	5,100	28.2	D	3,790	19.8	C
F-77	I-215	Barton Rd to Mt. Vernon Ave	5,540	31.6	D	4,210	22.2	C	5,590	32.3	D	4,220	22.2	C
F-78	I-215	Mt. Vernon Ave to I-10	6,480	26.2	D	5,210	20.3	C	6,570	26.7	D	5,190	20.3	C
F-80	I-215	Auto Plaza Dr to Mill St	5,600	21.7	C	4,540	17.4	B	5,500	21.4	C	4,570	17.6	B
F-83	I-215	Baseline Rd to Highland Ave	6,910	48.0	**F**	5,450	30.8	D	6,930	48.3	**F**	5,490	31.4	D
F-52	I-10	SR-60 to Beaumont Ave	7,820	35.3	**E**	6,060	24.5	C	7,880	36.1	**E**	6,040	24.5	C
F-53	I-10	Beaumont Ave to Pennsylvania Ave	7,660	34.1	D	5,840	23.5	C	7,680	34.3	D	5,820	23.4	C
F-54	I-10	Pennsylvania Ave to Highland Springs Ave	8,180	38.4	**E**	5,920	23.9	C	8,250	39.4	**E**	5,860	23.7	C
F-55	I-10	Highland Springs Ave to Sunset Ave	7,990	36.7	**E**	5,590	22.3	C	8,060	37.7	**E**	5,550	22.2	C
F-56	I-10	Sunset Ave to 22nd St	7,620	33.8	D	5,420	21.5	C	7,720	34.9	D	5,430	21.7	C
F-57	I-10	22nd St to 8th St	7,680	34.5	D	5,130	20.3	C	7,680	34.5	D	5,120	20.4	C
F-58	I-10	8th St to Hargrave St	7,790	35.4	**E**	5,370	21.4	C	7,860	36.0	**E**	5,350	21.4	C
F-59	I-10	Hargrave St to Fields Rd	7,610	34.0	D	5,000	19.8	C	7,720	34.9	D	4,980	19.8	C
F-60	I-10	Fields Rd to Morongo Trail	7,150	30.7	D	4,620	18.3	C	7,270	31.6	D	4,590	18.3	C
F-61	I-10	Morongo Trail to Main St	7,040	30.0	D	5,040	20.0	C	7,190	31.0	D	5,010	19.9	C
F-62	I-10	Main St to Haugen-Lehmann Way	7,070	30.2	D	4,410	17.4	B	7,230	31.3	D	4,560	18.0	C
F-64	I-10	SR-111 to Tipton Rd	6,420	26.2	D	4,860	19.2	C	6,560	27.1	D	4,830	19.1	C
F-65	I-10	Tipton Rd to SR-62	6,430	26.2	D	4,870	19.2	C	6,570	27.2	D	4,840	19.1	C

Indicates that the LOS exceeds the target level

Table 68: 2035 Plus Build-out Freeway Mainline Impacts and Mitigations

			Northbound / Eastbound											
			Determination of Impact					2035 Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-2	SR-60	Reservoir St to Ramona Ave	E	E	E	E	Yes	8,740	29.3	D	8,640	29.0	D	Add 1 mixed flow lane
F-3	SR-60	Ramona Ave to Central Ave	E	E	F	F	Yes	8,370	27.6	D	10,140	37.8	D	Add 1 mixed flow lane
F-4	SR-60	Central Ave to Mountain Ave	E	F	F	F	Yes	9,100	31.2	D	10,110	37.6	E	Add 1 mixed flow lane
F-5	SR-60	Mountain Ave to Euclid Ave	E	F	D	D	Yes	8,990	30.6	D	7,480	24.1	C	Add 1 mixed flow lane
F-6	SR-60	Euclid Ave to Grove Ave	F	F	F	F	Yes	10,120	37.3	E	9,580	34.1	D	Add 1 mixed flow lane
F-7	SR-60	Grove Ave to Vineyard Ave	F	F	F	F	Yes	9,410	32.9	D	9,960	36.5	E	Add 1 mixed flow lane
F-8	SR-60	Vineyard Ave to Archibald Ave	F	F	F	F	Yes	9,290	31.9	D	10,100	37.5	E	Add 1 mixed flow lane
F-9	SR-60	Archibald Ave to Haven Ave	E	E	D	D	Yes	8,650	28.9	D	7,220	23.1	C	Add 1 mixed flow lane
F-17	SR-60	Valley Way to Rubidoux Blvd	E	E	C	C	Yes	6,410	26.3	D	3,790	15.0	B	Add 1 mixed flow lane
F-18	SR-60	Rubidoux Blvd to Market St	E	F	C	C	Yes	6,710	28.0	D	4,140	16.4	B	Add 1 mixed flow lane
F-19	SR-60	Market St to Main St	E	E	E	F	Yes	6,240	25.4	C	6,610	27.8	D	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	F	F	F	F	Yes	9,980	42.7	E	10,060	44.7	E	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd St to Heacock St	D	D	E	E	Yes	3,590	19.8	C	4,110	22.4	C	Add 1 mixed flow lane
F-30	SR-60	Heacock St to Perris Blvd	C	D	E	E	Yes	3,540	19.4	C	4,240	23.2	C	Add 1 mixed flow lane
F-36	SR-60	Gilman Springs Rd to Jack Rabbit Trail	C	C	F	F	Yes	2,320	12.8	B	4,580	26.7	D	Add 1 mixed flow lane
F-37	SR-60	Jack Rabbit Trail to Potrero Blvd	C	C	F	F	Yes	2,400	12.4	B	4,950	27.0	D	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	E	E	E	E	Yes	6,550	26.9	D	6,310	25.8	C	Add 1 mixed flow lane
F-43	SR-91	La Sierra Ave to Tyler St	E	E	E	E	Yes	6,250	25.3	C	6,210	25.2	C	Add 1 mixed flow lane
F-46	SR-91	Adam St to Madison St	E	E	C	C	Yes	8,060	26.7	D	6,000	18.9	C	Add 1 mixed flow lane
F-49	SR-91	Central Ave to 14th St	E	E	D	D	Yes	6,410	26.0	C	5,580	21.9	C	Add 1 mixed flow lane
F-52	I-10	SR-60 to Beaumont Ave	C	C	E	E	Yes	5,060	15.9	B	8,230	27.3	D	Add 1 mixed flow lane
F-54	I-10	Pennsylvania Ave to Highland Springs	C	C	E	E	Yes	5,260	16.5	B	8,200	27.1	D	Add 1 mixed flow lane
F-55	I-10	Highland Springs Ave to Sunset Ave	C	C	E	E	Yes	5,340	16.8	B	8,230	27.3	D	Add 1 mixed flow lane
F-58	I-10	8th St to Hargrave St	C	C	D	E	Yes	4,970	15.6	B	7,810	25.4	C	Add 1 mixed flow lane
F-59	I-10	Hargrave St to Fields Rd	C	C	E	E	Yes	4,730	14.9	B	8,020	26.3	D	Add 1 mixed flow lane
F-61	I-10	Morongo Trail to Main St	B	B	E	E	Yes	4,310	13.6	B	7,850	25.6	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Table 68: 2035 Plus Build-out Freeway Mainline Impacts and Mitigations (continued)

			Southbound / Westbound											
			Determination of Impact					2035 Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
ID	Freeway	Segment	No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
F-2	SR-60	Reservoir St to Ramona Ave	E	E	D	E	Yes	8,670	29.0	D	7,920	25.6	C	Add 1 mixed flow lane
F-5	SR-60	Mountain Ave to Euclid Ave	C	C	E	E	Yes	6,120	19.1	C	8,310	27.3	D	Add 1 mixed flow lane
F-6	SR-60	Euclid Ave to Grove Ave	D	C	E	E	Yes	6,390	19.9	C	8,050	26.1	D	Add 1 mixed flow lane
F-7	SR-60	Grove Ave to Vineyard Ave	C	C	E	E	Yes	6,200	19.1	C	8,240	27.0	D	Add 1 mixed flow lane
F-17	SR-60	Valley Way to Rubidoux Blvd	C	C	E	E	Yes	4,420	17.1	B	6,390	25.9	C	Add 1 mixed flow lane
F-19	SR-60	Market St to Main St	D	D	E	E	Yes	5,400	21.2	C	6,430	26.1	D	Add 1 mixed flow lane
F-20	SR-60	Main to SR-91	D	D	E	E	Yes	5,300	20.8	C	6,480	26.3	D	Add 1 mixed flow lane
F-24	SR-60	Martin Luther King Blvd to Central Ave	D	D	D	E	Yes	8,240	24.5	C	9,380	29.2	D	Add 1 mixed flow lane
F-26	SR-60	Fair Isle Dr/Box Springs Rd to I-215	D	D	F	F	Yes	7,420	24.4	C	9,250	33.0	D	Add 1 mixed flow lane
F-27	SR-60	I-215 to Day St	F	F	C	C	Yes	7,080	30.3	D	3,810	15.4	B	Add 1 mixed flow lane
F-29	SR-60	Pigeon Pass Rd St to Heacock St	D	D	E	E	Yes	3,590	19.2	C	4,120	22.7	C	Add 1 mixed flow lane
F-30	SR-60	Heacock St to Perris Blvd	D	D	D	E	Yes	3,610	19.3	C	3,730	20.4	C	Add 1 mixed flow lane
F-34	SR-60	Redlands Blvd to Theodore St	E	E	D	E	Yes	4,290	23.2	C	3,780	20.3	C	Add 1 mixed flow lane
F-41	SR-91	Pierce St to Magnolia Ave	E	E	F	F	Yes	6,160	25.0	C	9,170	48.5	F	Add 1 mixed flow lane
F-42	SR-91	Magnolia Ave to La Sicrra Avc	E	E	F	F	Yes	6,050	24.4	C	8,720	43.3	E	Add 1 mixed flow lane
F-43	SR-91	La Sierra Ave to Tyler St	D	D	E	E	Yes	5,380	21.2	C	6,510	26.7	D	Add 1 mixed flow lane
F-44	SR-91	Tyler St to Van Buren Blvd	D	D	E	E	Yes	6,810	21.5	C	8,080	26.3	D	Add 1 mixed flow lane
F-45	SR-91	Van Buren Blvd to Adam St	D	D	D	E	Yes	6,540	20.6	C	7,830	25.2	C	Add 1 mixed flow lane
F-47	SR-91	Madison St to Arlington Ave	D	D	E	E	Yes	5,560	22.0	C	6,360	25.7	C	Add 1 mixed flow lane
F-71	I-215	SR-74 to Ellis Ave	F	F	E	E	Yes	7,110	29.6	D	6,000	23.6	C	Add 1 mixed flow lane
F-75	I-215	Center St to La Cadena Dr	E	E	C	C	Yes	6,010	23.9	C	4,740	18.4	C	Add 1 mixed flow lane
F-83	I-215	Baseline Rd to Highland Ave	F	F	D	D	Yes	6,930	28.5	D	5,490	21.5	C	Add 1 mixed flow lane
F-52	I-10	SR-60 to Beaumont Ave	E	E	C	C	Yes	7,880	25.7	C	6,040	19.0	C	Add 1 mixed flow lane
F-54	I-10	Pennsylvania Ave to Highland Springs	E	E	C	C	Yes	8,250	27.4	D	5,860	18.5	C	Add 1 mixed flow lane
F-55	I-10	Highland Springs Ave to Sunset Ave	E	E	C	C	Yes	8,060	26.5	D	5,550	17.5	B	Add 1 mixed flow lane
F-58	I-10	8th St to Hargrave St	E	E	C	C	Yes	7,860	25.6	C	5,350	16.9	B	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Freeway Weaving LOS

Table 69 compares the LOS for study weaving sections under 2035 No-Project and 2035 Plus Build-out conditions. As shown in the table, there are 12 sections where the project would have a significant impact. Eleven of the 12 sections would be deficient under both 2035 No-Project and Plus Build-out conditions, namely:

Northbound or Eastbound

- SR-60 from SR-71/Garey Ave. to Reservoir St.
- SR-60 from Main St. to SR-91
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from W. Blaine St./3rd St. to University Ave.

- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.
- SR-91 from Arlington Ave. to Central Ave.

Southbound or Westbound

- SR-60 from Haven Ave. to Archibald Ave.
- SR-60 from SR-91 to W. Blaine St./3rd St.
- SR-60 from W. Blaine St./3rd St. to University Ave.
- SR-60 from University Ave. to Martin Luther King Blvd.
- SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.

There was only one segment that would be deficient only under Plus Build-out conditions, namely:

Southbound or Westbound

- SR-60 from Day St. to Pigeon Pass Rd./Frederick St.

Table 70 identifies mitigation measures that would reduce the impact of the WLC project to a less-than-significant level. In five cases the mitigation would achieve the threshold of significance. In the other seven cases the LOS after mitigation would be worse than the LOS target but better than the 2035 No-Project condition, and so the project's impact with mitigation would be less-than-significant.

The mitigation measures shown in Table 70 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 69: 2035 Plus Build-out Freeway Weaving Section LOS

ID	Freeway	Weaving Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Northbound / Eastbound						Northbound / Eastbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	8,630	39.7	**E**	9,700	46.8	**E**	8,820	41.2	**E**	9,570	46.5	**E**
W-9	SR-60	Haven Ave to Archibald Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-20	SR-60	Main St to SR-91	7,060	34.1	D	7,110	35.1	**E**	7,280	35.8	**E**	7,040	35.2	**E**
W-21	SR-60	SR-91 to Blaine St/3rd St	7,280	32.4	D	10,640	>Capacity	**F**	7,540	34.3	D	10,640	> Capacity	**F**
W-22	SR-60	Blaine St/3rd St to University Ave	7,120	28.9	D	8,460	38.7	**E**	7,460	31.9	D	8,570	40.9	**E**
W-23	SR-60	University Ave to Martin Luther King	7,960	30.0	D	7,040	26.4	C	8,310	32.0	D	7,160	27.4	C
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	7,890	37.0	**E**	8,640	40.5	**E**	8,370	43.9	**E**	8,760	44.5	**E**
W-27	SR-60	I-215 to Day St	3,980	16.3	B	6,210	27.7	C	4,460	21.4	C	6,200	30.8	D
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	3,760	16.2	B	5,660	26.5	C	4,190	18.9	B	5,690	27.2	C
W-32	SR-60	Moreno Beach Dr to Nason St	2,640	16.5	B	3,480	22.6	C	3,150	21.0	C	3,650	24.9	C
W-35	SR-60	Theodore St to Gilman Springs Rd	3,070	17.5	B	5,710	37.9	**E**	3,080	18.3	B	5,360	36.2	**E**
W-42	SR-91	Magnolia Ave to La Sierra Ave	6,970	33.7	D	6,930	34.2	D	7,080	34.4	D	6,900	34.2	D
W-48	SR-91	Arlington Ave to Central Ave	7,620	41.0	**E**	4,370	21.3	C	7,660	41.6	**E**	4,220	20.6	C
W-50	SR-91	14th St to University Ave	5,310	26.4	C	5,060	26.1	C	5,260	26.2	C	4,930	25.4	C
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-73	I-215	SR-60 to Columbia Ave	5,330	28.4	D	4,610	24.6	C	5,300	28.3	D	4,670	25.0	C
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	4,590	16.9	B	5,640	20.9	C	4,570	16.8	B	5,730	21.3	C
W-81	I-215	Mill St to 2nd St	5,190	18.3	B	6,460	23.5	C	5,160	18.2	B	6,560	23.9	C
W-82	I-215	5th St to Baseline Rd	3,900	13.5	B	4,980	17.7	B	3,880	13.4	B	5,050	18.0	B
W-63	I-10	Haugen-Lehmann Way to SR-111	4,170	14.4	B	8,420	33.1	D	4,140	14.3	B	8,550	34.1	D

Indicates that the LOS exceeds the target level

Table 69: 2035 Plus Build-out Freeway Weaving Section LOS (continued)

ID	Freeway	Weaving Segment	2035 No-Project Conditions						2035 Plus Build-out Conditions					
			Southbound / Westbound						Southbound / Westbound					
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
			Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS
W-1	SR-60	SR-71/Garey Ave to Reservoir St	6,130	22.0	C	7,510	27.6	C	6,040	21.8	C	7,620	28.4	D
W-9	SR-60	Haven Ave to Archibald Ave	6,910	28.7	D	8,180	36.4	**E**	6,800	28.5	D	8,270	37.1	**E**
W-20	SR-60	Main St to SR-91	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-21	SR-60	SR-91 to Blaine St/3rd St	8,490	33.7	D	9,970	40.9	**E**	8,380	33.5	D	10,290	> Capacity	**F**
W-22	SR-60	Blaine St/3rd St to University Ave	6,320	24.3	C	8,890	35.8	**E**	6,320	25.3	C	9,220	39.6	**E**
W-23	SR-60	University Ave to Martin Luther King	6,750	28.2	D	8,830	36.9	**E**	6,670	28.3	D	9,130	39.2	**E**
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs	8,340	38.1	**E**	9,200	39.2	**E**	8,170	38.5	**E**	9,560	43.8	**E**
W-27	SR-60	I-215 to Day St	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	4,790	33.5	D	4,790	32.4	D	4,820	34.5	D	5,100	36.1	**E**
W-32	SR-60	Moreno Beach Dr to Nason St	3,310	20.5	C	2,680	16.2	B	3,460	22.2	C	3,040	19.5	B
W-35	SR-60	Theodore St to Gilman Springs Rd	4,560	32.0	D	3,680	24.2	C	4,220	27.3	C	3,470	22.5	C
W-42	SR-91	Magnolia Ave to La Sierra Ave	See Basic Analysis			See Basic Analysis			See Basic Analysis			See Basic Analysis		
W-48	SR-91	Arlington Ave to Central Ave	5,160	24.9	C	5,760	27.4	C	5,140	24.9	C	5,830	28.0	D
W-50	SR-91	14th St to University Ave	6,070	23.7	C	8,010	33.0	D	6,020	23.6	C	8,050	33.3	D
W-51	SR-91	SR-60 to Mission Inn Ave/University Ave	6,500	20.6	C	10,130	32.5	D	6,460	20.7	C	10,140	32.7	D
W-73	I-215	SR-60 to Columbia Ave	6,660	33.8	D	5,570	28.2	D	6,640	33.8	D	5,580	28.3	D
W-79	I-215	I-10 to Auto Plaza Dr/Orange Show Rd	6,200	22.5	C	4,950	18.8	B	6,240	22.7	C	4,970	18.9	B
W-81	I-215	Mill St to 2nd St	6,360	23.4	C	4,980	18.3	B	6,370	23.5	C	5,020	18.5	B
W-82	I-215	5th St to Baseline Rd	5,610	20.3	C	4,060	14.6	B	5,620	20.3	C	4,060	14.6	B
W-63	I-10	Haugen-Lehmann Way to SR-111	7,270	29.0	D	5,500	>Capacity	**F**	7,440	30.0	D	5,460	> Capacity	**F**

Indicates that the LOS exceeds the target level

Table 70: 2035 Plus Build-out Freeway Weaving Impacts and Mitigations

Northbound / Eastbound

ID	Freeway	Weaving Segment	Determination of Impact					2035 Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
W-1	SR-60	SR-71/Garey Ave to Reservoir St	E	E	E	E	Yes	8,820	33.1	D	9,570	37.2	E	Add 1 mixed flow lane
W-20	SR-60	Main St to SR-91	D	E	E	E	Yes	7,280	27.8	C	7,040	27.4	C	Add 1 mixed flow lane
W-21	SR-60	SR-91 to Blaine St/3rd St	D	D	F	F	Yes	7,540	27.7	C	10,640	40.7	E	Add 1 mixed flow lane
W-22	SR-60	Blaine St/3rd St to University Ave	D	D	E	E	Yes	7,460	30.2	D	8,570	38.7	E	Add a second off-ramp lane
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs Rd	E	E	E	E	Yes	8,370	34.9	D	8,760	35.6	E	Add 1 mixed flow lane
W-48	SR-91	Arlington Ave to Central Ave	E	E	C	C	Yes	7,660	37.2	E	4,220	18.8	B	Add a second off-ramp lane

Indicates that the LOS exceeds the target level

Southbound / Westbound

ID	Freeway	Weaving Segment	Determination of Impact					2035 Plus Build-out & Mitigations						
			AM Peak Hour		PM Peak Hour			AM Peak Hour			PM Peak Hour			
			No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS	Project Impact?	Freeway Volume	Density (pc/mi/ln)	LOS	Freeway Volume	Density (pc/mi/ln)	LOS	Mitigation Measures Required to Reduce Impact to Less-Than-Significant
W-9	SR-60	Haven Ave to Archibald Ave	D	D	E	E	Yes	6,800	25.2	C	8,270	32.6	D	Add 1 mixed flow lane
W-21	SR-60	SR-91 to Blaine St/3rd St	D	D	E	F	Yes	8,380	27.3	C	10,290	35.0	D	Add 1 mixed flow lane
W-22	SR-60	Blaine St/3rd St to University Ave	C	C	E	E	Yes	6,320	20.6	C	9,220	32.0	D	Add 1 mixed flow lane
W-23	SR-60	University Ave to Martin Luther King Blvd	D	D	E	E	Yes	6,670	26.2	C	9,130	35.6	E	Add a second off-ramp lane
W-25	SR-60	Central Ave to Fair Isle Dr/Box Springs Rd	E	E	E	E	Yes	8,170	30.9	D	9,560	35.1	E	Add 1 mixed flow lane
W-28	SR-60	Day St to Pigeon Pass Rd/Frederick St	D	D	D	E	Yes	4,820	25.1	C	5,100	26.2	C	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

Freeway Ramp LOS

Table 71 compares the freeway ramp level of service on SR-60 under 2035 No-Project and 2035 Plus Build-out conditions. As shown in the table, there are nine ramps where the project would have a significant impact. Four ramps would operate at below LOS "D" under both 2035 No-Project and 2035 Plus Build-out conditions while other five ramps would operate below LOS of "D" under 2035 Plus Build-out conditions only. These locations are:

Would Operate Below LOS "D" Under Both 2035 No-Project and Plus Build-out Conditions

- SR-60 eastbound On-Ramp from Central Ave.
- SR-60 eastbound On-Ramp from Gilman Springs Rd.
- SR-60 westbound On-Ramp from Theodore St.
- SR-60 westbound Loop On-Ramp from Redlands Blvd.

Would Operate Below LOS "D" Under 2035 Plus Build-out Conditions (only)

- SR-60 eastbound On-Ramp from Martin Luther King Blvd
- SR-60 westbound Off-Ramp to Redlands Blvd
- SR-60 westbound Direct On-Ramp from Redlands Blvd.
- SR-60 westbound Off-Ramp to Central Ave.
- SR-60 westbound Off-Ramp to Martin Luther King Blvd.

The mitigation measures shown in Table 72 are those that would be needed to reduce the impact of the project to a less-than-significant level. While these measures are feasible in the sense that, if they could be constructed, they would achieve the target LOS, this does not necessarily mean that they pass other tests of feasibility. The physical and financial feasibility of these mitigation measures and the means to fund them are discussed in greater depth in Chapter 11.

Table 71: 2035 Plus Build-out Freeway Ramp LOS

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	2035 No-Project Conditions								2035 Plus Build-out Conditions							
				AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
				Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS
R-1	SR-60 EB	On-Ramp from Martin Luther King Blvd	1	7,410	580	30.6	D	6,430	1,400	33.8	D	7,760	680	33.0	D	6,530	1,460	35.1	E
R-2	SR-60 EB	On-Ramp from Central Ave	1	7,890	1,220	32.2	F	8,630	970	32.9	F	8,370	1,360	35.5	F	8,760	970	33.9	F
R-3	SR-60 EB	Off-Ramp to Redlands Blvd	1	2,480	220	13.8	B	3,130	440	19.7	B	2,910	280	20.0	C	3,240	680	22.6	C
R-4	SR-60 EB	Loop On-Ramp from Redlands Blvd	1	2,260	90	22.1	C	2,690	60	25.4	C	2,630	110	27.2	C	2,560	70	25.8	C
R-5	SR-60 EB	Direct On-Ramp from Redlands Blvd	1	2,350	110	19.9	B	2,750	480	26.0	C	2,740	140	25.3	C	2,630	480	26.4	C
R-6	SR-60 EB	Off-Ramp to Theodore St	2	3,200	270	25.0	C	4,500	150	36.7	F	3,630	850	24.3	C	4,280	410	27.8	C
R-7	SR-60 EB	Loop On-Ramp from Theodore St	1	2,930	150	22.0	C	4,350	1,350	42.9	F	2,780	50	27.6	C	3,870	350	38.5	E
R-8	SR-60 EB	Direct On-Ramp from Theodore St	1	Does not Exist in this Scenario				Does not Exist in this Scenario				2,830	260	23.5	C	4,220	1,400	43.6	F
R-9	SR-60 EB	Off-Ramp to Gilman Springs Rd	2	3,070	840	19.4	B	5,710	1,570	35.8	E	3,080	980	19.8	B	5,360	1,240	34.0	D
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	2,230	260	16.9	B	4,140	470	34.3	F	2,100	300	16.5	B	4,120	690	36.4	F
R-11	SR-60 WB	Off-Ramp to Gilman Springs Rd	2	3,350	240	20.9	C	2,920	560	18.2	B	3,450	450	21.5	C	2,680	530	16.8	B
R-12	SR-60 WB	On-Ramp from Gilman Springs Rd	1	3,110	1,330	32.2	D	2,360	1,140	24.6	C	3,000	1,050	29.3	D	2,150	1,130	23.2	C
R-13	SR-60 WB	Off-Ramp to Theodore St	2	4,560	640	32.7	F	3,680	380	24.8	C	4,220	710	26.9	C	3,470	420	22.2	C
R-14	SR-60 WB	On-Ramp from Theodore St	1	3,920	90	35.5	E	3,300	230	31.5	D	3,510	520	36.8	E	3,050	640	34.1	D
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	4,010	310	32.4	D	3,530	370	28.1	D	4,290	420	36.1	E	3,780	540	31.6	D
R-16	SR-60 WB	Loop On-Ramp from Redlands Blvd	1	3,700	200	36.5	E	3,160	110	31.4	D	3,870	210	39.0	E	3,240	150	33.3	D
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	1	3,900	350	34.7	D	3,270	280	29.0	D	4,080	390	37.6	F	3,390	630	34.2	D
R-18	SR-60 WB	Off-Ramp to Central Ave	2	8,340	480	32.0	D	9,200	540	35.0	D	8,170	480	31.8	D	9,560	540	37.0	E
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	8,330	710	32.5	D	8,980	660	34.1	D	8,240	720	32.5	D	9,380	670	36.0	E

Indicates that the LOS exceeds the target level

Table 72: 2035 Plus Build-out Freeway Ramp Impacts and Mitigations

ID	Freeway / Direction	Ramp Segment	Ramp No. of Lanes	Determination of Impact					2035 Plus Build-out & Mitigations								Mitigation Measures Required to Reduce Impact to Less-Than-Significant
				AM Peak Hour		PM Peak Hour		Project Impact?	AM Peak Hour				PM Peak Hour				
				No-Project LOS	Plus Build-out LOS	No-Project LOS	Plus Build-out LOS		Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	Mainline Volume	Ramp Volume	Density (pc/mi/ln)	LOS	
R-1	SR-60 EB	On-Ramp from Martin Luther King	1	D	D	D	E	Yes	7,760	680	25.2	C	6,530	1,460	29.0	D	Add 1 mixed flow lane
R-2	SR-60 EB	On-Ramp from Central Ave	1	F	F	F	F	Yes	8,370	1,360	27.7	C	8,760	970	26.1	C	Add 1 mixed flow lane
R-10	SR-60 EB	On-Ramp from Gilman Springs Rd	1	B	B	F	F	Yes	2,100	300	9.6	A	4,120	690	23.1	C	Add 1 mixed flow lane
R-14	SR-60 WB	On-Ramp from Theodore St	1	E	E	D	D	Yes	3,510	520	24.7	C	3,050	640	23.5	C	Add 1 mixed flow lane
R-15	SR-60 WB	Off-Ramp to Redlands Blvd	1	D	E	D	D	Yes	4,290	420	22.1	C	3,780	540	19.9	B	Add 1 mixed flow lane
R-16	SR-60 WB	Loop On-Ramp from Redlands	1	E	E	D	D	Yes	3,870	210	25.1	C	3,240	150	21.6	C	Add 1 mixed flow lane
R-17	SR-60 WB	Direct On-Ramp from Redlands Blvd	1	D	F	D	D	Yes	4,080	390	23.7	C	3,390	630	22.6	C	Add 1 mixed flow lane
R-18	SR-60 WB	Off-Ramp to Central Ave	2	D	D	D	E	Yes	8,170	480	26.5	C	9,560	540	30.9	D	Add 1 mixed flow lane
R-19	SR-60 WB	Off-Ramp to Martin Luther King Blvd	1	D	D	D	E	Yes	8,240	720	28.0	C	9,380	670	30.9	D	Add 1 mixed flow lane

Indicates that the LOS exceeds the target level

11. MITIGATION MEASURES

The results of the traffic analysis indicate the proposed project would have some level of impact on the local and regional roadway system. The greatest impact by number of locations would occur under the 2035 Plus Build-out conditions. This chapter discusses the mitigation measures that would be needed to reduce the impact of the project to a less-than-significant level. The discussion includes the fee programs relevant to the WLC, the methodology used to determine project impacts, and policy considerations regarding possible mitigations. The objective of each recommended measure is to allow the road or intersection to achieve the target level of service under Plus Build-out Plus Mitigations conditions or, where that is not feasible, to improve the level of service at the impacted locations to a level not worse than under No-Project conditions.

As set forth in greater detail below, in some circumstances mitigation is infeasible and so project impacts cannot be mitigated to less than significant levels. In such cases a statement of overriding considerations should be considered in accordance with City of Moreno Valley General Plan Policy 5.3.7 which reads:

> "*Provide consideration to projects that have overriding regional or local benefits that would be desirable even though the LOS standards cannot be met. These projects would be required to analyze traffic impacts and mitigate such impacts to the extent that it is deemed feasible*."

A. THE TUMF PROGRAM

In 1988 the voters of Riverside County approved Measure A, a half-cent sales tax to fund transportation projects. In 2002 voters approved a 20-year extension of Measure A, this time including a Transportation Uniform Mitigation Fee or TUMF. The rationale behind TUMF was that having a single uniform fee program to mitigate the cumulative regional impacts of new development on the area's arterial highway system would be more effective than having multiple, and potentially uncoordinated, fee programs with varying policies, fee amounts and project lists. Under the TUMF, developers of residential, industrial, and commercial properties pay a development fee to fund transportation projects that will be required as a result of the growth the projects create. The program is recognition by voters that residents and employees in all of western Riverside County's jurisdictions benefit from arterials located not just in their own city, but also in nearby cities as well.

The TUMF program is designed to provide a network of roads, bridges, interchanges and railroad grade separations, known as the Regional System of Highways and Arterials (RSHA), needed to accommodate future growth in the area through 2035. The RSHA was developed by the Public Works Directors of the WRCOG member jurisdictions. A "Nexus Study" was then prepared in accordance with the California Mitigation Fee Act, which requires that a reasonable relationship exist between the impact fee collected

and the proposed improvements for which a fee is used. The study determined the proportion of the cost of the improvements that should be borne by different types of development based on the trip generating characteristics of each land use type. The Nexus Study was updated in 2010 and the RSHA was revised to reflect the most current transportation needs and costs for western Riverside County. The new RSHA network reflected several changes due to completed projects and recommendations from the WRCOG Public Works Committee (PWC) to better represent the transportation needs of western Riverside County.

TUMF is administered by the Western Riverside Council of Governments (WRCOG). As administrator, WRCOG receives all fees generated from the TUMF as collected by the local jurisdictions. TUMF funds are programmed by WRCOG's partner agencies, which are responsible for prioritizing projects and overseeing their development.

The TUMF program uses six categories of land uses; two residential and four non-residential. The two residential types are single-family residential and multi-family residential. Non-residential categories include industrial, retail, service commercial, and high-cube warehouse, with fees being assessed at different rates depending on the category. The high-cube warehouses in the WLC would fall into the "high-cube" category of non-residential development. Based on the current formula for calculating fees, if the WLC builds out as planned the developer would pay $34 million in TUMF fees.

TUMF fees are collected when a development reaches the building permit stage. TUMF revenues are allocated as follows:

- 46.39 percent is allocated for regional improvements. These revenues are programmed by the RCTC pursuant to an agreement with WRCOG.
- 46.39 percent is allocated to the geographic zone from which the fees are collected. Project prioritization and programming are undertaken by the jurisdictions in each of the five zones.
- 1.64 percent is allocated for regional transit projects. WRCOG administers the funds on behalf of the Riverside Transit Agency which prioritizes and programs capital transit projects.
- 1.59 percent is allocated to the Multiple Species Habitat Conservation Plan (MSHCP)
- 4.00% is used for program administration.

Since its inception TUMF has collected more than $554 million in revenues, making it the largest multi-jurisdictional fee program in the nation. It has completed 46 projects with several dozen more under development. The projects successfully funded by the program include a variety of road widening, intersection improvements, and freeway interchanges, including:

- Widening Pigeon Pass Rd. from 2 lanes to 4 lanes from Climbing Rose Dr. to Hidden Springs Dr.
- Widening the Ramona Expressway from 2 lanes to 6 lanes from I-215 to Evans Rd.

- Improvements to the Ironwood Ave./Moreno Beach Dr. Intersection
- Improvements to the Ironwood Ave./Nason St. intersection
- Adding a northbound lane to Lasselle St. from John F Kennedy Dr. to Alessandro Blvd.
- Widening Oleander Ave. from Perris Blvd to Indian Ave.
- The Van Buren Blvd./SR-91 Interchange project
- Widening State St. in Hemet from 2 to 4 lanes with a center turn lane
- Widening Sanderson Ave. from Menlo to Ramona Expressway

This track record of success is a key reason to believe that TUMF projects have a good probability of being implemented. Between now and 2035, when the program is scheduled for completion, the TUMF Program is forecasted to provide $1.9 billion towards a total of $4.2 billion in arterial road, bridge, intersection and interchange improvements in western Riverside County[50].

B. THE DIF PROGRAM

The City of Moreno Valley's Development Impact Fee (DIF) program is used to fund road and intersection improvements needed to accommodate new residential, commercial, and industrial development. The program collects fees from three categories of residential development (single-family, multi-family, and mobile homes) and five categories of commercial development (general commercial, regional commercial, general industrial, high-cube warehouse, and office) based on their respective trip generating characteristics. In many cases developers dedicate right-of-way and/or construct improvements that are part of the TUMF or DIF programs in lieu of paying the fees. These facilities are typically part of a project's direct frontage or are necessary to accommodate traffic needs in the immediate area of the project. DIF fees on high-cube warehouses are currently set at $0.9955 per square foot, which means that the WLC would more than $40 million in DIF fees if the project builds out as planned.

DIF funds are overseen by the City's Public Works Department. Department staff monitor traffic volumes and periodically develop a Capital Improvement Program (CIP) for use of the funds. The CIP is reviewed and approved by the city council. Examples of projects successfully completed using DIF funds include:

- Iris Ave. from Indian St. to Perris Blvd.
- Lasselle St./Bay Ave. traffic signal
- Lasselle St./Cottonwood Ave. traffic signal

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[50] *Transportation Uniform Mitigation Fee Program* 2012 Annual Report, page 17. Western Riverside Council of Governments. The TUMF program is one of several sources used to fund improvements.

- Cactus Ave. eastbound improvements from I-215 to Veterans Way

This track record of success is a key reason to believe that DIF projects have a good probability of being implemented. The DIF program supplements the TUMF program by funding elements of the City's General Plan Circulation Element not covered by TUMF, and in some projects by providing funds for additional capacity beyond what the TUMF project will provide. DIF and TUMF are routinely used in combination with other funding sources so that the inability of any single source to fund an entire project does not prevent the project from being implemented. Table 73 shows a sample of projects from Moreno Valley's Capital Improvement Program that used DIF and/or TUMF funds in combination with other funding sources.

Table 73: Projects Using DIF and TUMF in Combination with Other Funding Sources

Project	DIF Funds	TUMF Funds	Other Funds	Sources of Other Funds
Iron Avenue / Heacock Street to Perris Boulevard	$1,509,420	$72,413	$57,358	2005 Lease Revenue Bonds
Nason Street / Cactus Avenue Street Improvements	$9,272,000		$15,910,845	Measure "A"; State-Local Partnership Program; General Fund; General City C.P.; Successor Agency Tax Revenue; Redevelopment Agency Cap. Proj.; Eastern Municipal Water District; Riverside County Flood Control; 2007 Taxable Lease Revenue Bonds
SR-60 / Moreno Beach Drive South Side of Interchange (Phase 1)		$3,500,000	$6,110,735	Successor Agency; Redevelopment Agency
SR-60 / Nason Street Interchange	$740,000		$13,285,777	Measure "A"; Federal Demonstration Funds; Demo Toll Credit - Const.; Surface Transportation Program Local (construction); Surface Transportation Program Local Toll Credit - Const.
Heacock Street South Extension		$300,000	$564,172	Measure "A"
Emergency Vehicle Pre-emption at 117 Traffic Signals	$93,534		$840,000	Highway Safety Improvement Program
Nason Street / Riverside County Regional Medical Center Main Driveway Traffic Signal	$250,000		$50,000	Measure "A"
Transportation Management Center	$316,578		$214,646	Air Quality Management
Lasselle Street / John F. Kennedy Drive to Alessandro Boulevard		$2,757,886	$1,058,143	2005 Lease Revenue Bonds
Kitching Street / Alessandro Boulevard to Gentian Avenue	$11,903		$1,639,854	2005 Lease Revenue Bonds
Pigeon Pass Road Widening / Climbing Rose Drive to North City Limits	$462,239	$679,953	$22,664	Measure "A"
Total	$12,655,674	$7,310,252	$39,754,194	
Percentage of Total	21%	12%	67%	

The DIF program has been updated several times, most recently in October 2012, to reflect changes in priorities as development occurs in different parts of the city.

C. METHODOLOGY FOR DETERMINING IMPACTS

The potential impacts of the project were classified as either direct impacts or cumulative impacts. A direct impact of the project is one that would occur if the proposed project was the only change from

existing conditions. A cumulative impact is defined in the CEQA Guidelines, Section 15355 as, "an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." Both types of impacts can be either significant or less-than-significant depending on whether or not they result in traffic conditions that exceed the threshold of significance set by the agency that has jurisdiction over the road in question. For example, if a road was subject to a threshold of significance of LOS "D", and the proposed project would by itself cause the LOS to change from "B" to "C", then the direct impact would be less-than-significant. If the addition of other past, present, and reasonably foreseeable future projects would result in LOS "E", then the cumulative impact of the project would be significant.

The methodology used to identify mitigation measures included:

1) Determining whether the LOS exceeded the target threshold in the Plus Build-out condition.

2) If so, then determining whether the LOS under Plus Build-out conditions was better than the LOS under No-Project conditions. Some study freeway segments were found to exceed the threshold of significance under Plus Build-out conditions but the traffic density was better under Plus Build-out conditions than No-Project conditions. This would happen because detailed computer modeling shows that the project would cause some commuters to switch from the peak direction to the off-peak direction, thus reducing congestion at some locations (see Figure 40 and Figure 41). The project's impacts were considered significant only when the Plus Build-out condition was worse than the No-Project condition.

3) If the project had a significant impact, capacity-increasing improvements were then added incrementally until the LOS was within the target threshold of significance.

4) For cumulative projects, determining whether the mitigations could be funded as part of an established fee program such as TUMF or DIF. If so, then Payment into the TUMF or DIF program could constitute mitigation of impacts to the TUMF and DIF facilities.

5) For improvements that would not be funded from an established fee program the project's fair-share contribution was computed using the formula in Caltrans' *Guide for the Preparation of Traffic Impact Studies - Appendix "B"*. This formula defines the project's fair-share as the project-related traffic's percentage share of overall traffic growth, not including new traffic attributable to projects that have already been approved. Where there were significant impacts in both the AM and PM peak periods, the period with the higher share of project traffic was used to determine the fair-share contribution.

Potential mitigation measures were analyzed to determine whether they were feasible or not. Improvements were deemed to be infeasible if they would require the acquisition of existing homes or businesses, if they would result in excessive air, noise, or vibration impacts on existing homes,

businesses, or sensitive natural environments, or would create safety impacts that could be considered less acceptable than a reduced traffic LOS. In cases where feasibility is uncertain, the recommended improvement was treated as feasible in order to produce a conservative estimate of project responsibilities (i.e. "conservative" in the sense that the project's responsibilities would not be under-estimated).

In cases where a proposed modification to an existing intersection would result in the elimination of an existing bus stop or bicycle lane the proposed mitigation would include the replacement of the bicycle lane or bus stop even if not explicitly stated. This is also true of the replacement of existing curbs, gutters, sidewalks, lights, and other existing design features.

D. FORMAT FOR REPORTING IMPACTS

The remainder of the chapter is devoted to reporting project impacts and mitigation measures. The situation for each impacted facility is discussed in the text and the results are summarized in Table 74 through Table 79. These tables all follow a similar format which includes the following data fields (columns):

(A) This field identifies the location of the impact.

(B) This field identifies which agency has jurisdiction over the facility in question.

(C) This field shows the agency's target LOS for the facility in question.

(D) This field shows the LOS under Existing conditions. This is used to determine whether or not there is an existing deficiency.

(E) This field shows the LOS under Existing Plus Build-out conditions. This is used to determine whether or not the project has a significant impact.

(F) This field shows whether there is a significant impact. It is based on the thresholds of significance described in Chapter 2.

(G) This field describes what improvements would be required to achieve the target LOS under Existing Plus Build-out conditions.

(H) This field states whether the measure described in Column G is feasible or not. In some cases the needed improvements may not be feasible. For example, it may be infeasible to widen a road because doing so would cause serious negative impacts to an adjacent neighborhood.

(I) This field shows the LOS after all feasible mitigations have been implemented. If mitigation is infeasible then Column I will be the same as Column E.

(J) This field states whether the impact would still be significant after all feasible mitigation measures have been implemented. For those facilities under the jurisdiction of the City of Moreno Valley (see Column B) a "No" in Column J indicates that the impact will be mitigated to a less-than-significant level. For those facilities outside the jurisdiction of the City of Moreno Valley, Column J indicates what would happen if the jurisdiction that controls the facility implements the recommended feasible mitigations. However, because the City of Moreno Valley cannot guarantee that the other agency will implement the needed improvement the City cannot guarantee that the impact will be mitigated to a less-than-significant level.

(K) This field shows whether or not there is an existing deficiency. Generally speaking, under state law a developer is responsible for mitigating the impacts of their project but is not responsible for rectifying existing deficiencies that are the result of earlier projects. They need only pay a fair-share representing the portion of the improvements required to mitigate the impacts attributable to their own project.

(L) This field reports the action that the developers of the WLC will be required to take as a condition of approval.

E. PROJECT DIRECT IMPACTS

The direct impacts of the WLC project were determined by comparing the LOS of study facilities under Existing and Existing Plus Build-out conditions. The direct impacts of the project and their mitigation measures were as follows:

Table 74: Project Direct Impacts on Road Sections

Study Roadway		From	To	Jurisdiction	LOS Standard*	Existing LOS	Existing Plus Build-out LOS	Does the Project have a Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	Is the Mitigation Feasible?	LOS After Feasible Mitigations are Implemented	Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
(A)				(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
Road Section Impacts that can be Mitigated to a Less-Than-Significant Level														
S-22	Cactus Ave.	Redlands Blvd	Cactus Ave Extension	Moreno Valley	C	A	E	Yes	Widen to 4 lanes	Yes	A	No	No	Pay fair share (95.9%)
Road Section Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)														
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	Riverside County	D	F	F	Yes	Widen to 4 lanes	Yes	C	No	Yes	Pay fair share (12.2%)
S-17	Gilman Springs Rd	SR-60	Alessandro Blvd (Street C)	Riverside County	D	E	F	Yes	Widen to 4 lanes	Yes	C	No	Yes	Pay fair share (17.8%)

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

Indicates LOS exceeds the target level

Road Section Direct Impacts

The project's direct impacts on road sections are summarized in Table 74. These impacts would be:

- **Cactus Ave. east of Redlands Blvd.** (S-22) currently has one westbound lane and two eastbound lanes. The WLC would involve the re-construction of Alessandro Blvd. along a new alignment that ends at Cactus Ave. Extension, which would connect Cactus Ave. and Alessandro Blvd. (Street E) as the main route for east-west through traffic. Cactus Ave. would need to be widened to four lanes in conjunction with this change. The City will require the developer to pay a fair share for this improvement as a condition of approval.

- **Gilman Springs Rd. from Alessandro Blvd. to Bridge St.** (S-16) is already deficient and needs to be widened to four lanes and will need to be widened to six lanes in the future. In accordance with General Plan Policy 5.5.7 the City will require the developer to widen Gilman Springs Rd. to provide three southbound lanes and one northbound lane along the frontage of the WLC project. The developer will receive a TUMF credit for the portion of the cost of this improvement that exceeds the project's fair-share contribution.

  However, because Gilman Springs Rd. is a Riverside County facility and is thus outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. Moreover, there are right-of-way constraints involving sensitive environmental areas that may limit widening to four lanes between Alessandro Blvd. and Bridge St., or even preclude any widening at all. The project's impacts on Gilman Springs Rd. must therefore be considered significant and unavoidable. The City will work with Riverside County to find funding for improvements that would provide an acceptable LOS on this road to the extent feasible.

- **Gilman Springs Rd. from SR-60 to Alessandro Blvd.** (S-17) is already deficient and needs to be widened to four lanes. In accordance with General Plan Policy 5.5.7 the City will require the developer to widen Gilman Springs Rd. to provide three southbound lanes and one northbound lane along the frontage of the WLC project. The developer would receive a TUMF credit for the portion of the cost of this improvement that exceeds the project's fair-share contribution.

  However, because Gilman Springs Rd. is a Riverside County facility and is thus outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on Gilman Springs Rd. must therefore be considered significant and unavoidable. The City will work with Riverside County to find funding for improvements that would provide an acceptable LOS on this road to the extent feasible.

Intersection Direct Impacts

The project's direct impacts on study intersections are summarized in Table 75. These impacts would be:

- **Redlands Blvd./Locust Ave. intersection** (IN-10) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing the intersection and adding an eastbound left-turn and westbound left-turn would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Redlands Blvd./SR-60 WB ramps intersection** (IN-13) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing the intersection and adding a northbound right-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Oliver St./Alessandro Blvd. intersection** (IN-20) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Changing from side-street stop control to all-way stop control would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Redlands Blvd./Cactus Ave. intersection** (IN-27) currently operates within the LOS threshold but would exceed the threshold in both the AM and PM peak hour under Existing Plus Build-out conditions. Signalizing the intersection and adding eastbound and westbound left-turn lanes would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Moreno Beach Dr./John Kennedy Dr. intersection** (IN-28) currently operates within the LOS threshold but would exceed the threshold in the PM peak hour under Existing Plus Build-out conditions. Adding a westbound left-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.

Table 75: Direct Impacts on Intersections and Mitigation Measures

Study Intersection		Jurisdiction	LOS Standard	Existing Conditions		Existing Plus Build-out		Does the Project Have a Significant Impact?	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
				AM	PM	AM	PM				AM LOS	PM LOS			
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
Intersection Direct Impacts that can be Mitigated to a Less-Than-Significant Level															
IN-10	Redlands Blvd/Locust Ave	Moreno Valley	C	D	E	F	F	Yes	Signalize. Add 1 EB LT and 1 WB LT.	Yes	A	A	No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (34.8%)
IN-13	Redlands Blvd/SR-60 WB ramps	Moreno Valley	D	E	F	E	F	Yes	Signalize. Add 1 NB RT.	Yes	B	B	No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (49.6%)
IN-20	Oliver Str/Alessandro Blvd	Moreno Valley	C	D	B	F	C	Yes	Change to AWS.	Yes	C	B	No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (11.5%)
IN-27	Redlands Blvd/Cactus Ave	Moreno Valley	C	B	A	F	F	Yes	Signalize. Add 1 EB LT, 1 WB LT.	Yes	B	B	No	No	Implement improvement, with reimbursement agreement based on fair share contribution (60.7%)
IN-28	Moreno Beach Dr/John Kennedy Dr	Moreno Valley	D	B	B	C	F	Yes	Add 1 WB LT Lane.	Yes	B	B	No	No	Implement improvement, with reimbursement agreement based on fair share contribution (36.3%)
IN-36	Moreno Beach Dr/Ironwood Ave	Moreno Valley	D	D	D	E	D	Yes	Add 1 NB RT lane.	Yes	D	D	No	No	Implement improvement, with reimbursement agreement based on fair share contribution (14.9%)
IN-37	Moreno Beach Dr/SR-60 EB Ramps	Moreno Valley	D	D	E	D	F	Yes	Add 1 EB RT lane.	Yes	C	C	No	Yes	N/A*
IN-53	Lasselle Str/Cactus Ave	Moreno Valley	C	D	D	D	D	Yes	Add 1 WB LT, 1 NB LT, 1 SB LT, Add overlap phase for NB and EB RT.	Yes	D	C	No	Yes	Implement improvement, with reimbursement agreement based on fair share contribution (46.2%)
Intersection Direct Impacts that are Considered Significant and Unavoidable (either because they are not under the control of the City of Moreno Valley or because mitigation is infeasible)															
IN-94	Arlington Ave/Victoria Ave	City of Riverside	D	D	C	E	C	Yes	Add WB LT lane	Yes	D	C	No	No	Pay fair share (7.5%)
IN-95	Alessandro Blvd/Chicago Ave	City of Riverside	D	D	E	D	E	Yes	Add NB LT lane; adjust signal timings.	Yes	D	D	No	Yes	Pay fair share (10.3%)
IN-122	Bridge St/Ramona Expy	Riverside County	C	C	C	D	D	This intersection is due to be closed in the near future and replaced by a grade separated intersection further west. No improvements are warranted							
IN-123	Gilman Springs Rd/Bridge Str	Riverside County	C	D	C	E	D	Yes	Signalize.	Yes	A	A	No	Yes	Pay fair share (25.7%)
IN-124	SR-79(Sanderson Ave) NB/Gilman Springs Rd	Riverside County	C	D	D	F	E	Yes	Signalize.	Yes	A	A	No	Yes	Pay fair share (13.6%)
IN-125	SR-79(Sanderson Ave) SB/Gilman Springs Rd	Riverside County	C	D	E	E	F	Yes	Signalize.	Yes	A	A	No	Yes	Pay fair share (20.7%)
IN-132	San Timoteo Canyon Rd/Alessandro Rd	Redlands	D	F	C	F	F	Yes	Signalize.	Yes	D	B	No	Yes	Pay fair share (33.6%)
IN-133	San Timoteo Canyon Rd/Live Oak Canyon Rd	Riverside County	C	F	F	F	F	Yes	Signalize.	Yes	B	B	No	Yes	Pay fair share (32.1%)
IN-134	Redlands Blvd/San Timoteo Canyon Rd	Riverside County	C	F	F	F	F	Yes	Signalize. Add 1 EB RT. Also add EB RT overlap phase.	Yes	A	A	No	Yes	Pay fair share (34.1%)

Notes: "CSS" means cross-street is stop-controlled "AWS" means all-way stop "NB" and "SB" denote northbound and southbound respectively

"AWS" means all-way stop "LT" and "RT" denote left turn and right turn respectively "EB" and "WB" denote eastbound and westbound respectively

Indicates LOS exceeds the target level * Improvements already being made at intersection

- **Moreno Beach Dr./Ironwood Ave. intersection** (IN-36) currently operates within the LOS threshold but would exceed the threshold in the AM peak hour under Existing Plus Build-out conditions. Adding a northbound right-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.

- **Moreno Beach Dr./SR-60 EB Ramps intersection** (IN-37) already exceeds the LOS threshold in the PM peak hour and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Adding an eastbound right-turn lane would reduce project impacts to a less-than-significant level. At time of publication, improvements were already being made to the intersection.

- **Lasselle St./Cactus Ave. intersection** (IN-53) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Constructing an additional lane for the westbound left turn, northbound left-turn, southbound left-turn, and modifying the traffic signal to provide overlap phasing for northbound right-turns and eastbound right turns would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.

- **Arlington Ave./Victoria Ave. intersection** (IN-94) currently operates within the LOS threshold but would exceed the threshold in the AM peak hour under Existing Plus Build-out conditions. Adding an additional westbound left-turn lane would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. However, because this intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Alessandro Blvd./Chicago Ave. intersection** (IN-95) is already built out to near the practical limit before grade separation is required (it has five lanes for each approach). Despite this it already operates at LOS "E" in the PM peak period. To achieve the target LOS under Existing Plus Build-out conditions would require the addition of another northbound left-turn lane (with adjusted signal timings).

This intersection is under the jurisdiction of the City of Riverside. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval. However, because this intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Bridge St./Ramona Expressway intersection** (IN-122) currently operates within the LOS threshold but would exceed the threshold in the AM and PM peak hours under Existing Plus Build-out conditions. Signalizing the intersection would reduce project impacts to a less-than-significant level. However, there is a plan to close this intersection in the future and replace it with a grade-separated crossing west of the current location as part of the Villages of Lakeview project. It may not be worthwhile to signalize this intersection for only a few years before closing it.

  This intersection is under the jurisdiction of the Riverside County, because the intersection is outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **Gilman Springs Rd./Bridge St. intersection** (IN-123) already exceeds the LOS threshold in AM peak hour and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair share of this improvement as a condition of approval. However, because this intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with Riverside County to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **SR-79 (Sanderson Ave.) NB/Gilman Springs Rd. intersection** (IN-124) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would

experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection would reduce project impacts to a less-than-significant level.

This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because this intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **SR-79 (Sanderson Ave.) SB/Gilman Springs Rd. intersection** (IN-125) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **San Timoteo Canyon Rd./Alessandro Rd. intersection** (IN-132) already exceeds the LOS threshold in the AM peak hour and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Redlands. The City will require the developer to pay for a fair share of this improvement as a condition of approval. However, because this intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Redlands to develop a mechanism for implementing improvements that would provide an acceptable LOS at this intersection.

- **San Timoteo Canyon Rd./Live Oak Canyon Rd. intersection** (IN-133) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would

experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection would reduce project impacts to a less-than-significant level.

This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **Redlands Blvd./San Timoteo Canyon Rd. intersection** (IN-134) already exceeds the LOS threshold in both the AM and PM peak hours and traffic using the intersection would experience longer delays under Existing Plus Build-out conditions. Signalizing this intersection and adding an eastbound right-turn storage lane with an overlap phase would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. The City will require the developer to pay a fair-share contribution towards improvement of this intersection as a condition of approval. However, because intersection is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

Freeway Direct Impacts

Unlike the surface streets, where intersection improvements are generally both feasible and desirable, the strategic situation for freeways in western Riverside County is such that major freeway improvements are becoming increasingly problematic over time. A key problem is that the rights-of way are essentially built out in many locations and cannot be expanded without severe impacts to existing communities (loss of homes and businesses, visual intrusion, increased noise and air quality impacts, etc.) and high costs to replace overcrossing structures. Moreover, there is a growing consensus that over-provision of freeway capacity facilitates long-distance commuting by car and leads to more auto-oriented residential development on the urban fringe, which in turn increases greenhouse gas emissions. This has resulted in a policy shift away from continued expansion of the freeway system, as reflected, for example, in Riverside County Transportation Commission's Ordinance No. 02-001 which reads in part,

> *"State Routes 91 and 60 and Interstate Routes 15 and 215 cannot cost effectively be widened enough to provide for the traffic expected as Riverside County continues to grow. In addition to the specific highway improvements listed in Section 1 above, congestion relief for these*

highways will require that new north–south and east-west transportation corridors will have to be developed to provide mobility within Riverside County and between Riverside County and its neighboring Orange and San Bernardino Counties."

In other words, as a matter of policy, with the exception of spot improvements in some specific locations, the overall strategy to relieve congestion on SR-60 and SR-91 is to improve the capacity of surface streets that could serve as alternate routes to freeways. The policy to forego further widening of some sections of SR-60 and SR-91 is also noted in the Riverside County Congestion Management Program (CMP) which permits LOS "F" for some of the study freeway sections because those sections already operated at LOS "F" when the CMP was established in 1991[51]. For these reasons some of the identified mitigation measures may not be pursued even if they are deemed feasible in an engineering sense. In such cases the project's payment into the TUMF and DIF programs and funding for the surface street improvements would constitute a type of mitigation because they help create viable alternative routes that would substitute for freeway travel for some trips. For the purposes of this report, however, the impacts were treated as significant and unavoidable.

The project's direct impacts on the regional freeway system are summarized in Table 76. The freeways studied in this report are state facilities outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvements of these freeways as a condition of approval. However, because the freeways are outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable. These impacts would be:

Direct Impacts on Freeway Mainline Basic Sections

- **Eastbound SR-60 from Euclid Ave. to Grove Ave.** (F-6) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report[52].

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of

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51 *2011 Riverside County Congestion Management Program*, Page 4-7.

52 A transportation concept report is Caltrans' analysis of long-range demand for a highway.

the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

Table 76: Direct Impacts on Freeways and Mitigations

Study Facility		Juris-diction	LOS Standard	Determination of Impact					Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
				Existing		Existing Plus Build-out		Does the Project Have a Significant Impact?			AM LOS	PM LOS			
				AM	PM	AM	PM								
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
Freeway Mainline Basic Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
F-6	EB SR-60 Euclid Ave to Grove Ave	Caltrans	D	D	E	E	E	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (11.6%)
F-24	EB SR-60 Martin Luther King Blvd to Central Ave	Caltrans	D	C	F	D	F	Yes	Add one mixed flow lane.	No	D	F	Yes	Yes	N/A*
F-27	WB SR-60 I-215 to Day St	Caltrans	D	F	B	F	C	Yes	Add one mixed flow lane.	Yes	D	B	No	Yes	Pay fair share (52.7%)
F-29	WB SR-60 Pigeon Pass Rd/Frederick St to Heacock St	Caltrans	D	C	D	C	E	Yes	Add one mixed flow lane.	Yes	B	C	No	No	Pay fair share (36.8%)
F-41	WB SR-91 Pierce St to Magnolia Ave	Caltrans	D	C	F	C	F	Yes	Add one mixed flow lane.	Yes	B	D	No	Yes	Pay fair share (9.4%)
F-42	WB SR-91 Magnolia Ave to La Sierra Ave	Caltrans	D	C	F	C	F	Yes	Add one mixed flow lane.	No	C	F	Yes	Yes	N/A*
F-49	EB SR-91 Central Ave to 14th St	Caltrans	D	D	D	E	D	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (3.3%)
F-71	NB I-215 SR-74 to Redlands Ave	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	N/A**
F-71	SB I-215 SR-74 to Redlands Ave	Caltrans	D	E	D	F	D	Yes	Add one mixed flow lane.	Yes	C	C	No	Yes	N/A**
F-83	SB I-215 Baseline Rd to Highland Ave	Caltrans	D	E	F	F	F	Yes	Add one mixed flow lane.	Yes	C	C	No	Yes	N/A**
Freeway Weaving Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
W-21	EB SR-60 SR-91 to Blaine St/3rd St	Caltrans	D	B	E	B	E	Yes	Add one mixed flow lane.	No	B	E	Yes	Yes	N/A*
W-22	EB SR-60 Blaine St/3rd St to University Ave	Caltrans	D	B	E	C	E	Yes	Add a second off-ramp lane.	Yes	B	D	No	Yes	Pay fair share (10.1%)
W-25	EB SR-60 Central Ave to Fair Isle Dr/Box Springs Rd	Caltrans	D	B	D	C	E	Yes	Add one mixed flow lane.	No	C	E	Yes	No	N/A*
W-25	WB SR-60 Central Ave to Fair Isle Dr/Box Springs Rd	Caltrans	D	E	D	E	E	Yes	Add one mixed flow lane.	Yes	D	C	No	Yes	N/A**
W-48	EB SR-91 Arlington Ave to Central Ave	Caltrans	D	E	B	E	B	Yes	Add a second off-ramp lane.	Yes	D	B	No	Yes	Pay fair share (6.3%)
W-50	WB SR-91 14th to University Ave	Caltrans	D	C	E	C	E	Yes	Add a second off-ramp lane.	Yes	C	D	No	Yes	Pay fair share (6.0%)
Freeway Ramps - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
R-2	SR-60 EB On-Ramp from Central Ave	Caltrans	D	B	F	C	F	Yes	Add one mixed flow lane.	No	C	F	Yes	Yes	N/A*

Indicates LOS exceeds the target level

** Improvement identified in the current RTP and planned to be completed independent of the WLC project

* Not applicable because mitigation is infeasible

- **Eastbound SR-60 from Martin Luther King Blvd. to Central Ave.** (F-24) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The Transportation Concept Report does not call for further widening of this section, which could only be accomplished by eliminating the existing shoulder and thus leaving no space for disabled vehicles to pull over. Since this would create safety problems that would be less acceptable than a low LOS, mitigating this impact is infeasible. This impact is therefore significant and unavoidable.

- **Westbound SR-60 from I-215 to Day St.** (F-27) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St.** (F-29) currently operates at an acceptable LOS but would exceed the LOS threshold in the PM peak hour under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Pierce St. to Magnolia Ave.** (F-41) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of

the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Magnolia Ave. to La Sierra Ave.** (F-42) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. However, this could only be accomplished by eliminating the existing shoulder and thus leaving no space for disabled vehicles to pull over. Since this would create safety problems that would be less acceptable than a low LOS, mitigating this impact is infeasible. This impact is therefore significant and unavoidable.

- **Eastbound SR-91 from Central Ave. to 14th St.** (F-49) currently operates at an acceptable LOS but would exceed the LOS threshold in the AM peak hour under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Northbound I-215 from SR-74/Case Rd. to Redlands Ave.** (F-71) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2022 independent of the WLC project.

- **Southbound I-215 from SR-74/Case Rd. to Redlands Ave.** (F-71) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2022 independent of the WLC project.

- **Southbound I-215 from Baseline Rd to Highland Ave.** (F-83) already exceeds the LOS threshold in both the AM and PM peak hours and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2022 independent of the WLC project. There is no need for action by the developer since the mitigation measure will already be in place, thus eliminating the Project's impact.

Direct Impacts on Freeway Weaving Sections

- **Eastbound SR-60 from SR-91 to W. Blaine St/.3rd St.** (W-21) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would reduce the impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Eastbound SR-60 from W Blaine St./3rd St. to University Ave.** (W-22) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a second off-ramp lane would bring the LOS to within the target threshold.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.** (W-25) currently operates near capacity and the addition of the project would increase traffic above the target LOS threshold. Adding a mixed-flow lane would reduce the impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without eliminating the adjacent frontage road. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Westbound SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.** (W-25) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The improvement is identified in the current SCAG RTP and planned to be completed by 2022 independent of the WLC project.

- **Eastbound SR-91: Arlington Ave. to Central Ave.** (W-48) already exceeds the LOS threshold in the AM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a second off-ramp lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of

the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-91: 14th St. to University Ave.** (W-50) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a second off-ramp lane would bring the LOS to within the target threshold.

  SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

Direct Impacts on Freeway Ramps

- **Eastbound SR-60 from On-Ramp from Central Ave.** (R-2) already exceeds the LOS threshold in the PM peak hour and traffic density would increase under Existing Plus Build-out conditions. Adding a mixed-flow lane would reduce the impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without eliminating the adjacent frontage road. Since widening the freeway is infeasible, this impact is significant and unavoidable.

As individual projects within the WLC are processed the City will require that each project do a traffic impact assessment in accordance with City guidelines. These project-level assessments will determine the timing of each mitigation measure.

F. PROJECT CUMULATIVE IMPACTS

The cumulative impacts of the WLC project were determined by comparing the LOS of study facilities under 2035 No-Project and 2035 Plus Build-out conditions. The cumulative impacts of the project and their associated mitigation measures are described below. In cases where the facility had mitigation measures identified for direct impacts and requires additional improvements under cumulative conditions, the improvements described below are the improvements required beyond those described in the previous section on direct impacts.

Cumulative Impacts on Road Sections

The project's cumulative impact on road sections is summarized in Table 77. This impact would be:

- **Gilman Springs Rd. from Alessandro Blvd. to Bridge St.** (S-16) should be widened from two lanes to four lanes in the short term (see previous section on direct impacts) and may need to be further widened from four lanes to eight lanes sometime in the 2022-to-2035 timeframe. Gilman Springs is a TUMF facility. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because Gilman Springs Rd. is a Riverside County facility and is thus outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. Moreover, there are right-of-way constraints involving sensitive environmental areas that may limit widening to six lanes between Alessandro Blvd. and Bridge St., or even preclude any widening at all. The project's impacts on Gilman Springs Rd. must therefore be considered significant and unavoidable. The City will work with Riverside County and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS on this road to the extent feasible.

Table 77: Cumulative Impacts on Road Sections and Mitigations

Roadway		From	To	Jurisdiction	LOS Standard*	2035 No-Project LOS	2035 Plus Build-out LOS	Does the Project have a Significant Impact?	Mitigation Measures Required to Reduce Project Impacts to Less-Than-Significant	Is the Mitigation Feasible?	LOS After Feasible Mitigations are Implemented	Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
(A)				(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
Road Section Cumulative Impacts that are Considered Significant and Unavoidable (because they are not under the control of the City of Moreno Valley)														
S-16	Gilman Springs Rd	Alessandro Blvd (Street C)	Bridge Street	Riverside County	D	D	F	Yes	Widen to 8 lanes	Partially (to 6 lanes)	F	Yes	Yes	Pay Fair Share (12.2%)

* LOS Standard is "C" in residential areas and "D" for roads in employment-generating areas or near freeways.

** WLC's impacts would already be mitigated with the measures identified for direct impacts.

Indicates LOS exceeds the target level

Cumulative Impacts on Study Intersections

The WLC project's cumulative impacts on study intersections is summarized in Table 78, and described in detail below:

- **Redlands Blvd./Ironwood Ave. intersection** (IN-11) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a second southbound left-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Theodore St./Ironwood Ave. intersection** (IN-12) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Signalizing the intersection would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Moreno Beach Dr./Cactus Ave. intersection** (IN-25) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a second eastbound left-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Redlands Blvd./Cactus Ave. intersection** (IN-27) should be signalized and added eastbound and westbound left-turn lanes in the short term (see previous section on direct impacts) and may exceed the target LOS threshold at some point in the 2022-to2035 period. Constructing a westbound left-turn lane would reduce project impacts to a less-than-significant level. The City will require the developer to pay a fair-share contribution towards this improvement as a condition of approval.
- **Moreno Beach Dr./Locust Ave. intersection** (IN-35) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Signalizing the intersection and constructing a westbound left-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Moreno Beach Dr./Ironwood Ave. intersection** (IN-36) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Adding northbound and southbound left-turn lanes and changing north/south lefts from split to protected left-turn phase would reduce project impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City

will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.

- **Moreno Beach Dr./SR-60 EB Ramps intersection** (IN-37) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a southbound left-turn lane and changing the eastbound approach to one left-turn and one through lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.

Table 78: Cumulative Intersection Impacts and Mitigations

Study Intersection		Jurisdiction	LOS Standard	2035 No-Project		2035 Plus Build-out		Does the Project Have a Significant Impact?	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	TUMF Facility?	DIF Facility?	Developer Action Required
				AM	PM	AM	PM				AM LOS	PM LOS				
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)	(M)
Intersection Cumulative Impacts that can be Mitigated to a Less-Than-Significant Level																
IN-11	Redlands Blvd/Ironwood Ave	Moreno Valley	D	D	D	D	E	Yes	Add 1 SB LT lane.	Yes	D	D	No	Yes	Yes	Pay DIF
IN-12	Theodore Street/Ironwood Avenue	Moreno Valley	D	C	F	E	F	Yes	Signalize.	Yes	A	A	No	No	Yes	Pay DIF
IN-25	Moreno Beach Dr/Cactus Ave	Moreno Valley	C	C	C	C	D	Yes	Add 1 EB LT lane.	Yes	B	C	No	No	Yes	Pay DIF
IN-27	Redlands Blvd/Cactus Ave	Moreno Valley	C	B	B	F	F	Yes	Add 1 WB LT lane.	Yes	B	C	No	No	No	Pay fair share (60.7%)
IN-35	Moreno Beach Dr/Locust Ave	Moreno Valley	C	D	E	D	F	Yes	Signalize. Add 1 WB LT lane.	Yes	A	B	No	Yes	Yes	Pay DIF
IN-36	Moreno Beach Drive & Ironwood Avenue	Moreno Valley	D	D	D	D	E	Yes	Change N/S from split to protected LT phase. Add NB and SB LT lanes.	Yes	D	D	No	Yes	Yes	Pay DIF
IN-37	Moreno Beach Dr/SR-60 EB Ramps	Moreno Valley	D	F	F	F	F	Yes	Change EB from 1 shared LT/TH to 1 LT and 1 TH. Add 1 SB LT lane. Change split phasing on E/W movement to protected LT phasing.	Yes	C	D	No	Yes	Yes	Pay DIF
IN-39	Iris Ave/Perris Blvd	Moreno Valley	D	E	E	E	F	Yes	Add 1 WB LT and 1 SB LT lane.	Yes	D	D	No	Yes	Yes	Pay DIF
IN-40	Kitching St/Iris Ave	Moreno Valley	C	E	F	E	F	Yes	Add 1 WB LT and change NB shared TH/RT to RT lane and add another RT lane. Provide overlap phase for NB RT. Add 1 EB TH lane.	Yes	C	C	No	No	No	Pay fair share (16%)
IN-41	Lasselle Str/Iris Ave	Moreno Valley	D	C	E	D	F	Yes	Add 1 WB LT lane (resulting 3 turn lanes), and 1 EB RT Need to widen Lasselle in the SB to have 3 receiving lanes.	Yes	C	D	No	Yes	No	Pay TUMF
IN-57	Graham Str/Alessandro Blvd	Moreno Valley	D	D	F	D	F	Yes	Add 1 NB LT and 1 WB LT lanes.	Yes	C	D	No	Yes	Yes	Pay DIF
IN-74	Elsworth Str/Cactus Ave	Moreno Valley	D	F	F	F	F	Yes	Widen NB approach and change NB lane geometry from: 1 LT and 1 shared LT/TH/RT lanes to 3 LTs and 1 TH and 1 RT. Add 1 WB LT and EB RT lanes.	Yes	D	D	No	Yes	Yes	Pay DIF

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
Indicates LOS exceeds the target level
"RABT" means roundabout
* Not applicable because mitigation is infeasible
** The "Plus Build-out and Mitigations" condition is better than the "No-Project" condition
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively
"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes

Table 78: Cumulative Intersection Impacts and Mitigations (continued)

Study Intersection		Jurisdiction	LOS Standard	2035 No-Project		2035 Plus Build-out		Does the Project Have a Significant Impact?	Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	TUMF Facility?	DIF Facility?	Developer Action Required
				AM	PM	AM	PM				AM LOS	PM LOS				
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)	(M)
Intersection Cumulative Impacts that are Considered Significant and Unavoidable (because they are not feasible, not under the control of the City of Moreno Valley, or are not part of an existing fee program)																
IN-66	Alessandro Blvd/Sycamore Canyon Blvd	City of Riverside	D	D	F	D	F	Yes	Add SB RT overlap.	Yes	C	D	No	Yes	No	Pay TUMF
IN-73	I-215 NB Ramps/Cactus Ave	March AFB	D	E	F	E	F	Yes	Add 1 EB RT, 1 WB RT, 1 NB LT, and 1 SB LT lanes.	Yes	B	D	No	Yes	No	Pay TUMF
IN-75	Central Ave/Lochmoor Dr.	City of Riverside	D	B	E	B	F	Yes	Change NB approach to 1 LT and 1 shared LT/RT lane.	Yes	B	D	No	Yes	No	Pay TUMF
IN-80	Alessandro Blvd/Mission Grove Pkwy	City of Riverside	D	C	E	C	F	Yes	Add EB LT lane. Add WB LT lane. Add NB TH lane.	Yes	C	D	No	Yes	No	Pay TUMF
IN-85	Martin Luther King Blvd/I-215 NB Ramps	City of Riverside	D	E	C	E	C	Yes	Signalize.	Yes	B	A	No	No	No	Pay fair share (6.2%)
IN-86	Central Ave/Chicago Ave	City of Riverside	D	D	E	E	F	Yes	Add NB RT overlap.	Yes	C	D	No	Yes	No	Pay TUMF
IN-88	Central Ave/Canyon Crest Dr	City of Riverside	D	D	F	D	F	Yes	Change EB approach to 1 LT, 2 THs and 1 RT. Add WB LT lane. Add NB LT lane. Change SB approach to 2 LTs, 2 THs and 1 RT lane. Adjust splits.	Yes	D	D	No	Yes	No	Pay TUMF
IN-90	Arlington Ave/Riverside Ave/SR-91 SB Ramps	City of Riverside	D	D	E	D	E	Yes	Add SB LT lane.	Yes	C	D	No	Yes	No	Pay TUMF
IN-94	Arlington Ave/Victoria Ave	City of Riverside	D	F	F	F	F	Yes	Add EB TH lane. Add WB LT and RT. Adjust timings.	Yes	D	D	No	Yes	No	Pay TUMF
IN-95	Alessandro Blvd/Chicago Ave	City of Riverside	D	E	F	E	F	Yes	Add EB TH lane. Add WB LT lane. Add WB TH lane. Add NB LT lane. Reconfigure SB approach to 3 LTs, 3 THs and 1 RT.	No	E	F	Yes	Yes	Yes	N/A*
IN-98	Alessandro Blvd/Canyon Crest Dr	City of Riverside	D	E	F	E	F	Yes	Reconfigure EB approach to 1 LT, 1 TH and 2 RTs. Add WB TH lane. Add NB LT and NB RT lane. Reconfigure SB approach to 1 LT, 3 THs and 1 shared TH/RT lane.	Yes	D	D	No	Yes	No	Pay TUMF
IN-101	Ramona Expy/Indian St	Perris	E	F	F	F	F	Yes	Add 1 EB RT lane. Add 2nd NB LT and 1 NB RT. Provide signal phase overlap for all RTs.	Yes	E	E	No**	Yes	No	Pay TUMF
IN-107	Evans Rd/Rider St	Perris	C	D	C	D	C	Yes	Reconfigure SB approach to include 1 LT, 2 THs and 1 RT.	Yes	C	C	No	Yes	No	Pay TUMF
IN-129	W 6th St/California Ave	Beaumont	C	F	F	F	F	Yes	Signalize.	Yes	B	C	No	Yes	No	Pay TUMF
IN-130	W 6th St/Beaumont Ave	Beaumont	C	D	F	D	F	Yes	Reconfigure EB approach to 2 LTs, 2 THs and 1 RT. Make EB/WB LT protected phasing. Add 1 WB LT and 1 WB TH lane. Reconfigure NB approach to 1 LT, 2 THs and 1 RT. Add SB LT.	Yes	C	C	No	Yes	No	Pay TUMF
IN-131	Reche Canyon Rd/Reche Vista Dr	Riverside County	C	D	F	D	F	Yes	Adjusted NB approach to a dedicated LT and a shared LT/RT lane.	Yes	B	C	No	Yes	No	Pay TUMF

Notes: "CSS" means cross-street is stop-controlled
"AWS" means all-way stop
Indicates LOS exceeds the target level
"RABT" means roundabout
* Not applicable because mitigation is infeasible
** The "Plus Build-out and Mitigations" condition is better than the "No-Project" condition
"NB" and "SB" denote northbound and southbound respectively
"EB" and "WB" denote eastbound and westbound respectively
"LT" and "RT" denote left turn and right turn respectively
"TH" denotes through lanes

- **Iris Ave./Perris Blvd. intersection** (IN-39) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a second westbound left-turn lane and a second southbound left-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Kitching St./Iris Ave. intersection** (IN-40) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Adding a third eastbound through lane and a second westbound left-turn lane, widening and reconfiguring the northbound approach to provide one left-turn lane, one through lane, and two right-turn lanes, and modifying the traffic signal to provide overlap phasing for the northbound right-turn movement would reduce cumulative impacts to a less-than-significant level. The City will impose as a condition of approval that the WLC will provide fair-share funds to cover the cost of this improvement, which the City will use to construct the needed improvements.
- **Lasselle St./Iris Ave. intersection** (IN-41) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Adding a third westbound left-turn lane and an eastbound right-turn lane would reduce project impacts to a less-than-significant level. This improvement is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact.
- **Graham St./Alessandro Blvd. intersection** (IN-57) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a northbound left-turn lane and a westbound left-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Elsworth St./Cactus Ave. intersection** (IN-74) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Widening the northbound approach to provide three left-turn lanes, one through lane, and one right-turn lane, and adding a westbound left-turn lane and eastbound right-turn lane would reduce cumulative impacts to a less-than-significant level. This intersection is eligible for funds under the DIF program. The City will collect DIF fees in accordance with City Municipal Code 3.42.030 and 3.42.040, and use these fees to improve this intersection.
- **Alessandro Blvd./Sycamore Canyon Blvd. intersection** (IN-66) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Providing a southbound right-turn overlap phase at the signal would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **I-215 NB Ramps/Cactus Ave. intersection** (IN-73) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing an eastbound right-turn lane, a westbound right-turn lane, a second northbound left-turn lane, and a second southbound left-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the March AFB Joint Powers Authority. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the March AFB Joint Powers Authority and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Central Ave./Lochmoor Dr. intersection** (IN-75) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Converting the northbound approach to one left-turn lane and a shared left-right-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Alessandro Blvd./Mission Grove Pkwy. intersection** (IN-80) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Modifying the traffic signal to provide an additional eastbound left-turn, westbound left-turn, and northbound through lane would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Martin Luther King Blvd./I-215 NB Ramps intersection** (IN-85) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Signalizing the intersection would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is not eligible for TUMF funding. The City will work with the City of Riverside to establish a mechanism for collecting and distributing payments from developers for inter-jurisdictional impacts not covered by the TUMF program. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **Central Ave./Chicago Ave. intersection** (IN-86) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Modifying the traffic signal to provide overlap phasing for the northbound right-turn movement would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Central Ave./Canyon Crest Dr. intersection** (IN-88) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing an eastbound right-turn lane, a second westbound left-turn lane, and a second northbound left-turn lane, and a southbound right-turn lane (and adjust signal timings) would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Arlington Ave./Riverside Ave./SR-91 SB Ramps intersection** (IN-90) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a third southbound left-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Arlington Ave./Victoria Ave. intersection** (IN-94) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a fourth eastbound through lane, a second westbound left-turn lane, and a second westbound right-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Alessandro Blvd./Chicago Ave**. **intersection** (IN-95) is already built out to near the practical limit before grade separation is required (it has five lanes for each approach). Despite this it already operates at LOS "F" in the PM peak period. To achieve the target LOS in 2035 would require the addition of lanes to the eastbound through, westbound left-turn, westbound though,

northbound left-turn, southbound left-turn, and southbound right-turn movements. There are established residential communities on each corner that would be impacted by such a widening or by grade separation. These mitigation measures are thus likely to be infeasible, and the project impact at this location is therefore considered to be a significant and unavoidable.

- **Alessandro Blvd./Canyon Crest Dr. intersection** (IN-98) will exceed the target LOS threshold at some point in the 2022-to-2035 period. The following measures would reduce cumulative impacts to a less-than-significant level: widen and reconfigure the eastbound approach to provide: one left-turn lane, one through lane, and two right-turn lanes; add an additional westbound through lane; add an additional northbound left-turn and northbound right-turn lane; and reconfigure the southbound approach to one left-turn lane, three through lanes, and one shared through-right-turn lane.

  This intersection is under the jurisdiction of the City of Riverside. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Riverside and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Ramona Expwy./Indian St. intersection** (IN-101) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing one eastbound right-turn lane, a second northbound left-turn lane, and one northbound right-turn lane, and modifying the traffic signal to provide overlap phasing for all right-turn movements would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Perris. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Perris and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **Evans Rd./Rider St. intersection** (IN-107) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing an exclusive right-turn lane the on the southbound approach would reduce cumulative impacts to a less-than-significant level.

This intersection is under the jurisdiction of the City of Perris. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with the City of Perris and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

- **W. 6th St./California Ave. intersection** (IN-129) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Signalizing this intersection would reduce project impacts to a less-than-significant level.

  This intersection is under the jurisdiction of the City of Beaumont. Although it is a TUMF facility signalization is not currently eligible for TUMF funding. The City will work with the City of Beaumont to establish a mechanism for collecting and distributing payments from developers for inter-jurisdictional impacts not covered by the TUMF program. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable.

- **W. 6th St./Beaumont Ave. intersection** (IN-130) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Constructing a northbound right-turn lane, an eastbound right-turn lane, a second southbound left-turn lane, and a second westbound left-turn lane, removing on-street parking and restriping to provide a second westbound through lane, modifying the traffic signal to provide protected phasing for eastbound and westbound left-turn movements, and providing overlap phasing for northbound and eastbound right-turn movements would reduce cumulative impacts to a less-than-significant level.

  There are established commercial buildings on the corners on the northern part of the intersection that would be impacted by such a widening. These mitigation measures are thus infeasible, and the project impact at this location is therefore considered to be significant and unavoidable.

- **Reche Canyon Rd./Reche Vista Dr. intersection** (IN-131) will exceed the target LOS threshold at some point in the 2022-to-2035 period. Converting the existing northbound right-turn lane into a shared left-right-turn lane would reduce cumulative impacts to a less-than-significant level.

  This intersection is under the jurisdiction of Riverside County. It is eligible for TUMF funding. The City will collect TUMF fees in accordance with Municipal Code Chapter 3.44, and payment of these fees will constitute the mitigation for this impact. However, because both the intersection and the funding source are outside the jurisdiction of the City of Moreno Valley, the City cannot

ensure that the identified improvements would be made. The project's impacts on this intersection must therefore be considered significant and unavoidable. The City will work with Riverside County and WRCOG to direct TUMF funding for improvements that would provide an acceptable LOS at this intersection.

Cumulative Freeway Mainline Mitigations

The WLC's cumulative impacts on the freeways system are summarized in Table 79, and described in detail below:

Eastbound SR-60 from S. Reservoir St. to Ramona Ave. (F-2) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

The state freeway system is owned and operated by Caltrans and is thus outside the jurisdiction of the City of Moreno Valley. The City will work with Caltrans to establish a mechanism for collecting funds from developers for use in funding needed freeway improvements. However, since at the present time no such mechanism exists that would ensure that WLC funds contributed to Caltrans or any other state agency would be used to implement specific improvements that mitigate WLC impacts, and there is no mechanism by which the City can construct or guarantee the construction of any improvements to the freeway system by itself, this and all other freeway impacts must be considered as significant and unavoidable.

Table 79: Cumulative Freeway Impacts and Mitigations

Study Facility		Juris-diction	LOS Standard	Determination of Impact					Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
				2035 No-Project		2035 Plus Build-out		Does the Project Have a Significant Impact?			AM LOS	PM LOS			
				AM	PM	AM	PM								
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
Freeway Mainline Basic Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
F-2	EB SR-60 Reservoir St to Ramona Ave	Caltrans	D	E	E	E	E	Yes	Add one mixed flow lane.	Yes	D	D	No	No	Pay fair share (9.5%)
F-2	WB SR-60 Reservoir St to Ramona Ave	Caltrans	D	E	D	E	E	Yes	Add one mixed flow lane.	Yes	D	C	No	Yes	Pay fair share (7.9%)
F-3	EB SR-60 Ramona Ave to Central Ave	Caltrans	D	E	F	E	F	Yes	Add one mixed flow lane.	Yes	D	D	No	Yes	Pay fair share (9.5%)
F-4	EB SR-60 Central Ave to Mountain Ave	Caltrans	D	E	F	F	F	Yes	Add one mixed flow lane.	Yes	D	E	No**	Yes	Pay fair share (10.1%)
F-5	EB SR-60 Mountain Ave to Euclid Ave	Caltrans	D	E	D	F	D	Yes	Add one mixed flow lane.	Yes	D	C	No	No	Pay fair share (10.6%)
F-5	WB SR-60 Mountain Ave to Euclid Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (6.9%)
F-6	WB SR-60 Euclid Ave to Grove Ave	Caltrans	D	D	E	C	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (8.0%)
F-7	EB SR-60 Grove Ave to Vineyard Ave	Caltrans	D	F	F	F	F	Yes	Add one mixed flow lane.	Yes	D	E	No**	Yes	Pay fair share (11.3%)
F-7	WB SR-60 Grove Ave to Vineyard Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (8.5%)
F-8	EB SR-60 Vineyard Ave to Archibald Ave	Caltrans	D	F	F	F	F	Yes	Add one mixed flow lane.	Yes	D	E	No**	Yes	Pay fair share (11.9%)
F-9	EB SR-60 Archibald Ave to Haven Ave	Caltrans	D	E	D	E	D	Yes	Add one mixed flow lane.	Yes	D	C	No	No	Pay fair share (14.2%)
F-17	EB SR-60 Valley Way to Rubidoux Blvd	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	Yes	D	B	No	No	Pay fair share (19.1%)
F-17	WB SR-60 Valley Way to Rubidoux Blvd	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	B	C	No	No	Pay fair share (9.42%)
F-18	EB SR-60 Rubidoux Blvd to Market St	Caltrans	D	E	C	F	C	Yes	Add one mixed flow lane.	Yes	D	B	No	No	Pay fair share (22.7%)
F-19	EB SR-60 Market St to Main St	Caltrans	D	E	E	E	F	Yes	Add one mixed flow lane.	Yes	C	D	No	Yes	Pay fair share (20.9%)
F-19	WB SR-60 Market St to Main St	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (8.7%)
F-20	WB SR-60 Main to SR-91	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (8.9%)
F-24	WB SR-60 Martin Luther King Blvd to Central Ave	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (18.3%)
F-26	WB SR-60 Fair Isle Dr/Box Springs Rd to I-215	Caltrans	D	D	F	D	F	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (9.0%)
F-29	EB SR-60 Pigeon Pass Rd/Frederick St to Heacock St	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (19.5%)
F-30	EB SR-60 Heacock St to Perris Blvd	Caltrans	D	C	E	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (13.1%)
F-30	WB SR-60 Heacock St to Perris Blvd	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (37.2%)
F-34	WB SR-60 Redlands Blvd to Theodore St	Caltrans	D	E	D	E	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (12.5%)
F-36	EB SR-60 Gilman Springs Rd to Jack Rabbit Trail	Caltrans	D	C	F	C	F	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (4.9%)
F-37	EB SR-60 Jack Rabbit Trail to Potrero Blvd	Caltrans	D	C	F	C	F	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (7.0%)
F-41	EB SR-91 Pierce St to Magnolia Ave	Caltrans	D	E	E	E	E	Yes	Add one mixed flow lane.	Yes	D	C	No	No	Pay fair share (12.4%)
F-43	EB SR-91 La Sierra Ave to Tyler St	Caltrans	D	E	E	E	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (10.0%)
F-43	WB SR-91 La Sierra Ave to Tyler St	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (10.9%)
F-44	WB SR-91 Tyler St to Van Buren Blvd	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (8.7%)

Indicates LOS exceeds the target level

** Although the target LOS is not met, conditions with the project and the mitigation measure would be better than No-Project conditions

* Not applicable because mitigation is infeasible

*** The mitigation measures are in addition to the mitigation measure needed for direct Project impacts (see Table 76)

Table 79: Cumulative Freeway Impacts and Mitigations (continued)

Study Facility		Juris-diction	LOS Standard	Determination of Impact					Mitigation Measures Required to Reduce Impact to Less-Than-Significant	Is Mitigation Feasible?	LOS After Feasible Mitigations are Implemented		Impact Significant After Feasible Mitigations are Implemented?	Is There an Existing Deficiency?	Developer Action Required
				2035 No-Project		2035 Plus Build-out		Does the Project Have a Significant Impact?			AM LOS	PM LOS			
				AM	PM	AM	PM								
(A)		(B)	(C)	(D)		(E)		(F)	(G)	(H)	(I)		(J)	(K)	(L)
F-45	WB SR-91 Van Buren Blvd to Adam St	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (8.2%)
F-46	EB SR-91 Adam St to Madison St	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	No	E	C	Yes	No	N/A*
F-47	WB SR-91 Madison St to Arlington Ave	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (4.9%)
F-75	SB I-215 Center St to La Cadena Dr	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	No	E	C	Yes	No	N/A*
F-52	EB I-10 SR-60 to Beaumont Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (2.5%)
F-52	WB I-10 SR-60 to Beaumont Ave	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (2.9%)
F-54	EB I-10 Pennsylvania Ave to Highland Springs Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (1.9%)
F-54	WB I-10 Pennsylvania Ave to Highland Springs Ave	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	Yes	D	C	No	No	Pay fair share (3.2%)
F-55	EB I-10 Highland Springs Ave to Sunset Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (0.7%)
F-55	WB I-10 Highland Springs Ave to Sunset Ave	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	Yes	D	B	No	No	Pay fair share (3.3%)
F-58	EB I-10 8th St to Hargrave St	Caltrans	D	C	D	C	E	Yes	Add one mixed flow lane.	Yes	B	C	No	No	Pay fair share (2.1%)
F-58	WB I-10 8th St to Hargrave St	Caltrans	D	E	C	E	C	Yes	Add one mixed flow lane.	Yes	C	B	No	No	Pay fair share (2.1%)
F-59	EB I-10 Hargrave St to Fields Rd	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	Yes	B	D	No	No	Pay fair share (1.2%)
F-61	EB I-10 Morongo Trail to Main St	Caltrans	D	B	E	B	E	Yes	Add one mixed flow lane.	Yes	B	C	No	No	Pay fair share (1.9%)
F-71	SB I-215 SR-74 to Ellis Ave	Caltrans	D	F	E	F	E	Yes	Add one mixed flow lane.***	Yes	D	C	No	Yes	Pay fair share (0.8%)
F-83	SB I-215 Baseline Rd to Highland Ave	Caltrans	D	F	D	F	D	Yes	Add one mixed flow lane.***	No	F	D	Yes	Yes	N/A*
Freeway Weaving Sections - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
W-1	EB SR-60 SR-71/Garey Ave to Reservoir St	Caltrans	D	E	E	E	E	Yes	Add one mixed flow lane.	Yes	D	E	No**	Yes	Pay fair share (8.3%)
W-9	WB SR-60 Haven Ave to Archibald Ave	Caltrans	D	D	E	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	Pay fair share (6.1%)
W-20	EB SR-60 Main St to SR-91	Caltrans	D	D	E	E	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (19.1%)
W-21	WB SR-60 SR-91 to Blaine St/3rd St	Caltrans	D	D	E	D	F	Yes	Add one mixed flow lane.	No	D	F	Yes	No	N/A*
W-22	WB SR-60 Blaine St/3rd St to University Ave	Caltrans	D	C	E	C	E	Yes	Add one mixed flow lane.	No	C	E	Yes	No	N/A*
W-23	WB SR-60 University Ave to Martin Luther King Blvd	Caltrans	D	D	E	D	E	Yes	Add a second off-ramp lane.	Yes	C	E	No**	No	Pay fair share (10.4%)
W-25	WB SR-60 Central Ave to Fair Isle Dr/Box Springs Rd	Caltrans	D	E	E	E	E	Yes	Add one mixed flow lane.***	Yes	D	E	No**	Yes	Pay fair share (16.6%)
W-28	WB SR-60 Day St to Pigeon Pass Rd/Frederick St	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (35.6%)
Freeway Ramps - All Impacts are Considered Significant and Unavoidable (because they are not feasible, not part of an existing fee program, and/or not under the control of the City of Moreno Valley)															
R-1	SR-60 EB On-Ramp from Martin Luther King Blvd	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	No	D	E	Yes	No	N/A*
R-10	SR-60 EB On-Ramp from Gilman Springs Rd	Caltrans	D	B	F	B	F	Yes	Add one mixed flow lane.	Yes	A	C	No	No	See F-36
R-14	SR-60 WB On-Ramp from Theodore St	Caltrans	D	E	D	E	D	Yes	Add one mixed flow lane.	Yes	C	C	No	No	See F-34
R-15	SR-60 WB Off-Ramp to Redlands Blvd	Caltrans	D	D	D	E	D	Yes	Add one mixed flow lane.	Yes	C	B	No	No	See F-34
R-16	WB SR-60 Loop On-Ramp from Redlands Blvd	Caltrans	D	E	D	E	D	Yes	Add one mixed flow lane.	Yes	C	C	No	No	Pay fair share (14.0%)
R-17	SR-60 WB Direct On-Ramp from Redlands Blvd	Caltrans	D	D	D	F	D	Yes	Add one mixed flow lane.****	Yes	C	C	No	No	Pay fair share (14.0%)
R-18	SR-60 WB Off-Ramp to Central Ave	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	See W-25 (Table 74)
R-19	SR-60 WB Off-Ramp to Martin Luther King Blvd	Caltrans	D	D	D	D	E	Yes	Add one mixed flow lane.	Yes	C	D	No	No	See F-24

Indicates LOS exceeds the target level

** Although the target LOS is not met, conditions with the project and the mitigation measure would be better than No-Project conditions

* Not applicable because mitigation is infeasible

*** The mitigation measures are in addition to the mitigation measure needed for direct Project impacts (see Table 76)

**** The additional lane needed between Redlands Blvd. and Moreno Beach Dr. as mitigation for R-16 is the same lane that is needed to mitigate impacts to R-17. Only one lane is needed; not one for R-16 and a second for R-17.

- **Westbound SR-60 from South Reservoir St. to Ramona Ave.** (F-2) already exceeds the target LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Ramona Ave to Central Av**e (F-3) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Central Ave. to Mountain Ave.** (F-4) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Mountain Ave. to Euclid Ave.** (F-5) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Mountain Ave. to Euclid Ave.** (F-5) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

The existing freeway right-of-way in this section cannot accommodate additional lanes and the right-of-way cannot be expanded without severe impacts to the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Westbound SR-60 from Euclid Ave. to Grove Ave.** (F-6) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target

  The existing freeway right-of-way in this section cannot accommodate additional lanes and the right-of-way cannot be expanded without severe impacts to the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Eastbound SR-60 from Grove Ave. to Vineyard Ave.** (F-7) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Grove Ave. to Vineyard Ave.** (F-7) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Vineyard Ave. to Archibald Ave.** (F-8) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Archibald Ave. to Haven Ave.** (F-9) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035

Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Valley Way to Rubidoux Blvd.** (F-17) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

  Westbound SR-60 from Valley Way to Rubidoux Blvd. (F-17) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means to either widen the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

  Eastbound SR-60 from Rubidoux Blvd. to Market St. (F-18) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Market St. to Main St.** (F-19) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane

would bring the LOS to within target threshold. The addition of a lane is identified in the Transportation Concept Report.

As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Market St. to Main St.** (F-19) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Main St. to SR-91** (F-20) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Martin Luther King Blvd. to Central Ave.** (F-24) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Fair Isle Dr./Box Springs Rd. to I-215** (F-26) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Pigeon Pass Rd./Frederick St. to Heacock St**. (F-29) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. The addition of a lane is identified in the Transportation Concept Report.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Heacock St. to Perris Blvd.** (F-30) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Heacock St. to Perris Blvd.** (F-30) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Redlands Blvd .to Theodore St.** (F-34) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing

that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Gilman Springs Rd. to Jack Rabbit Trail** (F-36) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  Caltrans already has plans to build a truck climbing lane in this area. However, as explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Jack Rabbit Trail to Potrero Blvd.** (F-37) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow would reduce the cumulative impact to a less-than-significant level.

  Caltrans already has plans to build a truck climbing lane in this area. However, as explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-91 from Pierce St. to Magnolia Ave.** (F-41) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-91 from La Sierra Ave. to Tyler St.** (F-43) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing

that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-91 from La Sierra Ave. to Tyler St.** (F-43) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Tyler St. to Van Buren Blvd.** (F-44) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-91 from Van Buren Blvd. to Adam St.** (F-45) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-91 from Adam St. to Madison St.** (F-46) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Westbound SR-91 from Madison St. to Indiana Ave.** (F-47) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035

Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

As explained above, because SR-91 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from SR-60 to Beaumont Ave.** (F-52) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound I-10 from SR-60 to Beaumont Ave.** (F-52) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from Pennsylvania Ave. to Highland Springs Ave.** (F-54) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound I-10 from Pennsylvania Ave. to Highland Springs Ave.** (F-54) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from Highland Springs Ave. to Sunset Ave.** (F-55) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound I-10 from Highland Springs Ave. to Sunset Ave.** (F-55) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from S 8th St. to S. Hargrave St.** (F-58) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound I-10 from S 8th St. to S. Hargrave St.** (F-58) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some

other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from S. Hargrave St. to Field Rd.** (F-59) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound I-10 from Main St. (Cabazon) to Main St.** (F-61) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-10 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Southbound I-215 from SR-74 to Ellis Ave.** (F-71[53]) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because I-215 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Southbound I-215 from Center St. to Iowa Ave/La Cadena Dr.** (F-75) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent frontage road. Since widening the freeway is infeasible, this impact is significant and unavoidable.

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[53] I-215 currently runs unbroken between SR-74 and Redlands Ave. The 2012 RTP includes a project (3M0731) that would split this section with a new interchange at Ellis Ave. So this section is listed as "I-215 SR-74 to Redlands" on tables describing conditions prior to construction of the Ellis Avenue Interchange.

- **Southbound I-215 from Baseline Rd. to Highland Ave.** (F-83) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The freeway right-of-way in this section cannot accommodate an additional lane (beyond the lane already identified in the current SCAG RTP) and cannot be widened without impacting the adjacent railroad. Since widening the freeway is infeasible, this impact is significant and unavoidable.

Cumulative Freeway Weaving Mitigations

- **Eastbound SR-60: SR-71/S Garey Ave. to S. Reservoir St.** (W-1) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level.

  SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley. The City will require the developer to pay a fair-share contribution towards improvement of this section as a condition of approval. However, because the freeway is outside the jurisdiction of the City of Moreno Valley and because no mechanism is in place for ensuring the availability of the non-project portion of the needed funds, the City cannot ensure that the identified improvements would be made. The project's impacts on this section must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Haven Ave. to Archibald Ave.** (W-9) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Eastbound SR-60 from Main St. to SR-91** (W-20) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from SR-91 to W. Blaine St./3rd St.** (W-21) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Westbound SR-60 from W Blaine St./3rd St. to University Ave.** (W-22) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The existing freeway right-of-way in this section cannot accommodate an additional lane and cannot be widened without impacting the adjacent residential community. Since widening the freeway is infeasible, this impact is significant and unavoidable.

- **Westbound SR-60 from University Ave. to Martin Luther King Blvd.** (W-23) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a second off-ramp lane would reduce the cumulative impact to a less-than-significant level.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Central Ave. to Fair Isle Dr./Box Springs Rd.** (W-25) already exceeds the LOS threshold and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Day St. to Pigeon Pass Rd./Frederick St.** (W-28) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing

that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

Cumulative Freeway Ramp Mitigations

- **Eastbound SR-60 from On-Ramp from Martin Luther King Blvd.** (R-1) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would reduce the cumulative impact to a less-than-significant level. The Transportation Concept Report does not call for further widening of this section, which could only be accomplished by eliminating the existing shoulder and thus leaving no space for disabled vehicles to pull over. Since this would create safety problems that would be less acceptable than a low LOS, mitigating this impact is infeasible. This impact is therefore significant and unavoidable.

- **Eastbound SR-60 from On-Ramp from Gilman Spring Rd.** (R-10) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. (This improvement is already identified as the mitigation for mainline segment F-36.)

  Caltrans has plans to re-configure the SR-60/Gilman Springs Rd. interchange in the future. However, as explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from On-Ramp from Theodore St.** (R-14) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. (This improvement is already identified as the mitigation for mainline segment F-34.)

  The City has a study underway to develop alternative designs for this interchange. The City will collect a fair-share contribution from the developer to implement this improvement in conjunction with the reconfiguration of the SR-60/Theodore St. Interchange.

- **Westbound SR-60 from Off-Ramp to Redlands Blvd.** (R-15) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. (This improvement is already identified as the mitigation for mainline segment F-34.)

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing

that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Loop On-Ramp from Redlands Blvd.** (R-16) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Direct On-Ramp from Redlands Blvd.** (R-17) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold.

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Off-Ramp to Central Ave.** (R-18) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. (This improvement is already identified as the mitigation for weaving segment W-25 in the direct impacts list, Table 74.)

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

- **Westbound SR-60 from Off-Ramp to Martin Luther King Blvd.** (R-19) will exceed the target LOS threshold at some point in the 2022-to-2035 period and traffic density would increase under 2035 Plus Build-out conditions. Adding a mixed-flow lane would bring the LOS to within the target threshold. (This improvement is already identified as the mitigation for mainline segment F-24.)

  As explained above, because SR-60 is a state facility outside the jurisdiction of the City of Moreno Valley, the City has no means for either widening the freeway itself or for guaranteeing

that some other agency will widen the freeway. This impact must therefore be considered significant and unavoidable.

G. RECOMMENDED MITIGATION MEASURES

Based on the analysis described above following Mitigation Measures are recommended:

- MM Trans-1: A traffic impact analysis ("TIA"), conforming to the guidelines for TIAs adopted by the City shall be submitted in conjunction with each Plot Plan application within the WLCSP. Prior to the approval of the Plot Plan, the City shall review the TIA to determine if any of the traffic improvements listed in Tables 72 through 77 of the TIA prepared for the Program EIR are required to be completed prior to the issuance of a certificate of occupancy for each building. If the City determines that any of the improvements within Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated into insignificance, then the completion of construction of the improvements prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. Construction of improvements within the City shall be subject to reimbursement agreement for those costs that exceed the fair share contribution determined for the specific Plot Plan application. If the City determines that any of the improvements outside Moreno Valley are required to be constructed in order to ensure that the traffic impacts which will result from the construction and operation of the building will be mitigated to a less than significant level, then the payment of any necessary fair share contribution as prescribed in MM Trans-6 prior to the issuance of a Certificate of Occupancy for the building shall be made a Condition of Approval of the Plot Plan. If the City determines that the traffic impacts which will result from the construction or operation of a building will be significantly more adverse than those shown in the program EIR, further environmental review shall be conducted prior to the approval of the Plot Plan pursuant to Public Resources Code § 21166 and CEQA Guidelines § 15162 to determine what additional mitigation measures, if any, will be required in order to maintain the appropriate levels of service.

- MM Trans-2: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require the dedication of appropriate right-of-way, where feasible, consistent with the Subdivision Map Act for frontage street improvements contained within the World Logistics Center Specific Plan Circulation Map, as shown in Figure 22. Required dedications shall be made prior to the issuance of occupancy permits for the requested development.Figure 22.

- MM Trans-3: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require each project to pay the requisite Development Impact Fee (DIF) as set forth in Municipal Code Chapter 3.42.

Required DIF payments shall be made prior to the issuance of occupancy permits for the requested development.

- MM Trans-4: As a condition of approval for individual development permits processed in the future under the World Logistics Center Specific Plan, the City shall require each project to pay the requisite Transportation Uniform Mitigation Fee (TUMF) as set forth in Municipal Code Chapter 3.44. Required TUMF payments shall be made prior to the issuance of occupancy permits for the requested development.

- MM Trans-5: In order to ensure that all of the Project's traffic impacts are mitigated to the greatest extent feasible, the Applicant shall contribute its fair share of the cost of the needed traffic improvements that are not within the City as identified in the Traffic Impact Analysis, *i.e.,* under the jurisdiction of other cities, the County of Riverside or Caltrans, pursuant to MM Trans-6. As used in this mitigation measure, the Applicant's "fair share" has been determined in compliance with the requirements of the Fee Mitigation Act, Government Code § 66000 *et seq.*, and, pursuant to § 66001(g), does not require that the Applicant be responsible for making up for any existing deficiencies.

- MM Trans-6: The Applicant shall pay a portion of the fair share of the cost of traffic improvements identified in the Transportation Impact Analysis for those significantly impacted road segments and intersections for each warehouse building within the World Logistics Center if the impacted jurisdiction has established a fair share contribution program prior to the approval of a building-specific plot plan. The City shall determine whether a fair share program exists in the impacted jurisdiction and, if one does exist, require that the appropriate fees are paid by the Applicant, consistent with the requirements below, prior to the issuance of a certificate of occupancy for the building in question. If no fair share program exists or if the existing programs are not consistent with the requirements below, then no payment of fees shall be required. The impacts are to be determined on a road segment or intersection basis. Nothing in this condition requires the payment of a traffic impact fee imposed by another jurisdiction which covers improvement to facilities where the Project does not have a significant impact. Fair-share contributions will be determined on a building-by-building basis as a share of the impact of the Project as a whole (for each segment or intersection where the WLC project as a whole has a significant impact identified in the programmatic EIR) as determined by the Traffic Impact Analysis and will be due as each certificate of occupancy is issued. The fair share payments for the significantly impacted road segments and intersections identified in the program EIR will be required even though the impact resulting from a specific building does not, by itself, cause a significant impact.

  For example, the intersection of Martin Luther King Blvd. and the I-215 northbound ramps (Intersection 85) in the City of Riverside was identified as a place where the WLC contributes to cumulatively significant impacts, and where the fair share contribution of the WLC project as a

whole was computed to be 6.2%. If the City of Riverside establishes a fair share contribution program consistent with this MM Trans-6 to improve that intersection, then when a certificate of occupancy is to be issued for a 2-million sq.ft. high-cube warehouse in the WLC (approximately 5% of the entire WLC project) the amount of the fair share payment due from the Applicant to the City of Riverside would be computed as follows:

Amount Due	=	Total cost of Improvement	*	Total WLC fair Share (6.2%) as determined by TIA	*	% attributable to the building that is subject to the certificate of occupancy (5%)

A similar calculation would be done for each subsequent building, with payments for each due at the time of issuance of the certificate of occupancy. As a result, while each building individually would not produce a significant impact, and therefore would not be required to pay any mitigation fees if considered by itself, the total amount of the payments for all of the buildings would be equal to the fair share payment for the entire WLC to the extent that the responsible jurisdiction has chosen to adopt a fair share contribution funding program consistent with MM Trans-6.

- MM Trans-7: City shall work directly with WRCOG to request that TUMF funding priorities be shifted to align with the needs of the City, including improvements identified in this TIA. Toward this end, City shall meet regularly with WRCOG.

Level of Significance after Mitigation

The mitigation measures described above can be usefully grouped into four categories based on who is responsible for the facility, which is the primary determinant of the level of significance after mitigation. The four categories are as follows:

On-Site Improvements – These are changes to the road system within the WLC project site that are being undertaken as part of the WLC project. The developer shall be responsible for constructing the improvements described in the section "*Proposed Road Network*" in Chapter 4 above in accordance with City standards for roadway construction and the roadway cross-sections in the proposed Specific Plan. Completion of these improvements shall constitute the developer's mitigation of the project's on-site impacts. When these improvements are completed the project's impacts on the roadway system within the WLC project site will be mitigated to a **less-than-significant** level.

Off-Site Improvements for Non-TUMF Roads Under the Jurisdiction of the City of Moreno Valley - These are improvements to public streets in Moreno Valley that are outside the area covered by the proposed WLC Specific Plan Amendment. The developer shall be responsible for paying the

DIF as set forth in Municipal Code Chapter 3.42 which the City shall use to implement the mitigation measures identified in Table 74, Table 75, Table 76, Table 78 and Table 79 pertaining to DIF facilities. The developer shall also be required to pay its fair share of the improvements to City streets that are not in the DIF program where there are significant project impacts. These payments shall constitute the developer's mitigation of project impacts on this category of roads. When these improvements are completed the project's impacts on the City roadway system will be mitigated to a **less-than-significant** level.

Off-Site Improvements to TUMF Facilities – These are improvements to roads that are part of the TUMF Regional System of Highways and Arterials, some of which are under the jurisdiction of Moreno Valley and others are located in other jurisdictions. The developer shall be responsible for paying the TUMF fees in effect at the time of approval. These payments shall constitute the developer's mitigation of project impacts to this category of roads.

The City shall implement the mitigation measures identified in Table 76 and Table 79 pertaining to TUMF facilities under the City's jurisdiction. When these improvements are completed the project's impacts on the roadway system within the WLC project site will be mitigated to a **less-than-significant** level.

The City shall work with the other member agencies of WRCOG to program TUMF funds to implement the mitigation measures identified in Table 75, Table 76, Table 78 and Table 79 pertaining to TUMF facilities outside the jurisdiction of the City of Moreno Valley. To the extent that TUMF fees provided by the developer are used to implement the recommended improvements the project's impacts would be less-than-significant. However, because the City does not have direct control over TUMF funding the City cannot ensure that the identified improvements would be made. Thus at this point the project's impacts on these facilities must be considered **significant and unavoidable**.

Off-Site Improvements to Roads Outside the Jurisdiction of the City and Not Part of the TUMF Program – This category includes all of the recommended mitigation measures that are under the jurisdiction of Riverside County, Caltrans, and other municipalities and that are not included in the TUMF Regional System of Highways and Arterials.

At this time the City does not have cooperative agreements with neighboring jurisdictions that would serve as a mechanism for collecting and distributing developer funds to cover the cost of cross-jurisdictions mitigation measures, other than the TUMF program. The City shall therefore work with the City of Redlands and Riverside County to collect funds from the developer and to implement the signalization of the San Timoteo Rd./Alessandro Rd. intersection and the San Timoteo Rd./Live Oak Canyon intersection (respectively). The City shall also work with the City of

Riverside to collect a fair-share contribution from the developer to signalize the Martin Luther King Blvd./I-215 northbound ramp intersection. To the extent that the City is able to establish such a mechanism (as described in MM Trans-6) and the other jurisdiction constructs the recommended improvement the project's impacts would be less-than-significant. However, because the City cannot guarantee that such a mechanism will be established and does not have direct control over facilities outside of its jurisdiction the City cannot ensure that the identified improvements would be made. Thus at this point the project's impacts on these facilities must be considered **significant and unavoidable**.

Similarly, the City has not entered into an agreement with Caltrans for the collection of developer payments for improvements to the state highway system other than freeway interchange improvements funded through the TUMF program. Nor has Caltrans established a program to collect fair-share contributions to freeway improvements such as those indentified in Table 76 and Table 79. Instead, Caltrans has traditionally relied on other means to fund freeway improvements; means involving multiple stages of review and input from other agencies, with priorities and constraints applied at each stage, that preclude a direct connection between developer-provided fair-share funds and specific highway improvements.

Decisions on funding for improvements to the state highway system are made by four bodies, namely[54]:

Legislature: Establishes overall policies, including determining funding sources and distribution, and spending priorities through state statutes such as Revenue and Taxation Code, Streets and Highways Code, and Government Code. The Legislature appropriates funds through the annual budget for transportation projects and has authority to designate transportation projects statutorily.

California Transportation Commission (CTC): The nine-member CTC, appointed by the Governor, reviews and adopts the state transportation programs and approves projects nominated by Caltrans and regional agencies for funding. The CTC recommends policy and funding priorities to the Legislature and is also responsible for project delivery oversight.

California Department of Transportation (Caltrans): Caltrans owns, operates and maintains the state highway system. Caltrans plans, designs, and nominates interregional capital improvement projects on the state highway system and also manages the intercity rail operation.

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54 This information came from *Transportation Funding in California*, Caltrans Economic Analysis Branch, 2011, page 2.

Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs): MPOs and RTPAs are responsible for planning, coordinating and administering funds for regional transportation systems. In California, 17 MPOs and 48 RTPAs develop 20-year Regional Transportation Plans (RTPs) as well as 5-year Regional Transportation Improvement Program (RTIP), which identify projects for the regional portion of the State Transportation Improvement Program (STIP). SCAG is the MPO for Riverside County.

Most funds for improvements to the state highway system come through the State Highway Account (SHA), which receives funding from a variety of sources including:

- motor vehicle fuel taxes, part of which goes into the Highway Users Tax Account, a portion of which goes to the SHA and the rest goes to cities and counties according to a statutory formula.
- The fuel tax swap, enacted in 2011 (Fuel Tax Swap Fix), reenacted the provisions of the Fuel Tax Swap of 2010 addressing issues raised by the passage of Propositions 22 and 26. The Fuel Tax Swap eliminated the state sales tax on gasoline and instead imposed an additional excise tax on gasoline of 17.3¢ (July 2010). The increase in the excise tax would generate revenues equivalent to what would have been collected from the state sales tax on gasoline. These revenues are intended for new road construction (STIP), highway maintenance and operations (SHOPP), and local roadways.
- the federal fuel tax, which goes into the Highway Trust fund for use on the portions of the system that are designated ad federal aid highways

In addition local sales tax measures, such as Measure A in Riverside County, and the proceeds of Proposition 1B provide funding for improvements to certain portions of the state highway system.

The key feature of this system pertaining to the recommended freeway mitigation measures is that this system is outside the control of the City of Moreno Valley. The City shall work with Caltrans to establish a mechanism for collecting funds from developers for use in funding needed freeway improvements (as described in MM Trans-6). However, since at the present time no such mechanism exists that would ensure that WLC funds contributed to Caltrans or any other state agency would be used to implement specific improvements that mitigate WLC impacts, and there is no mechanism by which the City can construct or guarantee the construction of any improvements to the freeway system by itself, the project's impacts on the state highway system must be considered **significant and unavoidable**.

12. OTHER ISSUES

At the request of the City of Moreno Valley and to facilitate a more complete understanding of transportation issues related to the WLC, the following additional issues were studied.

A. TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants are criteria used to determine whether a traffic signal might be justified at a particular location. The warrants represent minimum criteria for justifiability; in other words, meeting a warrant by itself does not necessarily mean that a signal should be installed. The City of Moreno Valley's TIA Guidelines mandate that study intersections that are not currently signalized be analyzed to determine whether the *California Manual of Uniform Traffic Control Devices*' (California MUTCD) peak-hour warrant is met for existing intersections or whether the California MUCTD daily warrant is met for future intersections. Table 80 through Table 82 show this analysis for No-Project and Plus Build-out conditions for the 2012, 2022, and 2035 conditions. Detailed signal warrant analyses can be found in Appendix P.

Table 80: Signal Warrant Analysis for Existing

Study Intersection		Jurisdiction	Traffic Control	Existing		Existing Plus Phase 1		Existing Plus Build-out	
				AM	PM	AM	PM	AM	PM
3	Alessandro Blvd. & Theodore St.	Moreno Valley	CSS*	No	No	Yes	Yes	Yes	Yes
6	Alessandro Blvd. & Gilman Springs Rd.	Moreno Valley	CSS	No	Yes	Yes	Yes	Yes	Yes
10	Locust Ave. & Redlands Blvd.	Moreno Valley	CSS	No	No	No	No	Yes	Yes
12	Ironwood Ave. & Theodore St.	Moreno Valley	CSS	No	No	No	No	No	No
13	SR-60 WB Ramps & Redlands Blvd.	Moreno Valley	CSS	No	No	Yes	No	Yes	Yes
15	SR-60 WB Ramps & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes	Yes	Yes
16	SR-60 EB Ramps & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes	Yes	Yes
19	Eucalyptus Ave. & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes	Yes	Yes
20	Alessandro Blvd. & Oliver St.	Moreno Valley	CSS	No	No	No	No	Yes	No
23	Alessandro Blvd. & Redlands Blvd.	Moreno Valley	AWS	No	No	No	No	No	No
27	Cactus Ave. & Redlands Blvd.	Moreno Valley	AWS	No	No	Yes	Yes	Yes	Yes
35	Locust Ave. & Moreno Beach Dr.	Moreno Valley	CSS	No	No	No	No	No	No
85	Martain Luther King Blvd. & SR-60 NB Ramp	Riverside	AWS	No	No	Yes	No	Yes	No
113	Placentia Ave. & Evans Rd. (2035 only)	Perris	CSS	N/A	N/A	N/A	N/A	N/A	N/A
114	Orange Ave. & Evans Rd.	Perris	AWS	No	No	No	No	No	No
122	Ramona Expy & Bridge St.**	San Jacinto	CSS	No	No	No	Yes	No	Yes
123	Bridge St. Gilman Springs Rd.	San Jacinto	CSS	No	No	Yes	No	Yes	No
124	Gilman Springs Rd. & SR-79 NB Ramps	San Jacinto	CSS	Yes	Yes	Yes	Yes	Yes	Yes
125	Gilman Springs Rd. & SR-79 SB Ramps	San Jacinto	CSS	No	Yes	Yes	Yes	Yes	Yes
129	6th St. & California Ave.	Beaumont	AWS	No	No	No	No	No	No
132	San Timoteo Canyon Rd. & Alessandro Rd.	Redlands	AWS	Yes	Yes	Yes	Yes	Yes	Yes
133	Live Oak Canyon & San Timoteo Canyon Rd.	Redlands	AWS	Yes	Yes	Yes	Yes	Yes	Yes
134	San Timoteo Canyon Rd. & Redlands Blvd.	Redlands	AWS	Yes	Yes	Yes	Yes	Yes	Yes
135	Crescent Ave. & Alessandro Rd.	Redlands	CSS	No	No	No	No	No	No
136	Sunset Dr. & Alessandro Rd.	Redlands	AWS	No	No	No	No	No	No

* This would be a roundabout in the Plus Project condition.
** As part of a future upgrade of the Ramona Expressway, the Ramona Expressway/Bridge Street Intersection will be closed in the future and replaced with a new intersection west of the existing intersection.

Table 81: Signal Warrant Analysis for 2022

Study Intersection		Jurisdiction	Traffic Control	2022 No-Project		2022 Plus Phase 1	
				AM	PM	AM	PM
3	Alessandro Blvd. & Theodore St.	Moreno Valley	CSS*	No	No	Yes	Yes
6	Alessandro Blvd. & Gilman Springs Rd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
10	Locust Ave. & Redlands Blvd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
12	Ironwood Ave. & Theodore St.	Moreno Valley	CSS	No	No	No	No
13	SR-60 WB Ramps & Redlands Blvd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
15	SR-60 WB Ramps & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes
16	SR-60 EB Ramps & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes
19	Eucalyptus Ave. & Theodore St.	Moreno Valley	CSS	No	No	Yes	Yes
20	Alessandro Blvd. & Oliver St.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
23	Alessandro Blvd. & Redlands Blvd.	Moreno Valley	AWS	No	Yes	No	No
27	Cactus Ave. & Redlands Blvd.	Moreno Valley	AWS	No	No	Yes	Yes
35	Locust Ave. & Moreno Beach Dr.	Moreno Valley	CSS	No	No	No	No
85	Martain Luther King Blvd. & SR-60 NB Ramp	Riverside	AWS	Yes	No	Yes	No
113	Placentia Ave. & Evans Rd. (2035 only)	Perris	CSS	N/A	N/A	N/A	N/A
114	Orange Ave. & Evans Rd.	Perris	AWS	No	No	No	No
122	Ramona Expy & Bridge St.**	San Jacinto	CSS	N/A	N/A	N/A	N/A
123	Bridge St. Gilman Springs Rd.	San Jacinto	CSS	Yes	No	Yes	No
124	Gilman Springs Rd. & SR-79 NB Ramps	San Jacinto	CSS	Yes	Yes	Yes	Yes
125	Gilman Springs Rd. & SR-79 SB Ramps	San Jacinto	CSS	Yes	Yes	Yes	Yes
129	6th St. & California Ave.	Beaumont	AWS	Yes	Yes	Yes	Yes
132	San Timoteo Canyon Rd. & Alessandro Rd.	Redlands	AWS	Yes	Yes	Yes	Yes
133	Live Oak Canyon & San Timoteo Canyon Rd.	Redlands	AWS	Yes	Yes	Yes	Yes
134	San Timoteo Canyon Rd. & Redlands Blvd.	Redlands	AWS	Yes	Yes	Yes	Yes
135	Crescent Ave. & Alessandro Rd.	Redlands	CSS	No	No	No	No
136	Sunset Dr. & Alessandro Rd.	Redlands	AWS	No	No	No	No

* This would be a roundabout in the Plus Project condition.
** As part of a future upgrade of the Ramona Expressway, the Ramona Expressway/Bridge Street Intersection will be closed in the future and replaced with a new intersection west of the existing intersection.

Table 82: Signal Warrant Analysis for 2035

Study Intersection		Jurisdiction	Traffic Control	2035 No-Project		2035 Plus Build-out	
				AM	PM	AM	PM
3	Alessandro Blvd. & Theodore St.	Moreno Valley	CSS*	Yes	Yes	Yes	Yes
6	Alessandro Blvd. & Gilman Springs Rd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
10	Locust Ave. & Redlands Blvd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
12	Ironwood Ave. & Theodore St.	Moreno Valley	CSS	No	Yes	No	Yes
13	SR-60 WB Ramps & Redlands Blvd.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
15	SR-60 WB Ramps & Theodore St.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
16	SR-60 EB Ramps & Theodore St.	Moreno Valley	CSS	No	Yes	Yes	Yes
19	Eucalyptus Ave. & Theodore St.	Moreno Valley	CSS	No	Yes	Yes	Yes
20	Alessandro Blvd. & Oliver St.	Moreno Valley	CSS	Yes	No	Yes	Yes
23	Alessandro Blvd. & Redlands Blvd.	Moreno Valley	AWS	Yes	Yes	No	Yes
27	Cactus Ave. & Redlands Blvd.	Moreno Valley	AWS	Yes	Yes	Yes	Yes
35	Locust Ave. & Moreno Beach Dr.	Moreno Valley	CSS	Yes	Yes	Yes	Yes
85	Martain Luther King Blvd. & SR-60 NB Ramp	Riverside	AWS	Yes	Yes	Yes	Yes
113	Placentia Ave. & Evans Rd. (2035 only)	Perris	CSS	Yes	Yes	Yes	Yes
114	Orange Ave. & Evans Rd.	Perris	AWS	Yes	Yes	Yes	Yes
122	Ramona Expy & Bridge St.**	San Jacinto	CSS	N/A	N/A	N/A	N/A
123	Bridge St. Gilman Springs Rd.	San Jacinto	CSS	Yes	Yes	Yes	Yes
124	Gilman Springs Rd. & SR-79 NB Ramps	San Jacinto	CSS	Yes	Yes	Yes	Yes
125	Gilman Springs Rd. & SR-79 SB Ramps	San Jacinto	CSS	Yes	Yes	Yes	Yes
129	6th St. & California Ave.	Beaumont	AWS	Yes	Yes	Yes	Yes
132	San Timoteo Canyon Rd. & Alessandro Rd.	Redlands	AWS	Yes	Yes	Yes	Yes
133	Live Oak Canyon & San Timoteo Canyon Rd.	Redlands	AWS	Yes	Yes	Yes	Yes
134	San Timoteo Canyon Rd. & Redlands Blvd.	Redlands	AWS	Yes	Yes	Yes	Yes
135	Crescent Ave. & Alessandro Rd.	Redlands	CSS	No	No	No	No
136	Sunset Dr. & Alessandro Rd.	Redlands	AWS	No	No	No	No

* This would be a roundabout in the Plus Project condition.
** As part of a future upgrade of the Ramona Expressway, the Ramona Expressway/Bridge Street Intersection will be closed in the future and replaced with a new intersection west of the existing intersection.

In the medium-term future (2022), there are five intersections that would meet the signal warrant with the WLC project but would not meet the warrant without the project. These are:

- Alessandro Blvd./Theodore St.
- SR-60 WB Ramps/Theodore St.
- SR-60 EB Ramps/Theodore St.
- Eucalyptus Ave./Theodore St.
- Cactus Ave./Redlands Blvd.

In the long-term (2035) all five intersections listed above would warrant signalization even without the WLC project.

B. TRAFFIC NEAR SCHOOLS

Several comments were received regarding possible traffic safety issues related to traffic going to or from the WLC passing near schools.

In one case the commenter mistakenly believed that WLC trucks would be using Alessandro Blvd. to access SR-60 and I-215. In fact, trucks will be prohibited from using Cactus Ave. Extension and trucks are already prohibited from using Redlands Blvd. south of Eucalyptus Ave., which means that they will not be using Alessandro Blvd. to get to and from the WLC. Figure 54 shows the designated trucks routes in and around Moreno Valley[55], while Figure 55 shows the main routes expected to be taken by WLC trucks. With the exception of Perris Blvd., which will be used by a small volume of WLC trucks[56], none of the routes go near schools.

It was assumed that other comments regarding "streets adjacent and near schools" were safety related due to the fact that there may be a higher amount of pedestrian activity near schools. Therefore, the safety impact of Project-related auto trips along streets adjacent to and near schools was evaluated by reviewing the existing pedestrian facilities and collecting pedestrian counts at the intersections along Project truck trip distribution routes.

The intersections reviewed exhibit the characteristics of typical suburban arterial roadways with common pedestrian accommodations, such as crosswalks, curb ramps, push buttons, pedestrian walk/don't walk signals, etc. All pedestrian crossings at the signalized intersections are protected; a protected crossing occurs where traffic that conflicts with the pedestrian movement is required to stop. Crosswalks near a school are striped in yellow, consistent with guidance from the *California Manual on Traffic Control Devices* (page 1282). In most cases, sidewalks exist along roadways and lead to the striped, protected crosswalks at the intersections.

Key intersections along the truck trip distribution routes were reviewed during a site visit and found to provide adequate pedestrian amenities with protected crossings, crosswalks, curb ramps, and pedestrian signals, consistent with other signalized intersections in the City. Therefore, the location of an intersection on a Project truck trip distribution route is not expected to cause unsafe pedestrian facilities.

Pedestrian counts were collected at 25 study intersections along the Project truck trip distribution routes to determine if unusually high pedestrian volumes were being experienced at intersections. Table 83

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55 Note that Riverside County does not identify truck routes. The City of Riverside's code does not identify a positive list of where trucks are allowed, but does have a negative list of where trucks are prohibited based on weight.

56 22 medium and heavy trucks in the AM peak hour and 25 in the PM peak hour.

shows that many of the intersections along the routes have fewer than 30 pedestrian crossings per hour between the hours of 2:00 to 4:00 PM (the peak of school children crossing activity).

The main commuter routes expected to be used by WLC workers were identified using the RivTAM model. The routes with 50 or more peak-hour trips are shown in Figure 55.[57] These include the John F. Kennedy Dr./Moreno Beach Dr./Iris Ave. route, the Cactus Ave. route, the Alessandro Blvd. route, and the north Perris Ave. route. Only three locations were identified where significant pedestrian activity (50 or more pedestrians per hour) may encounter significant WLC commuter traffic (50 or more peak-hour trips). These occurred at the Iris Ave./Laselle St, Krameria Ave./Kitching St., and Alessandro Blvd./Perris Blvd. intersections. These intersections were specifically reviewed to ensure that pedestrian accommodations were provided. Protected, marked crosswalks exist at all of these intersections and pedestrian amenities are consistent with other, standard signalized intersections in the City.

Based on this analysis the conclusion was reached that the WLC project poses no special traffic safety risk to children near schools, and that appropriate safety measures have already been taken to minimize traffic risks in the vicinity of the schools near the project.

[57] Peak hour volumes are shown as a worse-case. Actual traffic volumes in the 2:00 to 3:00 PM period are forecast to be lower. The threshold of 50 project trips per hour was based on the City of Moreno Valley *Traffic Impact Guidelines* threshold for when potential impacts need to be analyzed.

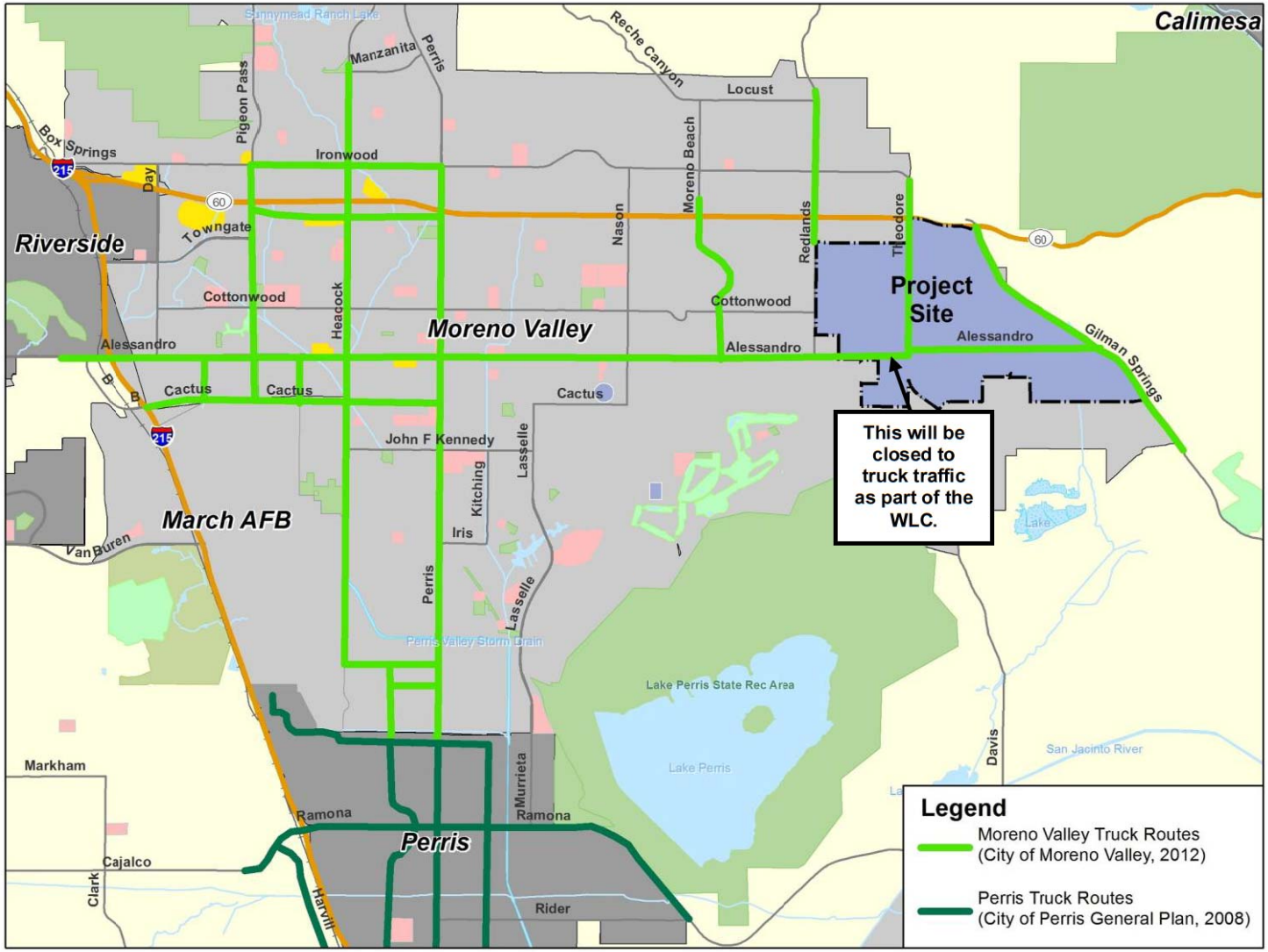
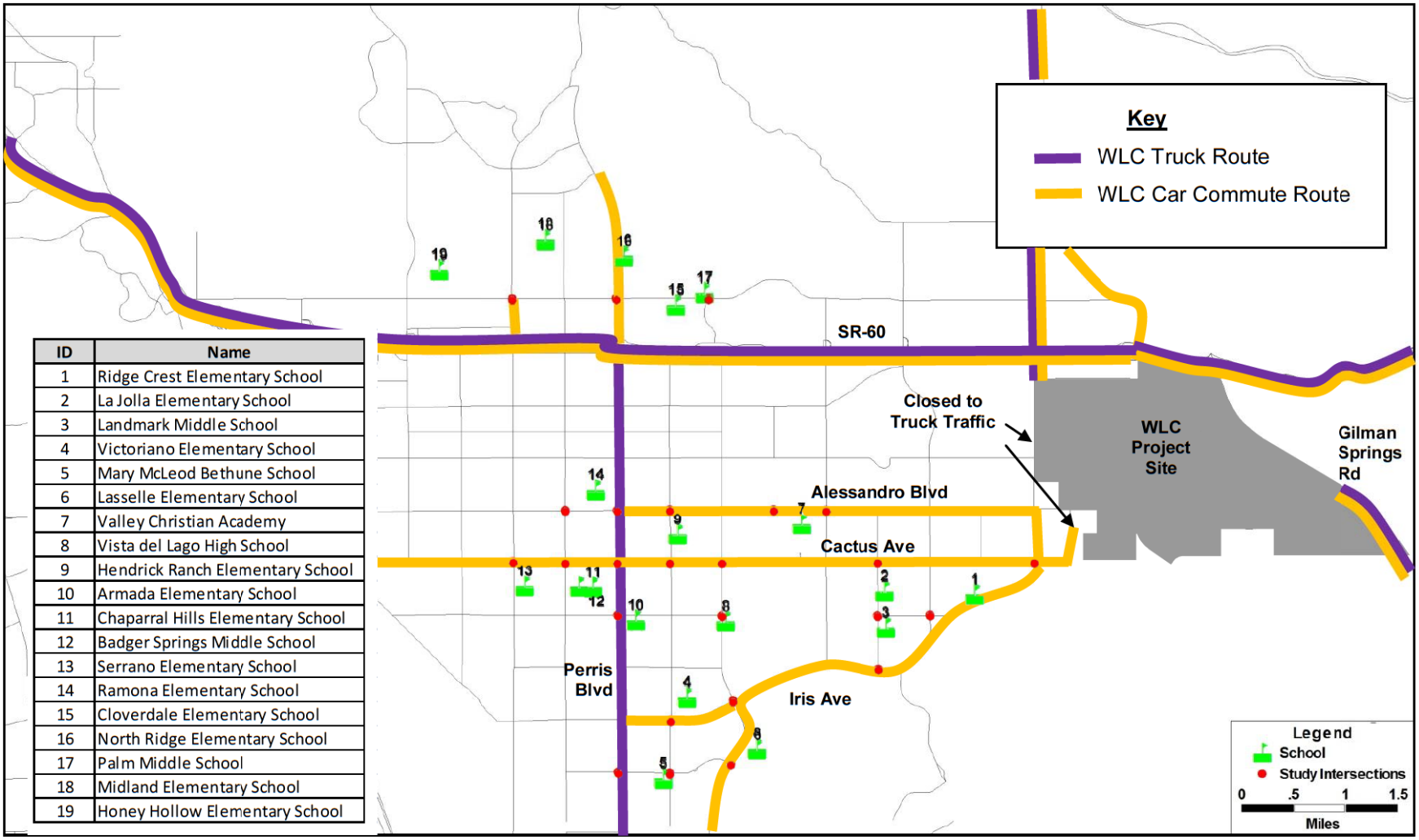


Figure 54: Existing Truck Routes in and Near Moreno Valley



ID	Name
1	Ridge Crest Elementary School
2	La Jolla Elementary School
3	Landmark Middle School
4	Victoriano Elementary School
5	Mary McLeod Bethune School
6	Lasselle Elementary School
7	Valley Christian Academy
8	Vista del Lago High School
9	Hendrick Ranch Elementary School
10	Armada Elementary School
11	Chaparral Hills Elementary School
12	Badger Springs Middle School
13	Serrano Elementary School
14	Ramona Elementary School
15	Cloverdale Elementary School
16	North Ridge Elementary School
17	Palm Middle School
18	Midland Elementary School
19	Honey Hollow Elementary School

Figure 55: Routes Taken by WLC Trips in Relation to Schools

Table 83: Pedestrian and Project Traffic in Vicinity of Schools[58]

ID	Intersection	Pedestrian Crossings	Expected WLC Car Trips
24	Cactus Ave / Oliver St	0	222
27	Cactus Ave / Redlands Blvd	0	985
28	John F. Kennedy Dr / Moreno Beach Dr	2	590
29	Ironwood Ave / Heacock St	23	55
38	John F. Kennedy Dr / Perris Blvd	20	73
40	Iris Ave / Kitching St	17	166
41	Iris Ave / Lasselle St	112	524
43	Iris Ave/Moreno Beach Dr / Oliver St	0	543
45	Krameria Ave / Perris Blvd	18	134
46	Krameria Ave / Kitching St	128	137
47	Krameria Ave / Lasselle St	25	336
48	Alessandro Blvd / Kitching St	18	52
50	Alessandro Blvd / Morrison St	0	49
51	Alessandro Blvd / Nason St	5	79
52	Cactus Ave / Kitching St	22	96
53	Cactus Ave / Lasselle St	1	202
59	Alessandro Blvd / Indian St	55	43
60	Alessandro Blvd / Perris Blvd	82	50
63	Cactus Ave / Heacock St	4	71
64	Cactus Ave / Indian St	23	74
65	Cactus Ave / Perris Blvd	17	84
201	John F. Kennedy Dr / Oliver St	5	47
202	John F. Kennedy Dr / Lasselle St	4	94
203	Ironwood Dr / Lasselle St	3	31
204	Ironwood Dr / Perris Blvd	12	76

C. SAFETY AND OPERATIONAL CONSIDERATIONS

The City's guidelines mandate that the TIA cover the following safety and operational issues:

- Turn Lanes: The improvements needed for study intersections were described in detail in the preceding chapters.
- Intersections Needing Future Sight Distance Studies: The City's established sight distance standard will be applied at all street intersections in connection with all plot plan and subdivision applications.

[58] Peak hour car volumes are shown as a worse-case. Actual traffic volumes in the 2:00 to 3:00 PM period are forecast to be lower. Peak hour pedestrian crossings are shown as the one peak hour within the 2:00 to 4:00 PM period.

- Parking Restrictions: Each plot plan application will be reviewed to ensure that off-street parking will be provided at each building in compliance with the Moreno Valley Municipal Code. A limited amount of short-term on-street parking for trucks will be provided in selected areas of the WLC. Overnight or extended parking would be prohibited.

- Measures to Reduce Cut-Through Traffic in Adjacent Residential Neighborhoods: The design of the WLC incorporates several features that limit the project's impacts on adjacent residential areas. Eastbound Alessandro Blvd. will end at Merwin St. to prevent traffic from passing through the neighborhood directly west of the project. Cactus Ave. Extension would be for cars and light trucks only. The intersection of Cactus Ave. Extension and Street E would include signage and, if deemed necessary by the City, a design feature, such as a median island, height-restricting gateway, or reduced curb return, which would preclude trucks from turning onto Cactus Ave.

- Potential Impacts to Adjacent Schools, Parks, and/or Trails: There are no schools or parks within or adjacent to the WLC. The WLC Specific Plan provides for the continuation of a public multi-use trail from Redlands Blvd. through the WLC linking to the Lake Perris State Recreation Area and the San Jacinto Wildlife Area.

- Queue Lengths and Impacts to Adjacent Intersections and/or Driveways: As individual buildings are developed, a traffic study will be performed including a queue length analysis to ensure there is not spill back affecting nearby intersections.

- Emergency Access: Every plot plan will be conditioned to provide all emergency access required by federal, state, and local regulations. Emergency vehicles that currently pass through the site using either Theodore St. or Alessandro Blvd. would continue to have those routes available to them, upgraded to arterial standards. The Alessandro route would reach Redlands Blvd. at Cactus Ave. instead of at Alessandro. The change would not lengthen the route between Gilman Springs Rd. and the Riverside Community Regional Medical Center on Cactus Ave. or the route to and from the Kaiser Moreno Valley Community Hospital on Iris Ave. The extension of Eucalyptus Ave. through the WLC would provide an upgraded [59] route to the project site from the nearest existing fire station (the Moreno Beach fire station). Moreover, the WLC would include a fire station on site.

D. TRANSIT, PEDESTRIAN, AND BICYCLE FACILITIES

There is currently no transit service in the project area. The WLC would be designed to accommodate bus access on all project streets. Bus turn-outs and shelters would be provided at all active bus stops. It

[59] There is currently a gated connection available to emergency vehicles only between Fir (future Eucalyptus) Avenue and Redlands Blvd.

is expected that transit service would be provided once the project reaches a transit-supportable level of operations.

The WLC pedestrian and bicycle facilities were described previously in Chapter 4 (see Figure 37, Figure 38, etc.).

E. CONSTRUCTION TRAFFIC IMPACTS

A project phasing plan was developed to estimate the level of construction activity occurring during any given year during build-out of the project. Based on this plan, the expected level of truck activity related to construction of the project is shown in Table 84.

Table 84: Estimated Construction-Related Truck Traffic

Land Use	2022 Study Year		
	Daily	AM Peak Hour	PM Peak Hour
Building			
Concrete Trucks	50	5	5
Material Delivery Trucks	20	2	2
Service/Support Trucks	80	8	8
Utilities			
Service/Support Trucks	15	2	2
Curbing			
Concrete Trucks	4	1	1
Service/Support Trucks	5	1	1
Paving			
Service/Support Trucks	5	1	1
Landscaping			
Service/Support Trucks	6	1	1
Project Total	**185**	**21**	**21**

In addition, the estimated construction activity would generate approximately 250 inbound car trips during the AM peak hour and 250 outbound car trips during the PM peak hour in 2022. This traffic was added onto the traffic forecasts used in the LOS analysis.

F. TRUCK TRIPS TO PORT

Several comments received on the Draft EIR indicated confusion regarding the volume of truck traffic between the WLC and the Ports of Los Angeles and Long Beach. In general, the DEIR commenters

seemed to believe that the truck traffic between the WLC and the ports will be much higher than will actually occur. This section responds to these comments by 1) describing the current share of port-related use of warehouse space, 2) estimating the truck traffic between the WLC and the ports using three different methods, 3) estimating the growth in WLC truck traffic to the port over time, and 4) determining whether WLC trucks would impose significant impacts on the freeways to the ports beyond those identified in previous chapters.

Current Share of Port-Related Warehouse Space

The DEIR commenters referred to SCAG's study entitled *Industrial Space in Southern California: Future Supply and Demand for Warehousing and Intermodal Facilities*[60]. This study states that 13% of the occupied warehouse space in the SCAG region in 2009 was port-related. This indicates that while the ports are important sources of demand for warehouse space, the great majority of warehouse space serves other demands. In a large regional economy such as southern California this other demand amounted to 578 million square feet in 2009, and is growing over time.

The SCAG study also shows wide differentiation in the markets served. As can be seen in Table 85[61], Riverside County serves only a small percentage of port-related demand while playing a much more important role in serving non-port demand. This differentiation reflects the tendency of warehouse tenants whose operations rely on the ports to self-select locations close to the port.

Table 85: Share of Port and Non-Port Demand by County

County	Share of Port Demand for Warehouse Space	Share of Non-Port Demand for Warehouse Space
Los Angeles	61%	21%
Orange	7%	7%
Ventura	1%	3%
San Bernardino	19%	34%
Riverside	12%	34%
Imperial	0%	1%
Total	100%	100%

The information provided in the report indicates that only 5% of the warehouse space in Riverside County serves port-related demand (See Table 87), which suggests that the volume of truck traffic between the ports and warehouses in Riverside County, including those in WLC, will be relatively small.

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60 *Industrial Space in Southern California: Future Supply and Demand for Warehousing and Intermodal Facilities (Task Report 5)*, SCAG, June 2010

61 Ibid

The study also reached two conclusions regarding the regional supply of warehouse space, taken from the report's Executive Summary (pages ES-1 and ES-2):

- "*According to assumed growth rates, the region will run out of suitably zoned vacant land in about the year 2028. At that time, forecasts show that the demand for warehousing space will be approximately 1,023 million square feet.*
- *During the year 2035, there will be a projected shortfall of space of about 228 million square feet, unless other land not currently zoned for warehousing becomes available.*"

In other words, according to SCAG study cited by the commenters, even if all of the land currently zoned for warehouse space were developed, there would still be a massive shortfall of warehouse space by 2035 unless projects like the WLC are approved and built.

Estimating Truck Trips between WLC and the Ports

In order to ensure that a reasonable worst case scenario was used for the impact analysis, the number of truck trips between the WLC and the ports was forecast using three different methods, all based on data provided by regional planning agencies, with the highest of the three forecasts used for the analysis. The three methods were as follows:

Method 1: RivTAM Model

The first method for estimating truck trips to the port was to use the RivTAM model. As described in Chapter 2, RivTAM is the standard traffic forecasting tool used by agencies in Riverside County to analyze the regional effects of proposed projects. Like most other traffic models, RivTAM assigns trips to destinations using a gravity model where the number of trips between each origin-destination pair increases in proportion to the number of trips generated at each end, but decreases in proportion to the distance between the origin and destination. The effect of distance on the likelihood of travel between origin-destination pairs is determined by the trip length distribution which in turn is based on survey data.

The WLC's proposed land uses were input into the RivTAM model as described in Chapter 2, the model was run, and the outputs were checked to find how many truck trips were assigned between the port TAZs and the WLC. Using the RivTAM model to estimate truck trips yields **82 truck trips per day between the ports and the WLC** if the WLC were built today (i.e. the 2012 Plus Full Build-Out scenario).

Method 2: Based on Port Truck Study

The best information currently available on truck trips from the ports comes from the Ports of Los Angeles and Long Beach Year 2010 Marine Terminal Gate Surveys[62]. These surveys found that 1.5% of truck trips entering the ports came from Riverside County, and 1.7% of trucks leaving the ports went to Riverside County. These finding are consistent with an earlier study[63] that found 1% of truck trips entering the ports came from Riverside County and 2% of truck trips leaving the ports went to Riverside County (the numbers are rounded in the study). Applying the percentages from the 2010 survey to the approximately 50,000 truck trips per day generated by the ports[64] yields a total of approximately 800 trucks per day between the ports and Riverside County.

If we make the conservative assumption that every one of these 800 truck trips goes to a warehouse rather than to a factory, store, or some other destination, and divide these trips among the 136 million square feet of occupied warehouse space in Riverside County, we find an average of 5.9 truck trips to or from the ports per million square feet of warehouse space per day. Applying this rate to the 40.6 million square feet of warehouse space proposed for the WLC yields **240 truck trips per day between the ports and the WLC** if the WLC were built today (the 2012 Plus Full Build-Out scenario).

Method 3: Based on Truck Flows from Riverside County

The best information currently available on regional truck traffic patterns comes from SCAG's Goods Movement Study[65] that was done in preparation for the 2012 RTP/SCS. Table 86 shows SCAG's estimated truck flows between Riverside County and other locations.

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62 Technical Memorandum, *Ports of Los Angeles and Long Beach Year 2010 Marine Terminal Gate Surveys*, Cambridge Systematics to SCAG, November 2010

63 *Ports of Long Beach/Los Angeles Transportation Study*, Meyer, Mohaddes Associates, June 2001

64 *Goods Movement Appendix, Regional Transportation Plan 2012-2035*, SCAG, April 2012

65 *Draft Regional Transportation Plan 2012-2035*, *Goods Movement Appendix,* Southern California Association of Governments. December 2011.

Table 86: Location of Other End of Trip, for Truck Trips Beginning or Ending in Riverside County

Trip Origin or Destination	Truck Trips	Percent of Truck Trips
Outside the SCAG Region	11,183	10.4%
Port (including Secondary Trips)	1,569	1.5%
Intermodal Facilities	271	0.3%
Other Places in SCAG Region	94,469	87.9%
Total	107,492	100.0%

Applying the ports' 1.5% share of Riverside County truck trips applies to WLC's 11,600 medium and heavy truck trips per day yields **174 truck trips per day between the ports and the WLC** if the WLC were built today (the 2012 Plus Full Build-Out scenario).

This analysis shows that a reasonable estimate of truck traffic between WLC and the ports would be in the range of 84-to-240 truck trips per day. The higher figure of 240 truck trips per day was used as a reasonable worst-case scenario.

Growth in Truck Trips to the Port

Some comments suggested that the analysis should consider the possibility that the share of warehouse space in the Inland Empire, and by extension the WLC, may grow over time. This section addresses those comments.

As discussed previously (see Table 86) currently only 1.5% (one and a half percent) of the truck trips in Riverside County are to or from the ports. In the future, port-related uses are anticipated to require a greater share of warehouse space. Table 87 shows the expected growth in port-related cargo's share of warehouse space by county. For Riverside County, SCAG estimates that the percentage of warehouse space devoted to port uses would more than triple between 2012 and 2035, from 5.0% to 16.3%.

Table 87: Percentage of Warehouse Space that is Port-Related[66]

Year	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial	Total
2012	27.8%	6.0%	5.0%	5.4%	3.6%	0.0%	15.9%
2022	30.2%	15.7%	9.3%	14.6%	5.4%	0.0%	19.3%
2035	28.3%	28.5%	16.3%	21.8%	7.6%	0.0%	22.5%

[66] Source: *Industrial Space in Southern California: Future Supply and Demand for Warehousing and Intermodal Facilities* (Task 5 Report), Southern California Association of Governments. June 2010, pages 16-19.

Note that the percentage of warehouse space devoted to port-related cargo will always be larger than the percentage of trucks going to and from the port. That is because the cargo that has come from the port to the warehouse then leaves the warehouse in trucks going to non-port destinations. There may also be inbound truck trips to warehouses from places other than the ports, delivering shipments of packaging material and other items which might be combined with port-related cargo, thus further reducing the proportion of trucks that come from the ports.

The estimated percentage of WLC trucks going to the ports is summarized in Table 88. The percentage of WLC going to the port (2.07%) was estimated from 240 truck trips per day to the port compared to 11,621 total medium and heavy truck trips to and from the WLC.

Table 88: Percentage of WLC Trucks to or from the Port

Year	% of Warehouse Space Used for Port-Related Cargo	% of Truck Trips Going to and from the Ports
2012	5.00%	2.07%
2022	9.30%	3.86%
2035	16.30%	6.76%

These percentages were then applied to the trip generation rates to obtain the number of WLC trucks to and from the port for each analysis period. These are shown in Table 89. Tests with the SCAG traffic model showed that these trips would split approximately evenly between the two routes shown in Figure 56 and thus, half of these trips were assigned to the SR-60 route and half to the SR-91 route.

Table 89: WLC Truck Trips to and from the Port by Analysis Period[67]

Scenario	AM Peak Hour		PM Peak Hour		Daily	
	In	Out	In	Out	In	Out
2012 Plus Build-out	18	10	14	17	121	121
2022 Plus Phase 1	19	11	15	18	127	127
2035 Plus Build-out	57	33	46	53	393	393

Determination of Whether Impacts are Significant

The potential for traffic impacts along the SR-60 and SR-91 corridors was assessed by manually adding the forecasts for WLC trucks to and from the port to the No-Project condition from the SCAG model. Because the ports and the freeways leading to them are in Los Angeles County, the threshold of

[67] The 2022 Plus Phase 1 scenario has only half as much warehouse space as the 2012 Plus Full Build-Out scenario but, because the percent of space devoted to port uses nearly doubles in the 2012-to-2022 period, the truck trips to the port (once rounded to whole numbers) are nearly the same.

significance for the analysis was taken from the Los Angeles County Congestion Management Program (CMP)[68]. The CMP states that a significant impact would be deemed to occur if the project increased demand on a highway by at least 2% causing LOS "F" or, if the highway facility already operates at LOS "F", then a significant impact would be deemed to occur if the project increases traffic demand by 2% or more of capacity.

Table 90 through Table 101[69] show the results of this analysis for each section of the SR-60 and SR-91 corridors and in each direction, for both the AM and PM peak periods, for three of the four Plus Build-out scenarios studied in other sections of the report[70]. As shown in the tables the addition of the WLC traffic, which ranges from 0.05% to 1.17% of non-project traffic, would not cause a significant impact on any segment of these freeways.

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[68] Note that Caltrans has not established thresholds of significance for freeway impacts, and neither have the CMPs for Orange, San Bernardino, or Riverside Counties.

[69] The determination of whether the 2% threshold was reached was done in Passenger Car Equivalents. Please see Chapter 2 Section A for an explanation of the PCE factors used.

[70] For freeway traffic the Existing Plus Phase 1 (Only) scenario is identical to the 2012 Plus Full Build-Out scenario but with only half as much warehouse space and so only half as many freeway truck trips. If the 2012 Plus Full Build-Out scenario does not generate any significant impacts then the Phase 1 (only) would necessarily not generate any significant impacts, either.

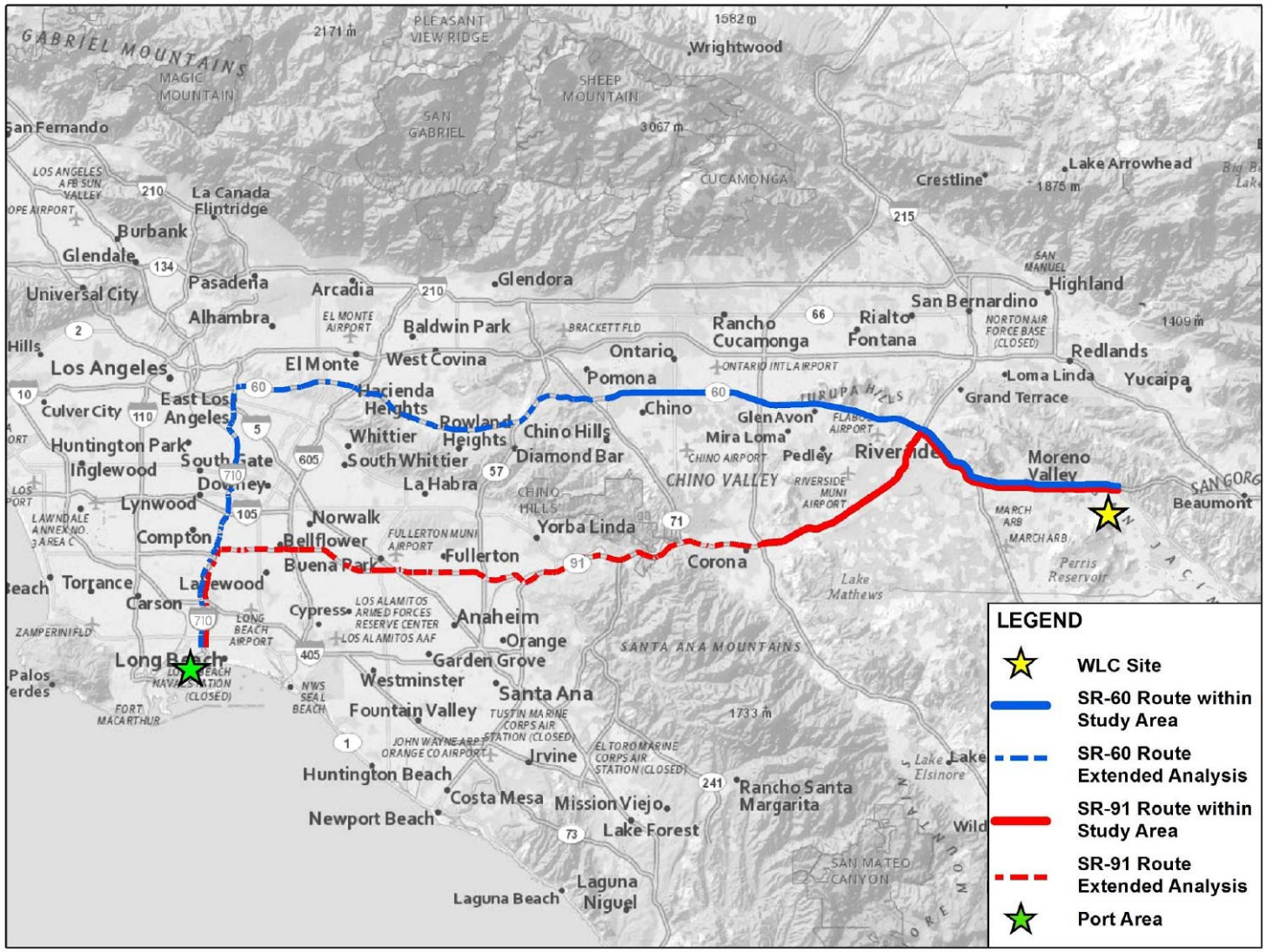

Figure 56: Routes to the Port Outside of the Study Area

Table 90: Volumes Along Routes to Port, Existing, Eastbound, AM Peak Hour

Route		Segment Descripton	2012 No Project (Existing Conditions)					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	5,562	214	5,776	5,883	118	9	14	0.23%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	5,700	220	5,920	6,030	121	9	14	0.22%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	9,367	276	9,643	9,781	196	9	14	0.14%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	9,238	272	9,510	9,646	193	9	14	0.14%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	7,496	219	7,715	7,825	156	9	14	0.17%	No
		Lemon Ave to Fairway Dr	7,496	219	7,715	7,825	156	9	14	0.17%	No
		Fairway Dr to Nogales St	6,337	183	6,520	6,612	132	9	14	0.20%	No
		Nogales St to Fullerton Rd	7,012	204	7,216	7,318	146	9	14	0.18%	No
		Fullerton Rd to S. Azusa Ave	7,727	225	7,952	8,064	161	9	14	0.17%	No
		S. Azusa Ave to S. Hacienda Blvd	9,648	284	9,932	10,074	201	9	14	0.13%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	6,670	193	6,863	6,960	139	9	14	0.19%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	5,974	172	6,146	6,232	125	9	14	0.22%	No
		Crossroads Pkwy N to I-605	8,031	236	8,267	8,385	168	9	14	0.16%	No
		I-605 to Peck Rd	6,775	210	6,985	7,090	142	9	14	0.19%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	6,473	200	6,673	6,773	135	9	14	0.20%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	6,108	189	6,297	6,392	128	9	14	0.21%	No
		Rosemead Blvd to San Gabriel Blvd	7,384	228	7,612	7,726	155	9	14	0.17%	No
		San Gabriel Blvd to Paramount Blvd	5,972	185	6,157	6,250	125	9	14	0.22%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	5,779	179	5,958	6,048	121	9	14	0.22%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,726	208	6,934	7,038	141	9	14	0.19%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	5,425	168	5,593	5,677	114	9	14	0.24%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	5,569	172	5,741	5,827	117	9	14	0.23%	No
		S Atlantic Blvd to I-710	5,537	171	5,708	5,794	116	9	14	0.23%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	6,437	199	6,636	6,736	135	9	14	0.20%	No
		I-5 to E Washington Blvd	6,949	290	7,239	7,384	148	9	14	0.18%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	9,109	380	9,489	9,679	194	9	14	0.14%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	5,704	238	5,942	6,061	121	9	14	0.22%	No
		Florence Ave to Firestone Blvd	6,036	318	6,354	6,513	130	9	14	0.21%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	9,024	376	9,400	9,588	192	9	14	0.14%	No
		Imperial Hwy/Abott Rd to I-105	8,302	346	8,648	8,821	176	9	14	0.15%	No
		I-105 to E Alondra Blvd	6,363	265	6,628	6,761	135	9	14	0.20%	No
		E Alondra Blvd to SR 91	6,238	260	6,498	6,628	133	9	14	0.20%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	6,578	331	6,909	7,075	141	9	14	0.19%	No
		Main St/Grand Blvd to Lincoln Ave	7,367	372	7,739	7,925	159	9	14	0.17%	No
		N Lincoln Ave to S Maple St/W 6th St	5,985	299	6,284	6,434	129	9	14	0.21%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	6,222	312	6,534	6,690	134	9	14	0.20%	No
		Serfas Club Dr/Auto Center Dr to SR-71	6,129	309	6,438	6,593	132	9	14	0.20%	No
		SR-71 to Green River Rd	6,686	243	6,929	7,051	141	9	14	0.19%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	7,275	267	7,542	7,676	154	9	14	0.18%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	6,891	251	7,142	7,268	145	9	14	0.19%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,273	308	8,581	8,735	175	9	14	0.15%	No
		SR-90/Imperial Hwy to N Lakeview Ave	7,218	264	7,482	7,614	152	9	14	0.18%	No
		N Lakeview Ave to SR-55	8,686	325	9,011	9,174	183	9	14	0.15%	No
		SR-55 to Tustin Ave	7,185	279	7,464	7,604	152	9	14	0.18%	No
		Tustin Ave to Kraemer Blvd	6,078	233	6,311	6,428	129	9	14	0.21%	No
		Kraemer Blvd to SR-57	6,319	243	6,562	6,684	134	9	14	0.20%	No
		SR-57 to State College Blvd	7,614	291	7,905	8,051	161	9	14	0.17%	No
		State College Blvd to Raymond Ave/East St	8,360	303	8,663	8,815	176	9	14	0.15%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,623	271	7,894	8,030	161	9	14	0.17%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	8,973	325	9,298	9,461	189	9	14	0.14%	No
		Euclid St to Brookhurst Rd	9,498	350	9,848	10,023	200	9	14	0.13%	No
		Brookhurst Rd to I-5	7,217	262	7,479	7,610	152	9	14	0.18%	No
		I-5 to Beach Blvd	9,144	331	9,475	9,641	193	9	14	0.14%	No
		Beach Blvd to Knott Ave	9,366	343	9,709	9,881	198	9	14	0.14%	No
		Knott Ave to Valley View St	9,492	352	9,844	10,020	200	9	14	0.13%	No
		Valley View St to Carmenita Rd	7,557	273	7,830	7,967	159	9	14	0.17%	No
		Carmenita Rd to Artesia Blvd	19,417	242	19,659	19,780	396	9	14	0.07%	No
		Artesia Blvd to Bloomfield Ave	7,254	260	7,514	7,644	153	9	14	0.18%	No
		Bloomfield Ave to Norwalk Blvd	8,850	321	9,171	9,332	187	9	14	0.14%	No
		Norwalk Blvd to Pioneer Blvd	8,926	331	9,257	9,423	188	9	14	0.14%	No
		Pioneer Blvd to SR-605	9,215	343	9,558	9,730	195	9	14	0.14%	No
		SR-605 to Bellflower Blvd	8,917	337	9,254	9,423	188	9	14	0.14%	No
		Bellflower Blvd to Clark Ave	9,079	343	9,422	9,594	192	9	14	0.14%	No
		Clark Ave to Lakewood Blvd	8,604	323	8,927	9,089	182	9	14	0.15%	No
		Lakewood Blvd to Downey Ave	8,911	324	9,235	9,397	188	9	14	0.14%	No
		Downey Ave to Paramount Blvd	8,443	304	8,747	8,899	178	9	14	0.15%	No
		Paramount Blvd to Cherry Ave	8,238	308	8,546	8,700	174	9	14	0.16%	No
		Cherry Ave to I-710	8,433	304	8,737	8,889	178	9	14	0.15%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	5,458	411	5,869	6,075	121	18	27	0.44%	No
		Long Beach Blvd to W Del Amo Blvd	3,208	242	3,450	3,571	71	18	27	0.76%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	3,182	239	3,421	3,541	71	18	27	0.76%	No
		I-405/W Wardlow Rd to W Willow St	5,313	400	5,713	5,913	118	18	27	0.46%	No
		W Willow St to Pacific Coast Hwy	4,928	371	5,299	5,485	110	18	27	0.49%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,119	310	4,429	4,584	92	18	27	0.59%	No

Table 91: Volumes Along Routes to Port, Existing, Westbound, AM Peak Hour

Route		Segment Descripton	2012 No Project (Existing Conditions)					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	6,368	214	6,582	6,689	134	5	8	0.1%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	6,631	223	6,854	6,965	139	5	8	0.1%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	9,876	266	10,142	10,275	205	5	8	0.1%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	9,849	265	10,114	10,246	205	5	8	0.1%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	6,211	153	6,364	6,440	129	5	8	0.1%	No
		Lemon Ave to Fairway Dr	6,211	153	6,364	6,440	129	5	8	0.1%	No
		Fairway Dr to Nogales St	6,480	161	6,641	6,721	134	5	8	0.1%	No
		Nogales St to Fullerton Rd	6,972	176	7,148	7,236	145	5	8	0.1%	No
		Fullerton Rd to S. Azusa Ave	7,230	184	7,414	7,506	150	5	8	0.1%	No
		S. Azusa Ave to S. Hacienda Blvd	10,095	273	10,368	10,504	210	5	8	0.1%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	10,401	282	10,683	10,824	216	5	8	0.1%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	12,680	353	13,033	13,210	264	5	8	0.06%	No
		Crossroads Pkwy N to I-605	11,594	319	11,913	12,073	241	5	8	0.06%	No
		I-605 to Peck Rd	11,397	353	11,750	11,927	239	5	8	0.06%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	11,397	353	11,750	11,927	239	5	8	0.06%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	11,397	353	11,750	11,927	239	5	8	0.06%	No
		Rosemead Blvd to San Gabriel Blvd	11,397	353	11,750	11,927	239	5	8	0.06%	No
		San Gabriel Blvd to Paramount Blvd	7,962	246	8,208	8,331	167	5	8	0.09%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	10,467	324	10,791	10,953	219	5	8	0.07%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,095	189	6,284	6,379	128	5	8	0.12%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Fi	8,745	270	9,015	9,150	183	5	8	0.08%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	9,192	284	9,476	9,618	192	5	8	0.08%	No
		S Atlantic Blvd to I-710	7,960	246	8,206	8,329	167	5	8	0.09%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	8,110	251	8,361	8,487	170	5	8	0.09%	No
		I-5 to E Washington Blvd	8,530	355	8,885	9,063	181	5	8	0.08%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	6,806	284	7,090	7,232	145	5	8	0.10%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	7,430	310	7,740	7,895	158	5	8	0.09%	No
		Florence Ave to Firestone Blvd	6,711	353	7,064	7,241	145	5	8	0.10%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	7,469	311	7,780	7,936	159	5	8	0.09%	No
		Imperial Hwy/Abott Rd to I-105	7,389	308	7,697	7,851	157	5	8	0.10%	No
		I-105 to E Alondra Blvd	9,614	401	10,015	10,216	204	5	8	0.07%	No
		E Alondra Blvd to SR 91	9,198	383	9,581	9,773	195	5	8	0.08%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	9,385	354	9,739	9,916	198	5	8	0.08%	No
		Main St/Grand Blvd to Lincoln Ave	10,157	376	10,533	10,721	214	5	8	0.07%	No
		N Lincoln Ave to S Maple St/W 6th St	10,194	376	10,570	10,758	215	5	8	0.07%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	8,717	308	9,025	9,179	184	5	8	0.08%	No
		Serfas Club Dr/Auto Center Dr to SR-71	8,775	311	9,086	9,242	185	5	8	0.08%	No
		SR-71 to Green River Rd	8,682	306	8,988	9,141	183	5	8	0.08%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	9,317	295	9,612	9,760	195	5	8	0.08%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	8,859	276	9,135	9,273	185	5	8	0.08%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,567	264	8,831	8,963	179	5	8	0.08%	No
		SR-90/Imperial Hwy to N Lakeview Ave	13,515	470	13,985	14,220	284	5	8	0.05%	No
		N Lakeview Ave to SR-55	13,515	470	13,985	14,220	284	5	8	0.05%	No
		SR-55 to Tustin Ave	7,622	282	7,904	8,045	161	5	8	0.09%	No
		Tustin Ave to Kraemer Blvd	7,997	289	8,286	8,431	169	5	8	0.09%	No
		Kraemer Blvd to SR-57	7,722	281	8,003	8,144	163	5	8	0.09%	No
		SR-57 to State College Blvd	7,400	264	7,664	7,796	156	5	8	0.10%	No
		State College Blvd to Raymond Ave/East St	7,882	268	8,150	8,284	166	5	8	0.09%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,341	246	7,587	7,710	154	5	8	0.10%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	7,990	273	8,263	8,400	168	5	8	0.09%	No
		Euclid St to Brookhurst Rd	8,362	290	8,652	8,797	176	5	8	0.09%	No
		Brookhurst Rd to I-5	8,137	280	8,417	8,557	171	5	8	0.09%	No
		I-5 to Beach Blvd	9,136	322	9,458	9,619	192	5	8	0.08%	No
		Beach Blvd to Knott Ave	10,433	376	10,809	10,997	220	5	8	0.07%	No
		Knott Ave to Valley View St	10,446	376	10,822	11,010	220	5	8	0.07%	No
		Valley View St to Carmenita Rd	10,464	376	10,840	11,028	221	5	8	0.07%	No
		Carmenita Rd to Artesia Blvd	10,171	376	10,547	10,735	215	5	8	0.07%	No
		Artesia Blvd to Bloomfield Ave	10,418	376	10,794	10,982	220	5	8	0.07%	No
		Bloomfield Ave to Norwalk Blvd	10,440	376	10,816	11,004	220	5	8	0.07%	No
		Norwalk Blvd to Pioneer Blvd	10,435	376	10,811	10,999	220	5	8	0.07%	No
		Pioneer Blvd to SR-605	10,217	376	10,593	10,781	216	5	8	0.07%	No
		SR-605 to Bellflower Blvd	11,389	414	11,803	12,010	240	5	8	0.06%	No
		Bellflower Blvd to Clark Ave	10,477	376	10,853	11,041	221	5	8	0.07%	No
		Clark Ave to Lakewood Blvd	10,502	376	10,878	11,066	221	5	8	0.07%	No
		Lakewood Blvd to Downey Ave	10,171	376	10,547	10,735	215	5	8	0.07%	No
		Downey Ave to Paramount Blvd	9,150	320	9,470	9,630	193	5	8	0.08%	No
		Paramount Blvd to Cherry Ave	12,757	470	13,227	13,462	269	5	8	0.06%	No
		Cherry Ave to I-710	11,510	417	11,927	12,136	243	5	8	0.06%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	7,097	534	7,631	7,898	158	10	15	0.19%	No
		Long Beach Blvd to W Del Amo Blvd	6,597	497	7,094	7,343	147	10	15	0.20%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	6,362	479	6,841	7,081	142	10	15	0.21%	No
		I-405/W Wardlow Rd to W Willow St	5,500	414	5,914	6,121	122	10	15	0.25%	No
		W Willow St to Pacific Coast Hwy	5,048	380	5,428	5,618	112	10	15	0.27%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,803	362	5,165	5,346	107	10	15	0.28%	No

Table 92: Volumes Along Routes to Port, Existing, Eastbound, PM Peak Hour

Route		Segment Descripton	2012 No Project (Existing Conditions)					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	6,423	219	6,642	6,752	135	7	11	0.16%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	7,289	255	7,544	7,672	153	7	11	0.14%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	12,288	344	12,632	12,804	256	7	11	0.08%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	12,124	339	12,463	12,633	253	7	11	0.08%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	10,285	282	10,567	10,708	214	7	11	0.10%	No
		Lemon Ave to Fairway Dr	10,285	282	10,567	10,708	214	7	11	0.10%	No
		Fairway Dr to Nogales St	8,245	219	8,464	8,574	171	7	11	0.12%	No
		Nogales St to Fullerton Rd	9,423	255	9,678	9,806	196	7	11	0.11%	No
		Fullerton Rd to S. Azusa Ave	10,294	282	10,576	10,717	214	7	11	0.10%	No
		S. Azusa Ave to S. Hacienda Blvd	12,561	353	12,914	13,090	262	7	11	0.08%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	8,432	224	8,656	8,768	175	7	11	0.12%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	8,058	214	8,272	8,379	168	7	11	0.13%	No
		Crossroads Pkwy N to I-605	12,320	346	12,666	12,839	257	7	11	0.08%	No
		I-605 to Peck Rd	9,300	288	9,588	9,732	195	7	11	0.11%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	8,184	253	8,437	8,564	171	7	11	0.12%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,893	244	8,137	8,259	165	7	11	0.13%	No
		Rosemead Blvd to San Gabriel Blvd	9,118	282	9,400	9,541	191	7	11	0.11%	No
		San Gabriel Blvd to Paramount Blvd	9,118	282	9,400	9,541	191	7	11	0.11%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	11,397	353	11,750	11,927	239	7	11	0.09%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,757	209	6,966	7,071	141	7	11	0.15%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	11,397	353	11,750	11,927	239	7	11	0.09%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	13,677	423	14,100	14,312	286	7	11	0.07%	No
		S Atlantic Blvd to I-710	11,397	353	11,750	11,927	239	7	11	0.09%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	7,371	228	7,599	7,713	154	7	11	0.14%	No
		I-5 to E Washington Blvd	6,465	269	6,734	6,869	137	7	11	0.15%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	7,269	303	7,572	7,724	154	7	11	0.14%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	4,993	208	5,201	5,305	106	7	11	0.20%	No
		Florence Ave to Firestone Blvd	6,065	319	6,384	6,544	131	7	11	0.16%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	8,448	352	8,800	8,976	180	7	11	0.12%	No
		Imperial Hwy/Abott Rd to I-105	7,386	308	7,694	7,848	157	7	11	0.13%	No
		I-105 to E Alondra Blvd	7,448	310	7,758	7,913	158	7	11	0.13%	No
		E Alondra Blvd to SR 91	7,916	330	8,246	8,411	168	7	11	0.12%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	10,058	470	10,528	10,763	215	7	11	0.10%	No
		Main St/Grand Blvd to Lincoln Ave	10,427	470	10,897	11,132	223	7	11	0.09%	No
		N Lincoln Ave to S Maple St/W 6th St	10,427	470	10,897	11,132	223	7	11	0.09%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	10,402	470	10,872	11,107	222	7	11	0.09%	No
		Serfas Club Dr/Auto Center Dr to SR-71	11,031	517	11,548	11,807	236	7	11	0.09%	No
		SR-71 to Green River Rd	10,461	368	10,829	11,013	220	7	11	0.10%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	11,612	398	12,010	12,209	244	7	11	0.09%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	11,980	414	12,394	12,601	252	7	11	0.08%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	10,782	364	11,146	11,328	227	7	11	0.09%	No
		SR-90/Imperial Hwy to N Lakeview Ave	9,490	310	9,800	9,955	199	7	11	0.11%	No
		N Lakeview Ave to SR-55	10,423	349	10,772	10,947	219	7	11	0.10%	No
		SR-55 to Tustin Ave	9,102	339	9,441	9,611	192	7	11	0.11%	No
		Tustin Ave to Kraemer Blvd	7,729	282	8,011	8,152	163	7	11	0.13%	No
		Kraemer Blvd to SR-57	8,620	320	8,940	9,100	182	7	11	0.12%	No
		SR-57 to State College Blvd	8,010	297	8,307	8,456	169	7	11	0.12%	No
		State College Blvd to Raymond Ave/East St	8,444	297	8,741	8,890	178	7	11	0.12%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,293	248	7,541	7,665	153	7	11	0.14%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	8,990	319	9,309	9,469	189	7	11	0.11%	No
		Euclid St to Brookhurst Rd	10,324	376	10,700	10,888	218	7	11	0.10%	No
		Brookhurst Rd to I-5	6,751	250	7,001	7,126	143	7	11	0.15%	No
		I-5 to Beach Blvd	8,746	304	9,050	9,202	184	7	11	0.11%	No
		Beach Blvd to Knott Ave	8,693	302	8,995	9,146	183	7	11	0.11%	No
		Knott Ave to Valley View St	10,438	376	10,814	11,002	220	7	11	0.10%	No
		Valley View St to Carmenita Rd	10,383	376	10,759	10,947	219	7	11	0.10%	No
		Carmenita Rd to Artesia Blvd	7,294	243	7,537	7,659	153	7	11	0.14%	No
		Artesia Blvd to Bloomfield Ave	7,427	249	7,676	7,801	156	7	11	0.13%	No
		Bloomfield Ave to Norwalk Blvd	8,477	302	8,779	8,930	179	7	11	0.12%	No
		Norwalk Blvd to Pioneer Blvd	8,977	317	9,294	9,453	189	7	11	0.11%	No
		Pioneer Blvd to SR-605	9,278	332	9,610	9,776	196	7	11	0.11%	No
		SR-605 to Bellflower Blvd	11,235	414	11,649	11,856	237	7	11	0.09%	No
		Bellflower Blvd to Clark Ave	9,063	318	9,381	9,540	191	7	11	0.11%	No
		Clark Ave to Lakewood Blvd	11,230	408	11,638	11,842	237	7	11	0.09%	No
		Lakewood Blvd to Downey Ave	9,620	349	9,969	10,144	203	7	11	0.10%	No
		Downey Ave to Paramount Blvd	10,167	372	10,539	10,725	215	7	11	0.10%	No
		Paramount Blvd to Cherry Ave	10,513	376	10,889	11,077	222	7	11	0.09%	No
		Cherry Ave to I-710	11,158	414	11,572	11,779	236	7	11	0.09%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	5,646	425	6,071	6,284	126	14	21	0.33%	No
		Long Beach Blvd to W Del Amo Blvd	3,772	284	4,056	4,198	84	14	21	0.50%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	3,740	282	4,022	4,163	83	14	21	0.50%	No
		I-405/W Wardlow Rd to W Willow St	6,556	494	7,050	7,297	146	14	21	0.29%	No
		W Willow St to Pacific Coast Hwy	6,248	470	6,718	6,953	139	14	21	0.30%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,201	316	4,517	4,675	94	14	21	0.45%	No

Table 93: Volumes Along Routes to Port, Existing, Westbound, PM Peak Hour

Route		Segment Descripton	2012 No Project (Existing Conditions)					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	6,587	219	6,806	6,915	138	9	13	0.18%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	6,442	229	6,671	6,785	136	9	13	0.19%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	10,010	281	10,291	10,431	209	9	13	0.12%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	9,981	280	10,261	10,401	208	9	13	0.12%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	6,356	168	6,524	6,608	132	9	13	0.19%	No
		Lemon Ave to Fairway Dr	6,356	168	6,524	6,608	132	9	13	0.19%	No
		Fairway Dr to Nogales St	7,042	189	7,231	7,325	147	9	13	0.17%	No
		Nogales St to Fullerton Rd	7,102	191	7,293	7,388	148	9	13	0.17%	No
		Fullerton Rd to S. Azusa Ave	6,939	193	7,132	7,229	145	9	13	0.18%	No
		S. Azusa Ave to S. Hacienda Blvd	7,606	204	7,810	7,912	158	9	13	0.16%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	9,717	275	9,992	10,129	203	9	13	0.13%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	7,326	201	7,527	7,627	153	9	13	0.17%	No
		Crossroads Pkwy N to I-605	7,766	215	7,981	8,088	162	9	13	0.16%	No
		I-605 to Peck Rd	7,311	226	7,537	7,650	153	9	13	0.17%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	7,690	238	7,928	8,047	161	9	13	0.16%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,360	228	7,588	7,702	154	9	13	0.17%	No
		Rosemead Blvd to San Gabriel Blvd	6,793	210	7,003	7,108	142	9	13	0.18%	No
		San Gabriel Blvd to Paramount Blvd	5,661	175	5,836	5,924	118	9	13	0.22%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	5,626	174	5,800	5,887	118	9	13	0.22%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,851	212	7,063	7,169	143	9	13	0.18%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	6,352	196	6,548	6,646	133	9	13	0.19%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	6,454	200	6,654	6,754	135	9	13	0.19%	No
		S Atlantic Blvd to I-710	5,840	181	6,021	6,112	122	9	13	0.21%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	9,118	282	9,400	9,541	191	9	13	0.13%	No
		I-5 to E Washington Blvd	11,280	470	11,750	11,985	240	9	13	0.11%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	9,024	376	9,400	9,588	192	9	13	0.13%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	8,397	350	8,747	8,922	178	9	13	0.14%	No
		Florence Ave to Firestone Blvd	6,513	343	6,856	7,028	141	9	13	0.18%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	7,152	298	7,450	7,599	152	9	13	0.17%	No
		Imperial Hwy/Abott Rd to I-105	4,576	191	4,767	4,863	97	9	13	0.26%	No
		I-105 to E Alondra Blvd	7,596	317	7,913	8,072	161	9	13	0.16%	No
		E Alondra Blvd to SR 91	7,551	315	7,866	8,024	160	9	13	0.16%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	6,537	244	6,781	6,903	138	9	13	0.18%	No
		Main St/Grand Blvd to Lincoln Ave	6,698	245	6,943	7,066	141	9	13	0.18%	No
		N Lincoln Ave to S Maple St/W 6th St	6,737	247	6,984	7,108	142	9	13	0.18%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	8,061	300	8,361	8,511	170	9	13	0.15%	No
		Serfas Club Dr/Auto Center Dr to SR-71	6,980	262	7,242	7,373	147	9	13	0.17%	No
		SR-71 to Green River Rd	7,449	278	7,727	7,866	157	9	13	0.16%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	7,106	266	7,372	7,505	150	9	13	0.17%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	6,735	251	6,986	7,112	142	9	13	0.18%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	6,552	243	6,795	6,917	138	9	13	0.18%	No
		SR-90/Imperial Hwy to N Lakeview Ave	7,086	265	7,351	7,484	150	9	13	0.17%	No
		N Lakeview Ave to SR-55	7,515	283	7,798	7,940	159	9	13	0.16%	No
		SR-55 to Tustin Ave	7,495	282	7,777	7,918	158	9	13	0.16%	No
		Tustin Ave to Kraemer Blvd	7,155	246	7,401	7,524	150	9	13	0.17%	No
		Kraemer Blvd to SR-57	8,239	305	8,544	8,697	174	9	13	0.15%	No
		SR-57 to State College Blvd	7,831	282	8,113	8,254	165	9	13	0.15%	No
		State College Blvd to Raymond Ave/East St	9,090	320	9,410	9,570	191	9	13	0.13%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,957	277	8,234	8,373	167	9	13	0.15%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	8,947	320	9,267	9,427	189	9	13	0.14%	No
		Euclid St to Brookhurst Rd	8,343	297	8,640	8,789	176	9	13	0.15%	No
		Brookhurst Rd to I-5	8,347	282	8,629	8,770	175	9	13	0.15%	No
		I-5 to Beach Blvd	8,848	314	9,162	9,319	186	9	13	0.14%	No
		Beach Blvd to Knott Ave	8,531	306	8,837	8,990	180	9	13	0.14%	No
		Knott Ave to Valley View St	8,603	308	8,911	9,065	181	9	13	0.14%	No
		Valley View St to Carmenita Rd	10,287	376	10,663	10,851	217	9	13	0.12%	No
		Carmenita Rd to Artesia Blvd	10,256	376	10,632	10,820	216	9	13	0.12%	No
		Artesia Blvd to Bloomfield Ave	10,254	376	10,630	10,818	216	9	13	0.12%	No
		Bloomfield Ave to Norwalk Blvd	10,275	376	10,651	10,839	217	9	13	0.12%	No
		Norwalk Blvd to Pioneer Blvd	10,254	376	10,630	10,818	216	9	13	0.12%	No
		Pioneer Blvd to SR-605	8,901	328	9,229	9,393	188	9	13	0.14%	No
		SR-605 to Bellflower Blvd	8,291	317	8,608	8,767	175	9	13	0.15%	No
		Bellflower Blvd to Clark Ave	8,286	317	8,603	8,762	175	9	13	0.15%	No
		Clark Ave to Lakewood Blvd	7,775	295	8,070	8,218	164	9	13	0.16%	No
		Lakewood Blvd to Downey Ave	8,654	309	8,963	9,118	182	9	13	0.14%	No
		Downey Ave to Paramount Blvd	8,189	313	8,502	8,659	173	9	13	0.15%	No
		Paramount Blvd to Cherry Ave	8,384	321	8,705	8,866	177	9	13	0.14%	No
		Cherry Ave to I-710	7,967	308	8,275	8,429	169	9	13	0.15%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	6,105	460	6,565	6,795	136	17	26	0.38%	No
		Long Beach Blvd to W Del Amo Blvd	5,662	426	6,088	6,301	126	17	26	0.40%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	5,671	427	6,098	6,312	126	17	26	0.40%	No
		I-405/W Wardlow Rd to W Willow St	5,142	387	5,529	5,723	114	17	26	0.45%	No
		W Willow St to Pacific Coast Hwy	4,740	357	5,097	5,276	106	17	26	0.48%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,643	350	4,993	5,168	103	17	26	0.49%	No

Table 94: Volumes Along Routes to Port, 2022, Eastbound, AM Peak Hour

Route		Segment Descripton	2022 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	6,866	256	6,471	6,599	132	10	14	0.22%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	6,918	257	6,577	6,706	134	10	14	0.21%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	10,751	331	10,537	10,703	214	10	14	0.13%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	10,510	327	10,292	10,456	209	10	14	0.14%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	8,478	246	8,094	8,217	164	10	14	0.17%	No
		Lemon Ave to Fairway Dr	8,478	246	8,094	8,217	164	10	14	0.17%	No
		Fairway Dr to Nogales St	7,310	210	6,890	6,995	140	10	14	0.20%	No
		Nogales St to Fullerton Rd	8,026	230	7,683	7,798	156	10	14	0.18%	No
		Fullerton Rd to S. Azusa Ave	8,713	249	8,461	8,586	172	10	14	0.17%	No
		S. Azusa Ave to S. Hacienda Blvd	10,564	305	10,288	10,441	209	10	14	0.14%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	7,547	213	7,159	7,266	145	10	14	0.20%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	6,901	192	6,590	6,686	134	10	14	0.21%	No
		Crossroads Pkwy N to I-605	9,006	256	8,759	8,887	178	10	14	0.16%	No
		I-605 to Peck Rd	7,642	248	7,890	8,014	160	10	14	0.18%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	7,281	236	7,517	7,635	153	10	14	0.19%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	6,880	225	7,105	7,218	144	10	14	0.20%	No
		Rosemead Blvd to San Gabriel Blvd	8,012	256	8,268	8,396	168	10	14	0.17%	No
		San Gabriel Blvd to Paramount Blvd	6,539	213	6,752	6,859	137	10	14	0.21%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	6,337	207	6,544	6,648	133	10	14	0.21%	No
		E Markland Dr to W Pomona Blvd E of Findlay	7,248	236	7,484	7,602	152	10	14	0.19%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	5,981	195	6,176	6,274	125	10	14	0.23%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	6,138	198	6,336	6,435	129	10	14	0.22%	No
		S Atlantic Blvd to I-710	6,073	196	6,269	6,367	127	10	14	0.22%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	6,597	218	6,815	6,924	138	10	14	0.21%	No
		I-5 to E Washington Blvd	7,139	302	7,441	7,592	152	10	14	0.19%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	9,247	390	9,637	9,832	197	10	14	0.14%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	5,824	246	6,070	6,193	124	10	14	0.23%	No
		Florence Ave to Firestone Blvd	6,179	326	6,505	6,668	133	10	14	0.21%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	9,183	384	9,567	9,759	195	10	14	0.15%	No
		Imperial Hwy/Abott Rd to I-105	8,500	354	8,854	9,031	181	10	14	0.16%	No
		I-105 to E Alondra Blvd	6,546	288	6,834	6,978	140	10	14	0.20%	No
		E Alondra Blvd to SR 91	6,423	284	6,707	6,849	137	10	14	0.21%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	8,942	416	7,264	7,472	149	10	14	0.19%	No
		Main St/Grand Blvd to Lincoln Ave	10,140	478	8,502	8,741	175	10	14	0.16%	No
		N Lincoln Ave to S Maple St/W 6th St	8,734	406	7,024	7,227	145	10	14	0.20%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	8,863	418	7,167	7,376	148	10	14	0.19%	No
		Serfas Club Dr/Auto Center Dr to SR-71	8,864	417	6,937	7,146	143	10	14	0.20%	No
		SR-71 to Green River Rd	9,141	349	6,294	6,469	129	10	14	0.22%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	9,646	360	8,546	8,726	175	10	14	0.16%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	8,983	333	7,856	8,023	160	10	14	0.18%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	10,008	382	8,930	9,121	182	10	14	0.16%	No
		SR-90/Imperial Hwy to N Lakeview Ave	8,845	318	7,703	7,862	157	10	14	0.18%	No
		N Lakeview Ave to SR-55	10,331	380	9,251	9,441	189	10	14	0.15%	No
		SR-55 to Tustin Ave	7,805	289	7,574	7,719	154	10	14	0.18%	No
		Tustin Ave to Kraemer Blvd	6,752	244	6,434	6,556	131	10	14	0.22%	No
		Kraemer Blvd to SR-57	7,046	253	6,736	6,863	137	10	14	0.21%	No
		SR-57 to State College Blvd	8,354	298	7,821	7,970	159	10	14	0.18%	No
		State College Blvd to Raymond Ave/East St	9,117	311	8,146	8,302	166	10	14	0.17%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	8,365	279	7,321	7,461	149	10	14	0.19%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	9,676	331	8,642	8,808	176	10	14	0.16%	No
		Euclid St to Brookhurst Rd	10,132	356	9,226	9,404	188	10	14	0.15%	No
		Brookhurst Rd to I-5	7,871	267	7,047	7,181	144	10	14	0.20%	No
		I-5 to Beach Blvd	10,178	352	9,061	9,237	185	10	14	0.15%	No
		Beach Blvd to Knott Ave	10,362	361	9,314	9,495	190	10	14	0.15%	No
		Knott Ave to Valley View St	10,458	366	9,505	9,688	194	10	14	0.15%	No
		Valley View St to Carmenita Rd	8,537	287	7,555	7,699	154	10	14	0.19%	No
		Carmenita Rd to Artesia Blvd	20,417	257	6,787	6,916	138	10	14	0.21%	No
		Artesia Blvd to Bloomfield Ave	8,188	271	7,186	7,322	146	10	14	0.19%	No
		Bloomfield Ave to Norwalk Blvd	9,779	332	8,729	8,895	178	10	14	0.16%	No
		Norwalk Blvd to Pioneer Blvd	9,792	329	8,905	9,070	181	10	14	0.16%	No
		Pioneer Blvd to SR-605	10,042	339	9,165	9,335	187	10	14	0.15%	No
		SR-605 to Bellflower Blvd	9,830	343	9,102	9,274	185	10	14	0.15%	No
		Bellflower Blvd to Clark Ave	9,941	349	9,206	9,381	188	10	14	0.15%	No
		Clark Ave to Lakewood Blvd	9,466	329	8,704	8,869	177	10	14	0.16%	No
		Lakewood Blvd to Downey Ave	9,758	335	8,711	8,879	178	10	14	0.16%	No
		Downey Ave to Paramount Blvd	9,259	313	8,190	8,347	167	10	14	0.17%	No
		Paramount Blvd to Cherry Ave	9,024	315	8,266	8,424	168	10	14	0.17%	No
		Cherry Ave to I-710	9,201	309	8,160	8,315	166	10	14	0.17%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	5,653	425	6,078	6,291	126	19	29	0.45%	No
		Long Beach Blvd to W Del Amo Blvd	3,453	255	3,708	3,836	77	19	29	0.74%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	3,401	251	3,652	3,778	76	19	29	0.75%	No
		I-405/W Wardlow Rd to W Willow St	5,464	405	5,869	6,072	121	19	29	0.47%	No
		W Willow St to Pacific Coast Hwy	5,088	376	5,464	5,652	113	19	29	0.50%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,277	315	4,592	4,750	95	19	29	0.60%	No

Table 95: Volumes Along Routes to Port, 2022, Westbound, AM Peak Hour

Route		Segment Descripton	2022 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	6,368	214	5,349	5,456	109	6	8	0.15%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	6,631	223	5,587	5,699	114	6	8	0.14%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	9,882	321	8,919	9,080	182	6	8	0.09%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	9,849	264	8,846	8,978	180	6	8	0.09%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	6,211	153	5,097	5,174	103	6	8	0.16%	No
		Lemon Ave to Fairway Dr	6,211	153	5,097	5,174	103	6	8	0.16%	No
		Fairway Dr to Nogales St	6,480	162	5,375	5,456	109	6	8	0.15%	No
		Nogales St to Fullerton Rd	6,972	175	5,880	5,968	119	6	8	0.14%	No
		Fullerton Rd to S. Azusa Ave	7,230	185	6,146	6,239	125	6	8	0.13%	No
		S. Azusa Ave to S. Hacienda Blvd	10,095	274	9,103	9,240	185	6	8	0.09%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	10,401	282	9,400	9,541	191	6	8	0.09%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	12,680	352	11,749	11,925	239	6	8	0.07%	No
		Crossroads Pkwy N to I-605	11,594	319	10,630	10,790	216	6	8	0.08%	No
		I-605 to Peck Rd	11,397	353	11,750	11,927	239	6	8	0.07%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	11,397	353	11,750	11,927	239	6	8	0.07%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	11,397	353	11,750	11,927	239	6	8	0.07%	No
		Rosemead Blvd to San Gabriel Blvd	11,397	354	11,751	11,928	239	6	8	0.07%	No
		San Gabriel Blvd to Paramount Blvd	7,962	246	8,208	8,331	167	6	8	0.10%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	10,433	365	10,798	10,981	220	6	8	0.08%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,095	189	6,284	6,379	128	6	8	0.13%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Fi	8,745	270	9,015	9,150	183	6	8	0.09%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	9,178	324	9,502	9,664	193	6	8	0.09%	No
		S Atlantic Blvd to I-710	8,003	286	8,289	8,432	169	6	8	0.10%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	8,443	275	8,718	8,856	177	6	8	0.09%	No
		I-5 to E Washington Blvd	8,996	367	9,363	9,547	191	6	8	0.09%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	7,245	296	7,541	7,689	154	6	8	0.11%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	7,864	319	8,183	8,343	167	6	8	0.10%	No
		Florence Ave to Firestone Blvd	7,154	364	7,518	7,700	154	6	8	0.11%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	7,854	317	8,171	8,330	167	6	8	0.10%	No
		Imperial Hwy/Abott Rd to I-105	7,775	313	8,088	8,245	165	6	8	0.10%	No
		I-105 to E Alondra Blvd	10,100	422	10,522	10,733	215	6	8	0.08%	No
		E Alondra Blvd to SR 91	9,660	405	10,065	10,268	205	6	8	0.08%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	10,306	404	7,565	7,767	155	6	8	0.11%	No
		Main St/Grand Blvd to Lincoln Ave	12,185	474	9,617	9,854	197	6	8	0.08%	No
		N Lincoln Ave to S Maple St/W 6th St	11,869	465	9,335	9,568	191	6	8	0.09%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	9,958	392	7,188	7,384	148	6	8	0.11%	No
		Serfas Club Dr/Auto Center Dr to SR-71	9,782	398	7,038	7,237	145	6	8	0.11%	No
		SR-71 to Green River Rd	8,682	306	7,641	7,794	156	6	8	0.11%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	9,317	295	7,377	7,525	150	6	8	0.11%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	9,304	407	7,149	7,353	147	6	8	0.11%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,983	392	6,813	7,009	140	6	8	0.12%	No
		SR-90/Imperial Hwy to N Lakeview Ave	13,937	591	11,966	12,262	245	6	8	0.07%	No
		N Lakeview Ave to SR-55	13,860	587	11,885	12,179	244	6	8	0.07%	No
		SR-55 to Tustin Ave	7,622	282	7,050	7,191	144	6	8	0.11%	No
		Tustin Ave to Kraemer Blvd	7,997	288	7,223	7,367	147	6	8	0.11%	No
		Kraemer Blvd to SR-57	7,690	326	7,019	7,182	144	6	8	0.11%	No
		SR-57 to State College Blvd	7,453	308	6,660	6,814	136	6	8	0.12%	No
		State College Blvd to Raymond Ave/East St	7,959	314	6,780	6,937	139	6	8	0.12%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,384	288	6,187	6,331	127	6	8	0.13%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	8,020	313	6,859	7,016	140	6	8	0.12%	No
		Euclid St to Brookhurst Rd	8,339	326	7,192	7,355	147	6	8	0.11%	No
		Brookhurst Rd to I-5	8,137	280	7,006	7,146	143	6	8	0.12%	No
		I-5 to Beach Blvd	9,136	322	8,044	8,205	164	6	8	0.10%	No
		Beach Blvd to Knott Ave	10,433	376	9,400	9,588	192	6	8	0.09%	No
		Knott Ave to Valley View St	10,446	376	9,400	9,588	192	6	8	0.09%	No
		Valley View St to Carmenita Rd	10,464	376	9,400	9,588	192	6	8	0.09%	No
		Carmenita Rd to Artesia Blvd	10,171	377	9,401	9,590	192	6	8	0.09%	No
		Artesia Blvd to Bloomfield Ave	10,418	375	9,399	9,587	192	6	8	0.09%	No
		Bloomfield Ave to Norwalk Blvd	10,440	376	9,400	9,588	192	6	8	0.09%	No
		Norwalk Blvd to Pioneer Blvd	10,435	376	9,400	9,588	192	6	8	0.09%	No
		Pioneer Blvd to SR-605	10,217	376	9,400	9,588	192	6	8	0.09%	No
		SR-605 to Bellflower Blvd	11,389	414	10,340	10,547	211	6	8	0.08%	No
		Bellflower Blvd to Clark Ave	10,477	377	9,401	9,590	192	6	8	0.09%	No
		Clark Ave to Lakewood Blvd	10,502	377	9,401	9,590	192	6	8	0.09%	No
		Lakewood Blvd to Downey Ave	10,171	376	9,400	9,588	192	6	8	0.09%	No
		Downey Ave to Paramount Blvd	9,150	320	7,990	8,150	163	6	8	0.10%	No
		Paramount Blvd to Cherry Ave	12,757	470	11,750	11,985	240	6	8	0.07%	No
		Cherry Ave to I-710	11,510	417	10,420	10,629	213	6	8	0.08%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	7,322	549	7,871	8,146	163	11	17	0.20%	No
		Long Beach Blvd to W Del Amo Blvd	6,824	512	7,336	7,592	152	11	17	0.22%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	6,621	492	7,113	7,359	147	11	17	0.22%	No
		I-405/W Wardlow Rd to W Willow St	5,686	419	6,105	6,315	126	11	17	0.26%	No
		W Willow St to Pacific Coast Hwy	5,243	384	5,627	5,819	116	11	17	0.28%	No
		Pacific Coast Hwy to W Anaheim St/9th St	5,045	365	5,410	5,593	112	11	17	0.30%	No

Table 96: Volumes Along Routes to Port, 2022, Eastbound, PM Peak Hour

Route		Segment Descripton	2022 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	6,423	219	5,475	5,585	112	8	11	0.20%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	7,289	255	6,377	6,505	130	8	11	0.17%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	12,471	406	11,647	11,850	237	8	11	0.09%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	12,298	400	11,458	11,658	233	8	11	0.10%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	10,304	347	9,546	9,720	194	8	11	0.12%	No
		Lemon Ave to Fairway Dr	10,304	347	9,546	9,720	194	8	11	0.12%	No
		Fairway Dr to Nogales St	8,262	286	7,443	7,586	152	8	11	0.15%	No
		Nogales St to Fullerton Rd	9,484	321	8,693	8,854	177	8	11	0.13%	No
		Fullerton Rd to S. Azusa Ave	10,321	345	9,596	9,769	195	8	11	0.12%	No
		S. Azusa Ave to S. Hacienda Blvd	12,579	410	11,896	12,101	242	8	11	0.09%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	8,448	280	7,688	7,828	157	8	11	0.14%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	8,120	269	7,170	7,305	146	8	11	0.15%	No
		Crossroads Pkwy N to I-605	12,401	400	11,582	11,782	236	8	11	0.10%	No
		I-605 to Peck Rd	9,305	349	9,654	9,829	197	8	11	0.11%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	8,206	313	8,519	8,676	174	8	11	0.13%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,898	301	8,199	8,350	167	8	11	0.13%	No
		Rosemead Blvd to San Gabriel Blvd	9,181	336	9,517	9,685	194	8	11	0.12%	No
		San Gabriel Blvd to Paramount Blvd	9,173	335	9,508	9,676	194	8	11	0.12%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	11,495	406	11,901	12,104	242	8	11	0.09%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,806	259	7,065	7,195	144	8	11	0.16%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	11,483	401	11,884	12,085	242	8	11	0.09%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	13,724	472	14,196	14,432	289	8	11	0.08%	No
		S Atlantic Blvd to I-710	11,423	397	11,820	12,019	240	8	11	0.09%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	7,720	260	7,980	8,110	162	8	11	0.14%	No
		I-5 to E Washington Blvd	6,850	292	7,142	7,288	146	8	11	0.15%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	7,647	320	7,967	8,127	163	8	11	0.14%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	5,326	223	5,549	5,661	113	8	11	0.20%	No
		Florence Ave to Firestone Blvd	6,373	332	6,705	6,871	137	8	11	0.16%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	8,780	364	9,144	9,326	187	8	11	0.12%	No
		Imperial Hwy/Abott Rd to I-105	7,694	319	8,013	8,173	163	8	11	0.14%	No
		I-105 to E Alondra Blvd	7,780	333	8,113	8,280	166	8	11	0.14%	No
		E Alondra Blvd to SR 91	8,237	352	8,589	8,765	175	8	11	0.13%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	12,374	628	10,065	10,379	208	8	11	0.11%	No
		Main St/Grand Blvd to Lincoln Ave	13,088	663	10,686	11,018	220	8	11	0.10%	No
		N Lincoln Ave to S Maple St/W 6th St	12,797	665	10,397	10,730	215	8	11	0.10%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	12,549	661	10,170	10,501	210	8	11	0.11%	No
		Serfas Club Dr/Auto Center Dr to SR-71	13,021	708	10,439	10,793	216	8	11	0.10%	No
		SR-71 to Green River Rd	12,256	543	9,195	9,467	189	8	11	0.12%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	13,076	574	10,932	11,219	224	8	11	0.10%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	12,530	554	10,366	10,643	213	8	11	0.11%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	11,251	497	9,030	9,279	186	8	11	0.12%	No
		SR-90/Imperial Hwy to N Lakeview Ave	9,958	441	7,681	7,902	158	8	11	0.14%	No
		N Lakeview Ave to SR-55	10,890	484	8,656	8,898	178	8	11	0.13%	No
		SR-55 to Tustin Ave	9,206	394	8,227	8,424	168	8	11	0.13%	No
		Tustin Ave to Kraemer Blvd	7,861	336	7,196	7,364	147	8	11	0.15%	No
		Kraemer Blvd to SR-57	8,749	375	8,134	8,322	166	8	11	0.14%	No
		SR-57 to State College Blvd	8,010	348	7,442	7,616	152	8	11	0.15%	No
		State College Blvd to Raymond Ave/East St	8,459	347	7,445	7,619	152	8	11	0.15%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	7,346	296	6,264	6,412	120	0	11	0.10%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	9,063	367	8,066	8,250	165	8	11	0.14%	No
		Euclid St to Brookhurst Rd	10,379	423	9,487	9,699	194	8	11	0.12%	No
		Brookhurst Rd to I-5	6,808	296	6,326	6,474	129	8	11	0.17%	No
		I-5 to Beach Blvd	8,820	347	7,678	7,852	157	8	11	0.14%	No
		Beach Blvd to Knott Ave	8,699	341	7,552	7,723	154	8	11	0.15%	No
		Knott Ave to Valley View St	10,465	412	9,436	9,642	193	8	11	0.12%	No
		Valley View St to Carmenita Rd	10,391	407	9,412	9,616	192	8	11	0.12%	No
		Carmenita Rd to Artesia Blvd	7,330	275	6,129	6,267	125	8	11	0.18%	No
		Artesia Blvd to Bloomfield Ave	7,466	280	6,283	6,423	128	8	11	0.18%	No
		Bloomfield Ave to Norwalk Blvd	8,519	336	7,599	7,767	155	8	11	0.14%	No
		Norwalk Blvd to Pioneer Blvd	8,975	347	7,924	8,098	162	8	11	0.14%	No
		Pioneer Blvd to SR-605	9,314	363	8,353	8,535	171	8	11	0.13%	No
		SR-605 to Bellflower Blvd	11,328	437	10,428	10,647	213	8	11	0.11%	No
		Bellflower Blvd to Clark Ave	9,125	339	7,982	8,152	163	8	11	0.14%	No
		Clark Ave to Lakewood Blvd	11,292	429	10,239	10,454	209	8	11	0.11%	No
		Lakewood Blvd to Downey Ave	9,685	370	8,784	8,969	179	8	11	0.13%	No
		Downey Ave to Paramount Blvd	10,247	392	9,368	9,564	191	8	11	0.12%	No
		Paramount Blvd to Cherry Ave	10,589	394	9,455	9,652	193	8	11	0.12%	No
		Cherry Ave to I-710	11,262	431	10,428	10,644	213	8	11	0.11%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	5,830	439	6,269	6,489	130	15	23	0.35%	No
		Long Beach Blvd to W Del Amo Blvd	3,955	302	4,257	4,408	88	15	23	0.51%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	3,967	299	4,266	4,416	88	15	23	0.51%	No
		I-405/W Wardlow Rd to W Willow St	6,705	500	7,205	7,455	149	15	23	0.30%	No
		W Willow St to Pacific Coast Hwy	6,431	480	6,911	7,151	143	15	23	0.31%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,433	324	4,757	4,919	98	15	23	0.46%	No

Table 97: Volumes Along Routes to Port, 2022, Westbound, PM Peak Hour

Route		Segment Descripton	2022 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	7,903	287	6,383	6,527	131	9	14	0.21%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	7,698	292	6,581	6,727	135	9	14	0.20%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	11,162	343	10,130	10,302	206	9	14	0.13%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	10,571	337	9,918	10,087	202	9	14	0.13%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	7,185	201	6,381	6,482	130	9	14	0.21%	No
		Lemon Ave to Fairway Dr	7,185	201	6,381	6,482	130	9	14	0.21%	No
		Fairway Dr to Nogales St	7,870	225	7,090	7,203	144	9	14	0.19%	No
		Nogales St to Fullerton Rd	7,978	229	7,145	7,260	145	9	14	0.19%	No
		Fullerton Rd to S. Azusa Ave	7,758	223	7,158	7,270	145	9	14	0.19%	No
		S. Azusa Ave to S. Hacienda Blvd	8,458	234	7,550	7,667	153	9	14	0.18%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	10,508	302	9,848	9,999	200	9	14	0.14%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	8,108	224	7,259	7,371	147	9	14	0.18%	No
		Crossroads Pkwy N to I-605	8,545	236	7,708	7,826	157	9	14	0.17%	No
		I-605 to Peck Rd	8,165	274	8,439	8,576	172	9	14	0.16%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	8,365	283	8,648	8,790	176	9	14	0.15%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,973	273	8,246	8,383	168	9	14	0.16%	No
		Rosemead Blvd to San Gabriel Blvd	7,404	255	7,659	7,787	156	9	14	0.17%	No
		San Gabriel Blvd to Paramount Blvd	6,229	217	6,446	6,555	131	9	14	0.21%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	6,159	212	6,371	6,477	130	9	14	0.21%	No
		E Markland Dr to W Pomona Blvd E of Findlay	7,327	247	7,574	7,698	154	9	14	0.18%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	6,836	231	7,067	7,183	144	9	14	0.19%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	6,960	237	7,197	7,316	146	9	14	0.18%	No
		S Atlantic Blvd to I-710	6,388	218	6,606	6,715	134	9	14	0.20%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	9,377	319	9,696	9,856	197	9	14	0.14%	No
		I-5 to E Washington Blvd	11,556	483	12,039	12,281	246	9	14	0.11%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	9,264	389	9,653	9,848	197	9	14	0.14%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	8,585	360	8,945	9,125	183	9	14	0.15%	No
		Florence Ave to Firestone Blvd	6,750	348	7,098	7,272	145	9	14	0.19%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	7,330	300	7,630	7,780	156	9	14	0.17%	No
		Imperial Hwy/Abott Rd to I-105	4,786	195	4,981	5,079	102	9	14	0.27%	No
		I-105 to E Alondra Blvd	7,885	331	8,216	8,382	168	9	14	0.16%	No
		E Alondra Blvd to SR 91	7,846	329	8,175	8,340	167	9	14	0.16%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	8,238	223	5,150	5,262	105	9	14	0.26%	No
		Main St/Grand Blvd to Lincoln Ave	9,723	260	6,567	6,697	134	9	14	0.20%	No
		N Lincoln Ave to S Maple St/W 6th St	9,688	266	6,533	6,666	133	9	14	0.20%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	10,981	331	7,849	8,015	160	9	14	0.17%	No
		Serfas Club Dr/Auto Center Dr to SR-71	9,870	296	6,869	7,017	140	9	14	0.19%	No
		SR-71 to Green River Rd	7,449	277	6,959	7,098	142	9	14	0.19%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	7,106	266	6,652	6,785	136	9	14	0.20%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	8,752	372	7,121	7,307	146	9	14	0.18%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,349	361	6,707	6,888	138	9	14	0.20%	No
		SR-90/Imperial Hwy to N Lakeview Ave	8,838	381	7,216	7,407	148	9	14	0.18%	No
		N Lakeview Ave to SR-55	9,019	391	7,407	7,603	152	9	14	0.18%	No
		SR-55 to Tustin Ave	8,352	316	7,312	7,470	149	9	14	0.18%	No
		Tustin Ave to Kraemer Blvd	7,967	280	6,752	6,892	138	9	14	0.20%	No
		Kraemer Blvd to SR-57	9,050	333	8,230	8,397	168	9	14	0.16%	No
		SR-57 to State College Blvd	8,551	305	7,520	7,673	153	9	14	0.18%	No
		State College Blvd to Raymond Ave/East St	9,788	343	8,434	8,606	172	9	14	0.16%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	8,655	301	7,345	7,496	150	9	14	0.10%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	9,531	342	8,333	8,504	170	9	14	0.16%	No
		Euclid St to Brookhurst Rd	8,820	313	7,617	7,774	155	9	14	0.17%	No
		Brookhurst Rd to I-5	8,825	298	7,428	7,577	152	9	14	0.18%	No
		I-5 to Beach Blvd	9,495	338	8,343	8,512	170	9	14	0.16%	No
		Beach Blvd to Knott Ave	9,205	326	8,161	8,324	166	9	14	0.16%	No
		Knott Ave to Valley View St	9,316	326	8,275	8,438	169	9	14	0.16%	No
		Valley View St to Carmenita Rd	10,983	390	9,950	10,145	203	9	14	0.13%	No
		Carmenita Rd to Artesia Blvd	10,943	389	9,938	10,133	203	9	14	0.13%	No
		Artesia Blvd to Bloomfield Ave	10,924	392	9,924	10,120	202	9	14	0.13%	No
		Bloomfield Ave to Norwalk Blvd	10,922	389	9,902	10,097	202	9	14	0.13%	No
		Norwalk Blvd to Pioneer Blvd	10,886	394	9,885	10,082	202	9	14	0.13%	No
		Pioneer Blvd to SR-605	9,498	347	8,698	8,872	177	9	14	0.15%	No
		SR-605 to Bellflower Blvd	8,865	344	8,392	8,564	171	9	14	0.16%	No
		Bellflower Blvd to Clark Ave	8,821	341	8,291	8,462	169	9	14	0.16%	No
		Clark Ave to Lakewood Blvd	8,303	320	7,752	7,912	158	9	14	0.17%	No
		Lakewood Blvd to Downey Ave	9,161	331	8,079	8,245	165	9	14	0.16%	No
		Downey Ave to Paramount Blvd	8,728	335	8,196	8,364	167	9	14	0.16%	No
		Paramount Blvd to Cherry Ave	8,949	345	8,443	8,616	172	9	14	0.16%	No
		Cherry Ave to I-710	8,569	333	8,155	8,322	166	9	14	0.16%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	6,329	480	6,809	7,049	141	18	27	0.38%	No
		Long Beach Blvd to W Del Amo Blvd	5,908	445	6,353	6,576	132	18	27	0.41%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	5,908	443	6,351	6,573	131	18	27	0.41%	No
		I-405/W Wardlow Rd to W Willow St	5,258	393	5,651	5,848	117	18	27	0.46%	No
		W Willow St to Pacific Coast Hwy	4,846	364	5,210	5,392	108	18	27	0.50%	No
		Pacific Coast Hwy to W Anaheim St/9th St	4,752	354	5,106	5,283	106	18	27	0.51%	No

Table 98: Volumes Along Routes to Port, 2035, Eastbound, AM Peak Hour

Route		Segment Descripton	2035 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	7,766	279	8,045	8,185	164	29	43	0.52%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	7,751	285	8,036	8,179	164	29	43	0.52%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	11,650	369	12,019	12,204	244	29	43	0.35%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	11,320	355	11,675	11,853	237	29	43	0.36%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	9,810	330	10,140	10,305	206	29	43	0.41%	No
		Lemon Ave to Fairway Dr	9,639	325	9,964	10,127	203	29	43	0.42%	No
		Fairway Dr to Nogales St	8,238	278	8,516	8,655	173	29	43	0.49%	No
		Nogales St to Fullerton Rd	8,932	294	9,226	9,373	187	29	43	0.46%	No
		Fullerton Rd to S. Azusa Ave	9,614	308	9,922	10,076	202	29	43	0.42%	No
		S. Azusa Ave to S. Hacienda Blvd	11,311	351	11,662	11,838	237	29	43	0.36%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	8,176	252	8,428	8,554	171	29	43	0.50%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	7,496	228	7,724	7,838	157	29	43	0.55%	No
		Crossroads Pkwy N to I-605	9,554	290	9,844	9,989	200	29	43	0.43%	No
		I-605 to Peck Rd	7,950	286	8,236	8,379	168	29	43	0.51%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	7,635	278	7,913	8,052	161	29	43	0.53%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,246	275	7,521	7,659	153	29	43	0.56%	No
		Rosemead Blvd to San Gabriel Blvd	8,379	308	8,687	8,841	177	29	43	0.48%	No
		San Gabriel Blvd to Paramount Blvd	6,850	265	7,115	7,248	145	29	43	0.59%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	6,644	247	6,891	7,015	140	29	43	0.61%	No
		E Markland Dr to W Pomona Blvd E of Findlay	7,508	277	7,785	7,924	158	29	43	0.54%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	6,270	240	6,510	6,630	133	29	43	0.64%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	6,508	246	6,754	6,877	138	29	43	0.62%	No
		S Atlantic Blvd to I-710	6,530	241	6,771	6,892	138	29	43	0.62%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	9,491	475	9,966	10,204	204	29	43	0.42%	No
		I-5 to E Washington Blvd	10,090	489	10,579	10,824	216	29	43	0.39%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	12,426	586	13,012	13,305	266	29	43	0.32%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	9,366	428	9,794	10,008	200	29	43	0.43%	No
		Florence Ave to Firestone Blvd	9,674	503	10,177	10,429	209	29	43	0.41%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	12,644	551	13,195	13,471	269	29	43	0.32%	No
		Imperial Hwy/Abott Rd to I-105	11,448	504	11,952	12,204	244	29	43	0.35%	No
		I-105 to E Alondra Blvd	9,540	396	9,936	10,134	203	29	43	0.42%	No
		E Alondra Blvd to SR 91	9,454	393	9,847	10,044	201	29	43	0.43%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	10,762	615	11,377	11,685	234	29	43	0.37%	No
		Main St/Grand Blvd to Lincoln Ave	12,104	653	12,757	13,084	262	29	43	0.33%	No
		N Lincoln Ave to S Maple St/W 6th St	11,014	591	11,605	11,901	238	29	43	0.36%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	11,014	633	11,647	11,964	239	29	43	0.36%	No
		Serfas Club Dr/Auto Center Dr to SR-71	11,149	598	11,747	12,046	241	29	43	0.35%	No
		SR-71 to Green River Rd	12,695	595	13,290	13,588	272	29	43	0.31%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	13,478	655	14,133	14,461	289	29	43	0.30%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	9,026	475	9,501	9,739	195	29	43	0.44%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	9,820	522	10,342	10,603	212	29	43	0.40%	No
		SR-90/Imperial Hwy to N Lakeview Ave	8,713	488	9,201	9,445	189	29	43	0.45%	No
		N Lakeview Ave to SR-55	10,108	534	10,642	10,909	218	29	43	0.39%	No
		SR-55 to Tustin Ave	9,722	453	10,175	10,402	208	29	43	0.41%	No
		Tustin Ave to Kraemer Blvd	8,314	407	8,721	8,925	178	29	43	0.48%	No
		Kraemer Blvd to SR-57	8,422	413	8,835	9,042	181	29	43	0.47%	No
		SR-57 to State College Blvd	9,446	453	9,899	10,126	203	29	43	0.42%	No
		State College Blvd to Raymond Ave/East St	10,076	464	10,540	10,772	215	29	43	0.40%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	9,306	431	9,737	9,953	199	29	43	0.43%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	10,487	479	10,966	11,206	224	29	43	0.38%	No
		Euclid St to Brookhurst Rd	11,282	514	11,796	12,053	241	29	43	0.35%	No
		Brookhurst Rd to I-5	9,051	426	9,477	9,690	194	29	43	0.44%	No
		I-5 to Beach Blvd	10,237	437	10,674	10,893	218	29	43	0.39%	No
		Beach Blvd to Knott Ave	10,444	442	10,886	11,107	222	29	43	0.38%	No
		Knott Ave to Valley View St	10,543	446	10,989	11,212	224	29	43	0.38%	No
		Valley View St to Carmenita Rd	8,591	362	8,953	9,134	183	29	43	0.47%	No
		Carmenita Rd to Artesia Blvd	20,471	333	20,804	20,971	419	29	43	0.20%	No
		Artesia Blvd to Bloomfield Ave	8,224	346	8,570	8,743	175	29	43	0.49%	No
		Bloomfield Ave to Norwalk Blvd	9,884	407	10,291	10,495	210	29	43	0.41%	No
		Norwalk Blvd to Pioneer Blvd	9,946	417	10,363	10,572	211	29	43	0.40%	No
		Pioneer Blvd to SR-605	10,293	428	10,721	10,935	219	29	43	0.39%	No
		SR-605 to Bellflower Blvd	10,749	427	11,176	11,390	228	29	43	0.38%	No
		Bellflower Blvd to Clark Ave	11,511	444	11,955	12,177	244	29	43	0.35%	No
		Clark Ave to Lakewood Blvd	10,454	413	10,867	11,074	221	29	43	0.39%	No
		Lakewood Blvd to Downey Ave	10,724	422	11,146	11,357	227	29	43	0.38%	No
		Downey Ave to Paramount Blvd	10,143	398	10,541	10,740	215	29	43	0.40%	No
		Paramount Blvd to Cherry Ave	9,866	397	10,263	10,462	209	29	43	0.41%	No
		Cherry Ave to I-710	10,091	393	10,484	10,681	214	29	43	0.40%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	9,614	554	10,168	10,445	209	57	86	0.82%	No
		Long Beach Blvd to W Del Amo Blvd	6,854	357	7,211	7,390	148	57	86	1.16%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	6,803	344	7,147	7,319	146	57	86	1.17%	No
		I-405/W Wardlow Rd to W Willow St	8,797	447	9,244	9,468	189	57	86	0.90%	No
		W Willow St to Pacific Coast Hwy	8,441	422	8,863	9,074	181	57	86	0.94%	No
		Pacific Coast Hwy to W Anaheim St/9th St	7,054	348	7,402	7,576	152	57	86	1.13%	No

Table 99: Volumes Along Routes to Port, 2035, Westbound, AM Peak Hour

Route		Segment Descripton	2035 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	6,368	214	6,582	6,689	134	17	25	0.37%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	6,631	223	6,854	6,966	139	17	25	0.36%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	10,369	392	10,761	10,957	219	17	25	0.23%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	10,820	394	11,214	11,411	228	17	25	0.22%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	6,453	295	6,748	6,896	138	17	25	0.36%	No
		Lemon Ave to Fairway Dr	6,211	153	6,364	6,441	129	17	25	0.38%	No
		Fairway Dr to Nogales St	6,480	162	6,642	6,723	134	17	25	0.37%	No
		Nogales St to Fullerton Rd	6,972	175	7,147	7,235	145	17	25	0.34%	No
		Fullerton Rd to S. Azusa Ave	7,230	185	7,415	7,508	150	17	25	0.33%	No
		S. Azusa Ave to S. Hacienda Blvd	10,095	274	10,369	10,506	210	17	25	0.24%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	10,401	282	10,683	10,824	216	17	25	0.23%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	12,680	352	13,032	13,208	264	17	25	0.19%	No
		Crossroads Pkwy N to I-605	11,594	319	11,913	12,073	241	17	25	0.21%	No
		I-605 to Peck Rd	11,397	353	11,750	11,927	239	17	25	0.21%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	11,397	353	11,750	11,927	239	17	25	0.21%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	11,397	353	11,750	11,927	239	17	25	0.21%	No
		Rosemead Blvd to San Gabriel Blvd	11,397	354	11,751	11,928	239	17	25	0.21%	No
		San Gabriel Blvd to Paramount Blvd	7,962	246	8,208	8,331	167	17	25	0.30%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	10,467	324	10,791	10,953	219	17	25	0.23%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,095	189	6,284	6,379	128	17	25	0.39%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	8,649	414	9,063	9,270	185	17	25	0.27%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	9,110	429	9,539	9,754	195	17	25	0.25%	No
		S Atlantic Blvd to I-710	7,960	246	8,206	8,329	167	17	25	0.30%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	10,750	556	11,306	11,584	232	17	25	0.21%	No
		I-5 to E Washington Blvd	11,653	593	12,246	12,543	251	17	25	0.20%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	10,093	511	10,604	10,860	217	17	25	0.23%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	10,353	507	10,860	11,114	222	17	25	0.22%	No
		Florence Ave to Firestone Blvd	9,673	547	10,220	10,494	210	17	25	0.24%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	10,301	492	10,793	11,039	221	17	25	0.22%	No
		Imperial Hwy/Abott Rd to I-105	10,048	480	10,528	10,768	215	17	25	0.23%	No
		I-105 to E Alondra Blvd	12,084	571	12,655	12,941	259	17	25	0.19%	No
		E Alondra Blvd to SR 91	11,628	548	12,176	12,450	249	17	25	0.20%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	9,385	354	9,739	9,916	198	17	25	0.25%	No
		Main St/Grand Blvd to Lincoln Ave	13,000	722	13,722	14,083	282	17	25	0.18%	No
		N Lincoln Ave to S Maple St/W 6th St	12,423	714	13,137	13,494	270	17	25	0.18%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	10,416	631	11,047	11,363	227	17	25	0.22%	No
		Serfas Club Dr/Auto Center Dr to SR-71	10,090	649	10,739	11,064	221	17	25	0.22%	No
		SR-71 to Green River Rd	10,340	599	10,939	11,239	225	17	25	0.22%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	11,234	627	11,861	12,175	243	17	25	0.20%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	8,859	276	9,135	9,273	185	17	25	0.27%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,567	264	8,831	8,963	179	17	25	0.28%	No
		SR-90/Imperial Hwy to N Lakeview Ave	13,515	469	13,984	14,219	284	17	25	0.17%	No
		N Lakeview Ave to SR-55	13,515	470	13,985	14,220	284	17	25	0.17%	No
		SR-55 to Tustin Ave	8,091	481	8,572	8,813	176	17	25	0.28%	No
		Tustin Ave to Kraemer Blvd	8,469	486	8,955	9,198	184	17	25	0.27%	No
		Kraemer Blvd to SR-57	8,209	478	8,687	8,926	179	17	25	0.28%	No
		SR-57 to State College Blvd	8,222	471	8,693	8,929	179	17	25	0.28%	No
		State College Blvd to Raymond Ave/East St	8,765	489	9,254	9,499	190	17	25	0.26%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	8,213	460	8,673	8,903	170	17	25	0.20%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	8,744	485	9,229	9,472	189	17	25	0.26%	No
		Euclid St to Brookhurst Rd	9,053	495	9,548	9,796	196	17	25	0.25%	No
		Brookhurst Rd to I-5	8,585	478	9,063	9,302	186	17	25	0.27%	No
		I-5 to Beach Blvd	9,136	322	9,458	9,619	192	17	25	0.26%	No
		Beach Blvd to Knott Ave	10,433	376	10,809	10,997	220	17	25	0.23%	No
		Knott Ave to Valley View St	10,446	376	10,822	11,010	220	17	25	0.22%	No
		Valley View St to Carmenita Rd	10,464	376	10,840	11,028	221	17	25	0.22%	No
		Carmenita Rd to Artesia Blvd	10,171	377	10,548	10,737	215	17	25	0.23%	No
		Artesia Blvd to Bloomfield Ave	10,418	375	10,793	10,981	220	17	25	0.23%	No
		Bloomfield Ave to Norwalk Blvd	10,440	376	10,816	11,004	220	17	25	0.22%	No
		Norwalk Blvd to Pioneer Blvd	10,435	376	10,811	10,999	220	17	25	0.23%	No
		Pioneer Blvd to SR-605	10,217	376	10,593	10,781	216	17	25	0.23%	No
		SR-605 to Bellflower Blvd	11,389	414	11,803	12,010	240	17	25	0.21%	No
		Bellflower Blvd to Clark Ave	10,477	377	10,854	11,043	221	17	25	0.22%	No
		Clark Ave to Lakewood Blvd	10,502	377	10,879	11,068	221	17	25	0.22%	No
		Lakewood Blvd to Downey Ave	10,171	376	10,547	10,735	215	17	25	0.23%	No
		Downey Ave to Paramount Blvd	9,150	320	9,470	9,630	193	17	25	0.26%	No
		Paramount Blvd to Cherry Ave	12,757	470	13,227	13,462	269	17	25	0.18%	No
		Cherry Ave to I-710	11,510	417	11,927	12,136	243	17	25	0.20%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	9,772	716	10,488	10,846	217	33	50	0.46%	No
		Long Beach Blvd to W Del Amo Blvd	8,634	658	9,292	9,621	192	33	50	0.51%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	8,462	635	9,097	9,415	188	33	50	0.53%	No
		I-405/W Wardlow Rd to W Willow St	7,457	511	7,968	8,224	164	33	50	0.60%	No
		W Willow St to Pacific Coast Hwy	7,130	470	7,600	7,835	157	33	50	0.63%	No
		Pacific Coast Hwy to W Anaheim St/9th St	6,405	427	6,832	7,046	141	33	50	0.70%	No

Table 100: Volumes Along Routes to Port, 2035, Eastbound, PM Peak Hour

Route		Segment Descripton	2035 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 EB	SR -71 S to Phillips Ranch Rd	6,672	284	6,956	7,098	142	23	35	0.49%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	7,504	316	7,820	7,978	160	23	35	0.43%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	13,153	492	13,645	13,891	278	23	35	0.25%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	12,672	469	13,141	13,376	268	23	35	0.26%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	10,992	455	11,447	11,675	233	23	35	0.30%	No
		Lemon Ave to Fairway Dr	10,773	449	11,222	11,447	229	23	35	0.30%	No
		Fairway Dr to Nogales St	8,567	372	8,939	9,125	183	23	35	0.38%	No
		Nogales St to Fullerton Rd	9,826	407	10,233	10,437	209	23	35	0.33%	No
		Fullerton Rd to S. Azusa Ave	10,554	419	10,973	11,183	224	23	35	0.31%	No
		S. Azusa Ave to S. Hacienda Blvd	12,702	479	13,181	13,421	268	23	35	0.26%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	8,833	357	9,190	9,369	187	23	35	0.37%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	8,328	344	8,672	8,844	177	23	35	0.39%	No
		Crossroads Pkwy N to I-605	12,565	469	13,034	13,269	265	23	35	0.26%	No
		I-605 to Peck Rd	9,300	288	9,588	9,732	195	23	35	0.35%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	8,184	253	8,437	8,564	171	23	35	0.40%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	7,893	244	8,137	8,259	165	23	35	0.42%	No
		Rosemead Blvd to San Gabriel Blvd	9,118	282	9,400	9,541	191	23	35	0.36%	No
		San Gabriel Blvd to Paramount Blvd	9,118	282	9,400	9,541	191	23	35	0.36%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	11,397	353	11,750	11,927	239	23	35	0.29%	No
		E Markland Dr to W Pomona Blvd E of Findlay	6,757	209	6,966	7,071	141	23	35	0.49%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	11,397	353	11,750	11,927	239	23	35	0.29%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	13,677	424	14,101	14,313	286	23	35	0.24%	No
		S Atlantic Blvd to I-710	11,397	353	11,750	11,927	239	23	35	0.29%	No
	SR-710 NB	SR 60 to S Eastern Ave/Olympic Blvd	11,267	482	11,749	11,990	240	23	35	0.29%	No
		I-5 to E Washington Blvd	11,399	493	11,892	12,139	243	23	35	0.28%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	12,628	537	13,165	13,434	269	23	35	0.26%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	10,400	432	10,832	11,048	221	23	35	0.31%	No
		Florence Ave to Firestone Blvd	11,531	539	12,070	12,340	247	23	35	0.28%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	14,000	562	14,562	14,843	297	23	35	0.23%	No
		Imperial Hwy/Abott Rd to I-105	12,538	505	13,043	13,296	266	23	35	0.26%	No
		I-105 to E Alondra Blvd	12,734	419	13,153	13,363	267	23	35	0.26%	No
		E Alondra Blvd to SR 91	13,220	439	13,659	13,879	278	23	35	0.25%	No
SR-91 Route	SR-91 EB	I-15 to N Main St	14,960	944	15,904	16,376	328	23	35	0.21%	No
		Main St/Grand Blvd to Lincoln Ave	15,482	954	16,436	16,913	338	23	35	0.20%	No
		N Lincoln Ave to S Maple St/W 6th St	15,710	974	16,684	17,171	343	23	35	0.20%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	15,070	1,008	16,078	16,582	332	23	35	0.21%	No
		Serfas Club Dr/Auto Center Dr to SR-71	15,871	1,088	16,959	17,503	350	23	35	0.20%	No
		SR-71 to Green River Rd	16,712	907	17,619	18,073	361	23	35	0.19%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	17,300	958	18,258	18,737	375	23	35	0.18%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	13,305	765	14,070	14,453	289	23	35	0.24%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	11,836	716	12,552	12,910	258	23	35	0.27%	No
		SR-90/Imperial Hwy to N Lakeview Ave	10,509	656	11,165	11,493	230	23	35	0.30%	No
		N Lakeview Ave to SR-55	11,388	692	12,080	12,426	249	23	35	0.28%	No
		SR-55 to Tustin Ave	11,096	650	11,746	12,071	241	23	35	0.29%	No
		Tustin Ave to Kraemer Blvd	9,501	594	10,095	10,392	208	23	35	0.33%	No
		Kraemer Blvd to SR-57	10,221	630	10,851	11,166	223	23	35	0.31%	No
		SR-57 to State College Blvd	9,135	578	9,713	10,002	200	23	35	0.34%	No
		State College Blvd to Raymond Ave/East St	9,431	580	10,011	10,301	206	23	35	0.33%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	8,209	531	8,740	9,006	180	23	35	0.30%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	9,814	601	10,415	10,716	214	23	35	0.32%	No
		Euclid St to Brookhurst Rd	11,325	661	11,986	12,317	246	23	35	0.28%	No
		Brookhurst Rd to I-5	7,956	541	8,497	8,768	175	23	35	0.39%	No
		I-5 to Beach Blvd	8,746	304	9,050	9,202	184	23	35	0.37%	No
		Beach Blvd to Knott Ave	8,693	302	8,995	9,146	183	23	35	0.38%	No
		Knott Ave to Valley View St	10,438	376	10,814	11,002	220	23	35	0.31%	No
		Valley View St to Carmenita Rd	10,383	376	10,759	10,947	219	23	35	0.32%	No
		Carmenita Rd to Artesia Blvd	7,294	243	7,537	7,659	153	23	35	0.45%	No
		Artesia Blvd to Bloomfield Ave	7,427	248	7,675	7,799	156	23	35	0.44%	No
		Bloomfield Ave to Norwalk Blvd	8,477	303	8,780	8,932	179	23	35	0.39%	No
		Norwalk Blvd to Pioneer Blvd	8,977	318	9,295	9,454	189	23	35	0.36%	No
		Pioneer Blvd to SR-605	9,278	332	9,610	9,776	196	23	35	0.35%	No
		SR-605 to Bellflower Blvd	11,849	503	12,352	12,604	252	23	35	0.27%	No
		Bellflower Blvd to Clark Ave	10,185	421	10,606	10,817	216	23	35	0.32%	No
		Clark Ave to Lakewood Blvd	11,866	498	12,364	12,613	252	23	35	0.27%	No
		Lakewood Blvd to Downey Ave	10,199	436	10,635	10,853	217	23	35	0.32%	No
		Downey Ave to Paramount Blvd	10,717	449	11,166	11,391	228	23	35	0.30%	No
		Paramount Blvd to Cherry Ave	11,065	452	11,517	11,743	235	23	35	0.29%	No
		Cherry Ave to I-710	11,865	494	12,359	12,606	252	23	35	0.27%	No
Shared Portion	SR-710 NB	SR 91 to Long Beach Blvd	12,401	548	12,949	13,223	264	46	69	0.52%	No
		Long Beach Blvd to W Del Amo Blvd	9,953	387	10,340	10,534	211	46	69	0.66%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	10,014	390	10,404	10,599	212	46	69	0.65%	No
		I-405/W Wardlow Rd to W Willow St	12,932	527	13,459	13,723	274	46	69	0.50%	No
		W Willow St to Pacific Coast Hwy	12,727	514	13,241	13,498	270	46	69	0.51%	No
		Pacific Coast Hwy to W Anaheim St/9th St	9,878	347	10,225	10,399	208	46	69	0.66%	No

Table 101: Volumes Along Routes to Port, 2035, Westbound, PM Peak Hour

Route		Segment Descripton	2035 No Project					WLC Trucks		WLC Truck PCEs as % of No-Project PCES	Do WLC PCEs Exceed 2% Threshold?
			Cars	Trucks	Total Vehicles	Total PCEs	2% of Total PCEs	Vehicles	PCEs		
SR-60 Route	SR-60 WB	SR -71 S to Phillips Ranch Rd	8,851	252	9,103	9,229	185	27	40	0.43%	No
		Phillips Ranch Rd to N Diamond Bar Blvd/Orange Fwy	8,671	290	8,961	9,106	182	27	40	0.44%	No
		N Diamond Bar Blvd/Orange Fwy to Grand Ave	13,308	384	13,692	13,884	278	27	40	0.29%	No
		Grand Ave to Orange Fwy/Brea Canyon Rd	13,110	390	13,500	13,695	274	27	40	0.29%	No
		Orange Fwy/Brea Canyon Rd to Fairway Dr/Lemon Ave	8,618	282	8,900	9,041	181	27	40	0.44%	No
		Lemon Ave to Fairway Dr	7,891	268	8,159	8,293	166	27	40	0.48%	No
		Fairway Dr to Nogales St	8,441	274	8,715	8,852	177	27	40	0.45%	No
		Nogales St to Fullerton Rd	8,564	276	8,840	8,978	180	27	40	0.44%	No
		Fullerton Rd to S. Azusa Ave	8,420	267	8,687	8,821	176	27	40	0.45%	No
		S. Azusa Ave to S. Hacienda Blvd	9,019	266	9,285	9,418	188	27	40	0.42%	No
		S. Hacienda Blvd to S 7th Ave/E Gale Ave	10,965	329	11,294	11,459	229	27	40	0.35%	No
		S 7th Ave/E Gale Ave to Crossroads Pkwy N	8,552	246	8,798	8,921	178	27	40	0.45%	No
		Crossroads Pkwy N to I-605	8,930	258	9,188	9,317	186	27	40	0.43%	No
		I-605 to Peck Rd	8,575	356	8,931	9,109	182	27	40	0.44%	No
		Peck Rd to Fawcett Ave/Santa Anita Ave	8,995	371	9,366	9,552	191	27	40	0.42%	No
		Fawcett Ave/Santa Anita Ave to Rosemead Blvd	8,602	366	8,968	9,151	183	27	40	0.43%	No
		Rosemead Blvd to San Gabriel Blvd	8,090	357	8,447	8,626	173	27	40	0.46%	No
		San Gabriel Blvd to Paramount Blvd	6,884	320	7,204	7,364	147	27	40	0.54%	No
		Paramount Blvd to E Markland Dr/Potrero Dr	6,798	313	7,111	7,268	145	27	40	0.55%	No
		E Markland Dr to W Pomona Blvd E of Findlay	7,938	348	8,286	8,460	169	27	40	0.47%	No
		W Pomona Blvd E of Findlay to W Pomona Blvd W of Find	7,491	332	7,823	7,989	160	27	40	0.50%	No
		W Pomona Blvd W of Findlay Ave to S Atlantic Blvd	7,612	339	7,951	8,121	162	27	40	0.49%	No
		S Atlantic Blvd to I-710	7,031	320	7,351	7,511	150	27	40	0.53%	No
	SR-710 SB	SR 60 to S Eastern Ave/Olympic Blvd	11,846	625	12,471	12,784	256	27	40	0.31%	No
		I-5 to E Washington Blvd	14,838	767	15,605	15,989	320	27	40	0.25%	No
		E Washington Blvd to S Atlantic Blvd/Bandini Blvd	13,003	662	13,665	13,996	280	27	40	0.28%	No
		S Atlantic Blvd/Bandini Blvd to Florence Ave	12,554	637	13,191	13,510	270	27	40	0.29%	No
		Florence Ave to Firestone Blvd	10,726	630	11,356	11,671	233	27	40	0.34%	No
		Firestone Blvd to Imperial Hwy/Abott Rd	11,260	568	11,828	12,112	242	27	40	0.33%	No
		Imperial Hwy/Abott Rd to I-105	8,107	445	8,552	8,775	175	27	40	0.45%	No
		I-105 to E Alondra Blvd	10,630	537	11,167	11,436	229	27	40	0.35%	No
		E Alondra Blvd to SR 91	10,581	522	11,103	11,364	227	27	40	0.35%	No
SR-91 Route	SR-91 WB	I-15 to N Main St	6,970	159	7,129	7,209	144	27	40	0.55%	No
		Main St/Grand Blvd to Lincoln Ave	11,253	617	11,870	12,179	244	27	40	0.33%	No
		N Lincoln Ave to S Maple St/W 6th St	11,168	614	11,782	12,089	242	27	40	0.33%	No
		Maple St/6th St to Serfas Club Dr/Auto Center Dr	12,551	653	13,204	13,531	271	27	40	0.29%	No
		Serfas Club Dr/Auto Center Dr to SR-71	11,591	623	12,214	12,526	251	27	40	0.32%	No
		SR-71 to Green River Rd	12,177	609	12,786	13,091	262	27	40	0.30%	No
		Green River Rd to Gypsum Cyn Rd/SR-241	12,237	623	12,860	13,172	263	27	40	0.30%	No
		Gypsum Cyn Rd/SR-241 to Yorba Linda Blvd	9,110	440	9,550	9,770	195	27	40	0.41%	No
		Yorba Linda Blvd to SR-90/Imperial Hwy	8,779	426	9,205	9,418	188	27	40	0.42%	No
		SR-90/Imperial Hwy to N Lakeview Ave	8,357	426	8,783	8,996	180	27	40	0.44%	No
		N Lakeview Ave to SR-55	8,300	422	8,722	8,933	179	27	40	0.44%	No
		SR-55 to Tustin Ave	9,020	477	9,497	9,736	195	27	40	0.41%	No
		Tustin Ave to Kraemer Blvd	8,659	444	9,103	9,325	187	27	40	0.43%	No
		Kraemer Blvd to SR-57	9,731	491	10,222	10,468	209	27	40	0.38%	No
		SR-57 to State College Blvd	9,900	508	10,408	10,662	213	27	40	0.37%	No
		State College Blvd to Raymond Ave/East St	11,221	561	11,782	12,063	241	27	40	0.33%	No
		Raymond Ave/East St to Anaheim Blvd/Harbor Blvd	10,126	516	10,642	10,900	210	27	40	0.36%	No
		Anaheim Blvd/Harbor Blvd to Euclid St	11,150	561	11,711	11,992	240	27	40	0.33%	No
		Euclid St to Brookhurst Rd	10,447	531	10,978	11,244	225	27	40	0.35%	No
		Brookhurst Rd to I-5	10,178	505	10,683	10,936	219	27	40	0.36%	No
		I-5 to Beach Blvd	9,142	430	9,572	9,787	196	27	40	0.41%	No
		Beach Blvd to Knott Ave	8,804	417	9,221	9,430	189	27	40	0.42%	No
		Knott Ave to Valley View St	8,891	414	9,305	9,512	190	27	40	0.42%	No
		Valley View St to Carmenita Rd	10,620	481	11,101	11,342	227	27	40	0.35%	No
		Carmenita Rd to Artesia Blvd	10,576	477	11,053	11,292	226	27	40	0.35%	No
		Artesia Blvd to Bloomfield Ave	10,545	480	11,025	11,265	225	27	40	0.35%	No
		Bloomfield Ave to Norwalk Blvd	10,525	477	11,002	11,241	225	27	40	0.35%	No
		Norwalk Blvd to Pioneer Blvd	10,521	482	11,003	11,244	225	27	40	0.35%	No
		Pioneer Blvd to SR-605	9,201	432	9,633	9,849	197	27	40	0.40%	No
		SR-605 to Bellflower Blvd	9,132	444	9,576	9,798	196	27	40	0.41%	No
		Bellflower Blvd to Clark Ave	9,045	442	9,487	9,708	194	27	40	0.41%	No
		Clark Ave to Lakewood Blvd	8,510	417	8,927	9,136	183	27	40	0.44%	No
		Lakewood Blvd to Downey Ave	9,349	428	9,777	9,991	200	27	40	0.40%	No
		Downey Ave to Paramount Blvd	8,970	432	9,402	9,618	192	27	40	0.41%	No
		Paramount Blvd to Cherry Ave	9,211	440	9,651	9,871	197	27	40	0.40%	No
		Cherry Ave to I-710	8,901	432	9,333	9,549	191	27	40	0.42%	No
Shared Portion	SR-710 SB	SR 91 to Long Beach Blvd	9,632	711	10,343	10,699	214	53	80	0.74%	No
		Long Beach Blvd to W Del Amo Blvd	8,406	649	9,055	9,380	188	53	80	0.85%	No
		W Del Amo Blvd to I-405/W Wardlow Rd	8,383	638	9,021	9,340	187	53	80	0.85%	No
		I-405/W Wardlow Rd to W Willow St	7,779	497	8,276	8,525	170	53	80	0.93%	No
		W Willow St to Pacific Coast Hwy	7,501	463	7,964	8,196	164	53	80	0.97%	No
		Pacific Coast Hwy to W Anaheim St/9th St	6,712	425	7,137	7,350	147	53	80	1.08%	No

G. GENERAL PLAN CONFORMITY

The City General Plan has established a set of goals, policies, and objectives for the Circulation Element. Table 102 shows how the WLC project conforms to these goals, policies, and objectives with the implementation of the proposed Specific Plan and General Plan amendments. In Table 102 WLCSP refers to the World Logistics Center Specific Plan while WLC is the World Logistics Center business entity for the project's development that ensures implementation of mitigations.

Table 102: Conformity to General Plan (as Amended)

Goals, Policies, and Objectives Goal, Policy, or Objective as Stated in the General Plan		Consistent?	Explanation
9.5 Circulation Element Goals, Objectives. Policies and Programs			
9.5.1 Circulation Element Goals			
Goal 5.1	Develop a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map, Figure 9-1, which provides access to development and supports mobility requirements of the system's users.	Yes	The WLC Specific Plan (WLCSP) meets the intent of the General Plan Circulation Element Map based on land use and design criteria. The WLCSP provides planned cross sections that satisfy minimum City requirements and serve the unique needs of logistics development.
Goal 5.2	Maintain safe and adequate pedestrian, bicycle, and public transportation systems to provide alternatives to single occupant vehicular travel and to support planned land uses.	Yes	The WLCSP supports this goal of the General Plan Circulation Element based on land use and design criteria. All on-site roads would include design features to facilitate the use of alternative transportation modes including but not limited to bus, bicycle, pedestrian, etc.
9.5.2 Circulation Element Objectives and Policies			
Objective 5.1	***Create a safe, efficient and neighborhood- friendly street system.***	Yes	The WLCSP supports this objective in that the specific plan is designed to reduce vehicle and pedestrian conflicts near residential neighborhoods by prohibiting truck access to nearby residential areas.
Policy 5.1.1	Plan access and circulation of each development project to accommodate vehicles (including emergency vehicles and trash trucks), pedestrians, and bicycles.	Yes	The planned street network features multiple routes to most buildings and would have two major east-west connectors called for in the General Plan. This would facilitate the passage of emergency and service vehicles. On-site roads would be provided with sidewalks and bicycle lanes. All of the WLC logistics buildings would be provided with bicycle racks.
Policy 5.1.2	Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.	Yes	The project features modern roundabouts at key locations, which are proven to be effective in reducing the frequency and severity of traffic accidents. Pedestrian ways are not curb-adjacent, and streets are designed to accommodate bikeways.
Policy 5.1.3	Require adequate off-street parking for all developments.	Yes	Off-street parking would be provided for all WLC buildings in accordance with City of Moreno Valley standards.

Policy 5.1.4	Driveway placement shall be designed for safety and to enhance circulation wherever possible.	Yes	Driveway design and placement would not be less than City code or engineering standards. Specific proposals will be reviewed with the plot plans.
Policy 5.1.5	Incorporate American Disability Act (ADA) and Title 24 requirements in roadway improvements as appropriate.	Yes	ADA compliant paths of travel would be required with all building permits.
Policy 5.1.6	Design new developments to provide opportunity for access and circulation to future adjacent developments.	Yes	The WLCSP is bounded by SR-60 to the north, Gilman Springs Rd. to the east, and permanent open space to the south. There is a small amount of developable land west of the project that would benefit from the construction of Cactus Ave. Extension.
Objective 5.2	***Implement access management policies.***	Yes	The WLCSP supports this objective by prohibiting truck movements on Cactus Ave. Extension. All developments subject to plot plans including detailed access management conditions.
Policy 5.2.1	Locate residential units with access from local streets. Minimize direct residential access from collectors. Prohibit direct single-family driveway access on arterials and higher classification roadways.	NA	The project has no residential component. Existing non-conforming uses would continue to have driveway access as long as the use continues.
Policy 5.2.2	Feed short local streets into collectors.	NA	The project has no local streets. All on-site streets are classified as arterials or collectors and meet City standards.
Policy 5.2.3	Encourage the incorporation of traffic calming design into local and collector streets to promote safe vehicle speeds.	Yes	The project has no residential component that would need traffic calming. There are three roundabouts to ensure that vehicle movement is fluid and to reduce pedestrian and vehicle conflicts.
Policy 5.2.4	Design new subdivisions to minimize the disruptive impact of motor vehicles on local streets. Long, broad and linear streets should be avoided. Residential streets should be no wider than 40 feet, and should have an uninterrupted length of less than one half mile. Curvilinear streets and cul-de-sacs are preferred. Streets within the subdivision should be designed to facilitate access to residences and to discourage through traffic.	NA	The project has no residential component and so design features intended to enhance the quality of life for residents of the street are not applicable to the WLCSP.

Objective 5.3	***Maintain Level of Service (LOS) "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR 60 and high employment centers. Figure 9-2 depicts the LOS standards that are applicable to all segments of the General Plan Circulation Element Map.***	Yes	All WLC streets would be designed to function at LOS D or better.
Policy 5.3.1	Obtain right-of-way and construct roadways in accordance with the designations shown on the General Plan Circulation Element Map and the City street improvement standards.	Yes	The project would obtain right-of-way and construct roadways in accordance with the General Plan Circulation Element Map as revised.
Policy 5.3.2	Wherever feasible, promote the development of roadways in accordance with the City standard roadway cross-sections, as shown in Figure 9-3. Cross-sections range from two-lane undivided roadways to 8-lane divided facilities.	Yes	The project would develop roadways in accordance with City standard cross-sections.
Policy 5.3.3	Create new roadway classifications to accommodate future traffic demand, including; Divided Major Arterial – Reduced Cross-Section, and Divided Arterial – 6-lane. These cross-sections are shown on Figure 9-3.	Yes	The project would develop roadways in accordance with City standard cross-sections.
Policy 5.3.4	For planning purposes, utilize LOS standards shown on Table 5 –1 to determine recommended roadway widths.	Yes	The City LOS standards were used to develop the General Plan Amendment.
Policy 5.3.5	Ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic impacts. For this purpose, require new developments to participate in Transportation Uniform Mitigation Fee Program (TUMF), the Development Impact Fee Program (DIF) and any other applicable transportation fee programs and benefit assessment districts.	Yes	The WLC would participate in the TUMF and DIF programs.

Policy 5.3.6	Where new developments would increase traffic flows beyond the LOS C (or LOS D, where applicable), require appropriate and feasible mitigation measures as a condition of approval. Such measures may include extra right-of-way and improvements to accommodate left-turn and right-turn lanes at intersections, or other improvements.	Yes	The project applicant would pay fair-share contributions towards improvements needed to mitigate the project's traffic impacts where applicable.
Policy 5.3.7	Provide consideration to projects that have overriding regional or local benefits that would be desirable even though the LOS standards cannot be met. These projects would be required to analyze traffic impacts and mitigate such impacts to the extent that it is deemed feasible.	Yes	Moreno Valley's jobs/housing ratio is currently very imbalanced, with too few jobs for the number of employable residents. By creating a large number of jobs in a housing-rich area, The WLCSP would reduce the need for long-distance out-commuting. The WLC has the potential to support reverse commute conditions reducing westbound commute impacts on SR-60. Also, the project helps fill the expected deficit in warehousing capacity that SCAG has identified as a drag on the regional economy (see *Logistics & Distribution: An Answer to Regional Upward Social Mobility*, SCAG June 2004).
Policy 5.3.8	Pursue arterial improvements that link and/or cross the State route 60 (SR-60) Freeway, including an additional over-crossing at Graham St.	Yes	The project would participate in the TUMF program which funds interchange improvements.
Policy 5.3.9	Address additional widenings at arterials providing access to SR-60 at Day St., Frederick St./Pigeon Pass Rd. and Perris Blvd.	Yes	The project would fund its fair share of improvements to these roads through its contributions to DIF and TUMF.
Objective 5.4	***Maximize efficiency of the regional circulation system through close coordination with state and regional agencies and implementation of regional transportation policies.***	Yes	WLC would pay all applicable DIF and TUMF fees and would participate in other multi-jurisdictional funding programs as established.
Policy 5.4.1	Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways and interchange expansion.	Yes	Project-specific Plot Plans and subdivisions would provide for the ultimate rights of way or regional facilities.

Policy 5.4.2	Coordinate with Caltrans and RCTC regarding the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations of the Inland Empire Regional ITS Architecture Project.	NA	This policy concerns system-wide improvements that are not associated with individual development projects.
Policy 5.4.3	Work with property owners, in cooperation with RCTC, to reserve rights-of-way for potential Community and Environmental Transportation Acceptability Process (CETAP) corridors through site design, dedication, and land acquisition, as appropriate.	NA	The project site is not on any of the four corridors being studied: Winchester to Temecula, Hemet to the Corona/Lake Elsinore area, west Moreno Valley to San Bernardino County, and Riverside County to Orange County.
Policy 5.4.4	The City Council will commit to establishing ongoing relationships with all agencies that play a role in the development of the City's transportation system. Council members who are appointed to these agencies as City representatives shall seek out leadership roles to maximize their effectiveness on behalf of the City. Council will strive to maintain continuity in their appointments of representatives.	NA	This policy concerns relationships that are not associated with individual development projects.
Policy 5.4.5	Work with RCTC, WRCOG, and the TUMF Central Zone Committee to facilitate the expeditious construction of TUMF Network projects, especially projects that directly benefit Moreno Valley.	Yes	The WLC would participate in the TUMF program.
Policy 5.4.6	Cooperatively participate with SCAG, RCTC, and WRCOG in the planning for a transportation system that anticipates regional needs for the safe and efficient movement of goods and people.	NA	This policy is not directly related to the WLC project.
Policy 5.4.7	Utilizing a combination of regional, state and federal funds, development impact fees, and other locally generated funds, provide needed improvements along SR 60 and the associated interchanges, including interchange and grade separation improvements.	Yes	With implementation of a cooperative program, the WLC would participate in a fair-share funding program for improvements to SR-60, if such a program is established among all contributing jurisdictions.

Policy 5.4.8	Reserve rights-of-way to accomplish future improvements as specified in the Caltrans District 8 Route Concept Fact Sheet for SR-60. Specifically, SR-60 shall be built to six general purpose lanes and two High Occupancy Vehicle (HOV) lanes through Moreno Valley. Additional auxiliary lanes may be required between interchanges. The need for auxiliary lanes will be determined from future studies.	Yes	The City would work with Caltrans to define and protect the ultimate right-of-way for SR-60 and its interchange at Theodore St.
Policy 5.4.9	Lobby the State Legislature to keep triple trailer trucks off highways in developed areas of California.	NA	This policy is not directly related to the WLC project.
Objective 5.5	***Maximize efficiency of the local circulation system by using appropriate policies and standards to design, locate and size roadways.***	Yes	The WLCSP supports this objective by requiring right of way standards that accommodates automobile and truck traffic that the project requires. Street cross sections meet or exceed minimum City standards.
Policy 5.5.1	Space Collectors between higher classification roadways within development areas at appropriate one-quarter mile intervals.	Yes	The WLCSP supports this policy. The spacing of roadways for collectors is at appropriate intervals to reflect the size and scale of the WLC buildings.
Policy 5.5.2	Provide dedicated left-turn lanes at all major intersections on minor arterials and higher classification roadways.	Yes, Partially	The most critical intersections within the project site would use modern roundabout rather than conventional intersections. These conform to the intent of the policy which is to minimize conflicts between left-turning traffic and through traffic. Subsequent subdivision applications will provide dedicated left-turn lanes in public streets as required by the City.
Policy 5.5.3	Prohibit points of access from conflicting with other existing or planned access points. Require points of access to roadways to be separated sufficiently to maintain capacity, efficiency, and safety of the traffic flow.	Yes	Plot plans and subdivisions would be reviewed to analyze all points of access on a project by project basis. The WLC features a relatively small number of very large buildings. There would therefore be fewer access points needed than for the same square footage of conventional low-rise commercial buildings. The driveways to WLC would be located away from intersections at distances not be less than required by City code or engineering standards.

Policy 5.5.4	Wherever possible, minimize the frequency of access points along streets by the consolidation of access points between adjacent properties on all circulation element streets, excluding collectors.	Yes	The WLC features a relatively small number of very large buildings. There would be fewer access points needed than for the same square footage of conventional low-rise business parks. Plot plans and subdivisions would be reviewed to analyze all points of access on a project by project basis.
Policy 5.5.5	Design streets and intersections in accordance with the Moreno Valley Municipal Code.	Yes	Project streets and intersections would be built to comply with City standards. The cross-sections would be designed to accommodate the type of traffic associated with high-cube logistics.
Policy 5.5.6	Consider the overall safety, efficiency and capacity of street designs as more important than the location of on-street parking.	Yes	On-street parking would be prohibited except at selected locations within the project subject to city approval. Safety, efficiency, and the capacity of the street would be key factors in selecting the location of on-street parking areas.
Policy 5.5.7	For developments fronting both sides of a street, require that streets be constructed to full width. Where new developments front only one side of a street, require that streets be constructed to half width plus an additional 12-foot lane for opposing traffic, whenever possible. Additional width may be needed for medians or left and/or right turn lanes.	Yes	The applicant would comply with this policy.
Policy 5.5.8	Whenever possible, require private and public land developments to provide on-site and off-site improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system. The City may require developers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.	Yes	A traffic impact study has been conducted for the project. Improvements needed to mitigate project impacts have been identified. The project would pay TUMF and DIF fees that would cover its share of many improvements, and would pay its fair share towards the cost of implementing the remaining (non-TUMF or DIF) improvements.
Policy 5.5.9	Design curves and grades to permit safe movement of vehicular traffic per applicable Caltrans and Moreno Valley standards.	Yes	All WLC roadways would be designed to meet or exceed City standards.

Policy 5.5.10	Provide adequate sight distances for safe vehicular movement at all intersections and driveways.	Yes	Plot plans and subdivisions would be reviewed to ensure compliance with City standards. Driveways would provide sight distances per City code and engineering standards.
Policy 5.5.11	Implement National Pollutant Discharge Elimination System (NPDES) Best Management Practices (BMPs) relating to construction of roadways to control runoff contamination from affecting water resources.	Yes	The WLCSP would design streets to comply with NPDES BMPs for street run-off.
Objective 5.6	***Support development of a ground access system to March Inland Port in accordance with its development plan as a major cargo airport.***	NA	The WLC is not related to the March Inland Cargo Port project.
Policy 5.6.1	Ensure that City arterials that provide access to and from March Inland Port are properly designed to accommodate projected traffic volumes, including truck traffic.	NA	The WLC is not involved in the development of the March Inland Cargo Port.
Policy 5.6.2	Ensure that traffic routes to March Inland Port are planned to minimize impacts to City residential communities.	NA	The WLC is not involved in the development of the March Inland Cargo Port.
Objective 5.7	***Design roads to meet the needs of the residents of the community without detracting from the "rural" atmosphere in designated portions of Moreno Valley. (Designated "rural" areas include those encompassed by the Residential Agriculture 2, Residential 1, Rural Residential and Hillside Residential zoning districts. "Urban" areas encompass all other zoning districts.)***	NA	The WLC project has no rural residential component.
Policy 5.7.1	Pursue development of modified sidewalk standards for local and collector roads within low density areas to reflect the rural character of those areas.	NA	The WLC would not be a low density residential area.

Policy 5.7.2	Provide sidewalks on arterials in designated low density areas that provide access to schools and bus stops.	NA	There is no residential component in this project.
Objective 5.8	***Encourage development of an efficient public transportation system for the entire community.***	Yes	All WLC streets would accommodate bus traffic, bus turnouts, and shelters.
Policy 5.8.1	Support the development of high-speed transit linkages, or express routes, that would benefit the citizens and employers of Moreno Valley.	Yes	All WLC streets would accommodate bus traffic, bus turnouts, and shelters.
Policy 5.8.2	Support the efforts of the March Joint Powers Authority in its pursuit of a Transit Center	NA	This policy is not directly related to the WLC.
Policy 5.8.3	Encourage public transportation opportunities that address the particular needs of transit dependent individuals in the City such as senior citizens, the disabled and low -income residents.	Yes	The WLC would be designed to accommodate transit. The City would work with Riverside Transit Agency to develop routes serving WLC when development on the site has reached transit-supportive levels.
Policy 5.8.4	Ensure that all new developments make adequate provision for bus stops and turnout areas for both public transit and school bus service.	Yes	WLC would provide bus turn-outs and shelters at all active bus stops.
Policy 5.8.5	Continue on-going coordination with transit authorities toward the expansion of transit facilities into newly developed areas.	Yes	The WLC would be designed to accommodate transit and would work with transit operators to establish routes once the WLC has reached a transit-supportive level of development.

Objective 5.9	***Support and encourage development of safe, efficient and aesthetic pedestrian facilities.***	Yes	The WLCSP establishes right of way standards and street sections appropriate for an employment center. The Specific Plan requires pedestrian ways (sidewalks) along both sides of all streets in the WLC. Project provides multi-use trails throughout.
Policy 5.9.1	Encourage walking as an alternative to single occupancy vehicle travel, and help ensure the safety of the pedestrian as follows:	Yes	The WLC encourages walking to work by providing jobs within walking distance of many homes in Moreno Valley.
	(a) All new developments shall provide sidewalks in conformance with the City's streets cross-section standards, and applicable policies for designated urban and rural areas.	Yes	All streets in the WLC would conform to GP cross-sections, as amended including the provision of sidewalks on all streets.
	(b) The City shall actively pursue funding for the infill of sidewalks in developed areas. The highest priority shall be to provide sidewalks on designated school routes.	NA	The WLC is not an infill area.
Policy 5.9.2	Walkways shall be designed to minimize conflicts between vehicles and pedestrians.	Yes	All streets and sidewalks in the WLC would meet minimum city standards
Policy 5.9.3	Where appropriate, provide amenities such as, but not limited to, enhanced paving, seating, and landscaping to enhance the pedestrian experience.	Yes	The WLC provides and supports pedestrian facilities along street right of ways as designed. California-friendly and drought-tolerant landscaping would be incorporated into the plan to create a pleasing environment.
Policy 5.9.4	Require the provision of convenient and safe pedestrian access to buildings from the public sidewalk.	Yes	Pedestrian considerations are incorporated into the appropriate streetscapes and rely on individual building site planning efforts as established in the development standards and design guidelines. All plot plans would provide such access.

Objective 5.10	***Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution. The Moreno Bikeway Plan is shown in Figure 9-4.***	Yes	All WLC streets would provide class II bikeways. The WLCSP provides continued trail use on the west side of Redlands Blvd. towards Alessandro Blvd. The WLCSP establishes right of way standards conducive to the economic center and to support heavy truck use. Pedestrian considerations are incorporated into the appropriate streetscapes and rely on individual building site planning efforts as established in the development standards and design guidelines.
Policy 5.10.1	Bikeways shall link residential neighborhood areas with parks, employment centers, civic and commercial areas, and schools.	Yes	All streets within the WLC will include class II bikeways. They will link to bikeways to the west to provide paths between residential areas outside WLC and employment centers within the WLC site.
Policy 5.10.2	Integrate bikeways, consistent with the Bikeway Plan, with the circulation system and maintain Class II and III bikeways as part of the City's street system.	Yes	The WLCSP provides continued trail use on the west side of Redlands Blvd. towards Alessandro Blvd. Class II bikeways are provided on all streets in the WLC.
Policy 5.10.3	Support bicycle safety programs, and active enforcement of laws relating to the safe operation of bicycles on City streets.	NA	This is a system-wide policy not associated with any specific development proposal.
Policy 5.10.4	Link local bikeways with existing and planned regional bikeways.	Yes	All streets within the WLC will include class II bikeways. They would link to bikeways to the west to provide paths between residential areas outside WLC and employment centers in WLC.
Objective 5.11	***Eliminate obstructions that impede safe movement of vehicles, bicyclists, and pedestrians.***	Yes	The WLC would provide a comprehensively planned network of roads, bikeways, pedestrian ways and trails to facilitate, efficient, safe travel for vehicles, cyclists, and pedestrians. Roadways would be designed with 8-ft shoulders with no parking, allowing unobstructed Class II bikeways.

Policy 5.11.1	Landscaping adjacent to City streets, sidewalks and bikeways shall be designed, installed and maintained so as not to physically or visually impede public use of these facilities.	Yes	WLC landscape design standards would provide a safe environment for motorists, pedestrians, and cyclists that would not impede visibility or access to facilities. Landscape areas adjacent to streets would be maintained by a Property Owner Association
	(a) The removal or relocation of mature trees, street trees and landscaping may be necessary to construct safe pedestrian, bicycle and street facilities.	NA	Existing vegetation may be removed to provide adequate pedestrian, bicycle, and street facilities.
	(b) New landscaping, especially street trees shall be planted in such a manner to avoid overhang into streets, obstruction of traffic control devices or sight distances, or creation of other safety hazards.	Yes	The WLCSP would establish right of way standards and street design that allow for safe sight distances.
Policy 5.11.2	Driveways shall be designed to avoid conflicts with pedestrian and bicycle travel.	Yes	Project-specific Plot Plans and subdivisions would be reviewed and approved by the City to ensure the safe design of streets, bikeways, and pedestrian ways.
Objective 5.12	***Promote efficient circulation planning for all school sites that will maximize pedestrian safety, and minimize traffic congestion and neighborhood impacts.***	NA	There are no schools in the WLC.
Policy 5.12.1	Coordinate with school districts to identify suggested pedestrian routes within existing and new subdivisions for school children to walk to and from schools and/or bus stops.	NA	There are no schools in the WLC.