

APPENDIX M

TRAFFIC STUDY (REVISED)

Final Traffic Study for:

Ione Band of Miwok Indians Casino/Hotel Proposal

Prepared for:
Analytical Environmental Services

Submitted by:

Dowling Associates, Inc.

Transportation Engineering • Planning • Research • Education



428 J Street, Suite 500
Sacramento, CA 95831
Phone: (916) 266-2190
www.dowlinginc.com
Contact: Carol Saucedo

November 7, 2008

TABLE OF CONTENTS

SECTION	PAGE
1 INTRODUCTION.....	1
Project Description.....	1
2 EXISTING CONDITION	3
Existing Roads	3
Existing Transit.....	7
Existing Bicycle and Pedestrian System.....	7
Existing Intersections.....	8
Existing Traffic Operations.....	9
Existing Roadway Segment Operations.....	20
Existing Intersection Operations.....	22
3 EXISTING PLUS APPROVED PROJECTS CONDITION	27
2010 Existing Plus Approved Projects Condition	27
2010 EPAP Roadway Segment Operations	30
2010 EPAP Intersection Operations	33
2013 Existing Plus Approved Projects Condition	38
2013 EPAP Roadway Segment Operations	38
2013 EPAP Intersection Operations	41
4 EPAP PLUS PROJECT CONDITIONS	46
Project Traffic	46
Project Trip Generation.....	46
Trip Distribution	53
Trip Assignment.....	53
Alternative A (Preferred Casino and Hotel)	57
2010 EPAP Plus Alternative A Phase 1 Roadway Segment Operations	57
2010 EPAP Plus Alternative A Phase 1 Intersection Operations	59
2013 EPAP Plus Alternative A Phase 1 & 2 Roadway Segment Operations.....	63
2013 EPAP Plus Alternative A Phase 1 & 2 Intersection Operations	66
Alternative B (Slightly Reduced Casino and Hotel)	70
2010 EPAP Plus Alternative B Phase 1 Roadway Segment Operations	70
2010 EPAP Plus Alternative B Phase 1 Intersection Operations	73
2013 EPAP Plus Alternative B Phase 1 & 2 Roadway Segment Operations	77
2013 EPAP Plus Alternative B Phase 1 & 2 Intersection Operations	80
Alternative C (Reduced Casino and Hotel)	84
2010 EPAP Plus Alternative C Roadway Segment Operations.....	84
2010 EPAP Plus Alternative C Intersection Operations.....	87
Alternative D (Retail Shopping Center.....	91
2010 EPAP Plus Alternative D Roadway Segment Operations	91
2010 EPAP Plus Alternative D Intersection Operations.....	94

TABLE OF CONTENTS

SECTION 4 (continued)	
	Sight Distance, Circulation and Parking98
5	CUMULATIVE CONDITION99
	Roadway Improvements99
	Cumulative No Project Traffic Volumes100
	Cumulative Roadway Segment Operations100
	Cumulative Intersection Operations103
6	CUMULATIVE PLUS PROJECT CONDITION108
	Cumulative Plus Project Roadway Network.....108
	Project Traffic108
	Alternative A (Preferred Casino and Hotel)108
	Cumulative Plus Alternative A Phase 1 & 2 Roadway Segment Operations108
	Cumulative Plus Alternative A Phase 1 & 2 Intersection Operations111
	Alternative B (Slightly Reduced Casino and Hotel)115
	Cumulative Plus Alternative B Phase 1 & 2 Roadway Segment Operations115
	Cumulative Plus Alternative B Phase 1 & 2 Intersection Operations118
	Alternative C (Reduced Casino and Hotel)122
	Cumulative Plus Alternative C Roadway Segment Operations.....122
	Cumulative Plus Alternative C Intersection Operations125
	Alternative D (Retail Shopping Center).....129
	Cumulative Plus Alternative D Roadway Segment Operations129
	Cumulative Plus Alternative D Intersection Operations.....132
7	MITIGATION MEASURES.....137
	Existing Plus Approved Plus Project137
	2010 Existing Plus Approved Project Plus Alternative A Phase 1137
	2013 Existing Plus Approved Project Plus Alternative A Phase 1 & 2.....157
	2010 Existing Plus Approved Project Plus Alternative B Phase 1177
	2013 Existing Plus Approved Project Plus Alternative B Phase 1 & 2193
	2010 Existing Plus Approved Project Plus Alternative C209
	2010 Existing Plus Approved Project Plus Alternative D224
	2025 Cumulative Plus Project.....242
	2025 Cumulative Plus Alternative A242
	2025 Cumulative Plus Alternative B264
	2025 Cumulative Plus Alternative C284
	2025 Cumulative Plus Alternative D304

TABLE OF CONTENTS

LIST OF TABLES

1	Acceptable Level of Service for Study Intersections.....	9
2	Acceptable Level of Service for Roadway Segments.....	10
3	Amador County Roadway Level of Service Criteria.....	12
4	Sacramento County Roadway Level of Service Criteria.....	13
5	San Joaquin County Roadway Level of Service Criteria.....	14
6	Level of Service Criteria - Unsignalized Intersections.....	15
7	Level of Service Criteria - Signalized Intersections.....	16
8	Roadway Segment Level of Service – Existing No Project.....	21
9	Existing No Project Intersection Level of Service.....	24
10	Approved Projects Trip Generation Estimate.....	27
11	Roadway Segment Level of Service – 2010 Existing Plus Approved Projects.....	32
12	2010 Existing Plus Approved Projects Intersection Level of Service.....	35
13	Roadway Segment Level of Service – 2013 Existing Plus Approved Projects.....	40
14	2013 Existing Plus Approved Projects Intersection Level of Service.....	43
15	Trip Generation Rate Estimations from 12 casinos.....	49
16	Project Trip Generation for Alternative A.....	55
17	Project Trip Generation for Alternative B.....	55
18	Project Trip Generation for Alternative C.....	56
19	Project Trip Generation for Alternative D.....	56
20	Roadway Segment Level of Service – 2010 EPAP Plus Alternative A Phase 1.....	58
21	Intersection Level of Service - 2010 EPAP Plus Alternative A Phase 1.....	61
22	Roadway Segment Level of Service – 2013 EPAP Plus Alternative A Phase 1 & 2.....	65
23	Intersection Level of Service - 2013 EPAP Plus Alternative A Phase 1 & 2.....	68
24	Roadway Segment Level of Service – 2010 EPAP Plus Alternative B.....	72
25	Intersection Level of Service - 2010 EPAP Plus Alternative B.....	75

TABLE OF CONTENTS

LIST OF TABLES (continued)

26	Roadway Segment Level of Service – 2013 EPAP Plus Alternative B Phase 1 & 2.....	79
27	Intersection Level of Service – 2013 EPAP Plus Alternative B Phase 1 & 2	82
28	Roadway Segment Level of Service – 2010 EPAP Plus Alternative C.....	86
29	Intersection Level of Service – 2010 EPAP Plus Alternative C.....	89
30	Roadway Segment Level of Service – 2010 EPAP Plus Alternative D.....	93
31	Intersection Level of Service – 2010 EPAP Plus Alternative D.....	96
32	Roadway Segment Level of Service – Cumulative (No Project)	102
33	Cumulative (No Project) Intersection Level of Service.....	105
34	Roadway Segment Level of Service – Cumulative Plus Alternative A Phase 1 & 2.....	110
35	Intersection Level of Service – Cumulative Plus Alternative A Phase 1 & 2	113
36	Roadway Segment Level of Service – Cumulative Plus Alternative B Phase 1 & 2.....	117
37	Intersection Level of Service – Cumulative Plus Alternative B Phase 1 & 2.....	120
38	Roadway Segment Level of Service – Cumulative Plus Alternative C.....	124
39	Intersection Level of Service – Cumulative Plus Alternative C.....	127
40	Roadway Segment Level of Service – Cumulative Plus Alternative D.....	131
41	Intersection Level of Service – Cumulative Plus Alternative D.....	134
42	Intersection and Roadway Segment Level of Service with Mitigation Measures – 2010 EPAP Plus Project.....	155
43	Intersection and Roadway Segment Level of Service with Mitigation Measures – 2013 EPAP Plus Project.....	174
44	Intersection and Roadway Segment Level of Service with Mitigation Measures – 2025 Cumulative Plus Project.....	262

TABLE OF CONTENTS

LIST OF FIGURES

- 1 Vicinity Map
- 2 Site Plan - Alternative A Phase 1
- 3 Site Plan - Alternative A Phase 1 & 2
- 4 Site Plan - Alternative B Phase 1
- 5 Site Plan - Alternative B Phase 1 & 2
- 6 Site Plan - Alternative C
- 7 Site Plan - Alternative D
- 8 Existing No Project Lane Geometry & PM Peak Hour Volumes
- 8a Existing No Project Lane Geometry & PM Peak Hour Volumes (cont.)
- 9 2010 EPAP No Project Lane Geometry & PM Peak Hour Volumes
- 9a 2010 EPAP No Project Lane Geometry & PM Peak Hour Volumes (cont.)
- 10 2013 EPAP No Project Lane Geometry & PM Peak Hour Volumes
- 10a 2013 EPAP No Project Lane Geometry & PM Peak Hour Volumes (cont.)
- 11 Trip Generation Equation Graph
- 12 Trip Distribution
- 13 Project Only PM Peak Hour Trips Alternative A Phase 1
- 13a Project Only PM Peak Hour Trips Alternative A Phase 1 (cont.)
- 14 Project Only PM Peak Hour Trips Alternative A Phase 1 & 2
- 14a Project Only PM Peak Hour Trips Alternative A Phase 1 & 2 (cont.)
- 15 Project Only PM Peak Hour Trips Alternative B Phase 1
- 15a Project Only PM Peak Hour Trips Alternative B Phase 1 (cont.)
- 16 Project Only PM Peak Hour Trips Alternative B Phase 1 & 2
- 16a Project Only PM Peak Hour Trips Alternative B Phase 1 & 2 (cont.)
- 17 Project Only PM Peak Hour Trips Alternative C
- 17a Project Only PM Peak Hour Trips Alternative C (cont.)
- 18 Project Only PM Peak Hour Trips Alternative D
- 18a Project Only PM Peak Hour Trips Alternative D (cont.)
- 19 2010 EPAP Plus Project Alternative A Phase 1 Lane Geometry & PM Peak Hour Volumes
- 19a 2010 EPAP Plus Project Alternative A Phase 1 Lane Geometry & PM Peak Hour Volumes (continued)
- 20 2013 EPAP Plus Project Alternative A Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes
- 20a 2013 EPAP Plus Project Alternative A Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes (continued)
- 21 2010 EPAP Plus Project Alternative B Phase 1 Lane Geometry & PM Peak Hour Volumes
- 21a 2010 EPAP Plus Project Alternative B Phase 1 Lane Geometry & PM Peak Hour Volumes (cont.)
- 22 2013 EPAP Plus Project Alternative B Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes

TABLE OF CONTENTS

LIST OF FIGURES (continued)

22a	2013 EPAP Plus Project Alternative B Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes (cont.)
23	2010 EPAP Plus Project Alternative C Lane Geometry & PM Peak Hour Volumes
23a	2010 EPAP Plus Project Alternative C Lane Geometry & PM Peak Hour Volumes (cont.)
24	2010 EPAP Plus Project Alternative D Lane Geometry & PM Peak Hour Volumes
24a	2010 EPAP Plus Project Alternative D Lane Geometry & PM Peak Hour Volumes (cont.)
25	Cumulative No Project Lane Geometry & PM Peak Hour Volumes
25a	Cumulative No Project Lane Geometry & PM Peak Hour Volumes (cont.)
26	Cumulative Plus Project Alternative A Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes
26a	Cumulative Plus Project Alternative A Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes (cont.)
27	Cumulative Plus Project Alternative B Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes
27a	Cumulative Plus Project Alternative B Phase 1 & 2 Lane Geometry & PM Peak Hour Volumes (cont.)
28	Cumulative Plus Project Alternative C Lane Geometry & PM Peak Hour Volumes
28a	Cumulative Plus Project Alternative C Lane Geometry & PM Peak Hour Volumes (cont.)
29	Cumulative Plus Project Alternative D Lane Geometry & PM Peak Hour Volumes
29a	Cumulative Plus Project Alternative D Lane Geometry & PM Peak Hour Volumes (cont.)
30	Mitigation Measures Existing Plus Approved Plus Alternative A Phase 1 - Intersections
31	Mitigation Measures Existing Plus Approved Plus Alternative A Phase 1 – Roadway Segments
32	Mitigation Measures Existing Plus Approved Plus Alternative A Phase 1 & 2 - Intersections
33	Mitigation Measures Existing Plus Approved Plus Alternative A Phase 1 & 2 – Roadway Segments
34	Mitigation Measures Existing Plus Approved Plus Alternative B Phase 1 - Intersections
35	Mitigation Measures Existing Plus Approved Plus Alternative B Phase 1 – Roadway Segments
36	Mitigation Measures Existing Plus Approved Plus Alternative B Phase 1 & 2 - Intersections
37	Mitigation Measures Existing Plus Approved Plus Alternative B Phase 1 & 2 – Roadway Segments
38	Mitigation Measures Existing Plus Approved Plus Alternative C - Intersections
39	Mitigation Measures Existing Plus Approved Plus Alternative C – Roadway Segments
40	Mitigation Measures Existing Plus Approved Plus Alternative D - Intersections
41	Mitigation Measures Existing Plus Approved Plus Alternative D – Roadway Segments

TABLE OF CONTENTS

LIST OF FIGURES (continued)

42	Mitigation Measures Cumulative Plus Alternative A - Intersections
43	Mitigation Measures Cumulative Plus Alternative A – Roadway Segments
44	Mitigation Measures Cumulative Plus Alternative B - Intersections
45	Mitigation Measures Cumulative Plus Alternative B – Roadway Segments
46	Mitigation Measures Cumulative Plus Alternative C - Intersections
47	Mitigation Measures Cumulative Plus Alternative C – Roadway Segments
48	Mitigation Measures Cumulative Plus Alternative D - Intersections
49	Mitigation Measures Cumulative Plus Alternative D – Roadway Segments

TABLE OF CONTENTS

APPENDIX A

Intersection Operations Calculations - Existing (No Project)
Intersection Operations Calculations – 2010 EPAP (No Project)
Intersection Operations Calculations – 2013 EPAP (No Project)
Intersection Operations Calculations – 2010 EPAP Plus Alternative A Phase 1
Intersection Operations Calculations – 2010 EPAP Plus Alternative A Phase 1 with Mitigation Measures
Intersection Operations Calculations – 2013 EPAP Plus Alternative A Phase 1 & 2
Intersection Operations Calculations – 2013 EPAP Plus Alternative A Phase 1 & 2 with Mitigation Measures
Intersection Operations Calculations – 2010 EPAP Plus Alternative B Phase 1
Intersection Operations Calculations – 2010 EPAP Plus Alternative B Phase 1 with Mitigation Measures
Intersection Operations Calculations – 2013 EPAP Plus Alternative B Phase 1 & 2
Intersection Operations Calculations – 2013 EPAP Plus Alternative B Phase 1 & 2 with Mitigation Measures
Intersection Operations Calculations – 2010 EPAP Plus Alternative C
Intersection Operations Calculations – 2010 EPAP Plus Alternative C with Mitigation Measures
Intersection Operations Calculations – 2010 EPAP Plus Alternative D
Intersection Operations Calculations – 2010 EPAP Plus Alternative D with Mitigation Measures
Intersection Operations Calculations - Cumulative (No Project)
Intersection Operations Calculations – Cumulative Plus Alternative A

TABLE OF CONTENTS

LIST OF APPENDICES (continued)

Intersection Operations Calculations – Cumulative Plus Alternative A with Mitigation Measures
Intersection Operations Calculations – Cumulative Plus Alternative B
Intersection Operations Calculations – Cumulative Plus Alternative B with Mitigation Measures
Intersection Operations Calculations – Cumulative Plus Alternative C
Intersection Operations Calculations – Cumulative Plus Alternative C with Mitigation Measures
Intersection Operations Calculations – Cumulative Plus Alternative D
Intersection Operations Calculations – Cumulative Plus Alternative D with Mitigation Measures
Traffic Counts

SECTION 1

INTRODUCTION

PROJECT DESCRIPTION

The project site consists of approximately 228 acres located within and outside of the City of Plymouth in Amador County. The project site will be served via two driveways on SR 49, a primarily rural two-lane roadway. The main driveway is located north of the site and the secondary service driveway access to the southwest of the project site. The existing loop road within the site will remain and continue to provide access to existing users. The loop road currently has a northern and a southern access. **Figure 1** shows the proposed location of the project with respect to the surrounding roadway network. The four development alternative projects are described below:

The Preferred Alternative, **Alternative A**, is proposed as a two-phase development. The single level 120,000 square foot gaming facility would include the casino floor, food and beverage areas, small retail shops, and offices for gaming related tribal activities, and security built in 2010. Phase II to be constructed in 2013 would include a 250-room hotel and convention center. **Figure 2 and Figure 3** provide the site plan for preferred Alternative A Phase 1 and 2.

Alternative B consists of similar components as Alternative A, but includes a smaller casino totaling 100,750 square feet. Alternative B would be constructed in two phases with the casino proposed for operation in 2010, and with the hotel/convention center opening in 2013. **Figure 4 and Figure 5** provide the site plan for preferred Alternative B Phase 1 and 2.

Alternative C would include a 79,250 square foot casino with no hotel or convention/event center. The casino would have similar proposed uses as Alternative A on a reduced scale including a buffet and sports bar. **Figure 6** shows the Alternative C site plan.

Alternative D consists of a 123,250 square foot regional retail outlet center with two anchor stores and a variety of smaller retail shops (**Figure 7**).

Section 2 of this report discusses existing traffic Condition for a number of adjacent roadway segments and the 38 identified study intersections. Section 3 presents the Existing Plus Approved Project (EPAP) Condition for 2010 to correlate with completion of Phase 1 for Alternatives A, B, and as well as Alternatives C, D. Existing Plus Approved Projects Condition for 2013 correlates with construction of Phase 2 for Alternatives A and B only is also presented in Section 3. Section 4 discusses operational deficiencies of roadway segments and intersections when project generated traffic volumes are added to the EPAP (No Project) traffic volumes. Section 5 describes the Cumulative year 2035 Condition (without the project). Section 6 discusses operational deficiencies of roadway segments and intersections when project generated traffic volumes are added to the Cumulative (No Project) traffic volumes. Section 7 discusses project impacts and suggested mitigation measures.

SECTION 2

EXISTING CONDITION

This section describes the roads and existing traffic operations in the study area. As noted in the Introduction, **Figure 1** provides a regional map for the project site.

EXISTING ROADS

The following roadways would be more heavily utilized by the project traffic:

US Route 50 (US 50) is an east-west freeway located north of the project site. Generally US 50 serves all of El Dorado County's major population centers and provides connections to Sacramento to the west and the South lake Tahoe/State of Nevada to the east. The highway is a divided 4-lane freeway in the vicinity of the US 50/Missouri Flat interchange with an ADT volume of approximately 55,000 vehicles.

The US 50/Missouri Flat interchange is currently being reconstructed into a tight diamond configuration and construction includes improvements to not only the eastbound and westbound ramp intersections, but also the adjacent Missouri Flat Road intersections with Mother Lode Drive and Plaza Drive. Improvements are being constructed in two phases designated as Phase 1A and 1B and an additional phase (designated as "phase 2") is planned for the future. These phases are described below:

- **Phase 1A** is scheduled for completion in 2009 (and is assumed for "Existing" conditions within this traffic study) and includes the widening of Missouri Flat Road to a divided 4-lane roadway northward from Mother Lode Drive to north of Plaza Drive, the widening of the eastbound off-ramp, and improvements at all four intersections along Missouri Flat Road.
- **Phase 1B** is scheduled for completion in 2011 (this configuration is assumed under Existing Plus Approved conditions) and includes the replacement of the existing loop westbound off-ramp with a new diagonal westbound off-ramp to complete the tight diamond configuration, a relocated and widened westbound on-ramp, and a new northbound right-turn bypass lane at the intersection

of Missouri Flat Road and Mother Lode Drive which connects with the eastbound US 50 on-ramp.

- **Phase 2** improvements which are anticipated to be constructed in 2025-2030 would include one of two alternatives: a six-lane tight diamond or a single point diamond interchange. This study assumes a single point interchange to be in place by 2025.

State Route 49 is a north-south primarily two-lane road extending nearly 300 miles between SR 70 in Plumas County to SR 41 in Oakhurst. The route serves residential and retail development and lacks curb, gutter, and sidewalk near the project site. SR 49 has a posted speed of 45 mph. In the vicinity of the project site, SR 49 has a center two-way left turn lane. It provides access to the site via two driveways.

Jackson Highway (SR 16) is a major arterial that traverses in the east-west direction, providing connection between Folsom Boulevard in the City of Sacramento and SR 49 in Amador County. Jackson Highway has two 12-foot travel lanes with 8-foot paved shoulders in the vicinity of the project site. The speed limit along Jackson Highway is posted at 55 miles per hour (mph). Surrounding land uses include retail and residential.

Grant Line Road is a 2-lane thoroughfare which begins at State Route 99 (SR 99) and continues in a northeast direction into the County of Sacramento where it terminates at White Rock Road. It has a full access interchange at SR 99. In the vicinity of the project site, Grant Line Road has two 12-foot travel lanes with 6-foot paved shoulders and a posted speed limit of 55 mph. The facility generally lacks curbs, gutters, and sidewalks.

Sunrise Boulevard is a north-south thoroughfare that begins at Grant Line Road and continues north into the City of Roseville. Sunrise Boulevard varies in roadway width, from two to six lanes. In the vicinity of the project site, Sunrise Boulevard is a 2-lane facility with paved shoulders and lacks curbs, gutters, and sidewalks. The posted speed limit along the roadway varies between 45 and 55 mph.

Bradshaw Road is a 4-lane wide thoroughfare with paved shoulders which begins at Grant Line Road. It has a full access interchange with US 50. The roadway primarily serves rural residential and industrial development. The posted speed limit varies between 45 and 55 mph along the roadway.

Dillard Road is a 2-lane rural collector that extends from SR 99 to SR 16. Dillard Road lacks curbs, gutters, and sidewalks and is approximately 22 feet wide. The roadway primarily serves low-density residential development. The posted speed limit along the roadway is 55 mph.

Stonehouse Road is a 2-lane undivided north-south rural collector which runs between SR 16 and Latrobe Road. Stonehouse Road is approximately 20 feet wide with no shoulders and lacks curbs, gutters, and sidewalks. There is no posted speed limit along Stonehouse Road. The roadway primarily serves residential development.

Murieta Parkway north of SR 16 serves the Ranch Murieta gated community. South of SR 16, Murieta Parkway is also known as Murieta Drive. South of SR 16, Murieta Drive is a 2-lane road with a posted speed limit of 25 mph and access to the Placerville Airport.

Murieta South Parkway north of SR 16 serves the Ranch Murieta gated community. South of SR 16, Murieta Parkway provides access to the Rancho Murieta Community Services District.

Latrobe Road (Sacramento County) is a 2-lane rural road with soft shoulders beginning at SR 16. South of SR 16, Latrobe Road is also known as Indio Drive. In the vicinity of the project site, Latrobe Road lacks curbs, gutters, and sidewalks and has a posted speed limit of 55 mph.

Sloughhouse Road is a 2-lane rural road which begins at SR 16. The roadway lacks curbs, gutters, and sidewalks and has no shoulders. The speed limit along this roadway is 55 mph.

Excelsior Road is a 2-lane road with a 55 mph posted speed limit with a southern terminus at Grant Line Road. North of Kiefer Road, Excelsior Road is also known as Mather Boulevard. Excelsior Road is generally rural in nature lacking curb, gutter and sidewalk.

Ione Road is a two-lane rural road between SR 16 and Michigan Bar Road with a posted speed limit of 50 mph and no curb, gutter and sidewalk.

State Route 88 (SR 88) begins in San Joaquin County at SR 99 and terminates at the California/Nevada border. In the vicinity of the project site, SR 88 is a two-lane conventional highway and is classified as a principal arterial. The posted speed limit is 55 mph. SR 88 also has paved shoulders on each side. A segment of SR 88 passing through the communities of Lockeford and Clemens is designated as both SR 88 and SR 12. The posted speed limit in these areas ranges from 25 to 40 mph. There is also a center two-way left-turn lane along SR 88 in Lockeford.

Kettleman Lane is an east-west roadway also known as SR 12 west of SR 99. East of SR 99, Kettleman Lane is 2-lanes wide with a posted speed limit that varies between 40 to 45 mph. There are paved shoulders on each side of the roadway.

State Route 12 (SR 12) extends from Highway 1 in Sonoma County and terminates at SR 88 in Amador County. East of SR 99, SR 12 is a 2-lane road with a posted speed limit of 55 mph. It generally provides paved shoulders on each side of the roadway.

Tully Road is two-lane rural roadway with soft shoulders. West of SR 88, Tully Road is known as Elliot Road. The roadway primarily serves residential and some agricultural lane uses. It has a posted speed limit of 25 mph. Sidewalk is available on both sides of the roadway.

Liberty Road is a two-lane rural roadway with soft shoulders. It primarily traverses between west of SR 99 in San Joaquin County and continues east until its terminus with Camanche Parkway. The posted speed limit is 55 mph.

State Route 124 (SR 124) is a 2-lane rural road extending from SR 88 south of Ione to SR 49. It is also known as Church Street in the City of Ione and Plymouth Highway north of the City of

Ione. The posted speed limit in the City of Ione is 25 to 35 mph. Outside of the City of Ione, it has a posted speed limit that varies from 55 to 65 mph.

State Route 104 (SR 104) is an east-west road connecting SR 99 near the City of Galt to SR 88 near the City of Ione. SR 104 is a two-lane roadway and has a posted speed limit of 25 mph in the City of Ione. It is designated as Main Street in Ione and has on-street parking and paved sidewalks along the roadway. It is known as Preston Avenue north of the City of Ione.

Jackson Valley Road is a 2-lane rural roadway with no shoulders. It runs between Old Stockton Road and Buena Vista Road in Amador County. The posted speed limit is 45 mph.

Latrobe Road (Amador County) is a 2-lane roadway which begins at SR 16 in Amador County and continues north into El Dorado County where it terminates with US 50. Latrobe Road generally lacks curbs, gutters, and sidewalks and provides access to rural residential development in Amador County. North of US 50, Latrobe Road is also known as El Dorado Hills Boulevard. It has a full access interchange with US 50.

Miller Way is a local roadway in the City of Plymouth. It is an east-west roadway which begins at SR 49. Miller Way is a wide roadway with no center line markings and provides access to residential development. The roadway has a posted speed limit of 25 mph.

Main Street is a 2-lane arterial in the City of Plymouth. It has a posted speed limit of 25 mph. It is also known as Shenandoah Road east of SR 49. The roadway primarily serves residential and retail development.

Poplar Street is a 2-lane collector which generally lacks curbs, gutters, and sidewalks. The roadway primarily serves residential development. The posted speed limit is 25 mph.

Empire Street is a 2-lane collector which runs between SR 49 and Church Street in the City of Plymouth. It has a posted speed limit of 25 mph. The roadway primarily serves residential development.

Randolph Drive is a 2-lane roadway which begins at SR 49 and continues east until its terminus with Randolph Court. The main project driveway will become the fourth leg of its intersection with SR 49.

Pleasant Valley Road is an east-west 2-lane minor arterial approximately 12 miles in length beginning to the west at Mother Lode Road and terminating to the east at Sly Park Road. Only the ± 2.2 mile section of Pleasant Valley Road west of Diamond Road is designated as SR 49. The roadway carries approximately 13,500-16,000 vehicles per day (VPD) along the SR 49 section of the roadway and immediately east of Diamond Road. The speed limit within the community of Diamond Springs is 25 mph (between Missouri Flat Rd. and Racquet Way), increasing to 35 mph outside of Diamond Springs.

South Shingle Road is a two lane road that provides connection between Latrobe Road to the south and US 50 to the north. Past US 50, it is also known as N Shingle Road. The speed limit

on this roadway varies between 25 mph to 45 mph. This two lane road provides access to residential communities south of US 50.

Missouri Flat Road is north-south arterial roadway approximately 3.5 miles in length that begins to the south at Pleasant Valley Road and terminates at Green Valley Rd. It has a full access interchange with US 50. In the vicinity of Forni Road, Missouri Flat Road accommodates approximately 33,500 VPD.

Mother Lode Drive is an east-west, two-lane roadway that generally parallels US-50 to the south. Mother Lode Drive connects South Shingle Road to the west with Missouri Flat Road to the east. As per El Dorado County Department of Transportation between South Shingle Road and Missouri Flat Road, Mother Lode Drive accommodates approximately 14,500 VPD.

Forni Road is a two-lane collector roadway that connects the intersection of SR 49/Pleasant Valley Road with Missouri Flat Road and serves approximately 9,000 VPD. The speed limit along this roadway varies between 35mph and 45 mph.

EXISTING TRANSIT

Public transportation throughout Amador County is serviced by Amador Regional Transit System (ARTS). ARTS services a range of communities linking them together through a regulated time and route schedule from Monday through Friday. There are six primary lines that service within Amador County and one route that is a direct route leading to and from Sacramento. This line known at the Sacramento/Amador express departs three times daily with many stops along the way.

Within the City of Plymouth there is one line known as the “P” line that runs between the City of Plymouth and the City of Jackson. There are three designated “P” lines departing at three different time intervals and with eight designated route stops. In addition there are three on-call stops for Fiddletown, River Pines and Amador High School that can be arranged by special request.

ARTS will deviate from the regular route within a ½ mile given a 24-hour notice. Once that stop has been approved, ARTS requires only a one-hour notification period. All buses are equipped to accommodate people with special needs and animals that serve to assist with special needs.

EXISTING BICYCLE AND PEDESTRIAN SYSTEM

Field observations indicate that walking and bicycling activity is limited in the immediate vicinity of the proposed project site. This is primarily due to the lack of existing bicycle and pedestrian traffic generators in the vicinity of the project site. However, there is a lack of curbs, gutters, and sidewalks along SR 49 to accommodate pedestrian activity. On most of the roadways in the study area, bicyclists must ride in the roadway and share the travel lane with vehicular traffic.

EXISTING INTERSECTIONS

Twenty-five intersections were considered most likely to be affected by the Alternatives and evaluated in this traffic study. The list of 25 study intersections was provided by AES. AES developed this list from a list of more than 45 intersections. The 45 intersections were narrowed down to 25 intersections by the criteria of intersections which were determined to experience more than a 10% growth in average weekday daily volumes with the addition of project traffic were selected for analysis. However Amador County, El Dorado County, and Caltrans District 10 requested more intersections than the original 25 intersections to be analyzed and were included in this analysis. The following are the list of intersections that were analyzed in this study:

1. SR 49/ Miller Way
2. SR 49/Main Street
3. SR 49 / Poplar Street
4. SR 49 / Empire Street
5. SR 49 / Randolph Drive
6. SR 49 / SR 16
7. SR 16 / SR 124
8. SR 16 / Latrobe Road (Amador County)
9. SR 124 / Preston Avenue
10. Preston Avenue / Main Street
11. Church Street / Main Street
12. SR 88 / SR 124
13. SR 88 / Jackson Valley Road
14. SR 88 / Liberty Road
15. SR 88 / SR 12 (east)
16. SR 88 / Tully Road
17. SR 88 / SR 12 (west)
18. SR 88 / Kettleman Lane
19. SR 16 / Ione Road
20. SR 16 / Murieta South Parkway
21. SR 16 / Murieta Parkway
22. SR 16 / Stonehouse Road
23. SR 16 / Latrobe Road (Sacramento County)
24. SR 16 / Dillard Road
25. SR 16 / Sloughhouse Road
26. SR 16 / Grant Line Road
27. SR 16 / Sunrise Boulevard
28. SR 16 / Excelsior Road
29. SR 16 / Bradshaw Road
30. Latrobe Road / White Rock Road
31. Latrobe Road / South Shingle Road
32. Missouri Flat Road / US 50 WB ramps
33. Missouri Flat Road / US 50 EB Ramps
34. Missouri Flat Road / Motherlode Drive
35. Missouri Flat Road / Forni Road

- 36. Pleasant Valley Road / Missouri Flat Road
- 37. Pleasant Valley Road / Forni Road
- 38. Pleasant Valley Road / SR 49

The location of these intersections is shown in **Figure 1**. Eighteen of the study intersections are controlled by a traffic signal. Twenty are unsignalized and controlled by either all way stops or stop signs on the minor street.

EXISTING TRAFFIC OPERATIONS

Period of Analysis

For this casino project the highest project trips would occur during the Friday PM peak hour of 4-6 PM which is an evening commute peak period. According to the 24-hour volume counts, the weekend peak period for a casino occurs on Saturdays also between the evening hours of 4-6 PM. These time periods are considered the peak periods because the project is expected to have the greatest impact on the local roadway network during these time periods.

Level of Service Concept

The operating condition experienced by motorists is described as “levels of service” (LOS). Level of service is a qualitative measure of how traffic operations affect several factors, including speed and travel time, traffic interruptions, freedom to maneuver, and driving comfort and convenience. Levels of service are designated “A” through “F” from best to worst, which cover the entire range of traffic operations that might occur. Levels of service “A” through “E” generally represent traffic volumes at less than roadway capacity, while LOS “F” represents over capacity or forced flow condition. There are some jurisdictions that LOS “D” and LOS “E” are not considered acceptable.

The following table 1 lists each intersection, the county the intersection is located in, and the acceptable LOS for each intersection.

Table 1
Acceptable Level of Service for Study Intersections

Int. No.	Intersection	Location	Acceptable LOS
1	SR 49 / Miller Way	Amador	D
2	SR 49 / Main Street/Shenandoah Rd.	Amador	D
3	SR 49 / Poplar Street	Amador	D
4	SR 49 / Pacific Street/Empire Street	Amador	D
5	SR 49 / Randolph Drive	Amador	D
6	SR 49 / SR 16	Amador	C
7	SR 16 / SR 124	Amador	C
8	SR 16 / Latrobe Road (Amador County)	Amador	C
9	SR 124/Shakeley Lane / Preston Avenue	Amador	C
10	Preston Avenue / Main Street	Amador	C
11	Church Street / Main Street	Amador	C

Int. No.	Intersection	Location	Acceptable LOS
12	SR 88 / SR 124	Amador	C
13	SR 88 / Jackson Valley Road	Amador	C
14	SR 88 / Liberty Road	San Joaquin	C
15	SR 88 / SR 12 (east)	San Joaquin	C
16	SR 88 / Tully Road/Elliott Road	San Joaquin	D
17	SR 88 / SR 12 (west)/Victor Road	San Joaquin	C
18	SR 88 / Kettleman Lane	San Joaquin	C
19	SR 16 / Ione Road	Sacramento	D
20	SR 16 / Murieta South Parkway	Sacramento	E
21	SR 16 / Murieta Parkway/Murieta Drive	Sacramento	E
22	SR 16 / Stonehouse Road	Sacramento	E
23	SR 16 / Latrobe Road/Indio Drive	Sacramento	D
24	SR 16 / Dillard Road	Sacramento	D
25	SR 16 / Sloughhouse Road	Sacramento	E
26	SR 16 / Grant Line Road	Sacramento	D
27	SR 16 / Sunrise Boulevard	Sacramento	D
28	SR 16 / Excelsior Road	Sacramento	E
29	SR 16 / Bradshaw Road	Sacramento	E
30	Latrobe Road / White Rock Road	El Dorado	E
31	Latrobe Road / South Shingle Road	El Dorado	E
32	Missouri Flat Road / Highway 50 WB Ramps	El Dorado	D
33	Missouri Flat Road / Highway 50 EB Ramps	El Dorado	D
34	Missouri Flat Road / Motherlode Road	El Dorado	E
35	Missouri Flat Road / Forni Road	El Dorado	E
36	Pleasant Valley Road / Missouri Flat Road	El Dorado	E
37	Pleasant Valley Road / Forni Road	El Dorado	E
38	Pleasant Valley Road / SR 49	El Dorado	E
39	Elliott / SR 88 (future intersection)	San Joaquin	D
40	Tully / SR 88 (future intersection)	San Joaquin	D

Table 2 lists each roadway segment, the county the roadway segment is located in, and the acceptable LOS for each roadway segment, and the capacity of each roadway segment.

Table 2
Acceptable Level of Service for Roadway Segments

Roadway	Location	Classification	Capacity	LOS Threshold
SR 49 between Main Casino Entrance and Main Street in Plymouth	Amador	Class III Art	18,600	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Amador	Art w/clmb lane	25,100	D
SR 16 between Bradshaw Road and Excelsior Road	Sacramento	2 lane Arterial	20,000	E
SR 16 between Excelsior Road and Sunrise Boulevard	Sacramento	2 lane Arterial	20,000	E
SR 16 between Sunrise Boulevard and Grant	Sacramento	2 lane Arterial	20,000	D

Roadway	Location	Classification	Capacity	LOS Threshold
Line Road				
SR 16 between Grant Line Road and Dillard Road	Sacramento	2 lane Arterial	20,000	D
SR 16 between Dillard Road and Stonehouse Road	Sacramento	2 lane Arterial	20,000	D
SR 16 between Stonehouse Road and Ione Road	Sacramento	2 lane Arterial	20,000	E
SR 16 between Ione Road and Old Sacramento Road	Amador	Class I Art	20,200	C
SR 16 between Latrobe Road (Amador) and SR 124	Amador	Class I Art	20,200	C
SR 16 between SR 124 and SR 49	Amador	Class I Art	20,200	C
Latrobe Road (Amador) north of SR 16	Amador	Class IV Coll	11,200	C
SR 124 between SR 16 and Tonzi Road	Amador	Class II Art	18,900	C
SR 124 between Tonzi Road and SR 104	Amador	Class II Art	18,900	C
SR 104 between SR 124 and Main Street	Amador	Class II Coll	16,900	C
SR 104 between Main Street and Church Street	Amador	Class II Coll	16,900	C
SR 124 between Main Street and SR 88	Amador	Class II Art	18,900	C
SR 88 between SR 124 and Liberty Road	Amador	Class I Art	20,200	C
SR 88 between Liberty Road and SR 12 East	San Joaquin	2 lane Arterial	15,000	C
SR 88 between SR 12 East and Tully Road	San Joaquin	2 lane Arterial	18,000	C
SR 88 between Tully Road and SR 12 West	San Joaquin	2 lane Arterial	18,000	C
SR 88 between SR 12 West and Kettleman Lane	San Joaquin	2 lane Arterial	15,000	C

Sources:

Buena Vista TIS, April 2007

Transportation Concept Report for SR 104, 124 and 16

Amador County RTP Update, September 2004

Transportation Impact Assessment Draft Report, City of Plymouth, June 2008

County of Sacramento, Traffic Impact Study Guidelines, June 2004

Different types of analyses are used for roadway segments, unsignalized and signalized intersections. The methods used to analyze roadway segments and both signalized and unsignalized intersections are described below.

Roadway Segments

Amador County

Roadway segment analysis is based upon the daily traffic volume thresholds established in the *Amador County Regional Transportation Plan (RTP) Update* dated September, 2004. The LOS methodology used to analyze the capacity of roadway segments was based on the Level of Service Criteria outlined in the RTP. This methodology examines the Average Daily Traffic (ADT) volumes as compared to the daily traffic volume capacity of the roadway facility. A roadway facility is classified as either an arterial or collector with a class ranging from I-V. The following describes Class I – V:

- Class I: 11' – 12' Lanes, 4'+ Shoulders, 0-40% No Passing, Level-Rolling Terrain,
- Class II: 11' – 12' Lanes, 2'+ Shoulders, 40-60% No Passing, Level-Rolling Terrain,
- Class III: 10' – 11' Lanes, 2'+ Shoulders, 60-80% No Passing, Level-Rolling Terrain,
- Class IV: 10' – 11' Lanes, 0'- 4' Shoulders, 80-100% No Passing, Rolling-Mountainous Terrain, and
- Class V: 9' – 10' Lanes, No Shoulders, 80-100% No Passing, Rolling-Mountainous Terrain.

The LOS thresholds for roadway segments are shown on **Table 3**.

Table 3
Amador County Roadway Level of Service Criteria

Facility Type	Daily Service Volumes (vehicles per day)				
	A	B	C	D	E
Arterial, Class I ¹	2,600	5,900	10,300	16,900	20,200
Arterial, Class II ¹	2,200	5,200	9,300	15,300	18,900
Arterial, Class III ¹	1,600	4,500	8,600	14,200	18,600
Arterial, Class IV ¹	1,200	3,300	6,400	11,000	15,500
Arterial, Class V ¹	1,000	3,000	5,900	10,200	14,300
Arterial (with climbing lane)	N/A	12,200	16,500	22,200	25,100
Arterial (2 lanes each direction) ²	N/A	24,900	30,800	32,700	34,900
Collector, Class I-III ¹	1,300	3,900	7,500	12,600	16,900
Collector, Class IV ¹	1,000	3,000	5,500	8,750	11,200
Collector, Class V ¹	600	2,000	3,500	4,900	5,500
Notes:					
¹ – Source – <i>Transportation Research Record 1194</i> , Transportation Research Board, 1988.					
² - Source – <i>Highway Capacity Manual – Special Report 209</i> , Transportation Research Board, 1994.					
N/A = Not Achievable					

Source: *Amador County RTP*, 2004.

Sacramento County

The LOS methodology used to analyze the capacity of roadway segments was based on the LOS criteria outlined in the *Traffic Impact Analysis Guidelines* (County of Sacramento 2004). This methodology examines the Average Daily Traffic (ADT) volumes as compared to the daily traffic volume capacity of the roadway facility. The LOS thresholds for roadway segments are shown on Table 4.

Table 4
Sacramento County Roadway Level of Service Criteria

Facility Type	Number of Lanes	Maximum Volume for Given Service Level				
		A	B	C	D	E
Residential	2	600	1,200	2,000	3,000	4,500
Residential collector with frontage	2	1,600	3,200	4,800	6,400	8,000
Residential collection without frontage	2	6,000	7,000	8,000	9,000	10,000
Arterial, low access control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, moderate access control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, high access control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	42,000	48,000	54,000	60,000
Rural, 2-lane highway	2	2,400	4,800	7,900	13,500	22,900
Rural, 2-lane road, 24'-36' of pavement, paved shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural, 2-lane road, 24'-36' of pavement, no shoulders	2	1,800	3,600	5,900	10,100	17,000

Source: *Traffic Impact Study Guidelines, County of Sacramento, July 2004.*

San Joaquin County

This methodology used for roadways in San Joaquin County examines the Average Daily Traffic (ADT) volumes as compared to the daily traffic volume capacity of the roadway facility. The LOS thresholds for roadway segments are shown on Table 5.

Table 5
San Joaquin County Roadway Level of Service Criteria

Facility Type	Total Daily Vehicles in both Directions (ADT)				
	A	B	C	D	E
6-lane Divided Freeway	42,000	64,800	92,400	111,600	120,000
4-lane Divided Freeway	28,000	43,200	61,600	74,400	80,000
6-lane Divided Arterial (with left-turn lane)	32,000	38,000	43,000	49,000	54,000
4-lane Divided Arterial (with left-turn lane)	22,000	25,000	29,000	32,500	36,000
4-lane Undivided Arterial (no left-turn lane)	18,000	21,000	24,000	27,000	30,000
2-lane Arterial (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
2-lane Arterial (no left-turn lane)	9,000	10,500	12,000	13,500	15,000
2-lane Collector / Local Street	6,000	7,500	9,000	10,500	12,000

Source: 1990 *San Joaquin County Traffic Impact Mitigation Fee*

Unsignalized Intersection Analysis

At an unsignalized intersection, most of the main street traffic is undelayed, and by definition have acceptable conditions. The main street left-turn movements and the minor street movements are all susceptible to delay of varying degrees. Generally, the higher the main street traffic volumes, the higher the delay for the minor movements.

The methodology for analysis of unsignalized intersections calculates an average total delay per vehicle for each minor street movement and for the major street left-turn movements, based on the availability of adequate gaps in the main street through traffic as described in the Transportation Research Board's *Special Report 209, Highway Capacity Manual*, 2000. A LOS designation is assigned to individual movements or to combinations of movements (in the case of shared lanes) based upon delay. Unsignalized intersection LOS reported herein is for each movement (or group of movements) based upon the respective average delay per vehicle. Table 6 presents the average delay criteria used to determine the LOS at unsignalized intersections. The LOS corresponding to the average delay for the whole intersection is also presented.

It is not unusual for some of the minor street movements at unsignalized intersections to have LOS D, E or F conditions while the major street movements have LOS A, B or C conditions. In such a case, the minor street traffic experiences delays that can be substantial for individual minor street vehicles, but the majority of vehicles using the intersection have very little delay. Usually in such cases, the minor street traffic volumes are relatively low. If the minor street volume is large enough, improvements to reduce the minor street delay may be justified, such as channelization, widening, or signalization.

Table 6
Level of Service Criteria
Unsignalized Intersections

Level of Service	Control Delay per Vehicle (Seconds)	Description
A	0 – 10.0	Little or no delay
B	10.1 – 15.0	Short traffic delay
C	15.1 – 25.0	Average traffic delays
D	25.1 – 35.0	Long traffic delays
E	35.1 – 50.0	Very long traffic delays
F	> 50.1	Extreme delays potentially affecting other traffic movements in the intersection

Note: This level of service criteria has been accepted by all jurisdictions related to this study.

Source: *Highway Capacity Manual*, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Signalized Intersection Analysis

Signalized intersection analyses were conducted using a methodology outlined in the Transportation Research Board's Special Report 209, *Highway Capacity Manual*, 2000. The methodology is known as "operations analysis." This procedure calculates an average control delay per vehicle at a signalized intersection, and assigns a LOS designation based on the delay. The method also provides a calculation of the volume-to-capacity (v/c) ratio of the critical movements at the intersection. **Table 7** presents the LOS criteria for signalized intersections.

Table 7
Level of Service Criteria
Signalized Intersections

Level of Service	Control Delay per Vehicle (secs)	Description
A	0 - 10.0	Very low delay. Occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	10.1 - 20.0	Generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS "A," causing higher levels of average delay.
C	20.1 - 35.0	These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though may still pass through the intersection without stopping.
D	35.1 - 55.0	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
F	> 80.0	This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Note: This level of service criteria has been accepted by all jurisdictions related to this study.

Source: *Highway Capacity Manual*, Transportation Research Board, Special Report No. 209, Washington, D.C., 2000.

Signal Warrants

At each unsignalized intersection, the potential need for a traffic signal was evaluated. Traffic signal warrants are a series of standards that provide guidelines for determining if a traffic signal is appropriate. Signal warrant analyses are typically conducted at intersections of uncontrolled major streets and stop sign-controlled minor streets. If one or more signal warrants are met, signalization of the intersection may be appropriate. However, a signal should not be installed if none of the warrants are met, since the installation of signals would increase delays on the previously uncontrolled major street, and may increase the occurrence of particular types of accidents.

As stated in the 2003 edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*, “An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location. The investigation of the need for a traffic control signal shall include an analysis of the applicable factors contained in the following traffic signal warrants and other factors related to existing operation and safety at the study location:

- Warrant 1, Eight-Hour Vehicular Volume.
- Warrant 2, Four-Hour Vehicular Volume.
- Warrant 3, Peak Hour.
- Warrant 4, Pedestrian Volume.
- Warrant 5, School Crossing.
- Warrant 6, Coordinated Signal System.
- Warrant 7, Crash Experience.
- Warrant 8, Roadway Network.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.”

This traffic impact analysis did not evaluate the full panoply of warrants for traffic signals, but instead focused on the peak hour warrant. The MUTCD states that, “*This [peak hour] signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.*” So the peak hour warrant is being used in this impact analysis study as an “indicator” of the likelihood of an unsignalized intersection warranting a traffic signal in the future. A signal may also be warranted by other criteria, some of which can not be known until the intersection is constructed and operational. Intersections that exceed the peak hour warrant are considered (for the purposes of this impact analysis) to be likely to meet one or more of the other signal warrants (such as the 4-hour or 8-hour warrants).

For this traffic analysis, available data are limited to peak hour of generator volumes. Therefore unsignalized intersections were evaluated using the Peak Hour Volume Warrant (Warrant No. 11) in

the Caltrans *Traffic Manual*, which is the same as Warrant No. 3 in the MUTCD. This warrant was evaluated since it is the most appropriate warrant to examine given the available data for this project. The Peak Hour Volume Warrant was applied where the minor street experiences long delays in entering or crossing the major street for at least one hour in a day.

Standards of Significance

According to the County of Sacramento's *Traffic Impact Analysis Guideline*, the following are thresholds of significance, which are used to determine if an impact is significant and requires mitigation. The City of Rancho Cordova uses the same significance criteria as the County of Sacramento.

Roadways/Signalized Intersections: A project is considered to have a significant effect if it would:

- Result in a roadway or a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
- Increase the V/C ratio by more than 0.05 at a roadway or at a signalized intersection that is operating at an unacceptable LOS without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- Result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or
- For an unsignalized intersection that meets a signal warrant, increase the delay by more than 5 seconds at a movement/approach that is operating at an unacceptable LOS without the project.

According to *Amador County Traffic Impact Study Guidelines*, the following are thresholds of significance, which are used to determine if an impact is significant and requires mitigation.

Roadways: A project is considered to have a significant effect if it would:

- Result in a roadway operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
- Increase the V/C ratio by more than 0.05 at a roadway that is operating at an unacceptable LOS without the project.

Signalized Intersection: A project is considered to have a significant effect if it would:

- Result in a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
- Increase the delay by more than 5 seconds at a signalized intersection that is operating at an unacceptable LOS without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- Result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or
- For an unsignalized intersection that meets a signal warrant, increase the delay by more than 5 seconds at a movement/approach that is operating at an unacceptable LOS without the project.

According to *County of El Dorado Department of Transportation Traffic Impact Study Protocols and Procedures*, the following are thresholds of significance, which are used to determine if an impact is significant and requires mitigation. A project is considered to have a significant effect if it would:

- Result in an intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or

If an intersection is already operating at an unacceptable LOS than it is a significant impact if the following occurs:

- A two (2) percent increase in traffic during the AM peak hour, PM peak hour, or daily; or
- The addition of 100 or more daily trips, or
- The addition of 10 or more trips during the AM or PM peak hour.

According to San Joaquin County and Caltrans District 10, a project is considered to have a significant impact if the project causes the intersection/roadway segments to degrade peak period LOS from C or better to D, E, or F in rural areas, and from LOS D or better to LOS E or F in urban or developing areas. In addition, if intersections/roadway segments are, or would be (cumulative Condition), operating an unacceptable LOS without the project, an impact is considered significant if the project exacerbates congestion at the intersection/roadway segment.

According to Caltrans District 3, a project is considered to have a significant impact if the project causes the intersection to degrade from an acceptable LOS to an unacceptable LOS. In addition if an intersection is or would be (under cumulative conditions), operating at an unacceptable LOS without the project, an impact is considered significant if the project increases the average delay by 2 percent or more at a signalized intersection.

The LOS standards of significance for each different jurisdiction for the Friday PM peak hours is applied to the Saturday PM peak hour.

EXISTING ROADWAY SEGMENT OPERATIONS

Automated daily machine counts for this TIA were conducted on a Friday and Saturday in August 2008 to characterize travel patterns in the study area. The following roadway segment locations in the vicinity of the project site were analyzed as requested by Amador County, Sacramento County and Caltrans District 10:

- SR 49 between Main Casino Entrance and Main Street in Plymouth
- SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.
- SR 16 between Bradshaw Road and Excelsior Road
- SR 16 between Excelsior Road and Sunrise Boulevard
- SR 16 between Sunrise Boulevard and Grant Line Road
- SR 16 between Grant Line Road and Dillard Road
- SR 16 between Dillard Road and Stonehouse Road
- SR 16 between Stonehouse Road and Ione Road
- SR 16 between Ione Road and Old Sacramento Road
- SR 16 between Latrobe Road (Amador) and SR 124
- SR 16 between SR 124 and SR 49
- Latrobe Road (Amador) north of SR 16
- SR 124 between SR 16 and Tonzi Road
- SR 124 between Tonzi Road and SR 104
- SR 104 between SR 124 and Main Street
- SR 104 between Main Street and Church Street
- SR 124 between Main Street and SR 88
- SR 88 between SR 124 and Liberty Road
- SR 88 between Liberty Road and SR 12 East
- SR 88 between SR 12 East and Tully Road
- SR 88 between Tully Road and SR 12 West
- SR 88 between SR 12 West and Kettleman Lane

Level of Service

Levels of service for the study roadway segments are shown in **Table 8**. All of the roadway segments operate acceptably except for the following:

- SR 104 between SR 124 and Main Street during the Friday and Saturday,
- SR 104 between Main Street and Church Street during the Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during the Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during the Saturday,
- SR 88 between SR 12 East and Tully Road during the Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during the Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during the Friday and Saturday.

Table 8
Roadway Segment Level of Service
Existing No Project

Roadway	Classification	Capacity Threshold	LOS Threshold	Existing No Project					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	7,800	0.42	C	6,400	0.34	C
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	8,100	0.32	B	6,500	0.26	B
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	15,600	0.78	C	12,500	0.63	B
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	11,500	0.58	A	8,100	0.41	A
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	15,500	0.78	C	12,100	0.61	B
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	16,900	0.85	D	13,700	0.69	B
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	15,800	0.79	C	12,700	0.64	B
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	9,500	0.48	A	8,100	0.41	A
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	7,100	0.35	C	6,300	0.31	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	9,800	0.49	C	8,600	0.43	C
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	11,800	0.58	D	10,200	0.50	C
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,800	0.25	B	2,600	0.23	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	2,000	0.11	A	1,800	0.10	A
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	3,000	0.16	B	2,500	0.13	B
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	12,000	0.71	D	9,500	0.56	D
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	10,500	0.62	D	8,600	0.51	D
SR 124 between Main Street and SR 88	Class II Art	18,900	C	3,400	0.18	B	2,800	0.15	B
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	12,500	0.62	D	10,900	0.54	D
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	13,700	0.91	E	11,900	0.78	C
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	18,300	1.02	F	15,900	0.88	D
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	21,100	1.17	F	18,000	1.00	E
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	14,500	0.97	E	12,200	0.81	D

Notes:
 Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

EXISTING INTERSECTION OPERATIONS

A collection of 24-hour traffic counts in the area determined that the peak hour of the project would be during the evening peak period for both a “weekday” (Friday) and weekend day. The PM peak hour is typically the most congested during a given “weekday” and evaluating traffic conditions during the evening peak period would reflect the worst case or more conservative condition. Therefore, the Friday PM and Saturday PM peak hour were analyzed for this project.

Friday and Saturday PM peak hour traffic counts were collected in August 2008 at the study intersections during the 4-6 pm periods. Friday and Saturday PM peak hour turning movement counts were developed for the intersections of Missouri Flat Road / WB Ramps, Missouri Flat Road / EB Ramps, and White Rock Road and Latrobe Road from data collected in the Placer Oaks traffic impact study done by Kimley Horn in 2008 since, the volumes would not be accurately depicted at these intersections due to current construction at these intersections. From 24-hour daily counts in this area, a factor was developed to obtain Friday and Saturday PM peak hour volumes from typical weekday (Tuesday, Wednesday, or Thursday) PM peak hour counts.

As stated earlier in this document, the lane configuration for Phase 1A of the US 50 Missouri Flat interchange intersections is being used under existing conditions. Also the proposed lane configuration (after construction) for the intersection of White Rock Road and Latrobe Road is being used for the existing condition. The lane configurations and Friday and Saturday PM peak hour turning movement traffic counts are shown in **Figure 8**.

Level of Service

Existing Condition LOS were calculated for the Friday and Saturday PM peak hour at the study intersections using the TRAFFIX and Synchro software packages and are listed in **Table 9**. Synchro was used along the Missouri Flat Road corridor in order to simulate coordination among the closely spaced signalized intersections. A peak hour factor was used at each intersection and calculated based on collected traffic count data. A truck percentage was used along each route as specified in the *2006 Annual Average Daily Truck Traffic on the California State Highway System* published by Caltrans. Truck percentages used in this analysis along SR 49 were 8 percent, along SR 16 in Sacramento County were 9 percent, along SR 16 in Amador County were 8 percent, along Route 124 were 8 percent, along SR 88 in San Joaquin County were 7 percent, and along SR 88 in Amador County were 9 percent. The following intersections are expected to operate at an unacceptable LOS:

- The westbound approach of the Preston / SR 124 intersection during the Friday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Missouri Flat / US 50 WB Ramps during the Friday PM peak hour, and
- Missouri Flat / US 50 EB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- Preston Avenue / SR 124 during the Friday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour, and
- Forni Road / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 9
Existing No Project Intersection Level of Service

Intersection			Control	Existing No Project			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	1.7	A	1.1	A
			NB Left	7.6	A	7.5	A
			EB Approach	8.8	A	8.4	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	6.3	A	9.6	A
			NB Left	7.6	A	7.5	A
			SB Left	8.0	A	7.8	A
			EB Approach	12.2	B	11.5	B
			WB Approach	17.7	C	20	C
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.9	A	0.4	A
			NB ThruLeft	7.9	A	8.0	A
			EB Approach	10.1	B	10.3	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.5	A	1.1	A
			NB Left	7.9	A	8.0	A
			SB Left	8.1	A	N/A	N/A
			EB Approach	12.0	B	10.3	B
			WB Approach	14.9	B	13.7	B
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	0.5	A	0.2	A
			NB Left	7.9	A	7.9	A
			EB Approach	12.4	B	11.3	B
6	SR 49 / SR 16	C	Signal	14.2	B	13.3	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	1.9	A	1.5	A
			NB Approach	13.1	B	11.5	B
			WB Left	8.7	A	8.3	A
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.1	A	2.2	A
			EB ThruLeft	8.0	A	8.1	A
			SB Approach	12.1	B	14.3	B
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	12.7	B	5.8	A
			NB Left	8.3	A	7.7	A
			SB Left	8.1	A	7.6	A
			EB Approach	22.4	C	10.6	B
			WB Approach	70.7	F	17.4	C
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	43.9	E	8.0	A
			EB ThruLeft	8.5	A	7.9	A
			SB Approach	86.7	F	14.8	B
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	5.2	A	3.3	A
			EB Left	7.6	A	7.6	A
			WB Left	8.3	A	7.7	A

Intersection			Control	Existing No Project			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			NB Approach	22.1	C	13.7	B
			SB Approach	11.0	B	10.2	B
12	SR 124 / SR 88	C	Unsignalized				
			Overall	2.4	A	2.0	A
			SB Approach	10.9	B	10.7	B
			EB Left	8.3	A	8.0	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	0.7	A	0.4	A
			EB Left	8.0	A	8.0	A
			WB Left	8.6	A	7.9	A
			NB Approach	11.3	B	9.6	A
			SB Approach	11.1	B	9.5	A
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	3.6	A	3.4	A
			NB Left	8.4	A	8.1	A
			SB Left	8.7	A	8.0	A
			EB Approach	22.9	C	14.9	B
			WB Approach	12.2	B	10.5	B
15	SR 88 / SR 12 (east)	C	Signal	12.2	B	11.7	B
16	Tully Rd. / SR 88	D	Signal	18.8	B	13.2	B
17	SR 88 / Victor (SR 12 west)	C	Signal	18.2	B	16.8	B
18	SR 88 / Kettleman Ln.	C	Signal	24.7	C	18.5	B
19	Ione / SR 16	D	Unsignalized				
			Overall	2.3	A	0.9	A
			WB Left	8.8	A	N/A	N/A
			NB Approach	14.2	B	8.9	A
20	Murieta South Pkwy./ SR 16	E	Signal	9.2	A	9.4	A
21	Murieta Pkwy. /SR 16	E	Signal	17	B	16.9	B
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	2.7	A	1.8	A
			SB Approach	43.0	E	26.0	D
			EB Left	8.6	A	8.7	A
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	0.8	A	0.6	A
			NB Approach	32.8	D	20.5	C
			SB Approach	19.7	C	15.7	C
			EB Left	8.5	A	8.6	A
			WB Left	9.6	A	8.6	A
24	Dillard / SR 16	D	Signal	15.7	B	9.4	A
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.5	A	1.2	A
			NB Approach	18.2	C	16.9	C
			WB Left	9.9	A	8.6	A
26	Grant Line / SR 16	D	Signal	63.2	E	20.5	C
27	Sunrise / SR 16	D	Signal	42.8	D	19.4	B
28	Excelsior / SR 16	E	Signal	19.3	B	18.8	B
29	Bradshaw / SR 16	E	Signal	36.7	D	20.1	C
30	Latrobe / White Rock	E	Signal	18.3	B	17.1	B
31	Latrobe / S. Shingle	E	Unsignalized				

Intersection			Control	Existing No Project			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			Overall	1.4	A	1.1	A
			NB Left	7.5	A	7.5	A
			EB Approach	11.4	B	10.4	B
			WB Approach	11.2	B	10.9	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	85	F	44.8	D
33	Missouri Flat / US 50 EB Ramps	D	Signal	90.5	F	53.4	D
34	Missouri Flat / Mother Lode	E	Signal	15.1	B	10.6	B
35	Missouri Flat / Forni	E	Signal	17.7	B	16	B
36	Missouri Flat / Pleasant Valley	E	Signal	17.2	B	12.3	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	3.4	A	2.4	A
			EB ThruLeft	8.3	A	7.8	A
			SB Approach	16.8	C	11.2	B
38	SR 49 / Pleasant Valley	E	All-way STOP	18.4	C	11.4	B
<p>Note: Average control delay is seconds per vehicle based on the <i>Highway Capacity Manual</i> (TRB, 2000). PM = PM Peak Hour of Generator which is 4-6 PM N/A= Not Applicable Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions. Delay = Average delay for all vehicles passing through intersection, in seconds.</p>							

SECTION 3

EXISTING PLUS APPROVED PROJECTS CONDITION

2010 EXISTING PLUS APPROVED PROJECTS (EPAP) CONDITION

This section describes conditions which would exist if traffic volumes associated with previously-approved projects in the vicinity of the site were added to existing traffic volumes. This EPAP scenario establishes a baseline condition for identifying project-related impacts.

Planned Roadway Improvements

In general, the analysis of EPAP Condition assumed the continued use of the existing roadway network, study intersections, intersection geometrics, and intersection traffic control. However, the analysis of the EPAP Condition assumed the roadway improvement of Phase 1B of the Missouri Flat Road interchange project as described in the Existing Condition section of the report. Another improvement included in the EPAP Condition is the intersection of SR 49 and Miller Way would now include an eastbound approach creating a four-legged intersection due to a project driveway for the Cottage Knoll approved project to be located east of SR 49. This improvement was documented in the *City of Plymouth Transportation Impact Study* done by Fehr & Peers in June 2008.

Planned/Approved Development Projects

Amador, El Dorado, Sacramento, and San Joaquin Counties were contacted to obtain an approved projects list in the project study area. Approved projects that did not add traffic to the project study area were not included in the analysis. Table 10 lists the approved projects and their respective trip generation that were included in the EPAP condition:

Table 10
Approved Projects Trip Generation Estimate

Approved Projects	Land Use	Size	Scenario	In	Out	Total
Diamond View	SFDW	27 Units	Friday Daily	--	--	258
			Saturday Daily	--	--	307
			Friday PM Peak	16	11	27
			Saturday PM Peak	13	12	25
Tullis Mine	THDW	40 Units	Friday Daily	--	--	295
			Saturday Daily	--	--	574
			Friday PM Peak	19	9	28
			Saturday PM Peak	29	25	54

Approved Projects	Land Use	Size	Scenario	In	Out	Total
McCann & Jongordon	SFDW	200 Units	Friday Daily	--	--	2,080
			Saturday Daily	---	---	2,019
			Friday PM Peak	134	80	214
			Saturday PM Peak	102	87	189
Forni Commercial	COMM	36.24 ksf	Friday Daily	--	--	3,469
			Saturday Daily	--	--	2,159
			Friday PM Peak	119	125	244
			Saturday PM Peak	107	102	209
Tiger Lily	SFDW, THDW	43 Units	Friday Daily	--	--	324
			Saturday Daily	--	--	612
			Friday PM Peak	21	10	31
			Saturday PM Peak	31	26	57
Panorama View	SFDW	18 Units	Friday Daily	--	--	215
			Saturday Daily	--	--	210
			Friday PM Peak	14	9	23
			Saturday PM Peak	15	12	27
6425 Capitol Ave	Gen Office	42.83 ksf	Friday Daily	--	--	645
			Saturday Daily	--	--	110
			Friday PM Peak	22	103	125
			Saturday PM Peak	10	9	19
Diamond Springs Center	Mixed Use	30 ksf	Friday Daily	--	--	371
			Saturday Daily	--	--	418
			Friday PM Peak	24	39	63
			Saturday PM Peak	15	12	27
Diamond Plaza	Mixed Use	19.66 ksf, 7 Units	Friday Daily	--	--	1,204
			Saturday Daily	--	--	2,108
			Friday PM Peak	64	116	180
			Saturday PM Peak	89	87	176
Missouri Flat Retail	COMM	425 ksf	Friday Daily	--	--	12,176
			Saturday Daily	--	--	19,542
			Friday PM Peak	547	592	1,139
			Saturday PM Peak	807	745	1,552
Piedmont Oak Estates	Mixed Use	22.542 ksf, 281 Units	Friday Daily	--	--	5,152
			Saturday Daily	--	--	5,935
			Friday PM Peak	277	216	493
			Saturday PM Peak	240	212	452

Approved Projects	Land Use	Size	Scenario	In	Out	Total
Shingle Springs Casino	Gaming		Friday Daily	--	--	9,918
			Saturday Daily	--	--	14,600
			Friday PM Peak	646	573	1219
			Saturday PM Peak	782	909	1691
Placer Oaks	SFDW	31 Units	Friday Daily	--	--	354
			Saturday Daily	--	--	350
			Friday PM Peak	24	14	37
			Saturday PM Peak	21	18	39
Teichert Quarry	--	--	Friday Daily	1,274	1,274	2,548
			Saturday Daily	--	--	--
			Friday PM Peak	166	156	322
			Saturday PM Peak	NA	NA	
Murieta Gardens	Mixed Use	--	Friday Daily	--	--	9,060
			Saturday Daily	--	--	13,889
			Friday PM Peak	451	496	947
			Saturday PM Peak	714	650	1,364
Residence & Retreat	SFDW	351	Friday Daily	--	--	3,359
			Saturday Daily	--	--	3,556
			Friday PM Peak	223	132	355
			Saturday PM Peak	179	153	332
Arroyo Woods	SFDW	20	Friday Daily	--	--	1,240
			Saturday Daily	--	--	1,313
			Friday PM Peak	83	48	131
			Saturday PM Peak	66	56	122
Cottage Knoll	SFDW	300	Friday Daily	--	--	2,870
			Saturday Daily	--	--	3,030
			Friday PM Peak	191	112	303
			Saturday PM Peak	152	130	282
Shenandoah Ridge	SFDW	150	Friday Daily	--	--	1,440
			Saturday Daily	--	--	1,515
			Friday PM Peak	96	56	152
			Saturday PM Peak	76	65	141
Zinfandel	SFDW	350	Friday Daily	--	--	3,550
			Saturday Daily	--	--	3,535
			Friday PM Peak	223	131	354
			Saturday PM Peak	178	151	329
Oak Glen	SFDW	40	Friday Daily	--	--	380
			Saturday Daily	--	--	404
			Friday PM Peak	25	15	40
			Saturday PM Peak	21	17	38

Approved Projects	Land Use	Size	Scenario	In	Out	Total
Shenandoah Springs	SFDW	62	Friday Daily	--	--	590
			Saturday Daily			626
			Friday PM Peak	40	23	63
			Saturday PM Peak	31	27	58
Easton Development	Mixed Use	--	Friday Daily	--	--	90,200
			Saturday Daily	--	--	--
			Friday PM Peak	--	--	8,640
			Saturday PM Peak	--	--	--
Buena Vista Casino	Gaming	71,525 gfa	Friday Daily	--	--	5,927
			Saturday Daily	--	--	9,200
			Friday PM Peak	241	198	439
			Saturday PM Peak	206	335	541
Wildflower	SFDW	277 units	Friday Daily	--	--	2,655
			Saturday Daily	--	--	2,770
			Friday PM Peak	169	99	268
			Saturday PM Peak	139	118	257
Castle Oaks	Mixed Use	--	Friday Daily	--	--	10,804
			Saturday Daily	--	--	13,315
			Friday PM Peak	571	475	1,046
			Saturday PM Peak	673	599	1,272
Note: -- Indicates data is not available or can not be estimated. SFDW = Single Family Dwelling Units Gfa= gross floor area COMM = commercial development Ksf = 1,000 square feet Source: Traffic impact study reports and Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003						

2010 EPAP ROADWAY SEGMENT OPERATIONS

The ADT roadway segment volumes for 2010 EPAP (No Project) Condition were calculated by adding the Friday and Saturday daily approved project volumes to existing ADT Friday and Saturday roadway volumes, respectively.

Level of Service

The results of the 2010 EPAP (No Project) Condition capacity analyses of study roadway segments, without the project, are shown in **Table 11**. All of the roadway segments operate acceptably in the 2010 EPAP (No Project) Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,

- SR 16 between Latrobe Road (Amador) and SR 124 during Friday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 11
Roadway Segment Level of Service
2010 EPAP (No Project)

Roadway	Classification	Capacity Threshold	LOS Threshold	2010 EPAP No Project					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	11,520	0.62	D	9,880	0.53	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	11,820	0.47	B	9,980	0.40	B
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	22,320	1.12	F	21,210	1.06	F
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	18,220	0.91	E	16,810	0.84	D
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	23,320	1.17	F	22,110	1.11	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	24,970	1.25	F	24,410	1.22	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	24,570	1.23	F	24,410	1.22	F
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	16,170	0.81	D	17,360	0.87	D
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	7,750	0.38	C	7,310	0.36	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	10,450	0.52	D	9,610	0.48	C
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	11,920	0.59	D	10,380	0.51	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,920	0.26	B	2,780	0.25	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	2,120	0.11	A	1,980	0.10	A
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	4,520	0.24	B	4,480	0.24	B
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	16,960	1.00	F	18,260	1.08	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	17,570	1.04	F	17,370	1.03	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	7,230	0.38	C	7,850	0.42	C
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	17,240	0.85	E	17,840	0.88	E
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	16,960	1.12	F	16,960	1.13	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	21,380	1.19	F	20,680	1.15	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	24,180	1.34	F	22,780	1.27	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	17,580	1.17	F	16,980	1.13	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2010 EPAP INTERSECTION OPERATIONS

The 2010 EPAP NP turning movement volumes for the study intersections during the Friday and Saturday PM peak hour were calculated by adding the existing turning movement volumes to the traffic expected from the various approved projects during each respective time period. **Figure 9** presents the EPAP PM peak hour turning movement volumes for the study intersections in the year 2010.

Level of Service

Levels of service for the 2010 EPAP Condition during the Friday and Saturday PM peak hour are summarized in **Table 12**. The following intersections are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during the Friday PM peak hour,
- The eastbound approach of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The westbound approach of the SR 88 / Liberty Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Latrobe Road (Sacramento) intersection during the Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise / SR 16 during the Friday PM peak hour, and
- Missouri Flat / US 50 WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 16 / Latrobe Road (Amador County) during the Friday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday PM peak hour,
- SR 88 / Liberty Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 12
Intersection Level of Service
2010 EPAP (No Project)

ID#	Intersection Name	LOS Threshold	Control	2010 EPAP NP			
				Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	6.4	A	3.9	A
			NB Left	8.3	A	7.8	A
			SB Left	8.0	A	7.8	A
			WB Approach	35.4	E	14.1	B
EB Approach	9.1	A	8.5	A			
2	SR 49 / Main St.	D	Unsignalized				
			Overall	70.3	F	>100	F
			NB Left	8.1	A	8.2	A
			SB Left	8.6	A	8.1	A
			EB Approach	87.0	F	>100	F
WB Approach	>100	F	>100	F			
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.3	A
			NB ThruLeft	8.4	A	8.4	A
EB Approach	11.6	B	11.9	B			
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.3	A	0.8	A
			NB Left	8.4	A	8.5	A
			SB Left	8.7	A	N/A	N/A
			EB Approach	16.0	C	11.7	B
WB Approach	21.9	C	19.6	C			
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	0.4	A	0.2	A
			NB Left	8.3	A	8.4	A
EB Approach	17.0	C	14.3	B			
6	SR 49 / SR 16	C	Signal	16.4	B	14.7	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	1.7	A	1.3	A
			NB Approach	14.7	B	12.4	B
WB Left	9.1	A	8.5	A			
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.1	A	2.1	A
			EB ThruLeft	8.2	A	8.2	A
SB Approach	14.5	B	16.9	C			
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	77.4	F
			NB Left	9.6	A	8.7	A
			SB Left	9.7	A	9.2	A
			EB Approach	>100	F	25.4	D
WB Approach	>100	F	>100	F			
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	10.2	B	9.5	A
SB Approach	>100	F	>100	F			
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				

ID#	Intersection Name		LOS Threshold	Control	2010 EPAP NP			
					Friday PM		Saturday PM	
					Delay	LOS	Delay	LOS
				Overall	88.5	F	>100	F
				EB Left	8.2	A	8.2	A
				WB Left	9.5	A	9.0	A
				NB Approach	>100	F	>100	F
				SB Approach	16.5	C	16.3	C
12	SR 124 / SR 88	C	Unsignalized	Overall	3.5	A	4.0	A
				SB Approach	11.8	B	12.1	B
				EB Left	8.6	A	8.4	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized	Overall	3.8	A	4.6	A
				EB Left	8.0	A	8.0	A
				WB Left	9.0	A	8.2	A
				NB Approach	30.6	D	21.2	C
				SB Approach	12.2	B	10.2	B
14	SR 88 / Liberty Rd.	C	Unsignalized	Overall	13.0	B	6.9	A
				NB Left	8.7	A	8.7	A
				SB Left	9.2	A	8.3	A
				EB Approach	86.2	F	33.1	D
				WB Approach	30.5	D	24.1	C
15	SR 88 / SR 12 (east)	C	Signal	Overall	13.6	B	12.2	B
16	Tully Rd. / SR 88	D	Signal	Overall	20.3	C	14.9	B
17	SR 88 / Victor (SR 12 west)	C	Signal	Overall	18.8	B	17.7	B
18	SR 88 / Kettleman Ln.	C	Signal	Overall	24.6	C	19.2	B
19	Ione / SR 16	D	Unsignalized	Overall	2.7	A	1.2	A
				WB Left	9.0	A	N/A	N/A
				NB Approach	16.2	C	9.9	A
20	Murieta South Pkwy./ SR 16	E	Signal	Overall	9.2	A	10.7	B
21	Murieta Pkwy. /SR 16	E	Signal	Overall	20.2	C	38.3	D
22	Stonehouse / SR 16	E	Unsignalized	Overall	9.8	A	21.2	C
				SB Approach	>100	F	>100	F
				EB Left	9.1	A	11.0	B
23	Latrobe (Sac) / SR 16	D	Unsignalized	Overall	1.0	A	1.0	A
				NB Approach	57.5	F	>100	F
				SB Approach	29.9	D	65.3	F
				EB Left	9	A	11	B
				WB Left	10.6	B	11.1	B
24	Dillard / SR 16	D	Signal	Overall	21.6	C	23.4	C
25	Sloughhouse / SR 16	E	Unsignalized	Overall	0.5	A	2.4	A
				NB Approach	25.0	C	78.5	F
				WB Left	11.1	B	11.0	B
26	Grant Line / SR 16	D	Signal	Overall	>100	F	38.5	D
27	Sunrise / SR 16	D	Signal	Overall	75.1	E	31.2	C
28	Excelsior / SR 16	E	Signal	Overall	19.6	B	18.5	B
29	Bradshaw / SR 16	E	Signal	Overall	54.2	D	20.3	C
30	Latrobe / White Rock	E	Signal	Overall	18.7	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized	Overall				

Intersection			Control	2010 EPAP NP			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			Overall	1.5	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	11.8	B	10.6	B
			WB Approach	11.6	B	10.9	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	65.0	E	28.8	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	29.3	C	18.2	B
34	Missouri Flat / Mother Lode	E	Signal	14.8	B	9.2	A
35	Missouri Flat / Forni	E	Signal	57.3	E	31.8	C
36	Missouri Flat / Pleasant Valley	E	Signal	20.8	C	14.3	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	5.7	A	3.2	A
			EB ThruLeft	8.6	A	7.9	A
			SB Approach	24.2	C	12.0	B
38	SR 49 / Pleasant Valley	E	All-way STOP	32.0	D	13.3	B

Note:

Average control delay is seconds per vehicle based on the *Highway Capacity Manual* (TRB, 2000).

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

2013 EPAP CONDITION

This section of this traffic study describes 2013 conditions, which would exist if traffic volumes associated with previously-approved projects plus growth were added to existing traffic volumes. This EPAP scenario establishes a baseline condition for identifying project-related impacts.

Planned Roadway Improvements

The analysis of 2013 EPAP assumed the continued use of the 2010 EPAP roadway network, study intersections, intersection geometrics, and intersection traffic control. However the following additional roadway improvements are assumed in place based on preliminary Caltrans fair share calculations which totaled 100% for 2010 mitigation measures:

- The southbound approach of the SR 49 / Main Street intersection would include an exclusive left-turn lane and a combined through/right-turn lane.
- The Latrobe Road (Amador) / SR 16 intersection would be signalized.
- The roadway segment of SR 16 between Stonehouse Road and Ione Road would be four lanes wide.
- The roadway segment of SR 16 between Ione Road and Old Sacramento would be two lanes with a climbing lane.
- The roadway segment of SR 16 between Excelsior Road and Sunrise Boulevard would be four lanes wide.
- The SR 49 / Project Service Access intersection would only allow right-turn movements out of the project service access driveway.

Section 7 in this document discusses 2010 impacts and mitigation measures in detail.

2013 EPAP ROADWAY SEGMENT OPERATIONS

The ADT roadway segment volumes for 2013 EPAP (No Project) Condition were calculated by applying an annual growth rate to 2010 ADT roadway volumes. An annual growth rate by county was derived through the use of historical vehicles-miles traveled data from 2000 – 2007 on both state and non-state highways from the *2007 California Motor Vehicle Stock, Travel and Fuel Forecast* published by Caltrans in May 2008. The annual growth rate for Amador County, Sacramento County, San Joaquin County, and El Dorado County were found to be 3%, 2.5%, 3.5%, and 1%, respectively. These growth rates were applied to the 2010 ADT roadway volumes.

Level of Service

The results of the 2013 EPAP (No Project) Condition capacity analyses of study roadway segments, without the project, are shown in **Table 13**. All of the roadway segments operate acceptably in the 2013 EPAP (No Project) Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,

- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 13
Roadway Segment Level of Service
2013 EPAP (No Project)

Roadway	Classification	Capacity Threshold	LOS Threshold	2013 EPAP No Project					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	12,560	0.68	D	10,770	0.58	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	12,880	0.51	C	10,880	0.43	B
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	24,550	1.23	F	23,330	1.17	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	20,040	0.50	A	18,490	0.46	A
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	25,650	1.28	F	24,320	1.22	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	27,470	1.37	F	26,850	1.34	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	27,030	1.35	F	26,850	1.34	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	17,790	0.44	A	19,100	0.48	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	8,450	0.34	B	7,970	0.32	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	11,390	0.56	D	10,470	0.52	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	12,990	0.64	D	11,310	0.56	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	3,180	0.28	C	3,030	0.27	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	2,310	0.12	B	2,160	0.11	A
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	4,930	0.26	B	4,880	0.26	B
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	18,490	1.09	F	19,900	1.18	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	19,150	1.13	F	18,930	1.12	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	7,880	0.42	C	8,550	0.45	C
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	18,790	0.93	E	19,450	0.96	E
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	18,270	1.22	F	18,270	1.22	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	23,030	1.28	F	22,270	1.24	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	26,040	1.45	F	24,530	1.36	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	18,930	1.26	F	18,290	1.22	F
Notes:									
Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.									

2013 EPAP INTERSECTION OPERATIONS

To approximate 2013 Condition, the annual growth rate developed for each county as specified in the 2013 EPAP roadway segment operations section was applied to the 2010 volumes. **Figure 10** presents the EPAP PM peak hour turning movement volumes for the study intersections in the year 2013.

Level of Service

Levels of service for the 2013 EPAP Condition during the Friday and Saturday PM peak hour are summarized in **Table 14**. The following intersections are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour, and
- Missouri Flat Road / US 50 WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 49 / Randolph Road during the Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,

- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 14
Intersection Level of Service
2013 EPAP (No Project)

ID#	Intersection Name	LOS Threshold	Control	2013 EPAP NP			
				Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	6.5	A	3.8	A
			NB Left	8.4	A	7.8	A
			SB Left	8.0	A	7.8	A
			WB Approach	38.3	E	14.4	B
			EB Approach	9.2	A	8.6	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	98.8	F	>100	F
			NB Left	8.1	A	8.2	A
			SB Left	8.7	A	8.1	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.3	A
			NB ThruLeft	8.5	A	8.5	A
			EB Approach	12.0	B	12.2	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.4	A	0.8	A
			NB Left	8.5	A	8.6	A
			SB Left	8.8	A	N/A	N/A
			EB Approach	17.1	C	12.0	B
			WB Approach	24.0	C	21.2	C
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	0.4	A	0.1	A
			NB Left	8.4	A	8.4	A
			EB Approach	26.9	D	21.7	C
6	SR 49 / SR 16	C	Signal	17.3	B	15.1	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	1.9	A	1.4	A
			NB Approach	15.7	C	13.0	B
			WB Left	9.3	A	8.6	A
8	Latrobe (Amador) / SR 16	C	Signal	7.3	A	6.2	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.9	A	8.8	A
			SB Left	9.9	A	9.3	A
			EB Approach	>100	F	28.9	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	10.5	B	9.7	A
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.3	A	8.2	A
			WB Left	9.7	A	9.1	A
			NB Approach	>100	F	>100	F

ID#	Intersection Name	LOS Threshold	Control	2013 EPAP NP			
				Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
			SB Approach	17.5	C	16.9	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	3.5	A	4.0	A
			SB Approach	12.3	B	12.6	B
			EB Left	8.7	A	8.5	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	5.3	A	5.7	A
			EB Left	8.1	A	8.0	A
			WB Left	9.2	A	8.3	A
			NB Approach	46.2	E	27.7	D
			SB Approach	13.3	B	10.7	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	18.6	C	8.3	A
			NB Left	8.9	A	8.8	A
			SB Left	9.3	A	8.4	A
			EB Approach	>100	F	40.6	E
			WB Approach	37.1	E	27.9	D
15	SR 88 / SR 12 (east)	C	Signal	14.8	B	12.7	B
16	Tully Rd. / SR 88	D	Signal	23.5	C	16.3	B
17	SR 88 / Victor (SR 12 west)	C	Signal	19.4	B	18.2	B
18	SR 88 / Kettleman Ln.	C	Signal	26.2	C	20.0	B
19	Ione / SR 16	D	Unsignalized				
			Overall	3.7	A	1.3	A
			WB Left	9.2	A	N/A	N/A
			NB Approach	22.4	C	10.4	B
20	Murieta South Pkwy./ SR 16	E	Signal	9.4	A	11.0	B
21	Murieta Pkwy. /SR 16	E	Signal	22.0	C	44.3	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	17.1	C	31.1	D
			SB Approach	>100	F	>100	F
			EB Left	9.3	A	11.3	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	1.3	A	1.3	A
			NB Approach	75.3	F	>100	F
			SB Approach	36.9	E	82.7	F
			EB Left	9.2	A	11.4	B
			WB Left	11.1	B	11.4	B
24	Dillard / SR 16	D	Signal	28.9	C	28.1	C
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.6	A	3.5	A
			NB Approach	28.7	D	>100	F
			WB Left	11.6	B	11.3	B
26	Grant Line / SR 16	D	Signal	>100	F	68.1	E
27	Sunrise / SR 16	D	Signal	96.3	F	44.2	D
28	Excelsior / SR 16	E	Signal	20.7	C	18.7	B
29	Bradshaw / SR 16	E	Signal	70.3	E	20.8	C
30	Latrobe / White Rock	E	Signal	19.0	B	17.3	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.6	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	12.5	B	11.1	B
			WB Approach	12.1	B	11.4	B

ID#	Intersection Name	LOS Threshold	Control	2013 EPAP NP			
				Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
32	Missouri Flat / US 50 WB Ramps	D	Signal	83.9	F	34.3	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	41.9	D	20.7	C
34	Missouri Flat / Mother Lode	E	Signal	15.1	B	10.2	B
35	Missouri Flat / Forni	E	Signal	74.7	E	35.7	D
36	Missouri Flat / Pleasant Valley	E	Signal	23.6	C	15.0	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.8	A	3.3	A
			EB ThruLeft	8.7	A	8.0	A
			SB Approach	30.0	D	12.5	B
38	SR 49 / Pleasant Valley	E	All-way STOP	42.4	E	14.4	B

Note:

Average control delay is seconds per vehicle based on the *Highway Capacity Manual* (TRB, 2000).

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

SECTION 4

EPAP PLUS PROJECT CONDITIONS

To develop the EPAP Plus Project traffic conditions, the traffic generated by the proposed project is added to EPAP traffic volumes. EPAP Plus Project conditions are compared relative to the EPAP conditions to determine the potential impacts due to the proposed project.

Traffic operations during the Friday, Saturday, and Friday and Saturday PM peak hours were analyzed for the following scenarios:

- 2010 EPAP Plus Alternative A Phase 1,
- 2013 EPAP Plus Alternative A Phase 1 & 2,
- 2010 EPAP Plus Alternative B Phase 1,
- 2013 EPAP Plus Alternative B Phase 1 & 2,
- 2010 EPAP Plus Alternative C,
- 2010 EPAP Plus Alternative D.

Parking and site circulation, access and sight distance from the project driveway are also discussed in this section.

PROJECT TRAFFIC

The project's traffic impacts were estimated in this section by considering the amount of traffic to be generated by the project and the directional distribution of that traffic. The project site is proposed to have two access points:

- SR 49 driveway (main access) – full movements at the intersection with SR 49 with the stop control at the SR 49 Project Driveway approach and Randolph Drive. The SR 49 project driveway will become the fourth leg of the existing SR 49 and Randolph Drive intersection.
- SR 49 driveway (service access and secondary access) – full movements at the intersection with SR 49 with the stop control at the SR 49 driveway approach.

PROJECT TRIP GENERATION

Standard trip generation equations/rates from the Institute of Transportation Engineers (ITE) *Trip Generation, 7th Edition* (commonly referred to as the ITE Trip Generation Manual), are often used for common types of land use. The ITE Trip Generation Manual does contain information for casinos; however, they are based on only a few traditional casinos. Due to their isolated locations, type of customers and gaming facilities, the Indian casinos generally possess distinct characteristics compared to those of traditional casinos. Therefore, the trip generation case studies of relevant

Indian casinos were reviewed. These studies were selected based on similarity to the proposed project in terms of location, size, total gross floor area, gaming floor area, number of gaming positions, on-site lodging, other land uses, etc. Moreover, some of the resources reveal different trip generating characteristics for the west-coast Indian casinos as compared to the east-coast Indian casinos. As a result, the following Indian casinos and/or their traffic studies were considered for further investigation:

- Spirit Mountain, Grand Ronde, Oregon
- Cache Creek, Yolo County, California
- A Northern California Casino. The identity was not revealed.
- The traffic study for the proposed Buena Vista Rancheria Gaming and Entertainment Facility examined trip generation counts of three other casinos; Harrah's Rincon Casino in San Diego County, Chukchansi Gold Casino in Madera County and Black Oak Casino in Tuolumne County.
- Thunder Valley Casino, Placer County, California.
- The traffic study of the proposed Shingle Spring Casino. Shingle Spring studied trip generation characteristics of five other casinos located in northern California. Two of them were originally surveyed by David Evans and Associates, Inc. The other three were reported in the traffic study for the proposed Auburn Rancheria Gaming Facility in Placer County conducted by Fehr & Peers. The identities of all five casinos were kept concealed.
- Cowlitz Indian Tribe Casino Traffic Study, Clark County, Washington

All of above Indian casinos are located on state highways in the rural or suburban areas. None of them have direct access to any freeways. Available trip generation information indicates trip generation rates should be determined based on the gaming floor area or number of gaming positions, since they are the primary measures of productions and attractions. San Diego Association of Governments (SANDAG) prepared a study of Indian casino trip generation, where they have established a trip generation rate based on gaming floor area. Therefore, the gaming floor area was selected as an independent variable to establish trip generation rates. The gaming floor area for the Indian casinos mentioned above ranges from 17,300 square feet to 134,100 square feet. The gaming floor area of the Ione Casino for alternatives A through C fall into this range. Alternative D for the proposed project is a shopping center.

Many of the Indian casinos mentioned above also offer food and beverage facilities, banking and administration services, and retail. Therefore, any trips that are produced or attracted by ancillary facilities have already been accounted for in the trip generation counts at the Indian casino driveways. Hence, a trip generation rate determined from the counts collected at the Indian casino driveways is inclusive of all amenities in addition to the casino such as the event/conference center for this project. Estimation of separate trip generation for ancillary facilities, such as restaurants, coffee bar, sports bar, etc. would result in double-counting of trips. Therefore, the trip generation rates established for this project includes the trips generated by the casino, event/conference center, and other ancillary facilities.

Table 15 provides trip generation rates and direction splits for the above casinos during the weekday daily, Friday daily, the Saturday daily, the Friday PM peak hour and the Saturday PM peak hour. A weighted average for trip generation rates and directional splits were calculated whenever data was

provided for each time period. The five surveys conducted by David Evans and Associates, Inc and Fehr & Peers are designated as A through E due to confidentiality.

Vehicular traffic entering and exiting observed at the above sites were collected by others. Since trip generation surveys were collected at different times of the year, it is essential to adjust total volumes collected at the project driveways to reflect peak month traffic conditions. Therefore, monthly variation factors established in ITE Journal Article "Gaming Casino Traffic" were used to adjust various traffic counts to the peak months which are July and August. January, February, April and December counts were increased by factors of 1.1, 1.3, 1.1 and 1.2, respectively.

Table 15 reveals that weekday daily volumes and directional splits were collected at Chukchansi Gold Casino, Black Oak and Harrah's casino. A weekday refers to any day of the week, Monday through Friday. Weekday and/or Friday PM peak hour volumes at casino driveways were collected at all 12 surveyed casinos.

Table 15
Trip Generation Rate Estimations from 12 casinos

Casino/Survey Location	Size (1000 Sq.Ft. of Gaming Floor Area)	Average Weekday or Friday					Saturday				
		Weekday Daily		Weekday or Friday PM Peak Hour			Daily		PM Peak Hour		
		Volume	Rate	Total Volume	Rates	In/Out Split	Volume	Rate	Total Volume	Rate	In/Out Split
Spirit Mountain	90.00			580 ⁽¹⁾	6.44	57% / 43%					
Cache Creek	94.50			624 ⁽²⁾	6.60						
Northern California	99.40			837 ⁽²⁾	8.42						
Harrah's	59.00	5,183	87.85	452 ⁽³⁾	7.66	55% / 45%	8,324	141.08			
Black Oak	43.00	4,109	95.56	356 ⁽³⁾	8.28	55% / 45%	6,340	147.45			
Chukchansi Gold	56.00	6,230	111.25	385 ⁽³⁾	6.88	55% / 45%	9,714	173.46	615	10.98	
A	78.00			208 ⁽¹⁾	2.67	45% / 55%				5.86	36% / 64%
B	50.00			253 ⁽¹⁾	5.06	55% / 45%				8.08	56% / 44%
C	32.40			300 ⁽³⁾	9.26	44% / 56%					
D	20.00			176 ⁽³⁾	8.80	67% / 33%					
E	17.30			239 ⁽³⁾	13.82	56% / 44%					
Thunder Valley	85.00			1,113 ⁽³⁾	13.09	52% / 48%			1,653	19.45	55% / 45%
Cowlitz Casino	134.15		74.63					93.24			
Weighted Average			87.40		7.62	54% / 46%		126.26		11.65	49% / 51%

Notes:

(1) = Volume collected on a Friday PM peak hour.

(2) = Confidential and not known what day of the week the count was collected.

(3) = Volume collected on one day or several days Monday through Friday.

Total Volumes = Volumes entering plus exiting project driveways

Blank cells indicate no data available

Rates are derived from ratio of total volume to size in ksf, where ksf = 1,000 square feet

A and B studied by David Evans Associates and Inc. Identities were not revealed

C, D and E were studied by Fehr & Peers for Auburn Ranchria Gaming Facility Study. Identities were not revealed

Inbound and outbound traffic for Chukchansi Gold Casino, Thunder Valley, and two casinos listed in the Shingle Spring Casino traffic study (Casino A and B) was counted during the Saturday PM peak hour. However, the total volume at the project driveways for Casino A and B during the Saturday PM peak hour were kept confidential and only the Saturday PM peak hour rates and directional splits were revealed. Directional splits for the Saturday PM peak hour were collected at Casino A and B by David Evans and Associates, Inc. and one survey was conducted at Thunder Valley Casino.

Saturday daily volumes and trip generation rates were collected from the Buena Vista traffic study which surveyed three casinos.

Chapter 3.3 of the ITE *Trip Generation Handbook*, 2nd Edition provides guidelines for estimating trip generation for a particular development. The weekday and/or Friday PM peak hour total volumes collected at the casino driveways were plotted versus gaming floor area for the twelve casinos and a fitted curve and equation was determined. Figure 11 presents the plotted curve, regression equation and coefficient of determination (R^2). A regression equation is a formula for the line that “best fits” the data. The R^2 value is an estimate of the accuracy of the fit. The R^2 value varies anywhere between 0 to 1.0 where closer to 1.0 indicates stronger relationship between number of trips and the independent variable. The ITE *Trip Generation Handbook* recommends using a regression equation when there are 20 or more data points and an R^2 of greater than 0.75. The regression equation here is based on twelve available surveys and produces an R^2 value of 0.58. Therefore, it is not advisable to use the equation. Moreover, the ITE Handbook recommends using the weighted average rate when an R^2 value is less than 0.75 and the ratio of standard deviation and weighted average rate is less than or equal to 1.1. The ratio of standard deviation and weighted average rate is estimated to be 0.4 and therefore, the weighted average rate should be used in accordance with the guidelines developed by the ITE *Trip Generation Handbook*, 2nd Edition. Furthermore, the regression equation developed here would generate fewer trips for the proposed casino as compared to those based on the weighted average trip generation rates developed in Table 15. Due to the limited number of data points, fitted curves were not plotted for other study time periods.

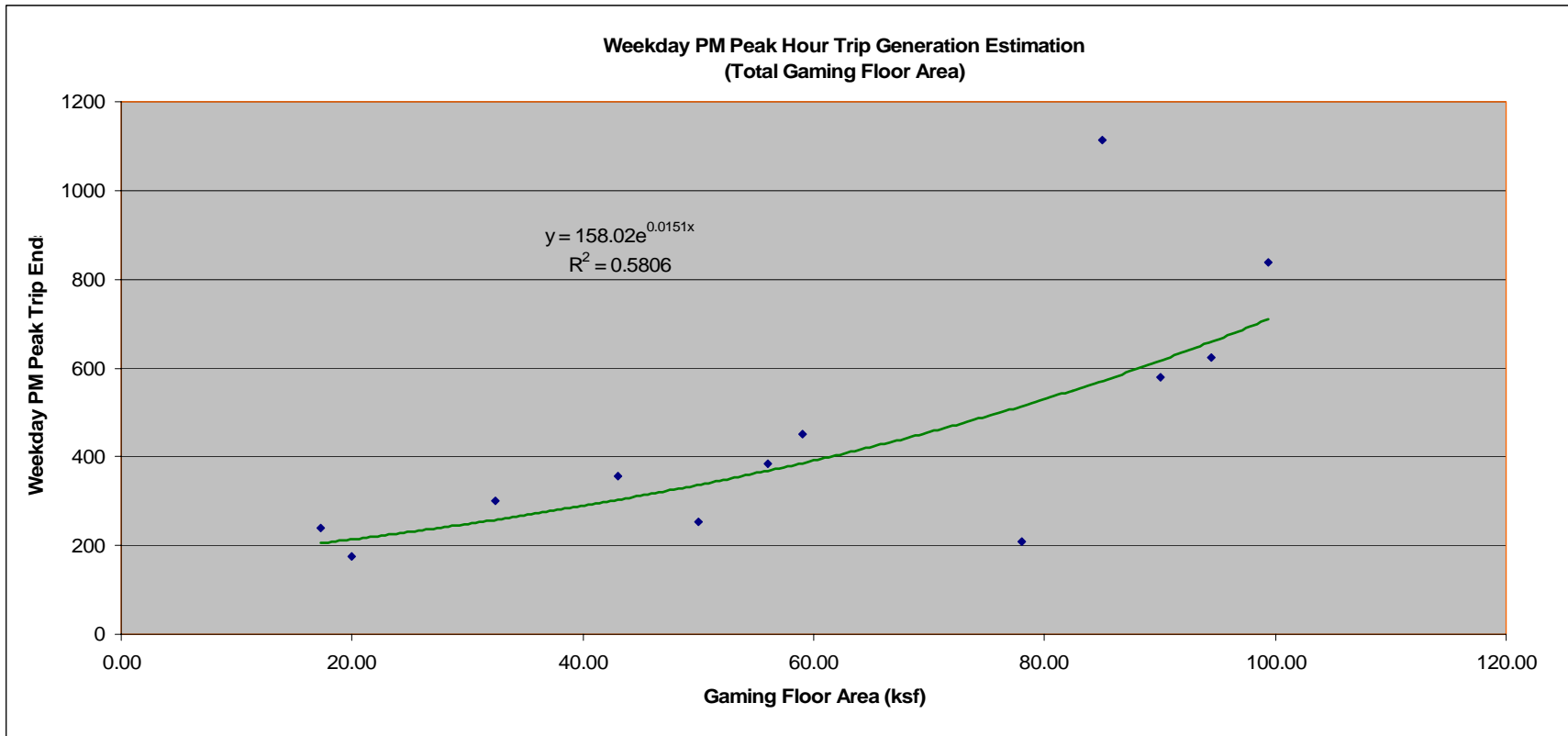
Since the regression equation from the studies listed above did not produce useable results, the weighted average trip generation rates are used in this study. Therefore, the Friday weighted average PM peak hour rate of 7.62 trips/ksf of gaming floor area was used to calculate the trips generated by the proposed project. The Saturday PM peak hour rate of 11.65 trips/ksf of gaming floor area was used in this study. Similarly, the Friday daily and the Saturday daily trip generation rates of 87.40 and 126.26 trips per ksf of gaming floor area, respectively, were also used. The weighted average daily trip generation rate is computed as 106.83 trips/ksf of gaming floor area, which is higher than the rate of 100 trips/1,000 square feet of gaming floor area based on SANDAG method.

The proposed project also includes a hotel in Alternatives A and B. Literature review of other casino studies indicates that the existence of the hotel will not necessarily result in a significant increase in new traffic. Since the hotel guests are expected to visit the casino without using the roadway transportation system, they should be treated as internal traffic. Any addition of the hotel generated traffic to the casino traffic would result in double counting. However many casino studies assumed that some portion of the total trip generation for the hotel would be considered “new” trips and added to the casino trip generation. This same assumption was used in this study.

The *Shingle Spring Environmental Impact Report* performed a comprehensive evaluation of this issue. Based on the comparison between the casinos with and without hotels, the report has shown that the weighted average Saturday peak hour average rate for hotels with casinos is actually lower than the rates for hotels without casinos. However, the study conservatively assumed 25 percent of total hotel trip generation would still be “new” trips.

Therefore, it is assumed here that the hotel as a part of the casino will generate 25 percent of the trips that a stand alone hotel would generate. In other words, it is assumed that 75 percent of the hotel guests are accounted for in connection with the gaming floor, convention center, or some other component of the project. The *ITE Trip Generation Manual*, 7th Edition (ITE Land Use Code 310 Hotel) was used to estimate daily and peak hour hotel traffic and total traffic was reduced by 75% as supported by other studies.

Figure 11
Trip Generation Equation Graph



No pass-by trip reduction was assumed for the proposed casino and hotel. Patrons of the casino and hotel would not stop by as a matter of convenience but would stop at this land use for the sole purpose of visiting the casino and hotel.

The proposed project alternative D consists of retail development. Based on the proposed size of the shopping center and the corresponding ITE trip generation equation (ITE Land Use Code 820), the number of trips to and from the project were calculated. However, the ITE publication does not provide trip generation rates and/or equations for the Saturday PM peak hour. However, hourly traffic variation in shopping center traffic for an average Saturday as published in Table 1 of the ITE Manual was used to estimate entering and exiting trips during the Saturday PM peak hour. It was found that 10.7 percent of Saturday daily entering and exiting traffic would equal the total trips generated in the Saturday PM peak hour. A 15 percent pass-by reduction for retail development as recommended by the *Caltrans publication Guide for Preparation of Traffic Impact Studies*, December 2002 was also used in this alternative. Pass-by trips are not new trips, but are trips that would otherwise be on the adjacent street for another purpose and stop at a land use as a matter of convenience.

The trip generation estimates for the project alternatives are shown in **Table 16** through **Table 19**.

To summarize, Phase 1 and 2 of alternative 'A' is anticipated to generate daily trips of 6,191 and 8,720 during a typical Friday and Saturday, respectively. It will also generate approximately 533 and 802 trips during the Friday and Saturday PM peak hours, respectively. Phase 1 and 2 of alternative 'B' is projected to generate 4,471 and 6,668 trips during a Friday and Saturday, respectively. It will also generate 409 and 613 trips during the Friday and Saturday PM peak hours, respectively. Similarly, the project alternative 'C' will generate approximately 248 and 379 trips during the Friday and Saturday PM peak hours, respectively. The project alternative 'D' is estimated to generate 611 and 959 new trips during a Friday and Saturday PM peak hour, respectively.

TRIP DISTRIBUTION

To evaluate the traffic-related effects of the project, trips that would be generated by the project were distributed on the roadway network. A marketing analysis was conducted for this project (*Ione Traffic Impact Analysis*, T.Y. Lin International, 2005). The marketing study revealed a detailed zip code analysis of population centers within central California to gauge the locations, and hence likely travel routes of gamers who would be visiting the project site. The trip distribution shown in Figure 12 shows the trip distribution of the project based on the findings of the market analysis.

TRIP ASSIGNMENT

Trips derived for each development alternative were independently assigned to the roadway network and study intersections from the project driveways based upon the trip distribution patterns described above after considering the origin and destination of vehicles.

After establishing the point of origin of project related trips, trips were assigned to area highways and roadways based on the likely travel routes of visitors. When multiple travel routes are available from

a single point of origin, trips were split along different likely travel routes. These splits take into account routes which might be utilized more by knowledgeable travelers (i.e. which might use less well known short-cuts) vs. routes which might be utilized more by less knowledgeable travelers (i.e. along designated highways). Figure 13 through Figure 18 shows the project only trips for Alternative A Phase 1, Alternative A Phase 1 and 2, Alternative B Phase 1, Alternative B Phase 1 and 2, Alternative C, and Alternative D, respectively.

**Table 16
Project Trip Generation for Alternative A**

Land Use	Size	Units	Friday Daily		Saturday Daily		Friday PM Peak Hour				Saturday PM Peak Hour					
			Rate	Trips	Rate	Trips	Rate	In/Out Split	In	Out	Total	Rate	In/Out Split	In	Out	Total
Phase I																
Casino ¹	65,000	Sq.Ft.	87.4	5,681	126.26	8,207	7.62	54%/46%	267	228	495	11.65	49%/51%	371	386	757
Phase - II																
Hotel ²	250	Rooms	2.04	510	2.05	513	0.15	53%/47%	20	18	38	0.18	56%/44%	25	20	45
TOTAL PROJECT				6,191		8,720			287	246	533			396	406	802

¹ Based on derived rates and directional distribution in Table 19. Rate is defined as trips per ksf, where ksf = 1,000 square feet

² Based on ITE Land Use Code 320 Hotel. Reduced to 25% of the total trip generation rates to capture potential internal trips
PM Peak Hour is between 4 and 6 PM.

**Table 17
Project Trip Generation for Alternative B**

Land Use	Size	Units	Friday Daily		Saturday Daily		Friday PM Peak Hour				Saturday PM Peak Hour					
			Rate	Trips	Rate	Trips	Rate	In/Out Split	In	Out	Total	Rate	In/Out Split	In	Out	Total
Phase I																
Casino ¹	48,750	Sq.Ft.	87.4	4,261	126.26	6,155	7.62	54%/46%	200	171	371	11.65	49%/51%	278	290	568
Phase - II																
Hotel ²	250	Rooms	2.04	510	2.05	513	0.15	53%/47%	20	18	38	0.18	56%/44%	25	20	45
TOTAL PROJECT				4,771		6,668			220	189	409			303	310	613

¹ Based on derived rates and directional distribution in Table 19. Rate is defined as trips per ksf, where ksf = 1,000 square feet

² Based on ITE Land Use Code 320 Hotel. Reduced to 25% of the total trip generation rates to capture potential internal trips
PM Peak Hour is between 4 and 6 PM.

Table 18
Project Trip Generation for Alternative C

Land Use	Size	Units	Friday Daily		Saturday Daily		Friday PM Peak Hour				Saturday PM Peak Hour					
			Rate	Trips	Rate	Trips	Rate	In/Out Split	In	Out	Total	Rate	In/Out Split	In	Out	Total
Casino ¹	32,500	Sq.Ft.	87.4	2,841	126.26	4,103	7.62	54%/46%	134	114	248	11.65	49%/51%	186	193	379

¹ Based on derived rates and directional distribution in Table 19. Rate is defined as trips per ksf, where ksf = 1,000 square feet
PM Peak Hour is between 4 and 6 PM.

Table 19
Project Trip Generation for Alternative D

Land Use	Size	Units	Friday	Saturday	Friday PM Peak Hour			Saturday PM Peak Hour				
			Daily	Daily	In/Out Split	In	Out	Total	In	Out	Total	
Shopping Center ¹	123,250	Sq. Ft.	7,779	10,540	48%/52%	345	374	719	50%/50%	564	564	1,128
- Pass-By Trips ²	15	% Daily, PM	1,167	1,581	50%/50%	54	54	108	50%/50%	85	85	169
"New" Trips	15	% SAT	6,612	8,959		291	320	611		479	479	959

¹ Based on equations for ITE Land Use Code 820 Shopping Center

² Based on Caltrans Traffic Impact Study Guidelines, December 2002
PM Peak Hour is between 4 and 6 PM.

ALTERNATIVE A (PREFERRED CASINO AND HOTEL)

As noted earlier this preferred Alternative A is proposed in two phases. Phase 1 consists of the casino proposed for operation by the year 2010 with the addition of a hotel to follow in Phase 2 three years later (2013).

2010 EPAP PLUS ALTERNATIVE A PHASE 1 ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2010 EPAP (No Project) roadway segment volumes. The roadway network under EPAP Plus Alternative A Phase 1 is assumed to be the same as 2010 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 and Randolph Drive.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative A Phase 1 Condition are summarized in **Table 20**. All of the roadway segments operate acceptably under the 2010 EPAP Plus Alternative A Phase 1 Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Stonehouse Road and Ione Road during Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 20
Roadway Segment Level of Service
2010 EPAP Plus Alternative A Phase 1

Roadway	Classification	Capacity Threshold	LOS Threshold	2010 EPAP Plus Alternative A Phase 1					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	13,160	0.708	D	12,240	0.66	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	15,860	0.632	C	15,820	0.63	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	23,560	1.178	F	23,000	1.15	F
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	19,560	0.978	E	18,750	0.94	E
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	25,090	1.255	F	24,670	1.23	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	26,940	1.347	F	27,260	1.36	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	26,570	1.329	F	27,300	1.37	F
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	18,190	0.910	E	20,270	1.01	F
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	9,770	0.484	C	10,220	0.51	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	12,470	0.617	D	12,520	0.62	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	15,670	0.776	D	15,800	0.78	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,920	0.261	B	2,780	0.25	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	3,860	0.204	B	4,490	0.24	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	6,260	0.331	C	6,990	0.37	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	18,650	1.104	F	20,700	1.22	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	19,250	1.139	F	19,800	1.17	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	8,820	0.467	C	10,140	0.54	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	18,900	0.936	E	20,240	1.00	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	17,780	1.185	F	18,150	1.21	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	22,200	1.233	F	21,870	1.22	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	25,000	1.389	F	23,970	1.33	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	18,350	1.223	F	18,090	1.21	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segment analyzed in this study are located in these jurisdictions.

2010 EPAP PLUS ALTERNATIVE A PHASE 1 INTERSECTION OPERATIONS

Anticipated project trips were assigned through the study intersections and added to the 2010 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting weekday and Saturday EPAP Plus Alternative A Phase 1 volumes for the Friday and Saturday PM peak hour are shown in **Figure 19**.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative A Phase 1 Friday PM peak hour and Saturday PM peak hour are summarized in **Table 21**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Latrobe (Amador) / SR 16 intersection during the Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston Avenue and SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The westbound approach of the SR 88 / Liberty Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise / SR 16 during the Friday PM peak hour,
- Missouri Flat / US 50 WB Ramps during the Friday PM peak hour, and
- The westbound approach of the SR 49 / Project Service Access during both the Friday and Saturday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 49 / Randolph Drive during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- SR 16 / Latrobe Road (Amador County) during the Friday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Project Service Access during the Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 21
Intersection Level of Service
2010 EPAP Plus Alternative A Phase 1

Intersection			Control	2010 EPAP + Alt A. Ph. 1			
ID#	Name	LOS Threshold		Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	6.8	A	3.4	A
			NB Left	8.6	A	8.0	A
			SB Left	8.1	A	8.0	A
			WB Approach	48.6	E	17.1	C
			EB Approach	9.5	A	8.9	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.3	A	8.5	A
			SB Left	8.8	A	8.3	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.4	A
			NB ThruLeft	8.6	A	8.8	A
			EB Approach	12.4	B	12.9	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.5	A	1.0	A
			NB Left	8.6	A	8.9	A
			SB Left	8.9	A	N/A	N/A
			EB Approach	17.5	C	13.0	B
			WB Approach	26.7	D	27.4	D
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	8.0	A	36.9	E
			NB Left	8.4	A	8.5	A
			SB Left	9.8	A	9.6	A
			WB Approach	68.9	F	>100	F
			EB Approach	30.3	D	26.7	D
6	SR 49 / SR 16	C	Signal	18.6	B	16.5	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	3.3	A	3.3	A
			NB Approach	19.6	C	17.3	C
			WB Left	9.9	A	9.7	A
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.3	A	2.5	A
			EB ThruLeft	8.5	A	8.7	A
			SB Approach	18.7	C	26.3	D
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.6	A	8.7	A
			SB Left	10.2	B	9.8	A
			EB Approach	>100	F	29.5	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	10.7	B	10.1	B
			SB Approach	>100	F	>100	F

Intersection			Control	2010 EPAP + Alt A. Ph. 1			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized Overall EB Left WB Left NB Approach SB Approach	>100 8.2 9.8 >100 17.1	F A A F C	>100 8.2 9.6 >100 17.3	F A A F C
12	SR 124 / SR 88	C	Unsignalized Overall SB Approach EB Left	4.5 12.8 8.9	A B A	5.8 13.8 8.8	A B A
13	Jackson Valley Rd. / SR 88	C	Unsignalized Overall EB Left WB Left NB Approach SB Approach	6.1 8.2 9.3 57.6 14.3	A A A F B	12.2 8.3 8.6 70.0 12.6	B A A F B
14	SR 88 / Liberty Rd.	C	Unsignalized Overall NB Left SB Left EB Approach WB Approach	50.7 8.7 9.4 >100 >100	F A A F F	45.6 8.7 8.5 88.9 >100	E A A F F
15	SR 88 / SR 12 (east)	C	Signal	14.4	B	12.9	B
16	Tully Rd. / SR 88	D	Signal	21.2	C	15.8	B
17	SR 88 / Victor (SR 12 west)	C	Signal	19.0	B	18.1	B
18	SR 88 / Kettleman Ln.	C	Signal	25.4	C	20.0	B
19	Ione / SR 16	D	Unsignalized Overall WB Left NB Approach	3.7 9.4 26.7	A A D	1.5 N/A 15.7	A N/A C
20	Murieta South Pkwy./ SR 16	E	Signal	9.2	A	11.1	B
21	Murieta Pkwy./SR 16	E	Signal	22.3	C	49.6	D
22	Stonehouse / SR 16	E	Unsignalized Overall SB Approach EB Left	15.9 >100 9.4	C F A	35.1 >100 11.8	E F B
23	Latrobe (Sac) / SR 16	D	Unsignalized Overall NB Approach SB Approach EB Left WB Left	1.2 80.7 39.3 9.3 11.2	A F E A B	1.5 >100 >100 11.9 11.9	A F F B B
24	Dillard / SR 16	D	Signal	26.6	C	32.1	C
25	Sloughhouse / SR 16	E	Unsignalized Overall NB Approach WB Left	0.5 29.4 11.7	A D B	3.9 >100 11.8	A F B
26	Grant Line / SR 16	D	Signal	>100	F	53.2	D
27	Sunrise / SR 16	D	Signal	85.7	F	38.7	D
28	Excelsior / SR 16	E	Signal	19.8	B	18.0	B
29	Bradshaw / SR 16	E	Signal	60.3	E	20.9	C

Intersection			Control	2010 EPAP + Alt A. Ph. 1			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
30	Latrobe / White Rock	E	Signal	18.7	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.5	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	11.9	B	10.8	B
			WB Approach	11.7	B	11.1	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	65.6	E	28.9	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	29.6	C	18.3	B
34	Missouri Flat / Mother Lode	E	Signal	13.0	B	9.2	A
35	Missouri Flat / Forni	E	Signal	64.7	E	31.9	C
36	Missouri Flat / Pleasant Valley	E	Signal	22.6	C	15.7	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.2	A	3.0	A
			EB ThruLeft	8.8	A	8.1	A
			SB Approach	29.1	D	13.2	B
38	SR 49 / Pleasant Valley	E	All-way STOP	38.5	E	15.9	C
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	3.1	A	9.0	A
			SB Left	9.9	A	9.5	A
			WB Approach	47.7	E	87.6	F

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

2013 EPAP PLUS ALTERNATIVE A PHASE 1 & 2 ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2013 EPAP (No Project) roadway segment volumes. The roadway network under EPAP Plus Alternative A Phase 1 and 2 is assumed to be the same as 2013 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 / Randolph Drive and would be signalized.

Level of Service

Levels of service for the 2013 EPAP Plus Alternative A Phase 1 & 2 Condition are summarized in **Table 22**. All of the roadway segments would operate acceptably in the 2013 EPAP Plus Alternative A Phase 1 & 2 Condition except for the following:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during the Friday,
- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,

- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 22
Roadway Segment Level of Service
2013 EPAP Plus Alternative A Phase 1 & 2

Roadway	Classification	Capacity Threshold	LOS Threshold	2013 EPAP Plus Alternative A Phase 1 & 2					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	14,340	0.77	E	13,860	0.75	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	17,290	0.69	D	17,090	0.68	D
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	25,900	1.30	F	25,240	1.26	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	21,510	0.54	A	20,560	0.51	A
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	27,580	1.38	F	27,040	1.35	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	29,610	1.48	F	29,880	1.49	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	29,210	1.46	F	29,920	1.50	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	19,980	0.50	A	22,190	0.55	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	10,640	0.42	B	11,060	0.44	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	13,590	0.67	D	13,570	0.67	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	17,080	0.85	E	17,080	0.85	E
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	3,180	0.28	C	3,030	0.27	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	4,210	0.22	B	4,830	0.26	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	6,820	0.36	C	7,550	0.40	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	20,330	1.20	F	22,500	1.33	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	20,990	1.24	F	21,510	1.27	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	9,610	0.51	D	10,990	0.58	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	20,600	1.02	F	21,990	1.09	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	19,160	1.28	F	19,530	1.30	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	23,920	1.33	F	23,530	1.31	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	26,940	1.50	F	25,790	1.43	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	19,770	1.32	F	19,460	1.30	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2013 EPAP PLUS ALTERNATIVE A PHASE 1 & 2 INTERSECTION OPERATIONS

Anticipated project trips were assigned through the study intersections and added to the 2013 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting weekday and Saturday EPAP Plus Alternative A Phase 1 & 2 volumes for the Friday and Saturday PM peak hour are shown in **Figure 20**.

Level of Service

Study intersection LOS calculation results for the 2013 EPAP Plus Alternative A Phase 1 & 2 project Condition during the Friday and Saturday PM peak hour are summarized in **Table 23**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Ione Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday and Saturday PM peak hour,
- Missouri Flat Road / US 50 WB Ramps during the Friday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 23
Intersection Level of Service
2013 EPAP Plus Alternative A Phase 1 & 2

Intersection			Control	2013 EPAP + Alt A. Ph. 1 & 2			
ID#	Name	LOS Threshold		Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	8.6	A	8.1	A
			NB Left	8.2	A	8.0	A
			SB Left	8.1	A	8.0	A
			WB Approach	55.0	F	17.8	C
			EB Approach	9.7	A	9.0	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.3	A	8.6	A
			SB Left	8.9	A	8.4	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.4	A
			NB ThruLeft	8.7	A	8.9	A
			EB Approach	12.9	B	13.4	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.6	A	1.0	A
			NB Left	8.7	A	9.0	A
			SB Left	9.0	A	N/A	N/A
			EB Approach	19.1	C	13.5	B
			WB Approach	30.0	D	30.7	D
5	SR 49 / Randolph Dr.	D	Signal	26.7	C	37.1	D
6	SR 49 / SR 16	C	Signal	21.0	C	18.0	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	3.8	A	3.6	A
			NB Approach	22.4	C	19.2	C
			WB Left	10.3	B	10	A
8	Latrobe (Amador) / SR 16	C	Signal	13.1	B	11.0	B
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.9	A	8.8	A
			SB Left	10.5	B	9.9	A
			EB Approach	>100	F	34.9	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11.1	B	10.3	B
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.3	A	8.2	A
			WB Left	10	B	9.7	A
			NB Approach	>100	F	>100	F
			SB Approach	18.1	C	18.1	C
12	SR 124 / SR 88	C	Unsignalized				

Intersection			Control	2013 EPAP + Alt A. Ph. 1 & 2			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			Overall	4.6	A	6.0	A
			SB Approach	13.5	B	14.7	B
			EB Left	9.1	A	8.9	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	11.8	B	19.0	C
			EB Left	8.3	A	8.4	A
			WB Left	9.5	A	8.7	A
			NB Approach	>100	F	>100	F
			SB Approach	16.2	C	13.6	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	90.5	F	78.7	F
			NB Left	8.9	A	8.8	A
			SB Left	9.5	A	8.6	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	15.8	B	13.7	B
16	Tully Rd. / SR 88	D	Signal	24.9	C	17.4	B
17	SR 88 / Victor (SR 12 west)	C	Signal	19.7	B	18.7	B
18	SR 88 / Kettleman Ln.	C	Signal	27.3	C	20.9	C
19	Ione / SR 16	D	Unsignalized				
			Overall	5.8	A	1.6	A
			WB Left	9.6	A	N/A	N/A
			NB Approach	42.5	E	17.3	C
20	Murieta South Pkwy. / SR 16	E	Signal	9.6	A	11.7	B
21	Murieta Pkwy. / SR 16	E	Signal	24.8	C	57.7	E
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	26.7	D	50.6	F
			SB Approach	>100	F	>100	F
			EB Left	9.6	A	12.3	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	1.6	A	2.1	A
			NB Approach	>100	F	>100	F
			SB Approach	51.5	F	>100	F
			EB Left	9.5	A	12.3	B
			WB Left	11.7	B	12.3	B
24	Dillard / SR 16	D	Signal	39.8	D	41.2	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.6	A	6.0	A
			NB Approach	34.6	D	>100	F
			WB Left	12.3	B	12.2	B
26	Grant Line / SR 16	D	Signal	>100	F	>100	F
27	Sunrise / SR 16	D	Signal	>100	F	60.3	E
28	Excelsior / SR 16	E	Signal	21.1	C	18.1	B
29	Bradshaw / SR 16	E	Signal	79.2	E	21.7	C
30	Latrobe / White Rock	E	Signal	19.0	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.6	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	12.6	B	11.2	B
			WB Approach	12.2	B	11.5	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	83.8	F	34.6	C

Intersection			Control	2013 EPAP + Alt A. Ph. 1 & 2			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
33	Missouri Flat / US 50 EB Ramps	D	Signal	44.4	D	20.8	C
34	Missouri Flat / Mother Lode	E	Signal	18.1	B	10.2	B
35	Missouri Flat / Forni	E	Signal	66.3	E	35.9	D
36	Missouri Flat / Pleasant Valley	E	Signal	26.0	C	16.7	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	7.9	A	3.1	A
			EB ThruLeft	8.9	A	8.2	A
			SB Approach	38.4	E	13.9	B
38	SR 49 / Pleasant Valley	E	All-way STOP	50.9	F	17.8	C
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	0.4	A	0.6	A
			SB Left	10.2	B	9.7	A
			WB Approach	16.6	C	15.1	C

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

ALTERNATIVE B (SLIGHTY REDUCED CASINO AND HOTEL)

As noted earlier this preferred Alternative B is proposed in two phases. Phase 1 consists of the reduced size casino proposed for operation by the year 2010 with the addition of a hotel to follow in Phase 2 three years later (2013).

2010 EPAP PLUS ALTERNATIVE B PHASE 1 ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2010 EPAP (No Project) roadway segment volumes. The roadway network under EPAP Plus Alternative B Phase 1 is assumed to be the same as 2010 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 and Randolph Drive.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative B Phase 1 Condition are summarized in **Table 24**. All of the roadway segments operate acceptably under the 2010 EPAP Plus Alternative B Phase 1 Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,

- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 24
Roadway Segment Level of Service
2010 EPAP Plus Alternative B Phase 1

Roadway	Classification	Capacity Threshold	LOS Threshold	2010 EPAP Plus Alternative B Phase 1					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	12,750	0.69	D	11,650	0.63	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	14,850	0.59	C	14,360	0.57	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	23,250	1.16	F	22,550	1.13	F
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	19,230	0.96	E	18,270	0.91	E
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	24,650	1.23	F	24,030	1.20	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	26,450	1.32	F	26,540	1.33	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	26,070	1.30	F	26,580	1.33	F
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	17,680	0.88	D	19,540	0.98	E
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	9,260	0.46	C	9,490	0.47	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	11,960	0.59	D	11,790	0.58	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	14,740	0.73	D	14,450	0.72	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,920	0.26	B	2,780	0.25	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	3,420	0.18	B	3,860	0.20	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	5,820	0.31	C	6,360	0.34	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	18,230	1.08	F	20,090	1.19	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	18,830	1.11	F	19,190	1.14	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	8,420	0.45	C	9,570	0.51	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	18,490	0.92	E	19,640	0.97	E
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	17,580	1.17	F	17,850	1.19	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	22,000	1.22	F	21,570	1.20	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	24,800	1.38	F	23,670	1.32	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	18,150	1.21	F	17,810	1.19	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2010 EPAP PLUS ALTERNATIVE B PHASE 1 INTERSECTION OPERATIONS

Project trips were assigned through the study intersections, and added to 2010 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour 2010 EPAP Plus Alternative B Phase 1 volumes are shown in **Figure 21**.

Level of Service

Levels of service for the 2010PAP Plus Alternative B Phase 1 Condition during the Friday and Saturday PM peak hour are summarized in **Table 25**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Randolph Drive intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston Avenue / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during both the Friday and Saturday PM peak hour,
- The northbound approach of the Church Street and Main street intersection during both the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The westbound approach of the SR 88 / Liberty Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise / SR 16 during the Friday PM peak hour,
- Missouri Flat / US 50 WB Ramps during the Friday PM peak hour, and
- The westbound approach of the SR 49 / Project Service Access during the Saturday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 49 / Randolph Drive during the Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- SR 16 / Latrobe Road (Amador County) during the Friday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Project Service Access during the Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 25
Intersection Level of Service
2010 EPAP Plus Alternative B Phase 1

Intersection			Control	2010 EPAP + Alt B Ph. 1			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	6.7	A	3.5	A
			NB Left	8.5	A	8.0	A
			SB Left	8.1	A	7.9	A
			WB Approach	44.7	E	16.3	C
			EB Approach	9.4	A	8.8	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.2	A	8.4	A
			SB Left	8.8	A	8.3	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.3	A
			NB ThruLeft	8.6	A	8.7	A
			EB Approach	12.2	B	12.6	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.4	A	0.9	A
			NB Left	8.6	A	8.8	A
			SB Left	8.9	A	N/A	N/A
			EB Approach	17.1	C	12.6	B
			WB Approach	25.3	D	25.1	D
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	4.3	A	12.5	B
			NB Left	8.4	A	8.4	A
			SB Left	9.5	A	9.3	A
			WB Approach	42.4	E	81.8	F
			EB Approach	26.7	D	22.8	C
6	SR 49 / SR 16	C	Signal	17.8	B	15.7	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	2.9	A	2.8	A
			NB Approach	17.9	C	15.5	C
			WB Left	9.7	A	9.3	A
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.2	A	2.3	A
			EB ThruLeft	8.4	A	8.6	A
			SB Approach	17.5	C	23.3	C
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.6	A	8.7	A
			SB Left	10.1	B	9.6	A
			EB Approach	>100	F	28.4	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	10.6	B	10.0	A
			SB Approach	>100	F	>100	F

Intersection			Control	2010 EPAP + Alt B Ph. 1			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.2	A	8.2	A
			WB Left	9.7	A	9.4	A
			NB Approach	>100	F	>100	F
			SB Approach	16.9	C	17.0	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	4.2	A	5.4	A
			SB Approach	12.5	B	13.3	B
			EB Left	8.8	A	8.7	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	5.5	A	9.2	A
			EB Left	8.2	A	8.2	A
			WB Left	9.2	A	8.5	A
			NB Approach	50.1	F	50.2	F
			SB Approach	13.8	B	11.9	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	32.6	D	23.9	C
			NB Left	8.7	A	8.7	A
			SB Left	9.3	A	8.4	A
			EB Approach	>100	F	66.0	F
			WB Approach	>100	F	100.0	F
15	SR 88 / SR 12 (east)	C	Signal	14.2	B	12.7	B
16	Tully Rd. / SR 88	D	Signal	21.0	C	15.5	B
17	SR 88 / Victor (SR 12 west)	C	Signal	18.9	B	18	B
18	SR 88 / Kettleman Ln.	C	Signal	25.2	C	19.8	B
19	Ione / SR 16	D	Unsignalized				
			Overall	3.5	A	1.4	A
			WB Left	9.3	A	N/A	N/A
			NB Approach	24.1	C	14.5	B
20	Murieta South Pkwy./ SR 16	E	Signal	9.2	A	10.9	B
21	Murieta Pkwy. /SR 16	E	Signal	21.8	C	46.6	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	14.2	B	31.2	D
			SB Approach	>100	F	>100	F
			EB Left	9.3	A	11.6	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	1.2	A	1.4	A
			NB Approach	73.8	F	>100	F
			SB Approach	36.6	E	97.1	F
			EB Left	9.2	A	11.7	B
			WB Left	11	B	11.7	B
24	Dillard / SR 16	D	Signal	25.1	C	29.1	C
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.5	A	3.5	A
			NB Approach	28.1	D	>100	F
			WB Left	11.5	B	11.6	B
26	Grant Line / SR 16	D	Signal	>100	F	48.4	D
27	Sunrise / SR 16	D	Signal	82.9	F	36.5	D
28	Excelsior / SR 16	E	Signal	19.8	B	18.1	B
29	Bradshaw / SR 16	E	Signal	58.7	E	20.7	C

Intersection			Control	2010 EPAP + Alt B Ph. 1			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
30	Latrobe / White Rock	E	Signal	18.7	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.5	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	11.9	B	10.7	B
			WB Approach	11.6	B	11.0	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	65.4	E	28.9	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	29.5	C	18.3	B
34	Missouri Flat / Mother Lode	E	Signal	13	B	9.2	A
35	Missouri Flat / Forni	E	Signal	64.6	E	31.9	C
36	Missouri Flat / Pleasant Valley	E	Signal	22.1	C	15.4	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.1	A	3.0	A
			EB ThruLeft	8.7	A	8.1	A
			SB Approach	27.7	D	12.9	B
38	SR 49 / Pleasant Valley	E	All-way STOP	36.6	E	15.2	C
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	1.8	A	3.6	A
			SB Left	9.6	A	9.2	A
			WB Approach	34.3	D	41.4	E

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

2013 EPAP PLUS ALTERNATIVE B PHASE 1 & 2 ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2013 EPAP (No Project) roadway segment volumes. The roadway network under EPAP Plus Alternative B Phase 1 and 2 is assumed to be the same as 2013 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 / Randolph Drive and would be signalized.

Level of Service

Levels of service for the 2013 EPAP Plus Alternative B Phase 1 & 2 Condition are summarized in **Table 26**. All of the roadway segments would operate acceptably in the 2013 EPAP Plus Alternative B Phase 1 & 2 Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,

- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 26
Roadway Segment Level of Service
2013 EPAP Plus Alternative B Phase 1 & 2

Roadway	Classification	Capacity Threshold	LOS Threshold	2013 EPAP Plus Alternative B Phase 1 & 2					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	13,930	0.75	D	12,690	0.68	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	16,280	0.65	C	15,630	0.62	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	25,590	1.28	F	24,790	1.24	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	21,170	0.53	A	20,070	0.50	A
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	27,140	1.36	F	26,400	1.32	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	29,120	1.46	F	29,160	1.46	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	28,710	1.44	F	29,200	1.46	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	19,480	0.49	A	21,460	0.54	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	10,140	0.40	B	10,330	0.41	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	13,080	0.65	D	12,840	0.64	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	15,140	0.75	D	15,720	0.78	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	3,180	0.28	C	3,030	0.27	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	3,770	0.20	B	4,320	0.23	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	6,390	0.34	C	7,040	0.37	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	19,910	1.18	F	21,890	1.30	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	20,570	1.22	F	20,900	1.24	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	9,210	0.49	C	10,410	0.55	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	20,190	1.00	E	21,400	1.06	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	18,960	1.26	F	19,230	1.28	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	23,720	1.32	F	23,240	1.29	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	26,730	1.49	F	25,500	1.42	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	19,580	1.31	F	19,190	1.28	F

Notes:
 Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2013 EPAP PLUS ALTERNATIVE B PHASE 1 & 2 INTERSECTION OPERATIONS

Project trips were assigned through the study intersections, and added to 2013 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour 2013 EPAP Plus Alternative B Phase 1 & 2 volumes are shown in **Figure 22**.

Level of Service

2013 EPAP Plus Alternative B Phase 1 & 2 Condition during the Friday and Saturday PM peak hour are summarized in **Table 27**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Ione Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday and Saturday PM peak hour, and
- Missouri Flat Road / US 50 WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during Friday and Saturday PM peak hour,

- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 27
Intersection Level of Service
2013 EPAP Plus Alternative B Phase 1 & 2

Intersection			Control	2013 EPAP + Alt B Ph. 1 & 2			
ID#	Name	LOS Threshold		Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	7.0	A	3.5	A
			NB Left	8.6	A	8.0	A
			SB Left	8.2	A	8.0	A
			WB Approach	50.2	F	16.9	C
			EB Approach	9.6	A	8.9	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.3	A	8.5	A
			SB Left	8.9	A	8.4	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.4	A
			NB ThruLeft	8.7	A	8.8	A
			EB Approach	12.6	B	13.0	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.6	A	1.0	A
			NB Left	8.7	A	8.9	A
			SB Left	9.0	A	N/A	N/A
			EB Approach	18.6	C	13.1	B
			WB Approach	28.5	D	28.0	D
5	SR 49 / Randolph Dr.	D	Signal	21.7	C	28.0	C
6	SR 49 / SR 16	C	Signal	19.6	B	16.8	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	3.2	A	3.0	A
			NB Approach	20.2	C	16.9	C
			WB Left	10.0	B	9.6	A
8	Latrobe (Amador) / SR 16	C	Signal	12.5	B	10.3	B
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.9	A	8.8	A
			SB Left	10.3	B	9.8	A
			EB Approach	>100	F	33.2	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11.0	B	10.2	B
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.3	A	8.2	A
			WB Left	9.9	A	9.5	A
			NB Approach	>100	F	>100	F
			SB Approach	18.0	C	17.8	C
12	SR 124 / SR 88	C	Unsignalized				

Intersection			Control	2013 EPAP + Alt B Ph. 1 & 2			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			Overall	4.4	A	5.5	A
			SB Approach	13.1	B	14.1	B
			EB Left	9.0	A	8.8	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	9.5	A	13.8	B
			EB Left	8.3	A	8.3	A
			WB Left	9.5	A	8.6	A
			NB Approach	94.6	F	80.1	F
			SB Approach	15.4	C	12.8	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	59.6	F	44.4	E
			NB Left	8.9	A	8.8	A
			SB Left	9.5	A	8.5	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	15.6	B	13.4	B
16	Tully Rd. / SR 88	D	Signal	24.5	C	17.1	B
17	SR 88 / Victor (SR 12 west)	C	Signal	19.6	B	18.5	B
18	SR 88 / Kettleman Ln.	C	Signal	27.1	C	20.7	C
19	Ione / SR 16	D	Unsignalized				
			Overall	5.2	A	1.6	A
			WB Left	9.5	A	N/A	N/A
			NB Approach	36.7	E	15.9	C
20	Murieta South Pkwy. / SR 16	E	Signal	9.5	A	11.5	B
21	Murieta Pkwy. / SR 16	E	Signal	24.1	C	54.2	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	24.2	C	45.4	E
			SB Approach	>100	F	>100	F
			EB Left	9.5	A	12.0	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	1.5	A	1.9	A
			NB Approach	>100	F	>100	F
			SB Approach	47.3	E	>100	F
			EB Left	9.4	A	12.1	B
			WB Left	11.5	B	12.1	B
24	Dillard / SR 16	D	Signal	36.8	D	37.9	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.6	A	5.2	A
			NB Approach	33.1	D	>100	F
			WB Left	12.2	B	12.0	B
26	Grant Line / SR 16	D	Signal	>100	F	94.0	F
27	Sunrise / SR 16	D	Signal	>100	F	55.7	E
28	Excelsior / SR 16	E	Signal	21.0	C	18.3	B
29	Bradshaw / SR 16	E	Signal	77.1	E	21.5	C
30	Latrobe / White Rock	E	Signal	19.0	B	17.3	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.6	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	12.6	B	11.2	B
			WB Approach	12.2	B	11.5	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	83.9	F	34.6	C

Intersection			Control	2013 EPAP + Alt B Ph. 1 & 2			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
33	Missouri Flat / US 50 EB Ramps	D	Signal	43.3	D	20.8	C
34	Missouri Flat / Mother Lode	E	Signal	17	B	10.2	B
35	Missouri Flat / Forni	E	Signal	67.9	E	35.9	D
36	Missouri Flat / Pleasant Valley	E	Signal	25.4	C	16.3	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	7.6	A	3.1	A
			EB ThruLeft	8.9	A	8.2	A
			SB Approach	36.2	E	13.6	B
38	SR 49 / Pleasant Valley	E	All-way STOP	48.6	E	16.8	C
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	0.3	A	0.5	A
			SB Left	9.9	A	9.4	A
			WB Approach	15.8	C	14.0	B

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

ALTERNATIVE C (REDUCED CASINO)

As noted earlier this Alternative C consists of a reduced size casino proposed for operation by the year 2010 with no addition of a hotel.

2010 EPAP PLUS ALTERNATIVE C ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2010 EPAP (No Project) roadway segment volumes. The roadway network under EPAP Plus Alternative C is assumed to be the same as 2010 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 and Randolph Drive.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative C Condition are summarized in **Table 28**. All of the roadway segments operate acceptably under the 2010 EPAP Plus Alternative C Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,

- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 28
Roadway Segment Level of Service
2010 EPAP Plus Alternative C

Roadway	Classification	Capacity Threshold	LOS Threshold	2010 EPAP Plus Alternative C					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	12,340	0.66	D	11,060	0.59	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	13,840	0.55	C	12,900	0.51	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	22,940	1.15	F	22,110	1.11	F
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	18,890	0.94	E	17,780	0.89	D
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	24,210	1.21	F	23,390	1.17	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	25,960	1.30	F	25,830	1.29	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	25,570	1.28	F	25,850	1.29	F
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	17,180	0.86	D	18,820	0.94	E
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	8,760	0.43	C	8,770	0.43	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	11,460	0.57	D	11,070	0.55	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	13,800	0.68	D	13,090	0.65	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,920	0.26	B	2,780	0.25	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	3,040	0.16	B	3,240	0.17	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	5,440	0.29	C	5,730	0.30	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	17,810	1.05	F	19,480	1.15	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	18,410	1.09	F	18,580	1.10	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	8,020	0.42	C	8,990	0.48	C
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	18,070	0.89	E	19,040	0.94	E
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	17,370	1.16	F	17,550	1.17	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	21,790	1.21	F	21,270	1.18	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	24,590	1.37	F	23,370	1.30	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	17,960	1.20	F	17,530	1.17	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2010 EPAP PLUS ALTERNATIVE C INTERSECTION OPERATIONS

Project trips were assigned through the study intersections, and added to 2010 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour 2010 EPAP Plus Alternative C volumes are shown in **Figure 23**.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative C Condition during the Friday and Saturday PM peak hour are summarized in **Table 29**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Randolph Drive intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston Avenue / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during both the Friday and Saturday PM peak hour,
- The northbound approach of the Church Street and Main street intersection during both the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The westbound approach of the SR 88 / Liberty Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Latrobe Road (Sacramento) intersection during the Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise / SR 16 during the Friday PM peak hour, and
- Missouri Flat / US 50 WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday PM peak hour,
- SR 16 / Latrobe Road (Amador County) during the Friday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 29
Intersection Level of Service
2010 EPAP Plus Alternative C

Intersection			Control	2010 EPAP + Alt C			
ID#	Name	LOS Threshold		Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	6.5	A	3.6	A
			NB Left	8.5	A	7.9	A
			SB Left	8.1	A	7.9	A
			WB Approach	41.3	E	15.5	C
EB Approach	9.3	A	8.7	A			
2	SR 49 / Main St.	D	Unsignalized				
			Overall	91.4	F	>100	F
			NB Left	8.2	A	8.3	A
			SB Left	8.7	A	8.2	A
			EB Approach	>100	F	>100	F
WB Approach	>100	F	>100	F			
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.3	A
			NB ThruLeft	8.5	A	8.6	A
			EB Approach	12.0	B	12.3	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.4	A	0.9	A
			NB Left	8.5	A	8.7	A
			SB Left	8.8	A	N/A	N/A
			EB Approach	16.7	C	12.3	B
WB Approach	24.1	C	23.0	C			
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	2.5	A	4.3	A
			NB Left	8.3	A	8.4	A
			SB Left	9.3	A	9.0	A
			WB Approach	30.2	D	35.1	E
EB Approach	23.9	C	19.7	C			
6	SR 49 / SR 16	C	Signal	17.2	B	15.2	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	2.5	A	2.3	A
			NB Approach	16.6	C	14.2	B
			WB Left	9.5	A	9.0	A
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.2	A	2.2	A
			EB ThruLeft	8.3	A	8.5	A
			SB Approach	16.4	C	20.8	C
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.6	A	8.7	A
			SB Left	10.0	A	9.5	A
			EB Approach	>100	F	27.3	D
WB Approach	>100	F	>100	F			
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F

Intersection			Control	2010 EPAP + Alt C			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			EB ThruLeft SB Approach	10.5 >100	B F	9.8 >100	A F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized Overall EB Left WB Left NB Approach SB Approach	>100 8.2 9.7 >100 16.8	F A A F C	>100 8.2 9.3 >100 16.8	F A A F C
12	SR 124 / SR 88	C	Unsignalized Overall SB Approach EB Left	4.0 12.2 8.7	A B A	4.9 12.9 8.6	A B A
13	Jackson Valley Rd. / SR 88	C	Unsignalized Overall EB Left WB Left NB Approach SB Approach	4.3 8.1 9.2 37.6 13.1	A A A E B	6.5 8.1 8.4 33.6 11.3	A A A D B
14	SR 88 / Liberty Rd.	C	Unsignalized Overall NB Left SB Left EB Approach WB Approach	23.2 8.7 9.3 >100 64.2	C A A F F	12.2 8.7 8.4 50.7 38.5	B A A F E
15	SR 88 / SR 12 (east)	C	Signal	14.0	B	12.5	B
16	Tully Rd. / SR 88	D	Signal	20.7	C	15.3	B
17	SR 88 / Victor (SR 12 west)	C	Signal	18.9	B	17.9	B
18	SR 88 / Kettleman Ln.	C	Signal	25.0	C	19.6	B
19	Ione / SR 16	D	Unsignalized Overall WB Left NB Approach	3.3 9.2 21.9	A A C	1.4 N/A 13.5	A N/A B
20	Murieta South Pkwy./ SR 16	E	Signal	9.2	A	10.8	B
21	Murieta Pkwy. /SR 16	E	Signal	21.2	C	43.5	D
22	Stonehouse / SR 16	E	Unsignalized Overall SB Approach EB Left	12.6 >100 9.2	B F A	27.6 >100 11.4	D F B
23	Latrobe (Sac) / SR 16	D	Unsignalized Overall NB Approach SB Approach EB Left WB Left	1.1 67.8 34.2 9.1 10.9	A F D A B	1.2 >100 84.6 11.4 11.5	A F F B B
24	Dillard / SR 16	D	Signal	23.8	C	26.9	C
25	Sloughhouse / SR 16	E	Unsignalized Overall NB Approach WB Left	0.5 27.0 11.4	A D B	3.1 >100 11.4	A F B
26	Grant Line / SR 16	D	Signal	>100	F	44.6	D
27	Sunrise / SR 16	D	Signal	80.4	F	34.5	C

Intersection			Control	2010 EPAP + Alt C			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
28	Excelsior / SR 16	E	Signal	19.7	B	18.3	B
29	Bradshaw / SR 16	E	Signal	57.1	E	20.6	C
30	Latrobe / White Rock	E	Signal	18.7	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.5	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	11.9	B	10.7	B
	WB Approach		11.6	B	11.0	B	
32	Missouri Flat / US 50 WB Ramps	D	Signal	65.3	E	29.0	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	29.4	C	19.6	B
34	Missouri Flat / Mother Lode	E	Signal	13.0	B	8.8	A
35	Missouri Flat / Forni	E	Signal	64.4	E	31.0	C
36	Missouri Flat / Pleasant Valley	E	Signal	21.6	C	15.0	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	5.9	A	3.1	A
			EB ThruLeft	8.7	A	8.0	A
			SB Approach	26.5	D	12.6	B
38	SR 49 / Pleasant Valley	E	All-way STOP	35.0	E	14.4	B
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	1.0	A	1.8	A
			SB Left	9.4	A	8.9	A
			WB Approach	26.7	D	26.1	D

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

ALTERNATIVE D (RETAIL SHOPPING CENTER)

As noted earlier this Alternative D consists of a retail shopping center proposed for operation by the year 2010. The roadway network under EPAP Plus Alternative D is assumed to be the same as 2010 EPAP No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 and Randolph Drive.

2010 EPAP PLUS ALTERNATIVE D ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to 2010 EPAP (No Project) roadway segment volumes.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative D Condition are summarized in **Table 30**. All of the roadway segments would operate acceptably in the 2010 EPAP Plus Alternative D Condition except for the following:

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Excelsior Road and Sunrise Boulevard during Friday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Stonehouse Road and Ione Road during Saturday,
- SR 16 between Ione Road and Old Sacramento Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 30
Roadway Segment Level of Service
2010 EPAP Plus Alternative D

Roadway	Classification	Capacity Threshold	LOS Threshold	2010 EPAP Plus Alternative D					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class III Art	18,600	D	13,760	0.74	D	12,920	0.69	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	17,360	0.69	D	17,480	0.70	D
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	24,020	1.20	F	23,510	1.18	F
SR 16 between Excelsior Road and Sunrise Boulevard	2 lane Arterial	20,000	E	20,060	1.00	F	19,300	0.97	E
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	25,740	1.29	F	25,400	1.27	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	27,670	1.38	F	28,060	1.40	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	27,310	1.37	F	28,120	1.41	F
SR 16 between Stonehouse Road and Ione Road	2 lane Arterial	20,000	E	18,930	0.95	E	21,100	1.06	F
SR 16 between Ione Road and Old Sacramento Road	Class I Art	20,200	C	10,510	0.52	D	11,050	0.55	D
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	13,210	0.65	D	13,350	0.66	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	17,060	0.84	E	17,340	0.86	E
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	2,920	0.26	B	2,780	0.25	B
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	4,500	0.24	B	5,210	0.28	C
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	6,900	0.37	C	7,700	0.41	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	19,280	1.14	F	21,400	1.27	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	19,880	1.18	F	20,490	1.21	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	9,400	0.50	D	10,790	0.57	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	19,510	0.97	E	20,920	1.04	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	18,080	1.21	F	18,480	1.23	F
SR 88 between SR 12 East and Tully Road	2 lane Arterial	18,000	C	22,500	1.25	F	22,200	1.23	F
SR 88 between Tully Road and SR 12 West	2 lane Arterial	18,000	C	25,300	1.41	F	24,300	1.35	F
SR 88 between SR 12 West and Kettleman Lane	2 lane Arterial	15,000	C	18,630	1.24	F	18,400	1.23	F

Notes:

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

2010 EPAP PLUS ALTERNATIVE D INTERSECTION OPERATIONS

Project trips were assigned through the study intersections, and added to 2010 EPAP (No Project) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour 2010 EPAP Plus Alternative D volumes are shown in **Figure 24**.

Level of Service

Levels of service for the 2010 EPAP Plus Alternative D Condition during the Friday and Saturday PM peak hour are summarized in **Table 31**. The following intersections and/or movements are expected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Randolph Drive intersection during the Friday and Saturday PM peak hour,
- The southbound approach of the Latrobe (Amador) / SR 16 intersection during the Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Ione Road intersection during the Friday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Missouri Flat Road / US 50 WB Ramps during the Friday PM peak hour, and
- The westbound approach of the SR 49 / Project Service Access driveway during both the Friday and Saturday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 49 / Randolph Drive during Friday and Saturday PM peak hour,
- SR 124 / SR 16 during Friday and Saturday PM peak hour,
- SR 16 / Latrobe Road (Amador County) during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- SR 16 / Ione Road during the Friday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour, and
- SR 49 / Project Service Access Driveway during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 31
Intersection Level of Service
2010 EPAP Plus Alternative D

Intersection			Control	2010 EPAP + Alt D			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	7.0	A	3.4	A
			NB Left	8.6	A	8.1	A
			SB Left	8.2	A	8.0	A
			WB Approach	52.6	F	18.2	C
			EB Approach	9.6	A	9.1	A
2	SR 49 / Main St.	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.3	A	8.6	A
			SB Left	8.9	A	8.4	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar St.	D	Unsignalized				
			Overall	0.7	A	0.4	A
			NB ThruLeft	8.6	A	8.9	A
			EB Approach	12.5	B	13.2	B
4	SR 49 / Empire St.	D	Unsignalized				
			Overall	1.5	A	1.0	A
			NB Left	8.7	A	9.0	A
			SB Left	9.0	A	N/A	N/A
			EB Approach	18.0	C	13.4	B
			WB Approach	28.1	D	31.4	D
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	29.4	D	>100	F
			NB Left	8.3	A	8.4	A
			SB Left	10	B	10.3	B
			WB Approach	>100	F	>100	F
			EB Approach	36.7	E	37.3	E
6	SR 49 / SR 16	C	Signal	18.8	B	17.9	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	3.6	A	4.1	A
			NB Approach	20.6	C	20.2	C
			WB Left	10.2	B	10.1	B
8	Latrobe (Amador) / SR 16	C	Unsignalized				
			Overall	2.4	A	2.7	A
			EB ThruLeft	8.6	A	8.8	A
			SB Approach	20.1	C	30.5	D
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	9.6	A	8.7	A
			SB Left	10.3	B	9.9	A
			EB Approach	>100	F	31.0	D
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	10.8	B	10.3	B
			SB Approach	>100	F	>100	F

Intersection			Control	2010 EPAP + Alt D			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.2	A	8.2	A
			WB Left	9.9	A	9.7	A
			NB Approach	>100	F	>100	F
			SB Approach	17.3	C	17.6	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	4.8	A	6.3	A
			SB Approach	13.2	B	14.4	B
			EB Left	8.9	A	8.9	A
13	Jackson Valley Rd. / SR 88	C	Unsignalized				
			Overall	7.6	A	18.5	C
			EB Left	8.3	A	8.4	A
			WB Left	9.3	A	8.7	A
			NB Approach	74.8	F	>100	F
			SB Approach	14.9	B	13.5	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	77.2	F	82.1	F
			NB Left	8.7	A	8.7	A
			SB Left	9.4	A	8.5	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	14.5	B	13.1	B
16	Tully Rd. / SR 88	D	Signal	21.6	C	16	B
17	SR 88 / Victor (SR 12 west)	C	Signal	19.1	B	18.2	B
18	SR 88 / Kettleman Ln.	C	Signal	25.5	C	20.2	C
19	Ione / SR 16	D	Unsignalized				
			Overall	4.0	A	1.5	A
			WB Left	9.4	A	N/A	N/A
			NB Approach	29.6	D	17.2	C
20	Murieta South Pkwy./ SR 16	E	Signal	9.3	A	11.2	B
21	Murieta Pkwy. /SR 16	E	Signal	23.3	C	52.7	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	17.7	C	39.5	E
			SB Approach	>100	F	>100	F
			EB Left	9.5	A	12.0	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	1.3	A	1.7	A
			NB Approach	87.9	F	>100	F
			SB Approach	42.3	E	>100	F
			EB Left	9.4	A	12.1	B
			WB Left	11.2	B	12.2	B
24	Dillard / SR 16	D	Signal	27.0	C	35.7	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.5	A	4.5	A
			NB Approach	30.2	D	>100	F
			WB Left	11.7	B	12.1	B
26	Grant Line / SR 16	D	Signal	133.7	F	59.1	E
27	Sunrise / SR 16	D	Signal	86.8	F	41.4	D
28	Excelsior / SR 16	E	Signal	19.8	B	17.8	B
29	Bradshaw / SR 16	E	Signal	61.2	E	21.1	C

Intersection			Control	2010 EPAP + Alt D			
				Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
30	Latrobe / White Rock	E	Signal	18.7	B	17.2	B
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.5	A	1.3	A
			NB Left	7.6	A	7.6	A
			EB Approach	11.9	B	10.8	B
			WB Approach	11.6	B	11.1	B
32	Missouri Flat / US 50 WB Ramps	D	Signal	65.7	E	29.0	C
33	Missouri Flat / US 50 EB Ramps	D	Signal	29.8	C	18.3	B
34	Missouri Flat / Mother Lode	E	Signal	12.8	B	9.2	A
35	Missouri Flat / Forni	E	Signal	64.8	E	31.9	C
36	Missouri Flat / Pleasant Valley	E	Signal	23.0	C	16.1	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.3	A	2.9	A
			EB ThruLeft	8.8	A	8.2	A
			SB Approach	30.1	D	13.7	B
38	SR 49 / Pleasant Valley	E	All-way STOP	40.8	E	17.0	C
A	SR 49 / Project Access Dvy.	D	Unsignalized				
			Overall	9.5	A	34.2	D
			SB Left	10.1	B	10.1	B
			WB Approach	99.5	F	>100	F

Note:

PM = PM Peak Hour of Generator which is 4-6 PM

N/A= Not Applicable

Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, in seconds.

SIGHT DISTANCE, CIRCULATION AND PARKING

Each of the development alternatives are proposed to use the same two driveways as access, a main driveway and a service driveway. Based on field observations at the main driveway there is adequate sight distance at the proposed main driveway. Some grading would need to be pursued to the west of the service driveway to insure adequate sight distance at the service driveway. Traffic circulation concerns were considered prior to the completion of the development site plans. The resulting site plan adequately addresses on-site circulation needs and attempts to minimize conflicts between the different users through the assignment of parking.

SECTION 5

CUMULATIVE CONDITION

Cumulative conditions, or the Future No Project condition, presents traffic conditions expected in 2025 without the proposed project. The Cumulative condition is used as a future baseline to compare against the Cumulative Plus Project condition. This comparison identifies long-term project-related impacts.

ROADWAY IMPROVEMENTS

The San Joaquin Council of Governments *2007 RTP*, *SACOG MTP 2035*, *2004 Amador County RTP Update* documents were all reviewed to determine cumulative geometrics. The projects that were programmed in these documents were assumed to be in place for this condition. Sacramento County Department of Transportation (DOT) was also contacted for further clarification of cumulative improvements to include in Sacramento County (Atwal pers. comm.). The following roadway improvements were assumed in the cumulative condition:

- The SR 88 Bypass in San Joaquin County using the alternative with the one-way couplet (2-lanes on each half of the one-way couplet) in the town of Lockeford and 4-lanes along SR 88 between SR 12 East and SR 12 West,
- Grant Line Road widened to 4-lanes,
- Sunrise Boulevard widened to 6-lanes, and
- Phase 2 of the US 50 Missouri Flat interchange with the design of a Single Point Urban Interchange (SPUI).

To be conservative no major circulation system improvements, including the Ione Bypass, were assumed for the 2025 horizon year in Amador County. The Ione Bypass is a project that would provide an alternate route for trips currently traveling through downtown Ione. The project consists of two segments, a north-south segment on the west side of the City of Ione and an east-west segment on the south side of the City of Ione. The north-south segment consists of a combination of a new roadway and improvements to existing roadways. The east-west roadway would consist primarily of a new roadway.

In addition to the roadway improvements identified above, the following roadway improvements are also assumed in place based on preliminary Caltrans fair share calculations which totaled 100% for 2010 and 2013 mitigation measures:

- The southbound approach of the SR 49 / Main Street intersection would include an exclusive left-turn lane and a combined through/right-turn lane.
- The Latrobe Road (Amador) / SR 16 intersection would be signalized.
- Ione Road / SR 16 intersection would be signalized.
- The SR 49 / Project service access intersection would only allow for right-turn out movements at the project service access driveway.
- The roadway segment of SR 49 between Main Casino Entrance and Main Street would be upgraded to a Class II Arterial.
- The roadway segment of SR 16 between Stonehouse Road and Ione Road would be four lanes wide.
- The roadway segment of SR 16 between Excelsior Road and Sunrise Boulevard would be four lanes wide.
- The roadway segment of SR 16 between Ione Road and Old Sacramento Road would be three lanes wide.

Section 7 in this document discusses 2010 and 2013 impacts and mitigation measures in detail.

CUMULATIVE NO PROJECT TRAFFIC VOLUMES

Forecasts of future year intersection turning movement traffic volumes were prepared using methods described in the Transportation Research Board's (TRB's) National Cooperative Highway Research Program (NCHRP) Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design* (Transportation Research Board 1982). Using the TRB methods, existing peak hour turning movement volumes at the study intersections were increased using growth factors from the Sacramento Metropolitan (SACMET) travel demand simulation model, SJCOG travel demand model, and the Amador County travel demand model. The NCHRP 255 method applies the traffic model growth factors to the intersection turning movement volumes, using an iterative process to balance and adjust the resulting forecasts to match the growth factors.

Upon reviewing the most recent SJCOG travel demand model, the daily volumes in the project study area for the model horizon year were found to be lower than the daily volumes in the base model year. This finding resulted in using the base and horizon year models that were used in the analysis for the SR 88 Bypass.

Friday and Saturday PM peak hour volumes and lane configurations at the study intersections under Cumulative (No Project) conditions are depicted in **Figure 25**.

CUMULATIVE ROADWAY SEGMENT OPERATIONS

Roadway segment operations were analyzed at the study roadways for Cumulative (2025) Condition. The ADT roadway segment volumes for the Cumulative Condition were calculated by applying the TRB method discussed above.

Level of Service

The results of the Cumulative Condition capacity analyses of study roadway segments, without the project, are shown in **Table 32**. All of the roadway segments are projected to operate acceptably except for the following:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during Friday,
- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (NB couplet) during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (SB couplet) during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 32
Roadway Segment Level of Service
Cumulative (No Project)

Roadway	Classification	Capacity Threshold	LOS Threshold	Cumulative No Project					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class II Art	18,900	D	15,610	0.83	E	13,250	0.70	D
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	16,200	0.65	C	13,540	0.54	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	38,230	1.91	F	30,660	1.53	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	23,320	0.58	A	25,720	0.64	B
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	31,220	1.56	F	28,670	1.43	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	29,140	1.46	F	28,200	1.41	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	31,130	1.56	F	30,150	1.51	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	19,690	0.49	A	20,710	0.52	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	9,350	0.37	B	8,760	0.35	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	14,150	0.70	D	12,490	0.62	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	18,210	0.90	E	15,680	0.78	D
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	4,340	0.39	C	3,950	0.35	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	3,890	0.21	B	3,500	0.19	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	5,860	0.31	C	4,920	0.26	B
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	20,620	1.22	F	21,600	1.28	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	21,030	1.24	F	20,460	1.21	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	8,510	0.45	C	9,070	0.48	C
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	33,420	1.65	F	29,050	1.44	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	27,310	1.82	F	23,710	1.58	F
SR 88 between SR 12 East and Tully Road	4 lane Undivided Arterial	30,000	C	32,360	1.08	F	28,030	0.93	E
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,070	1.40	F	17,920	1.19	F
SR 88 between Tully Road and SR 12 West (SB couplet)	2 lane Arterial	15,000	C	21,070	1.40	F	17,920	1.19	F
SR 88 between SR 12 West and Kettleman Lane	4 lane Undivided Arterial	30,000	C	34,970	1.17	F	29,550	0.99	E

Notes:
 Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

CUMULATIVE INTERSECTION OPERATIONS

Intersection operations were analyzed at the study intersections for Cumulative (2025) Condition. The intersection turning movement volumes for the Cumulative Condition were calculated by applying the TRB method discussed above.

Level of Service

Levels of service for the Cumulative Condition during the Friday and Saturday PM peak hour are summarized in **Table 33**. The following intersections and/or movements are projected to operate at an unacceptable LOS:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound approach of the SR 49 / Empire Street intersection during the Friday PM peak hour,
- The westbound approach of the SR 49 / Empire Street intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- SR 88 / Victor Street (SR 12 west) during the Friday PM peak hour,
- SR 88 / Kettleman Lane during both the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Bradshaw Road / SR 16 during the Friday PM peak hour,
- Latrobe Road / White Rock Road during the Friday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour,
- Elliott Road / SR 88 during the Friday PM peak hour,
- Missouri Flat Road / US 50 EB and WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 33
Intersection Level of Service
Cumulative (No Project)

Intersection			CUM No Project				
ID#	Name	LOS Threshold	Control	Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	7.4	A	3.7	A
			NB Left	8.6	A	7.9	A
			SB Left	8.2	A	7.9	A
			EB Approach	9.6	A	8.8	A
			WB Approach	54.6	F	15.7	C
2	SR 49 / Main	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.3	A	8.4	A
			SB Left	9.1	A	8.3	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar	D	Unsignalized				
			Overall	0.8	A	0.3	A
			NB ThruLeft	8.9	A	9	A
			EB Approach	13.8	B	13.6	B
4	SR 49 / Empire	D	Unsignalized				
			Overall	2.1	A	1	A
			NB Left	8.9	A	9.1	A
			SB Left	9.4	A	N/A	N/A
			EB Approach	25.1	D	13.6	B
			WB Approach	38.7	E	30.9	D
5	SR 49 / Randolph Dr.	D	Unsignalized				
			Overall	0.7	A	0.2	A
			NB Left	8.7	A	8.8	A
			EB Approach	25.2	D	18.4	C
6	SR 49 / SR 16	C	Signal	25.5	C	18.3	B
7	SR 124 / SR 16	C	Unsignalized				
			Overall	3	A	2.1	A
			NB Approach	19.8	C	14.8	B
			WB Left	9.7	A	8.9	A
8	Latrobe (Amador) / SR 16	C	Signal	9.2	A	7.5	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	10.3	B	9	A
			SB Left	10.3	B	9.6	A
			EB Approach	>100	F	57	F
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11	B	10	A
			SB Approach	>100	F	>100	F

Intersection			CUM No Project				
ID#	Name	LOS Threshold	Control	Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.4	A	8.3	A
			WB Left	10	B	9.3	A
			NB Approach	>100	F	>100	F
			SB Approach	19.5	C	18.9	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	3.6	A	4	A
			SB Approach	13.9	B	14.4	B
			EB Left	9.2	A	8.8	A
13	Jackson Valley / SR 88	C	Unsignalized				
			Overall	21.3	C	13.7	B
			EB Left	8.4	A	8.3	A
			WB Left	9.9	A	8.6	A
			NB Approach	>100	F	79.5	F
			SB Approach	18.6	C	12.8	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	12.2	B	10.9	B
			SB Left	13.9	B	9.7	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	30.3	C	27.4	C
17	SR 88 / Victor (SR 12 west)	C	Signal	68.8	E	40.7	D
18	SR 88 / Kettleman Ln.	C	Signal	241	F	143.8	F
19	Ione / SR 16	D	Signal	16	B	8.6	A
20	Murieta South Pkwy / SR 16	E	Signal	10.2	B	11.8	B
21	Murieta Pkwy / SR 16	E	Signal	30.7	C	44.5	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	41.9	E	59.5	F
			SB Approach	>100	F	>100	F
			EB Left	9.7	A	12.2	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	4.2	A	4.2	A
			NB Approach	>100	F	>100	F
			SB Approach	87	F	>100	F
			EB Left	9.7	A	12.3	B
			WB Left	12.4	B	12.3	B
24	Dillard / SR 16	D	Signal	40.3	D	36.4	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	0.9	A	9.8	A
			NB Approach	34.9	D	>100	F
			WB Left	12.2	B	11.6	B
26	Grant Line / SR 16	D	Signal	83.5	F	42.3	D
27	Sunrise / SR 16	D	Signal	55.2	E	41	D
28	Excelsior / SR 16	E	Signal	34.1	C	18.8	B

Intersection			CUM No Project				
			Control	Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
29	Bradshaw / SR 16	E	Signal	380.5	F	72.7	E
30	Latrobe / White Rock	E	Signal	80.2	F	21.4	C
31	Latrobe / S. Shingle	E	Unsignalized				
			Overall	1.9	A	1.3	A
			NB Left	8	A	8	A
			EB Approach	18.3	C	14.1	B
			WB Approach	15.6	C	14.1	B
33	Missouri Flat / US 50 Ramps	D	Signal	83.9	F	47.4	D
34	Missouri Flat / Mother Lode	E	Signal	11.3	D	7.3	A
35	Missouri Flat / Forni	E	Signal	45.2	D	27.4	C
36	Missouri Flat / Pleasant Valley	E	Signal	16.9	B	14.6	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.5	A	3.2	A
			EB ThruLeft	9.3	A	8.3	A
			SB Approach	31.1	D	13.2	B
38	SR 49 / Pleasant Valley	E	All-way STOP	95.9	F	18.5	C
39	Elliott / SR 88 (N)	D	Signal	69.3	E	31.1	C
40	Tully / SR 88 (S)	D	Signal	31.0	C	19.9	B

Note:

PM Peak Hour of Generator is 4-6 PM.

N/A = Not Applicable

Bolded Values indicate intersection non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County. These jurisdictions are the only ones relevant for this report since all Intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, seconds

SPUI = Single Point Urban Interchange

SECTION 6

CUMULATIVE PLUS PROJECT CONDITIONS

This section describes Cumulative Plus Project conditions. Cumulative Plus Project conditions are defined as the addition of project traffic to the Cumulative No Project traffic volumes. The comparison of Cumulative Plus Project conditions to Cumulative (No Project) conditions demonstrates project-related impacts.

Traffic operations during the Friday, Saturday, and Friday and Saturday PM peak hours were analyzed for the following scenarios:

- 2025 Cumulative Plus Alternative A Phase 1 & 2,
- 2025 Cumulative Plus Alternative B Phase 1 & 2,
- 2025 Cumulative Plus Alternative C, and
- 2025 Cumulative Plus Alternative D.

CUMULATIVE PLUS PROJECT ROADWAY NETWORK

The roadway network under Cumulative Plus Project is assumed to be the same as Cumulative No Project conditions except for the intersection of SR 49 and Randolph Drive. The project driveway would become the fourth leg of the existing intersection of SR 49 / Randolph Drive and would be signalized.

PROJECT TRAFFIC

Project traffic volumes were calculated using the same method as discussed under the EPAP Plus Project conditions.

ALTERNATIVE A (PREFERRED CASINO AND HOTEL)

CUMULATIVE PLUS ALTERNATIVE A PHASE 1 & 2 ROADWAY OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to projected cumulative (2025) roadway segment volumes.

Level of Service

Levels of service for the Cumulative Plus Alternative A Phase 1 and 2 Condition are summarized in **Table 34**. The following roadway segments are projected to operate at an unacceptable LOS:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during Friday and Saturday,
- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (NB couplet) during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (SB couplet) during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 34
Roadway Segment Level of Service
Cumulative Plus Alternative A Phase 1 & 2

Roadway	Classification	Capacity Threshold	LOS Threshold	Cumulative Plus Alt A					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class II Art	18,900	D	17,390	0.92	E	16,340	0.86	E
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	20,610	0.82	D	19,750	0.79	D
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	39,580	1.98	F	32,560	1.63	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	20,000	E	24,780	0.62	B	27,780	0.69	B
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	33,150	1.66	F	31,390	1.57	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	31,290	1.56	F	31,230	1.56	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	33,310	1.67	F	33,220	1.66	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	21,880	0.55	A	23,800	0.60	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	11,550	0.46	B	11,850	0.47	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	16,350	0.81	D	15,580	0.77	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	22,300	1.10	F	21,440	1.06	F
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	4,340	0.39	C	3,950	0.35	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	5,780	0.31	C	6,170	0.33	C
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	7,760	0.41	C	7,590	0.40	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	22,460	1.33	F	24,190	1.43	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	22,860	1.35	F	23,050	1.36	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	10,240	0.54	D	11,500	0.61	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	35,230	1.74	F	31,600	1.56	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	28,200	1.88	F	24,970	1.66	F
SR 88 between SR 12 East and Tully Road	4 lane Undivided Arterial	30,000	C	33,250	1.11	F	29,290	0.98	E
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,520	1.43	F	18,550	1.24	F
SR 88 between Tully Road and SR 12 West (SB couplet)	2 lane Arterial	15,000	C	21,520	1.43	F	18,550	1.24	F
SR 88 between SR 12 West and Kettleman Lane	4 lane Undivided Arterial	30,000	C	35,800	1.19	F	30,730	1.02	F

Notes:
Bolted Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

CUMULATIVE PLUS ALTERNATIVE A PHASE 1 & 2 INTERSECTION OPERATIONS

Trips to and from the project site were assigned through the study intersections and added to projected cumulative (2025) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour Cumulative Plus Alternative A Phase 1 & 2 volumes are shown on **Figure 26**.

Level of Service

Levels of service for the Cumulative Plus Alternative A Phase 1 & 2 Condition during the Friday and Saturday PM peak hour are summarized in **Table 35**. The following intersections and/or movements are forecasted to operate at an unacceptable LOS under the Cumulative Plus Alternative A Phase 1 & 2 Condition:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Empire Street intersection during both the Friday and Saturday PM peak hour,
- SR 49 / SR 16 during the Friday PM peak hour,
- The northbound approach of the SR 124 / SR 16 intersection during the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- SR 88 / Victor Street (SR 12 west) during both the Friday and Saturday PM peak hour,
- SR 88 / Kettleman Lane during both the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Bradshaw Road / SR 16 during the Friday and Saturday PM peak hour,
- Latrobe Road / White Rock Road during the Friday PM peak hour,

- SR 49 / Pleasant Valley Road during the Friday PM peak hour,
- Elliott Road / SR 88 during the Friday PM peak hour, and
- Missouri Flat Road / US 50 EB and WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Miller Way during the Friday PM peak hour,
- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 35
Intersection Level of Service
Cumulative Plus Alternative A Phase 1 & 2

Intersection			CUM Plus Alt A				
ID#	Name	LOS Threshold	Control	Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	8.9	A	3.4	A
			NB Left	8.8	A	8.2	A
			SB Left	8.3	A	8.1	A
			EB Approach	10.1	B	9.3	A
			WB Approach	84.9	F	19.8	C
2	SR 49 / Main	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.5	A	8.8	A
			SB Left	9.3	A	8.7	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar	D	Unsignalized				
			Overall	0.9	A	0.4	A
			NB ThruLeft	9.2	A	9.4	A
			EB Approach	15.1	C	15.1	C
4	SR 49 / Empire	D	Unsignalized				
			Overall	2.5	A	1.3	A
			NB Left	9.2	A	9.6	A
			SB Left	9.6	A	N/A	N/A
			EB Approach	30	D	15.5	C
			WB Approach	51.9	F	48.5	E
5	SR 49 / Randolph Dr.	D	Signal	31.7	C	44	D
6	SR 49 / SR 16	C	Signal	36.7	D	27.4	C
7	SR 124 / SR 16	C	Unsignalized				
			Overall	6.2	A	4.8	A
			NB Approach	34.6	D	25.3	D
			WB Left	10.9	B	10.4	B
8	Latrobe (Amador) / SR 16	C	Signal	9.1	A	7.2	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	10.3	B	9	A
			SB Left	10.9	B	10.2	B
			EB Approach	>100	F	86.4	F
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11.7	B	10.7	B
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.4	A	8.3	A

Intersection			CUM Plus Alt A				
			Control	Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			WB Left	10.4	B	9.9	A
			NB Approach	>100	F	>100	F
			SB Approach	20.4	C	20.4	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	4.8	A	6.2	A
			SB Approach	15.8	C	17.7	C
			EB Left	9.7	A	9.4	A
13	Jackson Valley / SR 88	C	Unsignalized				
			Overall	41.6	E	45.2	E
			EB Left	8.7	A	8.7	A
			WB Left	10.2	B	9	A
			NB Approach	>100	F	>100	F
			SB Approach	23.9	C	16.9	C
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	12.2	B	10.9	B
			SB Left	14.3	B	10	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	32	C	30	C
17	SR 88 / Victor (SR 12 west)	C	Signal	74	E	46.9	D
18	SR 88 / Kettleman Ln.	C	Signal	249.9	F	158.4	F
19	Ione / SR 16	D	Signal	17.6	B	8	A
20	Murieta South Pkwy / SR 16	E	Signal	10.6	B	13	B
21	Murieta Pkwy / SR 16	E	Signal	35.8	D	56.2	E
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	58.4	F	91.8	F
			SB Approach	>100	F	>100	F
			EB Left	10.1	B	13.3	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	6.4	A	7.6	A
			NB Approach	>100	F	>100	F
			SB Approach	>100	F	>100	F
			EB Left	10.1	B	13.5	B
			WB Left	13.2	B	13.3	B
24	Dillard / SR 16	D	Signal	53.9	D	54.2	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	1	A	16.5	C
			NB Approach	43.3	E	>100	F
			WB Left	12.9	B	12.6	B
26	Grant Line / SR 16	D	Signal	101.7	F	56.5	E
27	Sunrise / SR 16	D	Signal	65.6	E	52.4	D
28	Excelsior / SR 16	E	Signal	35.9	D	19	B
29	Bradshaw / SR 16	E	Signal	396	F	87.1	F
30	Latrobe / White Rock	E	Signal	80.4	F	21.4	C
31	Latrobe / S. Shingle	E	Unsignalized				

Intersection			CUM Plus Alt A				
			Control	Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			Overall	1.9	A	1.3	A
			NB Left	8.1	A	8.1	A
			EB Approach	18.5	C	14.3	B
			WB Approach	15.7	C	14.2	B
33	Missouri Flat / US 50 Ramps	D	Signal	81.6	F	49	D
34	Missouri Flat / Mother Lode	E	Signal	12.3	B	7.5	A
35	Missouri Flat / Forni	E	Signal	45.3	D	27.5	C
36	Missouri Flat / Pleasant Valley	E	Signal	17.7	B	15.2	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	7.5	A	3.1	A
			EB ThruLeft	9.5	A	8.5	A
			SB Approach	39	E	14.7	B
38	SR 49 / Pleasant Valley	E	All-way STOP	108.9	F	23.6	C
39	Elliott / SR 88 (N)	D	Signal	73.1	E	33.6	C
40	Tully / SR 88 (S)	D	Signal	32.6	C	20.8	C
100	SR 49 / Project Service Access	D	Unsignalized				
			Overall	0.4	A	0.6	A
			SB Left	11.1	B	10.3	B
			WB Approach	20	C	17.3	C

Note:

PM Peak Hour of Generator is 4-6 PM.

N/A = Not Applicable

Bolded Values indicate intersection non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County. These jurisdictions are the only ones relevant for this report since all Intersection/roadway segment analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, seconds

SPUI = Single Point Urban Interchange

ALTERNATIVE B (SLIGHTLY REDUCED CASINO AND HOTEL)

CUMULATIVE PLUS ALTERNATIVE B PHASE 1 & 2 ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to projected cumulative (2025) roadway segment volumes.

Level of Service

Levels of service for the Cumulative Plus Alternative B Condition are summarized in **Table 36**. The following roadway segments are forecasted to operate at an unacceptable LOS:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during Friday and Saturday,

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (NB couplet) during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (SB couplet) during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 36
Roadway Segment Level of Service
Cumulative Plus Alternative B Phase 1 & 2

Roadway	Classification	Capacity Threshold	LOS Threshold	Cumulative Plus Alt B					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class II Art	18,900	D	16,980	0.90	E	15,170	0.80	E
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	19,600	0.78	D	18,290	0.73	D
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	39,270	1.96	F	32,120	1.61	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	24,450	0.61	B	27,300	0.68	B
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	32,710	1.64	F	30,750	1.54	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	30,790	1.54	F	30,520	1.53	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	32,810	1.64	F	32,500	1.63	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	21,380	0.53	A	23,070	0.58	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	11,040	0.44	B	11,120	0.44	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	15,840	0.78	D	14,860	0.74	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	20,360	1.01	F	20,090	0.99	E
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	4,340	0.39	C	3,950	0.35	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	5,350	0.28	C	5,670	0.30	C
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	7,320	0.39	C	7,090	0.38	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	22,040	1.30	F	23,580	1.40	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	22,440	1.33	F	22,440	1.33	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	9,840	0.52	D	10,930	0.58	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	34,810	1.72	F	31,000	1.53	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	28,000	1.87	F	24,680	1.65	F
SR 88 between SR 12 East and Tully Road	4 lane Undivided Arterial	30,000	C	33,050	1.10	F	28,990	0.97	E
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,420	1.43	F	18,400	1.23	F
SR 88 between Tully Road and SR 12 West (SB couplet)	2 lane Arterial	15,000	C	21,420	1.43	F	18,400	1.23	F
SR 88 between SR 12 West and Kettleman Lane	4 lane Undivided Arterial	30,000	C	35,610	1.19	F	30,450	1.02	F

Notes:
Bolted Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

CUMULATIVE PLUS ALTERNATIVE B PHASE 1 & 2 INTERSECTION OPERATIONS

Trips to and from the project site were assigned through the study intersections and added to projected cumulative (2025) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour Cumulative Plus Alternative B Phase 1 & 2 volumes are shown on **Figure 27**.

Level of Service

Levels of service for the Cumulative Plus Alternative B Phase 1 & 2 Condition during the Friday and Saturday PM peak hour are summarized in **Table 37**. The following intersections and/or movements are forecasted to operate at an unacceptable LOS in the Cumulative Plus Alternative B Phase 1 & 2 Condition:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Empire Street intersection during both the Friday and Saturday PM peak hour,
- The northbound approach of the SR 124 / SR 16 intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- SR 88 / Victor Street (SR 12 west) during both the Friday and Saturday PM peak hour,
- SR 88 / Kettleman Lane during both the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Bradshaw Road / SR 16 during the Friday and Saturday PM peak hour,
- Latrobe Road / White Rock Road during the Friday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour,

- Elliott Road / SR 88 during the Friday PM peak hour,
- Missouri Flat Road / US 50 EB and WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 37
Intersection Level of Service
Cumulative Plus Alternative B Phase 1 & 2

Intersection			Control	CUM Plus Alt B			
ID#	Name	LOS Threshold		Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	8.4	A	3.5	A
			NB Left	8.8	A	8.1	A
			SB Left	8.3	A	8.1	A
			EB Approach	10	A	9.2	A
			WB Approach	76	F	18.7	C
2	SR 49 / Main	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.4	A	8.7	A
			SB Left	9.3	A	8.6	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar	D	Unsignalized				
			Overall	0.9	A	0.4	A
			NB ThruLeft	9.1	A	9.3	A
			EB Approach	14.8	B	14.7	B
4	SR 49 / Empire	D	Unsignalized				
			Overall	2.4	A	1.2	A
			NB Left	9.1	A	9.5	A
			SB Left	9.6	A	N/A	N/A
			EB Approach	28.8	D	15	B
			WB Approach	48.5	E	43.2	E
5	SR 49 / Randolph Dr.	D	Signal	25	C	31.4	C
6	SR 49 / SR 16	C	Signal	33.3	C	24.3	C
7	SR 124 / SR 16	C	Unsignalized				
			Overall	5.1	A	3.9	A
			NB Approach	29.2	D	21.4	C
			WB Left	10.6	B	10	A
8	Latrobe (Amador) / SR 16	C	Signal	9.1	A	7.2	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	10.3	B	9	A
			SB Left	10.8	B	10.1	B
			EB Approach	>100	F	78.4	F
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			SB Approach	>100	F	>100	F
			EB ThruLeft	11.5	B	10.5	B
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.4	A	8.3	A

Intersection			CUM Plus Alt B				
			Friday PM		Saturday PM		
ID#	Name	LOS Threshold	Control	Delay	LOS	Delay	LOS
			WB Left	10.3	B	9.8	A
			NB Approach	>100	F	>100	F
			SB Approach	20.2	C	20.1	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	4.5	A	5.7	A
			SB Approach	15.3	C	16.7	C
			EB Left	9.6	A	9.3	A
13	Jackson Valley / SR 88	C	Unsignalized				
			Overall	36.6	E	36.6	E
			EB Left	8.6	A	8.6	A
			WB Left	10.1	B	8.9	A
			NB Approach	>100	F	>100	F
			SB Approach	22.5	C	15.8	C
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	12.2	B	10.9	B
			SB Left	14.2	B	9.9	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	31.6	C	29.3	C
17	SR 88 / Victor (SR 12 west)	C	Signal	72.7	E	45.4	D
18	SR 88 / Kettleman Ln.	C	Signal	247.9	F	155.1	F
19	Ione / SR 16	D	Signal	17.2	B	8.1	A
20	Murieta South Pkwy / SR 16	E	Signal	10.5	B	12.6	B
21	Murieta Pkwy / SR 16	E	Signal	34.5	C	53.2	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	54.1	F	83.1	F
			SB Approach	>100	F	>100	F
			EB Left	10	B	13	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	5.7	A	6.6	A
			NB Approach	>100	F	>100	F
			SB Approach	>100	F	>100	F
			EB Left	10	B	13.2	B
			WB Left	13	B	13.1	B
24	Dillard / SR 16	D	Signal	50.5	D	49.3	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	1	A	14.7	B
			NB Approach	41.1	E	>100	F
			WB Left	12.7	B	12.3	B
26	Grant Line / SR 16	D	Signal	97.6	F	52.7	D
27	Sunrise / SR 16	D	Signal	63.5	E	49.4	D
28	Excelsior / SR 16	E	Signal	35.5	D	18.9	B
29	Bradshaw / SR 16	E	Signal	392.5	F	83.6	F
30	Latrobe / White Rock	E	Signal	80.4	F	21.4	C
31	Latrobe / S. Shingle	E	Unsignalized				

Intersection			CUM Plus Alt B				
			Friday PM		Saturday PM		
ID#	Name	LOS Threshold	Control	Delay	LOS	Delay	LOS
			Overall	1.9	A	1.3	A
			NB Left	8.1	A	8.1	A
			EB Approach	18.5	C	14.2	B
			WB Approach	15.7	C	14.2	B
33	Missouri Flat / US 50 Ramps	D	Signal	81.3	F	46.8	D
34	Missouri Flat / Mother Lode	E	Signal	11.3	B	6.8	A
35	Missouri Flat / Forni	E	Signal	45.4	D	28.1	D
36	Missouri Flat / Pleasant Valley	E	Signal	17.5	B	15	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	7.3	A	3.1	A
			EB ThruLeft	9.5	A	8.4	A
			SB Approach	37	E	14.3	B
38	SR 49 / Pleasant Valley	E	All-way STOP	105.5	F	22.1	C
39	Elliott / SR 88 (N)	D	Signal	72.1	E	33.0	C
40	Tully / SR 88 (S)	D	Signal	32.2	C	20.6	C
100	SR 49 / Project Service Access	D	Unsignalized				
			Overall	0.3	A	0.4	A
			SB Left	10.7	B	9.9	A
			WB Approach	19.5	C	15.9	C

Note:

PM Peak Hour of Generator is 4-6 PM.

N/A = Not Applicable

Bolded Values indicate intersection non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County. These jurisdictions are the only ones relevant for this report since all Intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, seconds

SPUI = Single Point Urban Interchange

ALTERNATIVE C (REDUCED CASINO)

CUMULATIVE PLUS ALTERNATIVE C ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to projected cumulative (2025) roadway segment volumes.

Level of Service

Levels of service for the Cumulative Plus Alternative C Condition are summarized in **Table 38**. All of the roadway segments are forecasted to operate acceptably in the Cumulative Plus Alternative C Condition except for the following:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during Friday and Saturday,

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (NB couplet) during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (SB couplet) during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 38
Roadway Segment Level of Service
Cumulative Plus Alternative C

Roadway	Classification	Capacity Threshold	LOS Threshold	Cumulative Plus Alt C					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class II Art	18,900	D	16,430	0.87	E	14,430	0.76	E
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	18,230	0.73	D	16,460	0.66	C
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	38,850	1.94	F	31,560	1.58	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	23,990	0.60	A	26,690	0.67	B
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	32,110	1.61	F	29,950	1.50	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	30,130	1.51	F	29,630	1.48	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	32,130	1.61	F	31,600	1.58	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	20,690	0.52	A	22,160	0.55	A
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	10,360	0.41	B	10,210	0.41	B
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	15,160	0.75	D	13,940	0.69	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	20,090	0.99	E	18,390	0.91	E
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	4,340	0.39	C	3,950	0.35	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	4,810	0.25	B	4,760	0.25	B
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	6,780	0.36	C	6,180	0.33	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	21,470	1.27	F	22,820	1.35	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	21,870	1.29	F	21,680	1.28	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	9,300	0.49	C	10,210	0.54	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	34,250	1.70	F	30,250	1.50	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	27,720	1.85	F	24,310	1.62	F
SR 88 between SR 12 East and Tully Road	4 lane Undivided Arterial	30,000	C	32,770	1.09	F	28,620	0.95	E
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,280	1.42	F	18,210	1.21	F
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,280	1.42	F	18,210	1.21	F
SR 88 between SR 12 West and Kettleman Lane	4 lane Undivided Arterial	30,000	C	35,350	1.18	F	30,100	1.00	F

Notes:
 Bolded Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

CUMULATIVE PLUS ALTERNATIVE C INTERSECTION OPERATIONS

Trips to and from the project site were assigned through the study intersections and added to projected cumulative (2025) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour Cumulative Plus Alternative C volumes are shown on **Figure 28**.

Level of Service

Levels of service for the Cumulative Plus Alternative C Condition during the Friday and Saturday PM peak hour are summarized in **Table 39**. The following intersections are expected to operate at an unacceptable LOS in the Cumulative Plus Alternative C Condition:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Empire Street intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- SR 88 / Victor Street (SR 12 west) during both the Friday and Saturday PM peak hour,
- SR 88 / Kettleman Lane during both the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Bradshaw Road / SR 16 during the Friday PM peak hour,
- Latrobe Road / White Rock Road during the Friday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour,
- Elliott Road / SR 88 during the Friday PM peak hour, and
- Missouri Flat Road / US 50 EB and WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 39
Intersection Level of Service
Cumulative Plus Alternative C

Intersection			CUM Plus Alt C				
ID#	Name	LOS Threshold	Control	Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	8	A	3.5	A
			NB Left	8.7	A	8.1	A
			SB Left	8.2	A	8	A
			EB Approach	9.9	A	9	A
			WB Approach	66.5	F	17.4	C
2	SR 49 / Main	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.4	A	8.5	A
			SB Left	9.2	A	8.5	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar	D	Unsignalized				
			Overall	0.9	A	0.4	A
			NB ThruLeft	9	A	9.2	A
			EB Approach	14.4	B	14.2	B
4	SR 49 / Empire	D	Unsignalized				
			Overall	2.3	A	1.1	A
			NB Left	9	A	9.4	A
			SB Left	9.5	A	N/A	N/A
			EB Approach	27	D	14.4	B
			WB Approach	44.1	E	37.9	E
5	SR 49 / Randolph Dr.	D	Signal	17.6	B	21.2	C
6	SR 49 / SR 16	C	Signal	29.8	C	21.1	C
7	SR 124 / SR 16	C	Unsignalized				
			Overall	4.2	A	3.1	A
			NB Approach	24.5	C	18	C
			WB Left	10.2	B	9.5	A
8	Latrobe (Amador) / SR 16	C	Signal	9.1	A	7.2	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	10.3	B	9	A
			SB Left	10.6	B	9.9	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11.3	B	10.3	B
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.4	A	8.3	A

Intersection			CUM Plus Alt C				
			Friday PM		Saturday PM		
ID#	Name	LOS Threshold	Control	Delay	LOS	Delay	LOS
			WB Left	10.2	B	9.6	A
			NB Approach	>100	F	>100	F
			SB Approach	19.9	C	19.6	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	4.1	A	5	A
			SB Approach	14.7	B	15.7	C
			EB Left	9.4	A	9.1	A
13	Jackson Valley / SR 88	C	Unsignalized				
			Overall	29.6	D	26.4	D
			EB Left	8.5	A	8.5	A
			WB Left	10	B	8.8	A
			NB Approach	>100	F	>100	F
			SB Approach	20.7	C	14.5	B
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	12.2	B	10.9	B
			SB Left	14.1	B	9.8	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	31.1	C	28.6	C
17	SR 88 / Victor (SR 12 west)	C	Signal	71.1	E	43.6	D
18	SR 88 / Kettleman Ln.	C	Signal	245.5	F	150.6	F
19	Ione / SR 16	D	Signal	16.7	B	8.2	A
20	Murieta South Pkwy / SR 16	E	Signal	10.3	B	12.2	B
21	Murieta Pkwy / SR 16	E	Signal	32.9	C	49.9	D
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	49.1	E	73.2	F
			SB Approach	>100	F	>100	F
			EB Left	9.9	A	12.7	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	5.1	A	5.5	A
			NB Approach	>100	F	>100	F
			SB Approach	>100	F	>100	F
			EB Left	9.9	A	12.8	B
			WB Left	12.7	B	12.7	B
24	Dillard / SR 16	D	Signal	46.3	D	43.7	D
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	1	A	12.6	B
			NB Approach	38.4	E	>100	F
			WB Left	12.5	B	12.1	B
26	Grant Line / SR 16	D	Signal	91.9	F	48.6	D
27	Sunrise / SR 16	D	Signal	60.5	E	45.9	D
28	Excelsior / SR 16	E	Signal	34.9	C	18.9	B
29	Bradshaw / SR 16	E	Signal	387.7	F	79.2	E
30	Latrobe / White Rock	E	Signal	80.3	F	21.4	C
31	Latrobe / S. Shingle	E	Unsignalized				

Intersection			CUM Plus Alt C				
			Friday PM		Saturday PM		
ID#	Name	LOS Threshold	Control	Delay	LOS	Delay	LOS
			Overall	1.9	A	1.3	A
			NB Left	8.1	A	8	A
			EB Approach	18.4	C	14.2	B
			WB Approach	15.7	C	14.1	B
33	Missouri Flat / US 50 Ramps	D	Signal	81.3	F	49.1	D
34	Missouri Flat / Mother Lode	E	Signal	11.3	B	6.9	A
35	Missouri Flat / Forni	E	Signal	45.3	D	27.2	C
36	Missouri Flat / Pleasant Valley	E	Signal	17.2	B	14.9	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	6.9	A	3.1	A
			EB ThruLeft	9.4	A	8.4	A
			SB Approach	34.5	D	13.8	B
38	SR 49 / Pleasant Valley	E	All-way STOP	101.5	F	20.6	C
39	Elliott / SR 88 (N)	D	Signal	71.0	E	32.2	C
40	Tully / SR 88 (S)	D	Signal	31.8	C	20.4	C
100	SR 49 / Project Service Access	D	Unsignalized				
			Overall	0.2	A	0.3	A
			SB Left	10.3	B	9.5	A
			WB Approach	18.2	C	14.5	B

Note:

PM Peak Hour of Generator is 4-6 PM.

N/A = Not Applicable

Bolded Values indicate intersection non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County. These jurisdictions are the only ones relevant for this report since all Intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, seconds

SPUI = Single Point Urban Interchange

ALTERNATIVE D (RETAIL SHOPPING CENTER)

CUMULATIVE PLUS ALTERNATIVE D ROADWAY SEGMENT OPERATIONS

Trips to and from the project site were assigned through the roadway segments and added to projected cumulative (2025) roadway segment volumes.

Level of Service

Levels of service for the Cumulative Plus Alternative D Condition are summarized in **Table 40**. All of the roadway segments are forecasted to operate acceptably in the Cumulative Plus Alternative D Condition except for the following:

- SR 49 between Main Casino Entrance and Main Street in Plymouth during Friday and Saturday,

- SR 16 between Bradshaw Road and Excelsior Road during Friday and Saturday,
- SR 16 between Sunrise Boulevard and Grant Line Road during Friday and Saturday,
- SR 16 between Grant Line Road and Dillard Road during Friday and Saturday,
- SR 16 between Dillard Road and Stonehouse Road during Friday and Saturday,
- SR 16 between Latrobe Road (Amador) and SR 124 during Friday and Saturday,
- SR 16 between SR 124 and SR 49 during Friday and Saturday,
- SR 104 between SR 124 and Main Street during Friday and Saturday,
- SR 104 between Main Street and Church Street during Friday and Saturday,
- SR 124 between Main Street and SR 88 during Friday and Saturday,
- SR 88 between SR 124 and Liberty Road during Friday and Saturday,
- SR 88 between Liberty Road and SR 12 East during Friday and Saturday,
- SR 88 between SR 12 East and Tully Road during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (NB couplet) during Friday and Saturday,
- SR 88 between Tully Road and SR 12 West (SB couplet) during Friday and Saturday, and
- SR 88 between SR 12 West and Kettleman Lane during Friday and Saturday.

Table 40
Roadway Segment Level of Service
Cumulative Plus Alternative D

Roadway	Classification	Capacity Threshold	LOS Threshold	Cumulative Plus Alt D					
				Friday ADT	Friday V/C	Friday LOS	Saturday ADT	Saturday V/C	Saturday LOS
SR 49 between Main Casino Entrance and Main Street in Plymouth	Class II Art	18,900	D	17,850	0.94	E	16,290	0.86	E
SR 49 between Main Casino Entrance and SR 49/SR 16 Jct.	Art w/clmb lane	25,100	D	21,740	0.87	D	21,050	0.84	D
SR 16 between Bradshaw Road and Excelsior Road	2 lane Arterial	20,000	E	39,920	2.00	F	32,960	1.65	F
SR 16 between Excelsior Road and Sunrise Boulevard	4 lane Arterial	40,000	E	25,160	0.63	B	28,210	0.71	C
SR 16 between Sunrise Boulevard and Grant Line Road	2 lane Arterial	20,000	D	33,650	1.68	F	31,960	1.60	F
SR 16 between Grant Line Road and Dillard Road	2 lane Arterial	20,000	D	31,840	1.59	F	31,860	1.59	F
SR 16 between Dillard Road and Stonehouse Road	2 lane Arterial	20,000	D	33,870	1.69	F	33,860	1.69	F
SR 16 between Stonehouse Road and Ione Road	4 lane Arterial	40,000	E	22,440	0.56	A	24,440	0.61	B
SR 16 between Ione Road and Old Sacramento Road	Art w/clmb lane	25,100	C	12,110	0.48	B	12,500	0.50	C
SR 16 between Latrobe Road (Amador) and SR 124	Class I Art	20,200	C	16,910	0.84	E	16,230	0.80	D
SR 16 between SR 124 and SR 49	Class I Art	20,200	C	23,350	1.16	F	22,640	1.12	F
Latrobe Road (Amador) north of SR 16	Class IV Coll	11,200	C	4,340	0.39	C	3,950	0.35	C
SR 124 between SR 16 and Tonzi Road	Class II Art	18,900	C	6,270	0.33	C	6,730	0.36	C
SR 124 between Tonzi Road and SR 104	Class II Art	18,900	C	8,240	0.44	C	8,150	0.43	C
SR 104 between SR 124 and Main Street	Class II Coll	16,900	C	22,940	1.36	F	24,740	1.46	F
SR 104 between Main Street and Church Street	Class II Coll	16,900	C	23,330	1.38	F	23,580	1.40	F
SR 124 between Main Street and SR 88	Class II Art	18,900	C	10,680	0.57	D	12,010	0.64	D
SR 88 between SR 124 and Liberty Road	Class I Art	20,200	C	35,690	1.77	F	32,130	1.59	F
SR 88 between Liberty Road and SR 12 East	2 lane Arterial	15,000	C	28,430	1.90	F	25,240	1.68	F
SR 88 between SR 12 East and Tully Road	4 lane Undivided Arterial	30,000	C	33,480	1.12	F	29,550	0.99	E
SR 88 between Tully Road and SR 12 West (NB couplet)	2 lane Arterial	15,000	C	21,640	1.44	F	18,680	1.25	F
SR 88 between Tully Road and SR 12 West (SB couplet)	2 lane Arterial	15,000	C	21,640	1.44	F	18,680	1.25	F
SR 88 between SR 12 West and Kettleman Lane	4 lane Undivided Arterial	30,000	C	36,020	1.20	F	30,970	1.03	F

Notes:
Bolted Values indicate intersections non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County standards. These jurisdictions are the only ones relevant for this report since all intersections/roadway segments analyzed in this study are located in these jurisdictions.

CUMULATIVE PLUS ALTERNATIVE D INTERSECTION OPERATIONS

Trips to and from the project site were assigned through the study intersections and added to projected cumulative (2025) Friday and Saturday PM peak hour turning volumes. The resulting Friday and Saturday PM peak hour Cumulative Plus Alternative D volumes are shown on **Figure 29**.

Level of Service

Levels of service for the Cumulative Plus Alternative D Condition during the Friday and Saturday PM peak hour are summarized in **Table 41**. The following intersections are projected to operate at an unacceptable LOS in the Cumulative Plus Alternative D Condition:

- The westbound approach of the SR 49 / Miller Way intersection during the Friday PM peak hour,
- The eastbound and westbound approaches of the SR 49 / Main Street intersection during both the Friday and Saturday PM peak hour,
- The westbound approach of the SR 49 / Empire Street intersection during both the Friday and Saturday PM peak hour,
- The SR 49 / Randolph Drive intersection during the Saturday PM peak hour,
- SR 49 / SR 16 during the Friday PM peak hour,
- The northbound approach of the SR 124 / SR 16 intersection during the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the Preston / SR 124 intersection during both the Friday and Saturday PM peak hour,
- The southbound approach of the Preston Avenue / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Church / Main Street intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the Jackson Valley Road / SR 88 intersection during both the Friday and Saturday PM peak hour,
- The eastbound and westbound approaches of the SR 88 / Liberty Road intersection during the Friday and Saturday PM peak hour,
- SR 88 / Victor Street (SR 12 west) during both the Friday and Saturday PM peak hour,
- SR 88 / Kettleman Lane during both the Friday and Saturday PM peak hour,
- The southbound approach of the SR 16 / Stonehouse Road intersection during the Friday and Saturday PM peak hour,
- The northbound and southbound approaches of the SR 16 / Latrobe Road (Sacramento) intersection during the Friday and Saturday PM peak hour,
- The northbound approach of the SR 16 / Sloughhouse Road intersection during the Saturday PM peak hour,
- Grant Line Road / SR 16 during the Friday and Saturday PM peak hour,
- Sunrise Boulevard / SR 16 during the Friday PM peak hour,
- Bradshaw Road / SR 16 during the Friday and Saturday PM peak hour,
- Latrobe Road / White Rock Road during the Friday PM peak hour,
- SR 49 / Pleasant Valley Road during the Friday PM peak hour,

- Elliott Road / SR 88 during the Friday PM peak hour, and
- Missouri Flat Road / US 50 EB and WB Ramps during the Friday PM peak hour.

Detailed LOS analysis data and worksheets are provided in **Appendix A**.

The results of the MUTCD peak hour signal warrant show the following intersections meet the MUTCD peak hour signal warrant:

- SR 49 / Miller Way during the Friday PM peak hour,
- SR 49 / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 16 during the Friday and Saturday PM peak hour,
- Preston Avenue / SR 124 during the Friday and Saturday PM peak hour,
- Preston Avenue / Main Street during the Friday and Saturday PM peak hour,
- Church Street / Main Street during the Friday and Saturday PM peak hour,
- SR 124 / SR 88 during the Friday and Saturday PM peak hour,
- Jackson Valley Road/ SR 88 during the Friday and Saturday PM peak hour,
- SR 88 / Liberty Road during the Friday and Saturday PM peak hour,
- Forni Road / Pleasant Valley Road during the Friday and Saturday PM peak hour, and
- SR 49 / Pleasant Valley Road during the Friday and Saturday PM peak hour.

All other unsignalized intersections do not meet the MUTCD peak hour warrant during the Friday and/or Saturday PM peak hour. Detailed peak hour signal warrant sheets are provided in **Appendix A**.

Table 41
Intersection Level of Service
Cumulative Plus Alternative D

Intersection			CUM Plus Alt D				
ID#	Name	LOS Threshold	Control	Friday PM		Saturday PM	
				Delay	LOS	Delay	LOS
1	SR 49 / Miller Way	D	Unsignalized				
			Overall	9.1	A	3.4	A
			NB Left	8.8	A	8.2	A
			SB Left	8.4	A	8.2	A
			EB Approach	10.2	B	9.4	A
			WB Approach	90.5	F	20.9	C
2	SR 49 / Main	D	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	8.5	A	8.8	A
			SB Left	9.4	A	8.7	A
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
3	SR 49 / Poplar	D	Unsignalized				
			Overall	0.9	A	0.4	A
			NB ThruLeft	9.2	A	9.5	A
			EB Approach	15.2	C	15.5	C
4	SR 49 / Empire	D	Unsignalized				
			Overall	2.6	A	1.4	A
			NB Left	9.2	A	9.8	A
			SB Left	9.7	A	N/A	N/A
			EB Approach	30.9	D	16	C
			WB Approach	54.6	F	55.8	F
5	SR 49 / Randolph Dr.	D	Signal	45	D	75.1	E
6	SR 49 / SR 16	C	Signal	36.7	D	30.9	C
7	SR 124 / SR 16	C	Unsignalized				
			Overall	6.4	A	5.8	A
			NB Approach	36	E	30.6	D
			WB Left	11.2	B	10.9	B
8	Latrobe (Amador) / SR 16	C	Signal	9.1	A	7.2	A
9	SR 104 (Preston) / SR 124 (North)	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	10.3	B	9	A
			SB Left	10.9	B	10.4	B
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
10	Preston Ave. / Main St.	C	Unsignalized				
			Overall	>100	F	>100	F
			EB ThruLeft	11.7	B	10.9	B
			SB Approach	>100	F	>100	F
11	SR 124 (Church) / SR 104 (Main)	C	Unsignalized				
			Overall	>100	F	>100	F
			EB Left	8.4	A	8.3	A

Intersection			CUM Plus Alt D				
			Control	Friday PM		Saturday PM	
ID#	Name	LOS Threshold		Delay	LOS	Delay	LOS
			WB Left	10.5	B	10	B
			NB Approach	>100	F	>100	F
			SB Approach	20.6	C	20.7	C
12	SR 124 / SR 88	C	Unsignalized				
			Overall	5	A	6.7	A
			SB Approach	16.4	C	18.6	C
			EB Left	9.7	A	9.6	A
13	Jackson Valley / SR 88	C	Unsignalized				
			Overall	45.1	E	54	F
			EB Left	8.7	A	8.8	A
			WB Left	10.2	B	9.1	A
			NB Approach	>100	F	>100	F
			SB Approach	24.8	C	18.1	C
14	SR 88 / Liberty Rd.	C	Unsignalized				
			Overall	>100	F	>100	F
			NB Left	12.2	B	10.9	B
			SB Left	14.3	B	10.1	B
			EB Approach	>100	F	>100	F
			WB Approach	>100	F	>100	F
15	SR 88 / SR 12 (east)	C	Signal	32.6	C	30.4	C
17	SR 88 / Victor (SR 12 west)	C	Signal	75.7	E	48.1	D
18	SR 88 / Kettleman Ln.	C	Signal	252.5	F	160.9	F
19	Ione / SR 16	D	Signal	17.5	B	8	A
20	Murieta South Pkwy / SR 16	E	Signal	10.8	B	13.3	B
21	Murieta Pkwy / SR 16	E	Signal	37.5	D	58.6	E
22	Stonehouse / SR 16	E	Unsignalized				
			Overall	61.1	F	99.5	F
			SB Approach	>100	F	>100	F
			EB Left	10.3	B	13.5	B
23	Latrobe (Sac) / SR 16	D	Unsignalized				
			Overall	6.8	A	8.5	A
			NB Approach	>100	F	>100	F
			SB Approach	>100	F	>100	F
			EB Left	10.3	B	13.7	B
			WB Left	13.2	B	13.6	B
24	Dillard / SR 16	D	Signal	53.8	D	58.9	E
25	Sloughhouse / SR 16	E	Unsignalized				
			Overall	1	A	18.2	C
			NB Approach	44.2	E	>100	F
			WB Left	12.9	B	12.8	B
26	Grant Line / SR 16	D	Signal	102.2	F	60.2	E
27	Sunrise / SR 16	D	Signal	65.6	E	55.1	E
28	Excelsior / SR 16	E	Signal	36	D	19	B
29	Bradshaw / SR 16	E	Signal	397.3	F	90.1	F
30	Latrobe / White Rock	E	Signal	80.4	F	21.4	C
31	Latrobe / S. Shingle	E	Unsignalized				

Intersection			CUM Plus Alt D				
			Friday PM		Saturday PM		
ID#	Name	LOS Threshold	Control	Delay	LOS	Delay	LOS
			Overall	1.9	A	1.3	A
			NB Left	8.1	A	8.1	A
			EB Approach	18.6	C	14.3	B
			WB Approach	15.8	C	14.3	B
33	Missouri Flat / US 50 Ramps	D	Signal	85.2	F	46.9	D
34	Missouri Flat / Mother Lode	E	Signal	10.1	B	7.2	A
35	Missouri Flat / Forni	E	Signal	47.9	D	27.4	C
36	Missouri Flat / Pleasant Valley	E	Signal	17.7	B	15.3	B
37	Forni / Pleasant Valley	E	Unsignalized				
			Overall	7.6	A	3.1	A
			EB ThruLeft	9.5	A	8.6	A
			SB Approach	39.8	E	15	B
38	SR 49 / Pleasant Valley	E	All-way STOP	112.7	F	25.1	D
39	Elliott / SR 88 (N)	D	Signal	74.2	E	34.1	C
40	Tully / SR 88 (S)	D	Signal	32.6	C	21.0	C
100	SR 49 / Project Service Access	D	Unsignalized				
			Overall	0.7	A	0.9	A
			SB Left	11.2	B	10.9	B
			WB Approach	21.2	C	19.5	C

Note:

PM Peak Hour of Generator is 4-6 PM.

N/A = Not Applicable

Bolded Values indicate intersection non-compliant with corresponding Caltrans, Sacramento County, Amador County, San Joaquin County, and/or El Dorado County. These jurisdictions are the only ones relevant for this report since all Intersections/roadway segments analyzed in this study are located in these jurisdictions.

Delay = Average delay for all vehicles passing through intersection, seconds

SPUI = Single Point Urban Interchange

SECTION 7

MITIGATION MEASURES

Impact criteria as described in the existing conditions section were applied to impacted study intersections and roadway segments in accordance with County of Sacramento, Caltrans, Amador County, and El Dorado County guidelines. The results of the analysis are discussed below.

EXISTING PLUS APPROVED PROJECT PLUS PROJECT

2010 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE A PHASE 1

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative A Phase 1 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 42**. The mitigation measures for the intersections are shown in Figure 30.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS E under the EPAP Plus Alternative A Phase 1 condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during

the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative A Phase 1 condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. The WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Shenandoah Road. The NB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 22%).
- In addition the SB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Randolph Drive - Significant Impact

The westbound approach of the SR 49 / Randolph Drive intersection would operate at unacceptable LOS F under this scenario during the Friday and Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – N/A
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

4. Latrobe Road (Amador) / SR 16 - Significant Impact

The southbound approach of the Latrobe Road (Amador) / SR 16 intersection would operate at unacceptable LOS D under this scenario during the Saturday PM peak hour. Project-related traffic would contribute to the poor operation and degrade operating conditions at the southbound approach of this intersection from LOS C under the 2010 EPAP (no project) condition to LOS D under the EPAP Plus Alternative A Phase 1 condition. The intersection also meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. This degradation in LOS from C to D during the Saturday PM peak hour and the intersection meeting the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

5. SR 104 (Preston Avenue) / SR 124 – Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

8. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. This mitigation measure is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 43%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

9. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 37%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

10. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative A Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative A Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative A Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E

- LOS without Project – LOS F
- LOS with Project – LOS F

13. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Grant Line Road. The northbound and southbound approaches should have permitted left-turn phasing. Improvements to widen Grant Line Road north of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by the Sacramento Area Council of Governments (SACOG). (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The southbound right-turn lane should be converted into a combined through/right-turn lane on Sunrise Boulevard. An additional southbound departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. Improvements to widen Sunrise Boulevard south of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by the SACOG. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

15. Missouri Flat Road / US 50 WB ramps – Less-Than-Significant

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS E under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus Alternative A Phase 1 condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

16. SR 49 / Project Service driveway - Significant Impact

The westbound approach of the SR 49 / Project Service driveway would operate at unacceptable LOS E and LOS F under this scenario during the Friday and Saturday PM peak hour, respectively. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Although this intersection meets the MUTCD peak hour signal warrant, it is not located at least a quarter mile from the adjacent intersection and should not therefore be considered for signalization. This intersection should be changed to allow for only right-out movements at the project driveway. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – N/A

- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative A Phase 1 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 42**. The mitigation measures for the roadway segments are shown in Figure 31.

17. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.06 and 0.09 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Bradshaw Road and Excelsior Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Sunrise Boulevard and Grant Line Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.14 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Grant Line Road and Dillard Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.15 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Dillard Road and Stonehouse Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

21. SR 16 between Stonehouse Road and Ione Road - Significant Impact

The roadway segment of SR 16 between Stonehouse Road and Ione Road would operate at unacceptable LOS F during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS D under the EPAP (no project) condition to LOS F under EPAP Plus Alternative A Phase 1 condition. This degradation in LOS from D to F is considered a project-related effect and a significant impact.

Mitigation Measure:

- Widen SR 16 between Stonehouse Road and Ione Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS D
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

22. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Latrobe Road (Amador) and SR 124 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 74%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

23. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.19 and 0.29 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between SR 124 and SR 49 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 97%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

24. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.14 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

25. SR 104 between Main Street and Church Street - Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.14 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

26. SR 124 between Main Street and SR 88 - Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no

project) condition to LOS D under EPAP Plus Alternative A Phase 1 condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 31%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

27. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative A Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 88 between SR 124 and Liberty Road from two to four lanes wide. This improvement is in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 26%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

28. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Liberty Road and SR 12 East from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 19%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

29. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 East and Tully Road from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

30. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic

will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Tully Road and SR 12 West from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

31. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 West and Kettleman Lane from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 19%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

Table 42
Intersection and Roadway Segment Level of Service – with Mitigation Measures
2010 EPAP Plus Project

ID	Intersection/Roadway Segment	LOS Threshold	Alternative A				Alternative B				Alternative C				Alternative D			
			LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share
Intersections																		
1	SR 49 / Miller Way	D	E	N/A	Signal not warranted, less-than-significant	0	E	N/A	Signal not warranted, less-than-significant	0	E	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
2	SR 49 / Main Street	D	F	C	Install Signal. Construct NB and WB left-turn lane	22	F	D	Install Signal. Construct NB and WB left-turn lane	18	F	D	Install Signal. Construct NB and WB left-turn lane	12	F	C	Install Signal. Construct NB and WB left-turn lane	26
					Construct SB left-turn lane	100											Construct SB left-turn lane	100
5	SR 49 / Randolph Dr	D	F	C	Install a traffic signal	100	F	C	Install a traffic signal	100	E	N/A	Signal not warranted, less-than-significant	0	F	C	Install a traffic signal	100
8	Latrobe (Amador) / SR 16	C	D	C	Install a traffic signal	100	C	N/A	N/A	0	C	N/A	N/A	0	D	C	Install a traffic signal	100
9	SR 104 (Preston) / SR 124	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	21	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	16	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	25
10	Preston Ave / Main St	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	22	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	18	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	27
11	SR 124 (Church) / SR 104 (Main)	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	22	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	17	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	26
13	Jackson Valley Rd / SR 88	C	F	C	Install a traffic signal	43	F	C	Install a traffic signal	36	E	C	Install a traffic signal	27	F	C	Install a traffic signal	49
14	SR 88 / Liberty Rd	C	F	C	Install a traffic signal	37	F	C	Install a traffic signal	30	F	C	Install a traffic signal	22	F	C	Install a traffic signal	42
22	Stonehouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
23	Latrobe (Sac) / SR 16	D	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
25	Sloughhouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
26	Grant Line / SR 16	D	F	D	Add NB and SB left-turn lanes	21	F	D	Add NB and SB left-turn lanes	16	F	D	Add NB and SB left-turn lanes	12	F	D	Add NB and SB left-turn lanes	25
27	Sunrise / SR 16	D	F	D	Convert SB right-turn lane into a shared thru/right-turn	20	F	D	Convert SB right-turn lane into a shared thru/right-turn	16	F	D	Convert SB right-turn lane into a shared thru/right-turn	11	F	D	Convert SB right-turn lane into a shared thru/right-turn	24
32	Missouri Flat / US 50 WB Ramps	D	E	N/A	Less-than-significant	0	E	N/A	Less-than-significant	0	E	N/A	Less-than-significant	0	E	N/A	Less-than-significant	0
A	SR 49 / Project Access Dwy	D	F	C	Restrict left-turn out of driveway	100	E	B	Restrict left-turn out of driveway	100	D	N/A	N/A	0	F	C	Restrict left-turn out of driveway	100

Roadway Segments																		
SR 16 between Bradshaw and Excelsior	E	F	A	Widen from 2 to 4 lanes	17	F	A	Widen from 2 to 4 lanes	13	F	N/A	Less-than-significant	0	F	B	Widen from 2 to 4 lanes	21	
SR 16 between Excelsior and Sunrise	E	E	N/A	N/A	0	E	N/A	N/A	0	E	N/A	N/A	0	F	A	Widen from 2 to 4 lanes	100	
SR 16 between Sunrise and Grant Line	D	F	B	Widen from 2 to 4 lanes	20	F	B	Widen from 2 to 4 lanes	16	F	B	Widen from 2 to 4 lanes	11	F	B	Widen from 2 to 4 lanes	25	
SR 16 between Grant Line and Dillard	D	F	B	Widen from 2 to 4 lanes	21	F	B	Widen from 2 to 4 lanes	17	F	B	Widen from 2 to 4 lanes	12	F	C	Widen from 2 to 4 lanes	25	
SR 16 between Dillard and Stonehouse	D	F	B	Widen from 2 to 4 lanes	20	F	B	Widen from 2 to 4 lanes	16	F	B	Widen from 2 to 4 lanes	11	F	C	Widen from 2 to 4 lanes	24	
SR 16 between Stonehouse and Ione	E	F	A	Widen from 2 to 4 lanes	100	E	N/A	N/A	0	E	N/A	N/A	0	F	A	Widen from 2 to 4 lanes	100	
SR 16 between Ione and Old Sacramento	C	C	N/A	N/A	0	C	N/A	N/A	0	C	N/A	N/A	0	D	B	Widen from 2 to 3 lanes	100	
SR 16 between Latrobe Rd (Amador) and SR 124	C	D	C	Widen from 2 to 3 lanes	74	D	B	Widen from 2 to 3 lanes	68	D	B	Widen from 2 to 3 lanes	59	D	C	Widen from 2 to 3 lanes	79	
SR 16 between SR 124 and SR 49	C	D	C	Widen from 2 to 3 lanes	97	D	C	Widen from 2 to 3 lanes	96	D	C	Widen from 2 to 3 lanes	94	E	B	Widen from 2 to 4 lanes	97	
SR 104 between SR 124 and Main Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	22	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	17	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	26	
SR 104 between Main Street and Church Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	22	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	17	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	26	
SR 124 between Main Street and SR 88	C	D	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	31	D	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	25	C	N/A	N/A	0	D	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	37	
SR 88 between SR 124 and Liberty	C	F	B	Widen from 2 to 4 lanes	26	E	B	Widen from 2 to 4 lanes	21	E	B	Widen from 2 to 4 lanes	15	F	B	Widen from 2 to 4 lanes	31	
SR 88 between Liberty and SR 12 East	C	F	B	Widen from 2 to 4 lanes	19	F	A	Widen from 2 to 4 lanes	15	F	A	Widen from 2 to 4 lanes	10	F	B	Widen from 2 to 4 lanes	23	
SR 88 between SR 12 East and Tully Road	C	F	C	Widen from 2 to 4 lanes	20	F	C	Widen from 2 to 4 lanes	16	F	C	Widen from 2 to 4 lanes	11	F	C	Widen from 2 to 4 lanes	24	
SR 88 between Tully and SR 12 West	C	F	B	Widen from 2 to 4 lanes	20	F	B	Widen from 2 to 4 lanes	16	F	B	Widen from 2 to 4 lanes	11	F	C	Widen from 2 to 4 lanes	24	
SR 88 between SR 12 West and Kettleman	C	F	B	Widen from 2 to 4 lanes	19	F	B	Widen from 2 to 4 lanes	15	F	A	Widen from 2 to 4 lanes	10	F	B	Widen from 2 to 4 lanes	23	

2013 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE A PHASE 1 & 2

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative A Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 43**. The mitigation measures for the intersections are shown in Figure 32.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 & 2 condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative A Phase 1 & 2 condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E

- LOS with Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

3. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 14%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

4. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 14%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

5. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

7. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

8. Ione Road / SR 16 - Significant Impact

The northbound approach of the Ione Road / SR 16 intersection would operate at unacceptable LOS E under this scenario during the Friday PM peak hour. Project-related traffic would contribute to the poor operation and degrade operating conditions at the southbound approach of this intersection from LOS C under the 2013 EPAP (no project) condition to LOS E under the EPAP Plus Alternative A Phase 1 & 2 condition. The intersection also meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. This degradation in LOS from C to E during the Friday PM peak hour and the intersection meeting the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS C
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

9. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 & 2 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative A Phase 1 & 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

10. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 & 2 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative A Phase 1& 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative A Phase 1 & 2 condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative A Phase 1 & 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 10%).
- In addition to 2010 Alternative A Phase 1 mitigation, the northbound and southbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on Grant Line Road. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

13. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 9%).
- In addition to 2010 Alternative A Phase 1 mitigation, the northbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on Sunrise Boulevard. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. Missouri Flat Road / US 50 WB Ramps - Less-Than-Significant Impact

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS F under this scenario with the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus Alternative A Phase 1 & 2 condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F

15. Pleasant Valley Road / SR 49 - Significant Impact

The Pleasant Valley Road / SR 49 intersection would operate at unacceptable LOS F under this scenario during the Friday PM peak hour. Project-related traffic would contribute to the poor operation and degrade operating conditions at the this intersection from LOS C under the 2013 EPAP (no project) condition to LOS F under the EPAP Plus Alternative A Phase 1 & 2 condition. The intersection also meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative A Phase 1 & 2 condition. This degradation in LOS from C to F during the Friday PM peak hour and the intersection meeting the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- The intersection should be signalized, since it meets the MUTCD peak hour signal warrant during both the Friday and Saturday PM peak hour, and coordinated with the intersection of Pleasant Valley Road / Forni Road if and when it becomes signalized. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- El Dorado County's LOS Threshold – LOS E
- LOS without Project – LOS C
- LOS with Project – LOS F

- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative A Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 43**. The mitigation measures for the roadway segments are shown in Figure 33.

16. SR 49 between Main Casino Entrance and Main Street - Significant Impact

The roadway segment of SR 49 between Main Casino Entrance and Main Street in Plymouth would operate at unacceptable LOS E during the Friday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS D under the EPAP (no project) condition to LOS E under EPAP Plus Alternative A Phase 1 & 2 condition. This degradation in LOS from D to E is considered a project-related effect and a significant impact.

Mitigation Measure:

- Upgrade SR 49 between Main Casino Entrance and Main Street to Arterial Class II from Arterial Class III. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – D
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

17. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.10 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Sunrise Boulevard and Grant Line Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 18%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 19%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 18%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

21. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 62%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

22. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS E during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.20 and 0.29 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 84%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

23. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively.

According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

24. SR 104 between Main Street and Church Street – Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 20%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

25. SR 124 between Main Street and SR 88 - Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no project) condition to LOS D under EPAP Plus Alternative A Phase 1 & 2 condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 30%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

26. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative A Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 23%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

27. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

28. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

29. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

30. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative A Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

Table 43
Intersection and Roadway Segment Level of Service – with Mitigation Measures
2013 EPAP Plus Project

ID	Intersection/Roadway Segment	LOS Threshold	Alternative A				Alternative B			
			LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share
Intersections										
1	SR 49 / Miller Way	D	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
2	SR 49 / Main Street	D	F	C	Install Signal. Construct NB and WB left-turn lane	22	F	C	Install Signal. Construct NB and WB left-turn lane	10
9	SR 104 (Preston) / SR 124	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	14	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	11
10	Preston Ave / Main St	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	14	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	11
11	SR 124 (Church) / SR 104 (Main)	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	15	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	12
13	Jackson Valley Rd / SR 88	C	F	C	Install a traffic signal	20	F	C	Install a traffic signal	16
14	SR 88 / Liberty Rd	C	F	C	Install a traffic signal	15	F	C	Install a traffic signal	12
19	SR 16 / Ione Road	D	E	B	Install a traffic signal	100	E	B	Install a traffic signal	100
22	Stonehouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0

23	Latrobe (Sac) / SR 16	D	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
25	Sloughhouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
26	Grant Line / SR 16	D	F	D	Add NB and SB left-turn lanes	10	F	D	Add NB and SB left-turn lanes	8
					Add NB and SB right-turn lanes	100			Add NB & SB right-turn lane	100
27	Sunrise / SR 16	D	F	D	Convert SB right-turn lane into a shared thru/right-turn	9	F	D	Convert SB right-turn lane into a shared thru/right-turn	7
					Add NB right-turn lane	100			Add NB right-turn lane	100
32	Missouri Flat / US 50 WB Ramps	D	F	N/A	Less-Than-Significant	0	F	N/A	Less-Than-Significant	0
38	SR 49 / Pleasant Valley	E	F	D	Install a signal	100	E	N/A	N/A	0
Roadway Segments										
	SR 49 between Casino and Main	D	E	D	Upgrade to Arterial Class II	100	D	N/A	N/A	0
	SR 16 between Bradshaw and Excelsior	E	F	B	Widen from 2 to 4 lanes	15	F	B	Widen from 2 to 4 lanes	12
	SR 16 between Sunrise and Grant Line	D	F	B	Widen from 2 to 4 lanes	18	F	B	Widen from 2 to 4 lanes	15
	SR 16 between Grant Line and Dillard	D	F	C	Widen from 2 to 4 lanes	19	F	C	Widen from 2 to 4 lanes	15
	SR 16 between Dillard and Stonehouse	D	F	C	Widen from 2 to 4 lanes	18	F	C	Widen from 2 to 4 lanes	14
	SR 16 between Latrobe Rd (Amador) and SR 124	C	D	C	Widen from 2 to 3 lanes	62	D	C	Widen from 2 to 3 lanes	56
	SR 16 between SR 124 and SR 49	C	E	B	Widen from 2 to 4 lanes	84	D	C	Widen from 2 to 4 lanes	80
	SR 104 between SR 124 and Main Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	20	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	16

	SR 104 between Main Street and Church Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	20	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	16
	SR 124 between Main Street and SR 88	C	D	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	30	D	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	24
	SR 88 between SR 124 and Liberty	C	F	B	Widen from 2 to 4 lanes	23	F	B	Widen from 2 to 4 lanes	19
	SR 88 between Liberty and SR 12 East	C	F	B	Widen from 2 to 4 lanes	17	F	B	Widen from 2 to 4 lanes	13
	SR 88 between SR 12 East and Tully Road	C	F	C	Widen from 2 to 4 lanes	17	F	C	Widen from 2 to 4 lanes	13
	SR 88 between Tully and SR 12 West	C	F	C	Widen from 2 to 4 lanes	16	F	C	Widen from 2 to 4 lanes	13
	SR 88 between SR 12 West and Kettleman	C	F	B	Widen from 2 to 4 lanes	16	F	B	Widen from 2 to 4 lanes	13

2010 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE B PHASE 1

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative B Phase 1 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 42**. The mitigation measures for the intersections are shown in Figure 34.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS E under the EPAP Plus Alternative B Phase 1 condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative B Phase 1 condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. The WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Shenandoah Road. The NB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 18%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Randolph Drive - Significant Impact

The westbound approach of the SR 49 / Randolph Drive intersection would operate at unacceptable LOS E and LOS F under this scenario during the Friday and Saturday PM peak hour, respectively. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – N/A

- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

4. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

5. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed

mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 18%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant and Unavoidable**

6. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the delay increases by more than 5 seconds from the EPAP

(No Project) condition to the EPAP Plus Alternative B Phase 1 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. This mitigation measure is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 36%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

8. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 30%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

9. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak

hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative B Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

10. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative B Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative B Phase 1 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Grant Line Road. The northbound and southbound approaches should have permitted left-turn phasing. Improvements to widen Grant Line Road north of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

13. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The southbound right-turn lane should be converted into a combined through/right-turn lane on Sunrise Boulevard. An additional southbound departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. Improvements to widen Sunrise Boulevard south of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by the SACOG. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. Missouri Flat Road / US 50 WB Ramps – Less-Than-Significant Impact

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS E under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus Alternative B Phase 1 condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

15. SR 49 / Project Service driveway - Significant Impact

The westbound approach of the SR 49 / Project Service driveway would operate at unacceptable LOS E under this scenario during the Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Although this intersection meets the MUTCD peak hour signal warrant, it is not located at least a quarter mile from the adjacent intersection and should not therefore be considered for signalization. This intersection should be changed to allow for only right-out movements at

the project driveway. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – N/A
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative B Phase 1 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 42**. The mitigation measures for the roadway segments are shown in Figure 35.

16. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.06 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Bradshaw Road and Excelsior Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 13%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

17. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.10 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Sunrise Boulevard and Grant Line Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.11 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Grant Line Road and Dillard Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Dillard Road and Stonehouse Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Latrobe Road (Amador) and SR 124 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 68%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS B

- **Significance after Mitigation – Less-Than-Significant**

21. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.20 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between SR 124 and SR 49 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 96%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

22. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

23. SR 104 between Main Street and Church Street - Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

24. SR 124 between Main Street and SR 88 - Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no project) condition to LOS D under EPAP Plus Alternative B Phase 1 condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

25. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS E during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.06 and 0.09 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative B Phase 1 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 88 between SR 124 and Liberty Road from two to four lanes wide. This improvement is in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

26. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Liberty Road and SR 12 East from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

27. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 East and Tully Road from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

28. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Tully Road and SR 12 West from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

29. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 West and Kettleman Lane from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

2013 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE B PHASE 1 & 2

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative B Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 43**. The mitigation measures for the intersections are shown in Figure 36.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 & 2 condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative B Phase 1 & 2 condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E

- LOS with Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative A Phase 1 & 2 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

3. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

4. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

5. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

7. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

8. Ione Road / SR 16 - Significant Impact

The northbound approach of the Ione Road / SR 16 intersection would operate at unacceptable LOS E under this scenario during the Friday PM peak hour. Project-related traffic would contribute to the poor operation and degrade operating conditions at the southbound approach of this intersection from LOS C under the 2013 EPAP (no project) condition to LOS E under the EPAP Plus Alternative B Phase 1 & 2 condition. The intersection also meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative B Phase 1 & 2 condition. This degradation in LOS from C to E during the Friday PM peak hour and the intersection meeting the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – C
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

9. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 & 2 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative B Phase 1 & 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

10. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 & 2 condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative B Phase 1& 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2013 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative B Phase 1 & 2 condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2013 EPAP (no project) and EPAP Plus Alternative B Phase 1 & 2 condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 8%).
- The northbound and southbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on Grant Line Road. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

13. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative B Phase 1 & 2 this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 7%).
- The northbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on Sunrise Boulevard. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F

- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. Missouri Flat Road / US 50 WB Ramps – Less-Than-Significant Impact

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS F under this scenario with the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus Alternative B Phase 1 & 2 condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltrans's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative B Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 43**. The mitigation measures for the roadway segments are shown in Figure 37.

15. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

16. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.10 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

17. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 14%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 56%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.21 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 80%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

21. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

22. SR 104 between Main Street and Church Street - Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

23. SR 124 between Main Street and SR 88 - Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no project) condition to LOS D under EPAP Plus Alternative B Phase 1 & 2 condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C

- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

24. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS E and LOS F during the Friday and Saturday, respectively. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.09 from the 2013 EPAP No Project condition to the 2013 EPAP Plus Alternative B Phase 1 & 2 condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 19%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

25. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 13%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B

- **Significance after Mitigation – Less-Than-Significant**

26. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 13%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

27. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 13%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

28. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2010 Alternative B Phase 1. (The fair share calculation of this project impact using Caltrans methodology is 13%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

2010 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE C

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative C condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 42**. The mitigation measures for the intersections are shown in Figure 38.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS E under the EPAP Plus Alternative C condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative C condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative C condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. The WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Shenandoah Road. The NB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Randolph Drive – Less-Than-Significant Impact

The westbound approach of the SR 49 / Randolph Drive intersection would operate at unacceptable LOS E under this scenario during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative C condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

4. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative C condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

5. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative C condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative C condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS E and LOS D under this scenario during the Friday and Saturday PM peak hour, respectively. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative C condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. This mitigation measure is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 27%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

8. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 22%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

9. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative C condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative C condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

10. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative C condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative C condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative C condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative C condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E

- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Grant Line Road. The northbound and southbound approaches should have permitted left-turn phasing. Improvements to widen Grant Line Road north of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

13. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative C this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The southbound right-turn lane should be converted into a combined through/right-turn lane on Sunrise Boulevard. An additional southbound departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. Improvements to widen Sunrise Boulevard south of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. Missouri Flat Road / US 50 WB Ramps – Less-Than-Significant Impact

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS E under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus Alternative C condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative C condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 42**. The mitigation measures for the roadway segments are shown in Figure 39.

15. SR 16 between Bradshaw Road and Excelsior Road - Less-Than-Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.03 and 0.045 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is not over 0.05, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

16. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.06 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Saturday. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Sunrise Boulevard and Grant Line Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

17. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Grant Line Road and Dillard Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F

- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Dillard Road and Stonehouse Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Latrobe Road (Amador) and SR 124 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 59%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C

- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between SR 124 and SR 49 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 94%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

21. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

22. SR 104 between Main Street and Church Street - Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

23. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS E during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.04 and 0.06 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 88 between SR 124 and Liberty Road from two to four lanes wide. This improvement is in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 15%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

24. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Liberty Road and SR 12 East from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

25. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 East and Tully Road from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

26. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Tully Road and SR 12 West from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

27. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 West and Kettleman Lane from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

2010 EXISTING PLUS APPROVED PROJECT PLUS ALTERNATIVE D

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the EPAP Plus Alternative D condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 42**. The mitigation measures for the intersections are shown in Figure 40.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative D condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative D condition. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. The WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Shenandoah Road. The NB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 26%).
- In addition the SB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Randolph Drive - Significant Impact

The westbound approach of the SR 49 / Randolph Drive intersection would operate at unacceptable LOS F under this scenario during the Friday and Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – N/A
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

4. Latrobe Road (Amador) / SR 16 - Significant Impact

The southbound approach of the Latrobe Road (Amador) / SR 16 intersection would operate at unacceptable LOS D under this scenario during the Saturday PM peak hour. Project-related traffic would contribute to the poor operation and degrade operating conditions at the southbound approach of this intersection from LOS C under the 2010 EPAP (no project) condition to LOS D under the EPAP Plus Alternative D condition. The intersection also meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. This degradation in LOS from C to D during the Saturday PM peak hour and the intersection meeting the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

5. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. Preston Avenue / Main Street - Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 27%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. SR 124 (Church Street) / SR 104 (Main Street) - Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP

Plus Alternative D condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 26%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

8. SR 88 / Jackson Valley Road - Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Install a signal. This mitigation measure is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 49%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

9. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 42%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

10. SR 16 / Stonehouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative D condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative D condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

11. SR 16 / Latrobe Road (Sacramento) - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound and southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative D condition during both the Friday and Saturday PM peak hour. However, this intersection does not

meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative D condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

12. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from 2010 EPAP (no project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS F under the EPAP Plus Alternative D condition during the Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during both the 2010 EPAP (no project) and EPAP Plus Alternative D condition. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since this intersection does not meet the MUTCD peak hour signal warrant with or without the proposed project this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

13. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane on Grant Line

Road. The northbound and southbound approaches should have permitted left-turn phasing. Improvements to widen Grant Line Road north of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

14. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the EPAP (No Project) condition to the EPAP Plus Alternative D this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The southbound right-turn lane should be converted into a combined through/right-turn lane on Sunrise Boulevard. An additional southbound departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. Improvements to widen Sunrise Boulevard south of SR 16 are included in the *Metropolitan Transportation Plan 2035* produced by the SACOG. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

15. Missouri Flat Road / US 50 WB Ramps – Less-Than-Significant Impact

The Missouri Flat Road / US 50 WB ramp intersection would operate at unacceptable LOS E under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the EPAP No Project condition to the EPAP Plus

Alternative D condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran’s LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E

16. SR 49 / Project Service driveway - Significant Impact

The westbound approach of the SR 49 / Project Service driveway would operate at unacceptable LOS F under this scenario during both the Friday and Saturday PM peak hours. The intersection meets the MUTCD peak hour signal warrant under the EPAP Plus Alternative D condition. Since the westbound approach operates at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Although this intersection meets the MUTCD peak hour signal warrant, it is not located at least a quarter mile from the adjacent intersection and should not therefore be considered for signalization. This intersection should be changed to allow for only right-out movements at the project driveway. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County’s LOS Threshold – LOS D
- LOS without Project – N/A
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the EPAP Plus Alternative D condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 42**. The mitigation measures for the roadway segments are shown in Figure 41.

17. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.11 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Bradshaw Road and Excelsior Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

18. SR 16 between Excelsior Road and Sunrise Boulevard - Significant Impact

The roadway segment of SR 16 between Excelsior Road and Sunrise Boulevard would operate at unacceptable LOS F during the Friday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS E under the EPAP (no project) condition to LOS F under EPAP Plus Alternative D condition. This degradation in LOS from E to F is considered a project-related effect and a significant impact.

Mitigation Measure:

- Widen SR 16 between Excelsior Road and Sunrise Boulevard from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

19. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.12 and 0.17 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Sunrise Boulevard and Grant Line Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

20. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.18 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Grant Line Road and Dillard Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

21. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.13 and 0.18 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Dillard Road and Stonehouse Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

22. SR 16 between Stonehouse Road and Ione Road - Significant Impact

The roadway segment of SR 16 between Stonehouse Road and Ione Road would operate at unacceptable LOS F during the Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS D under the EPAP (no project) condition to LOS F under EPAP Plus Alternative D condition. This degradation in LOS from D to F is considered a project-related effect and a significant impact.

Mitigation Measure:

- Widen SR 16 between Stonehouse Road and Ione Road from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS D
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

23. SR 16 between Ione Road and Old Sacramento Road - Significant Impact

The roadway segment of SR 16 between Ione Road and Old Sacramento Road would operate at unacceptable LOS D during both Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no project) condition to LOS D under EPAP Plus Alternative D condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Widen SR 16 between Ione Road and Old Sacramento Road from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

24. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between Latrobe Road (Amador) and SR 124 from two to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 79%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C

- **Significance after Mitigation – Less-Than-Significant**

25. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS E during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.25 and 0.34 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 16 between SR 124 and SR 49 from two to four lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 97%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

26. SR 104 between SR 124 and Main Street - Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.18 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 26%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

27. SR 104 between Main Street and Church Street - Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.18 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 26%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

28. SR 124 between Main Street and SR 88 - Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the EPAP (no project) condition to LOS D under EPAP Plus Alternative D condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Based on comments received on the Draft EIS and the initial traffic impact analysis, it is recommended by Amador County to contribute a fair share to the Ione Bypass as the proposed mitigation measure for this impact. The Ione Bypass is identified in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 37%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

29. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS E and LOS F during the Friday and Saturday, respectively. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the 2010 EPAP No Project condition to the 2010 EPAP Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 88 between SR 124 and Liberty Road from two to four lanes wide. This improvement is in the *2004 Amador County RTP Update*. (The fair share calculation of this project impact using Caltrans methodology is 31%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

30. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Liberty Road and SR 12 East from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 23%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

31. SR 88 between SR 12 East and Tully Road - Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 East and Tully Road from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

32. SR 88 between Tully Road and SR 12 West - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between Tully Road and SR 12 West from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

33. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Widen SR 88 between SR 12 West and Kettleman Lane from two to four lanes wide. This improvement is in the *2007 San Joaquin County RTP*. (The fair share calculation of this project impact using Caltrans methodology is 23%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

CUMULATIVE PLUS PROJECT

2025 CUMULATIVE PLUS ALTERNATIVE A Phase 1 & 2

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the Cumulative Plus Alternative A Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 44**. The mitigation measures for the intersections are shown in Figure 42.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) condition would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative A condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative A conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS F

- LOS With Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would continue to operate at unacceptable LOS F under this scenario during the Friday and Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Project Alternative A scenario. Since the eastbound and westbound approaches operate at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 33%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Empire Street – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Empire Street to continue to operate at an unacceptable LOS F and LOS E under the Cumulative Plus Alternative A condition during the Friday and Saturday PM peak hour respectively. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative A conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS F

4. SR 49 / SR 16 - Significant Impact

With the addition of Alternative A project traffic to the Cumulative (No Project) traffic, LOS at this intersection is forecast to worsen from LOS C to LOS D during the Friday PM peak hour. As per Amador County guidelines, this is a significant impact.

Mitigation Measure:

- An exclusive left-turn lane should be added to the NB approach creating dual left-turn lanes on SR 49. An additional WB departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

5. SR 124 / SR 16 - Significant Impact

The northbound approach of the SR 124 / SR 16 intersection would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this approach from LOS C under the Cumulative (No Project) condition to LOS D under Cumulative Plus Alternative A condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

6. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic

would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative A condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 55%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. Main Street / Preston Avenue – Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative A condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 69%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

8. SR 124 (Church Street) / SR 104 (Main Street) – Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative A condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 72%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

9. Jackson Valley Road / SR 88 – Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative A condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 56%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

10. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would continue to operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative A condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- In addition to 2013 Phase 1 & 2 mitigation, the NB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 23%).
- In addition to the 2013 Phase 1 & 2 mitigation, the WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

11. SR 88 / Victor Road - Significant Impact

The SR 88 / Victor Road intersection will continue to operate at an unacceptable LOS E during Friday PM peak hour with the addition of proposed project Alternative A. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The SB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 9%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS E

- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

12. SR 88 / Kettleman Lane - Significant Impact

The SR 88 / Kettleman Lane intersection will continue to operate at an unacceptable LOS F with the addition of proposed project Alternative A. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The EB combined left/through/right-turn lane should be split out to include two exclusive left-turn lanes creating dual left-turn lanes and a combined through/right-turn lane on Kettleman Lane. An additional SB through lane should be added to SR 88. (The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

13. SR 16 / Stonehouse Road – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative A condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

14. SR 16 / Latrobe (Sacramento) – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound and the southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative A condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

15. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS E or worse under the Cumulative Plus Alternative A condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

16. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are

included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 29%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

17. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 31%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

18. SR 16 / Bradshaw Road - Significant Impact

The SR 16 / Bradshaw Road intersection will continue to operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative A this is considered a significant impact per Sacramento County thresholds.

Mitigation Measure:

- An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. Two additional eastbound through lanes should be added to SR 16. An additional westbound through lane should be added to SR 16. The westbound right-turn lane should be converted into a combined through/right-turn lane on SR 16. An additional northbound and southbound through lane should be added to Bradshaw Road. Improvements to widen SR 16 between South Watt Road and Excelsior Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. Improvements to widen Bradshaw Road between Calvine Road and Old Placerville Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 8%).
- The WB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less than Significant**

19. Latrobe Road / White Rock Road - Less-Than-Significant Impact

The Latrobe Road / White Rock Road intersection would operate at unacceptable LOS F during the Friday PM peak hour under this scenario. The project does not contribute more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be less-than-significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure: None Required

Impact Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

20. US 50 Ramps / Missouri Flat Road – Less-Than-Significant Impact

The Missouri Flat Road / US 50 Ramps intersection would operate at unacceptable LOS F under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the Cumulative (No Project) condition to the

Cumulative Plus Alternative A condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran’s LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

21. Pleasant Valley Road / SR 49– Significant Impact

The Pleasant Valley Road / SR 49 intersection would operate at unacceptable LOS F under this scenario during the Friday PM peak hour. The project contributes more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be significant as per El Dorado County’s *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure:

- The intersection should be signalized, since it meets the MUTCD peak hour signal warrant during both the Friday and Saturday PM peak hour, and coordinated with the intersection of Pleasant Valley Road / Forni Road if and when it becomes signalized. (The fair share calculation of this project impact using Caltrans methodology is 49%).

Mitigation Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

22. SR 88(N) / Elliott Road - Significant Impact

The SR 88 (N) / Elliott Road intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the already unacceptable operating conditions at the intersection. This is considered a significant impact per San Joaquin County LOS thresholds.

Mitigation Measure:

- The SB exclusive right-turn lane would need to be converted to a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 5%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the Cumulative Plus Alternative A condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 44**. The mitigation measures for the roadway segments are shown in Figure 43.

23. SR 49 between Main Casino Entrance and Main Street - Significant Impact

The roadway segment of SR 49 between Casino Entrance and Main Street would operate at unacceptable LOS E during a Friday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition during a Friday. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 49 between the Main Casino Entrance and Main Street from two lanes to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 55%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

24. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.06 from the Cumulative (No Project)

condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 21%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

25. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from Cumulative (No Project) condition to Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 38%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

26. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic

would result in the increase of the v/c ratio by 0.10 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 69%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

27. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 48%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

28. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 60%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

29. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.20 and 0.28 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 57%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

30. SR 104 between SR 124 and Main Street – Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 60%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

31. SR 104 between Main Street and Church Street – Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 63%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

32. SR 124 between Main Street and SR 88 – Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the both Friday and Saturday. The addition of project generated traffic would contribute to

the poor operation and degrade operating conditions at this roadway segment from LOS C under the Cumulative (No Project) condition to LOS D under Cumulative Plus Alternative A condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 82%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

33. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.12 from the Cumulative (No Project) condition to the Cumulative Plus Alternative A condition for Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 21%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between SR 124 and Liberty Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

There are currently no LOS criteria for six lane roadways in Amador County. However reviewing the volume thresholds for arterials with four lanes in Amador County and the additional amount of vehicles added by the project to this roadway segment, a six-lane roadway would reasonably mitigate this impact to a less-than-significant level.

34. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 19%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between Liberty Road and SR 12 East would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

35. SR 88 between SR 12 East and Tully Road –Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 East and Tully Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Impact Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

36. SR 88 between Tully Road and SR 12 West (NB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (NB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

37. SR 88 between Tully Road and SR 12 West (SB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (SB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 10%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

38. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 West and Kettleman Lane would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

Table 44
Intersection and Roadway Level of Service – with Mitigation Measures
Cumulative Plus Project

ID	Intersection/Roadway Segment	LOS Threshold	Alternative A				Alternative B				Alternative C				Alternative D			
			LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share	LOS Before Mitigation	LOS After Mitigation	Mitigation Measures	Fair Share
Intersections																		
1	SR 49 / Miller Way	D	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
2	SR 49 / Main Street	D	F	D	Install a signal. Construct NB left-turn and WB right-turn lane	33	F	D	Install a signal. Construct NB left-turn and WB right-turn lane	27	F	D	Install a signal. Construct NB left-turn and WB right-turn lane	19	F	D	Install a signal. Construct NB left-turn and WB right-turn lane	37
4	SR 49 / Empire	D	F	N/A	Signal not warranted, less-than-significant	0	E	N/A	Signal not warranted, less-than-significant	0	E	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
5	SR 49 / Randolph Dr	D	D	N/A	N/A	0	C	N/A	N/A	0	C	N/A	N/A	0	E	D	Add NB right-turn lane	100
6	SR 49 / SR 16	C	D	C	Add NB left-turn lane	100	C	N/A	N/A	0	C	N/A	N/A	0	D	C	Add NB left-turn lane	100
7	SR 124 / SR 16	C	D	B	Install a traffic signal	100	D	C	Install a traffic signal	100	C	N/A	N/A	0	E	B	Install a traffic signal	100
9	SR 104 (Preston) / SR 124	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	55	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	48	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	36	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	59
10	Preston Ave / Main St	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	69	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	63	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	51	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	72
11	SR 124 (Church) / SR 104 (Main)	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	72	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	66	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	55	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	76
13	Jackson Valley Rd / SR 88	C	F	C	Install a traffic signal	56	F	C	Install a traffic signal	50	F	C	Install a traffic signal	38	F	C	Install a traffic signal	61
14	SR 88 / Liberty Rd	C	F	C	Install a traffic signal and Convert NB right-turn lane into shared through/right-turn	23	F	C	Install a traffic signal and Convert NB right-turn lane into shared through/right-turn	18	F	C	Install a traffic signal and Convert NB right-turn lane into shared through/right-turn	12	F	C	Install a traffic signal and Convert NB right-turn lane into shared through/right-turn	26
					Construct separate WB left-turn lane	100											Construct separate WB left-turn lane	100
17	SR 88 / Victor (SR 12)	C	E	C	Convert SB right-turn lane into a shared thru/right-turn	9	E	C	Convert SB right-turn lane into a shared thru/right-turn	7	E	C	Convert SB right-turn lane into a shared thru/right-turn	5	E	C	Convert SB right-turn lane into a shared thru/right-turn	11
18	SR 88 / Kettleman	C	F	C	Install EB dual left-turn lanes and SB through lane	10	F	C	Install EB dual left-turn lanes and SB through lane	7	F	C	Install EB dual left-turn lanes and SB through lane	5	F	C	Install EB dual left-turn lanes and SB through lane	11
22	Stonehouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0

23	Latrobe (Sac) / SR 16	D	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
24	SR 16 / Dillard	D	D	N/A	N/A	0	D	N/A	N/A	0	D	N/A	N/A	0	E	D	Add EB right-turn lane	100
25	Sloughhouse / SR 16	E	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0	F	N/A	Signal not warranted, less-than-significant	0
26	Grant Line / SR 16	D	F	D	Convert EB right-turn lane into shared thru/right-turn	29	F	C	Convert EB right-turn lane into shared thru/right-turn	23	F	C	Convert EB right-turn lane into shared thru/right-turn	16	F	D	Convert EB right-turn lane into shared thru/right-turn	32
27	Sunrise / SR 16	D	E	D	Convert EB right-turn lane into shared thru/right-turn	31	E	D	Convert EB right-turn lane into shared thru/right-turn	25	E	C	Convert EB right-turn lane into shared thru/right-turn	17	E	D	Convert EB right-turn lane into shared thru/right-turn	35
29	SR 16 / Bradshaw	E	F	E	Add a NB and SB through lane, an EB left-turn lane, two EB and WB through lanes.	8	F	E	Add a NB and SB through lane, an EB left-turn lane, two EB and WB through lanes.	6	F	E	Add a NB and SB through lane, an EB left-turn lane, two EB and WB through lanes.	4	F	E	Add a NB and SB through lane, an EB left-turn lane, two EB and WB through lanes.	9
					Construct a WB right-turn lane	100			Construct a WB right-turn lane	100			Construct a WB right-turn lane	100			Construct a WB right-turn lane	100
30	Latrobe / White Rock	E	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0
32	Missouri Flat / US 50 WB Ramps	D	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0	F	N/A	Less-than-significant	0
38	SR 49 / Pleasant Valley	E	F	E	Install a traffic signal	49	F	E	Install a traffic signal	42	F	E	Install a traffic signal	31	F	E	Install a traffic signal	54
39	SR 88 (N) / Elliot	D	E	C	Convert SB right-turn lane into shared thru/right-turn	5	E	C	Convert SB right-turn lane into shared thru/right-turn	4	E	C	Convert SB right-turn lane into shared thru/right-turn	3	E	C	Convert SB right-turn lane into shared thru/right-turn	6

Roadway Segments

	SR 49 between Main Casino Entrance and Main	D	E	D	Widen from 2 to 3 lanes	55	E	D	Widen from 2 to 3 lanes	44	E	C	Widen from 2 to 3 lanes	32	E	D	Widen from 2 to 3 lanes	55
	SR 16 between Bradshaw and Excelsior	E	F	E	Widen from 2 to 4 lanes	21	F	E	Widen from 2 to 4 lanes	17	F	N/A	Less-than-significant	0	F	E	Widen from 2 to 4 lanes	24
	SR 16 between Sunrise and Grant Line	D	F	D	Widen from 2 to 4 lanes	38	F	D	Widen from 2 to 4 lanes	32	F	D	Widen from 2 to 4 lanes	23	F	D	Widen from 2 to 4 lanes	43
	SR 16 between Grant Line and Dillard	D	F	C	Widen from 2 to 4 lanes	69	F	C	Widen from 2 to 4 lanes	63	F	C	Widen from 2 to 4 lanes	51	F	C	Widen from 2 to 4 lanes	73
	SR 16 between Dillard and Stonehouse	D	F	D	Widen from 2 to 4 lanes	48	F	D	Widen from 2 to 4 lanes	42	F	D	Widen from 2 to 4 lanes	30	F	D	Widen from 2 to 4 lanes	53
	SR 16 between Latrobe Rd (Amador) and SR 124	C	D	C	Widen from 2 to 3 lanes	60	D	C	Widen from 2 to 3 lanes	54	D	C	Widen from 2 to 3 lanes	42	E	B	Widen from 2 to 3 lanes	65
Widen from 3 to 4 lanes																	100	
	SR 16 between SR 124 and SR 49	C	F	B	Widen from 2 to 4 lanes	57	F	B	Widen from 2 to 4 lanes	50	E	B	Widen from 2 to 4 lanes	38	F	B	Widen from 2 to 4 lanes	61
	SR 104 between SR 124 and Main Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	60	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	54	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	42	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	65
	SR 104 between Main Street and Church Street	C	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	63	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	56	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	44	F	N/A at this time. Bypass Alternatives still in design stage.	Ione Bypass	67
	SR 124 between Main Street and SR 88	C	D	N/A at this time. Bypass Alternatives still in design	Ione Bypass	82	D	N/A at this time. Bypass Alternatives still in design	Ione Bypass	78	D	N/A at this time. Bypass Alternatives still in design	Ione Bypass	69	D	N/A at this time. Bypass Alternatives still in design	Ione Bypass	85

				stage.			stage.			stage.			stage.				
SR 88 between SR 124 and Liberty	C	F	N/A at this time. No LOS standards for 6-lanes.	Widen from 2 to 4 lanes.	21	F	N/A at this time. No LOS standards for 6-lanes.	Widen from 2 to 4 lanes.	17	F	N/A at this time. No LOS standards for 6-lanes.	Widen from 2 to 4 lanes.	11	F	N/A at this time. No LOS standards for 6-lanes.	Widen from 2 to 4 lanes.	24
				Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100
SR 88 between Liberty and SR 12 East	C	F	A	Widen from 2 to 4 lanes.	19	F	A	Widen from 2 to 4 lanes.	15	F	A	Widen from 2 to 4 lanes.	10	F	A	Widen from 2 to 4 lanes.	22
				Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100			Widen from 4 to 6 lanes.	100
SR 88 between SR 12 East and Tully Road	C	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100
SR 88 between Tully Road and SR 12 West (NB couplet)	C	F	C	Widen from 2 to 4 lanes.	10	F	C	Widen from 2 to 4 lanes.	8	F	C	Widen from 2 to 4 lanes.	5	F	C	Widen from 2 to 4 lanes.	12
SR 88 between Tully Road and SR 12 West (SB couplet)	C	F	C	Widen from 2 to 4 lanes.	10	F	C	Widen from 2 to 4 lanes.	8	F	C	Widen from 2 to 4 lanes.	5	F	C	Widen from 2 to 4 lanes.	12
SR 88 between SR 12 West and Kettleman	C	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100	F	B	Widen from 4 to 6 lanes.	100

2025 CUMULATIVE PLUS ALTERNATIVE B Phase 1 & 2

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the Cumulative Plus Alternative B Phase 1 & 2 condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 44**. The mitigation measures for the intersections are shown in Figure 44.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative B condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative B conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would continue to operate at unacceptable LOS F under this scenario during the Friday and Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Project Alternative B scenario. Since the eastbound and westbound approaches operate at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 27%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Empire Street – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Empire Street to continue to operate at an unacceptable LOS E under the Cumulative Plus Alternative B condition during both the Friday and Saturday PM peak hours. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative B conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E

4. SR 124 / SR 16 - Significant Impact

With the addition of Alternative B project traffic to the Cumulative (No Project) traffic, LOS at the northbound approach of this intersection is forecast to worsen from LOS C to LOS D during the Friday PM peak hour. Additionally, this intersection meets the peak hour MUTCD signal warrants. As per Amador County guidelines, this is a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

5. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative B condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 48%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. Main Street / Preston Avenue – Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative B condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 63%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. SR 124 (Church Street) / SR 104 (Main Street) – Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative B condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 66%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F

- **Significance after Mitigation – Less-Than-Significant**

8. Jackson Valley Road / SR 88 – Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative B condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 50%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-than-significant**

9. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would continue to operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative B condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- In addition to 2013 Phase 1 & 2 mitigation, the NB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 18%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

10. SR 88 / Victor Road - Significant Impact

The SR 88 / Victor Road intersection will continue to operate at an unacceptable LOS E during Friday PM peak hour with the addition of proposed project Alternative B. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The SB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 7%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

11. SR 88 / Kettleman Lane - Significant Impact

The SR 88 / Kettleman Lane intersection will continue to operate at an unacceptable LOS F with the addition of proposed project Alternative B. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The EB combined left/through/right-turn lane should be split out to include two exclusive left-turn lanes creating dual left-turn lanes and a combined through/right-turn lane on Kettleman Lane. An additional SB through lane should

be added to SR 88. (The fair share calculation of this project impact using Caltrans methodology is 7%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

12. SR 16 / Stonehouse Road – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative B condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

13. SR 16 / Latrobe (Sacramento) – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound and the southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative B condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D

- LOS Without Project – LOS F
- LOS With Project – LOS F

14. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS E or worse under the Cumulative Plus Alternative B condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

15. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 23%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS C

- **Significance after Mitigation – Less than Significant**

16. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 25%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

17. SR 16 / Bradshaw Road - Significant Impact

The SR 16 / Bradshaw Road intersection will continue to operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative B this is considered a significant impact per Sacramento County thresholds.

Mitigation Measure:

- An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. Two additional eastbound through lanes should be added to SR 16. An additional westbound through lane should be added to SR 16. The westbound right-turn lane should be converted into a combined through/right-turn lane on SR 16. An additional northbound and southbound through lane should be added to Bradshaw Road. Improvements to widen SR 16 between South Watt Road and Excelsior Road are included in the *Metropolitan*

Transportation Plan 2035 produced by SACOG. Improvements to widen Bradshaw Road between Calvine Road and Old Placerville Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 6%).

- The WB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less than Significant**

18. Latrobe Road / White Rock Road - Less-Than-Significant Impact

The Latrobe Road / White Rock Road intersection would operate at unacceptable LOS F during the Friday PM peak hour under this scenario. The project does not contribute more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be less-than-significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure: None Required

Impact Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

19. US 50 Ramps / Missouri Flat Road – Less-Than-Significant Impact

The Missouri Flat Road / US 50 Ramps intersection would operate at unacceptable LOS F under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

20. Pleasant Valley Road / SR 49 – Significant Impact

The Pleasant Valley Road / SR 49 intersection would operate at unacceptable LOS F under this scenario during the Friday PM peak hour. The project contributes more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure:

- The intersection should be signalized, since it meets the MUTCD peak hour signal warrant during both the Friday and Saturday PM peak hour, and coordinated with the intersection of Pleasant Valley Road / Forni Road if and when it becomes signalized. (The fair share calculation of this project impact using Caltrans methodology is 42%).

Mitigation Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

21. SR 88(N) / Elliott Road - Significant Impact

The SR 88 (N) / Elliott Road intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the already unacceptable operating conditions at the intersection. This is considered a significant impact per San Joaquin County LOS thresholds.

Mitigation Measure:

- The SB exclusive right-turn lane would need to be converted to a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 4%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the Cumulative Plus Alternative B condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 44**. The mitigation measures for the roadway segments are shown in Figure 45.

22. SR 49 between Main Casino Entrance and Main Street - Significant Impact

The roadway segment of SR 49 between Casino Entrance and Main Street would operate at unacceptable LOS E during the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.10 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 49 between the Main Casino Entrance and Main Street from two lanes to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 44%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

23. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

24. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 and 0.10 from Cumulative (No Project) condition to Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 32%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

25. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.08 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 63%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

26. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.08 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 42%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D

- **Significance after Mitigation – Less-Than-Significant**

27. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 54%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

28. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS F and LOS E during the Friday and Saturday, respectively. The addition of project generated traffic would result in the increase of the v/c ratio by 0.10 and 0.21 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 50%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E

- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

29. SR 104 between SR 124 and Main Street – Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.12 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 54%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

30. SR 104 between Main Street and Church Street – Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 56%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

31. SR 124 between Main Street and SR 88 – Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the both Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the Cumulative (No Project) condition to LOS D under Cumulative Plus Alternative B condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 78%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

32. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.06 and 0.09 from the Cumulative (No Project) condition to the Cumulative Plus Alternative B condition for Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 17%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between SR 124 and Liberty Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

There are currently no LOS criteria for six lane roadways in Amador County. However reviewing the volume thresholds for arterials with four lanes in Amador County and the additional amount of vehicles added by the project to this roadway segment, a six-lane roadway would reasonably mitigate this impact to a less-than-significant level.

33. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 15%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between Liberty Road and SR 12 East would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

34. SR 88 between SR 12 East and Tully Road –Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 East and Tully Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

35. SR 88 between Tully Road and SR 12 West (NB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (NB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 8%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

36. SR 88 between Tully Road and SR 12 West (SB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (SB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 8%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

37. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 West and Kettleman Lane would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

2025 CUMULATIVE PLUS ALTERNATIVE C

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the Cumulative Plus Alternative C condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved

intersection LOS is presented in **Table 44**. The mitigation measures for the intersections are shown in Figure 46.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative C condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative C conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would continue to operate at unacceptable LOS F under this scenario during the Friday and

Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Project Alternative C scenario. Since the eastbound and westbound approaches operate at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 19%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Empire Street – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Empire Street to continue to operate at an unacceptable LOS E under the Cumulative Plus Alternative C condition during both the Friday and Saturday PM peak hours. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative C conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E

4. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the SR 104 (Preston Avenue) / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus

Alternative C condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 36%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

5. Main Street / Preston Avenue – Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative C condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 51%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

6. SR 124 (Church Street) / SR 104 (Main Street) – Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of

project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative C condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 55%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

7. Jackson Valley Road / SR 88 – Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative C condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 38%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-than-significant**

8. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would continue to operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative C condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- In addition to 2013 Phase 1 & 2 mitigation, the NB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

9. SR 88 / Victor Road - Significant Impact

The SR 88 / Victor Road intersection will continue to operate at an unacceptable LOS E during Friday PM peak hour with the addition of proposed project Alternative C. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The SB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 5%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS E

- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

10. SR 88 / Kettleman Lane - Significant Impact

The SR 88 / Kettleman Lane intersection will continue to operate at an unacceptable LOS F with the addition of proposed project Alternative C. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The EB combined left/through/right-turn lane should be split out to include two exclusive left-turn lanes creating dual left-turn lanes and a combined through/right-turn lane on Kettleman Lane. An additional SB through lane should be added to SR 88. (The fair share calculation of this project impact using Caltrans methodology is 5%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

11. SR 16 / Stonehouse Road – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative C condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F

- LOS With Project – LOS F

12. SR 16 / Latrobe (Sacramento) – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound and the southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative C condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

13. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS E or worse under the Cumulative Plus Alternative C condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

14. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition

to the Cumulative Plus Alternative C this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 16%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

15. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 17%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

16. SR 16 / Bradshaw Road - Significant Impact

The SR 16 / Bradshaw Road intersection will continue to operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative C this is considered a significant impact per Sacramento County thresholds.

Mitigation Measure:

- An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. Two additional eastbound through lanes should be added to SR 16. An additional westbound through lane should be added to SR 16. The westbound right-turn lane should be converted into a combined through/right-turn lane on SR 16. An additional northbound and southbound through lane should be added to Bradshaw Road. Improvements to widen SR 16 between South Watt Road and Excelsior Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. Improvements to widen Bradshaw Road between Calvine Road and Old Placerville Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 4%).
- The WB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less than Significant**

17. Latrobe Road / White Rock Road - Less-Than-Significant Impact

The Latrobe Road / White Rock Road intersection would operate at unacceptable LOS F during the Friday PM peak hour under this scenario. The project does not contribute more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be less-than-significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure: None Required

Impact Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

18. US 50 Ramps / Missouri Flat Road – Less-Than-Significant Impact

The Missouri Flat Road / US 50 Ramps intersection would operate at unacceptable LOS F under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran’s LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

19. Pleasant Valley Road / SR 49 – Significant Impact

The Pleasant Valley Road / SR 49 intersection would operate at unacceptable LOS F under this scenario during the Friday PM peak hour. The project contributes more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be significant as per El Dorado County’s *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure:

- The intersection should be signalized, since it meets the MUTCD peak hour signal warrant during both the Friday and Saturday PM peak hour, and coordinated with the intersection of Pleasant Valley Road / Forni Road if and when it becomes signalized. (The fair share calculation of this project impact using Caltrans methodology is 31%).

Mitigation Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

20. SR 88(N) / Elliott Road - Significant Impact

The SR 88 (N) / Elliott Road intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the already unacceptable operating conditions at the intersection. This is considered a significant impact per San Joaquin County LOS thresholds.

Mitigation Measure:

- The SB exclusive right-turn lane would need to be converted to a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 3%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the Cumulative Plus Alternative C condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 44**. The mitigation measures for the roadway segments are shown in Figure 47.

22. SR 49 between Main Casino Entrance and Main Street - Significant Impact

The roadway segment of SR 49 between Casino Entrance and Main Street would operate at unacceptable LOS E during the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.04 and 0.06 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 49 between the Main Casino Entrance and Main Street from two lanes to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 32%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

23. SR 16 between Bradshaw Road and Excelsior Road – Less-Than-Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.03 and 0.045 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is less than 0.05, this impact is considered less-than-significant.

Mitigation Measure: None required

Impact Summary

- Sacramento County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

24. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.04 and 0.06 from Cumulative (No Project) condition to Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 23%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

25. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for Saturday. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 51%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

26. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 30%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

27. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS D during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 42%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS D
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

28. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS E during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.09 and 0.13 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador

County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 38%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

29. SR 104 between SR 124 and Main Street – Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 42%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

30. SR 104 between Main Street and Church Street – Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.05 and 0.07 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for the

Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 44%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

31. SR 124 between Main Street and SR 88 – Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the both Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the Cumulative (No Project) condition to LOS D under Cumulative Plus Alternative C condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 69%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

32. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.04 and 0.06 from the Cumulative (No Project) condition to the Cumulative Plus Alternative C condition for Friday and Saturday, respectively. According to the approach recommended in Amador

County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 11%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between SR 124 and Liberty Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

There are currently no LOS criteria for six lane roadways in Amador County. However reviewing the volume thresholds for arterials with four lanes in Amador County and the additional amount of vehicles added by the project to this roadway segment, a six-lane roadway would reasonably mitigate this impact to a less-than-significant level.

33. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 10%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between Liberty Road and SR 12 East would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

34. SR 88 between SR 12 East and Tully Road –Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 East and Tully Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

35. SR 88 between Tully Road and SR 12 West (NB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (NB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 5%).

Mitigation Summary

- San Joaquin County’s LOS Threshold – LOS C
- LOS without Project – LOS F

- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

36. SR 88 between Tully Road and SR 12 West (SB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (SB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 5%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

37. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 West and Kettleman Lane would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F

- Mitigated LOS - LOS B
- **Significance after Mitigation – Less-Than-Significant**

2025 CUMULATIVE PLUS ALTERNATIVE D

Intersections

The following is a description of the intersections that would operate at unacceptable LOS or have movements operating unacceptably under the Cumulative Plus Alternative D condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved intersection LOS is presented in **Table 44**. The mitigation measures for the intersections are shown in Figure 48.

Without the jurisdiction to implement off-site mitigation measures, the only feasible mitigation available to the Tribe is to provide funding for recommended roadway improvements. Various study roadway intersections and segments currently operate under unacceptable conditions (according to the corresponding jurisdictional agency) without the project. Therefore, the Tribe would only need to contribute a share of the required funding proportionate to the level of impact associated with the trips added by the project alternatives. Under Caltrans guidelines this proportionate share contribution to recommended roadway improvements are deemed appropriate mitigation to reduce the impact of a proposed project. When an intersection or roadway segment operates acceptably before but not after project trips are added, the proportionate share would be considered 100% for the existing roadway network (at the time of implementation, the Tribe's proportionate share may be considerably less based on future development in the region). Proportionate share calculations are provided for each recommended mitigation measure below, and were based on formulas presented in the Caltrans *Guide for the Preparation of Traffic Impact Studies*, December 2002. Actual funding mechanisms of the recommended roadway improvements are the responsibility of the jurisdictional agency (such as Caltrans for the State Routes), and the Tribe's required contributions would be determined during negotiations for a Tribal-State Gaming Compact with the Governor's Office.

1. SR 49 / Miller Way – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) condition would cause the westbound approach of SR 49 and Miller Way to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative D condition during the Friday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative D conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

2. SR 49 / Main Street - Significant Impact

The eastbound and westbound approaches of the SR 49 / Main Street intersection would continue to operate at unacceptable LOS F under this scenario during the Friday and Saturday PM peak hour. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Project Alternative D scenario. Since the eastbound and westbound approaches operate at an unacceptable LOS and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 37%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

3. SR 49 / Empire Street – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the westbound approach of SR 49 and Empire Street to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative D condition during both the Friday and Saturday PM peak hours. However, this intersection does not meet the MUTCD peak hour signal warrant during the Friday and/or Saturday PM peak hours during the Cumulative (No Project) and Cumulative Plus Project Alternative D conditions. As per Amador County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Amador County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS F

4. SR 49 / Randolph Drive - Significant Impact

With the addition of Alternative D project traffic to the Cumulative (No Project) traffic, LOS at this intersection is forecast to worsen from LOS D to LOS E during the Saturday PM peak hour. As per Amador County guidelines, this is a significant impact.

Mitigation Measure:

- The NB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 49. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – D
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

5. SR 49 / SR 16 - Significant Impact

With the addition of Alternative D project traffic to the Cumulative (No Project) traffic, LOS at this intersection is forecast to worsen from LOS C to LOS D during the Friday PM peak hour. As per Amador County guidelines, this is a significant impact.

Mitigation Measure:

- An exclusive left-turn lane should be added to the NB approach creating dual left-turn lanes on SR 49. An additional WB departure lane would need to be provided past the intersection and then the roadway should be tapered back to two-lanes wide. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D

- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

6. SR 124 / SR 16 - Significant Impact

The northbound approach of the SR 124 / SR 16 intersection would operate at unacceptable LOS E during the Friday PM peak hour. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this approach from LOS C under the Cumulative (No Project) condition to LOS E under Cumulative Plus Alternative D condition. This degradation in LOS from C to E is considered a project-related effect and a significant impact.

Mitigation Measure:

- Install a signal. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

7. SR 104 (Preston Avenue) / SR 124 - Significant Impact

The eastbound and westbound approaches of the Preston Avenue / SR 124 intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative D condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 59%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

8. Main Street / Preston Avenue – Significant Impact

The southbound approach of the Preston Avenue / Main Street intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the southbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative D condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition at the southbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 72%).

Mitigation Summary

- Amador County’s LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

9. SR 124 (Church Street) / SR 104 (Main Street) – Significant Impact

The northbound approach of the SR 124 (Church Street) / SR 104 (Main Street) intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative D condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 76%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

10. Jackson Valley Road / SR 88 – Significant Impact

The northbound approach of the SR 88 / Jackson Valley Road intersection would operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the northbound approach of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative D condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition at the northbound approach and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 61%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

11. SR 88 / Liberty Road - Significant Impact

The eastbound and westbound approaches of the SR 88 / Liberty Road intersection would continue to operate at unacceptable LOS F during both the Friday and Saturday PM peak hour. The addition of project generated traffic would degrade operating conditions at the eastbound and westbound approaches of this intersection and increase delay by more than 5 seconds. The intersection meets the MUTCD peak hour signal warrant under the Cumulative Plus Alternative D condition. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition at the eastbound and westbound approaches and the intersection meets the MUTCD peak hour signal warrant, this is considered a significant impact.

Mitigation Measure:

- In addition to 2013 Phase 1 & 2 mitigation measures, the NB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 26%).
- In addition to 2013 Phase 1 & 2 mitigation measures, the WB combined left/through/right-turn lane should be split out to include an exclusive left-turn lane and a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

12. SR 88 / Victor Road - Significant Impact

The SR 88 / Victor Road intersection will continue to operate at an unacceptable LOS E during Friday PM peak hour with the addition of proposed project Alternative D. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The SB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 88. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

13. SR 88 / Kettleman Lane - Significant Impact

The SR 88 / Kettleman Lane intersection will continue to operate at an unacceptable LOS F with the addition of proposed project Alternative D. The addition of project generated traffic will exacerbate the already unacceptable operations at this intersection and

therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- The EB combined left/through/right-turn lane should be split out to include two exclusive left-turn lanes creating dual left-turn lanes and a combined through/right-turn lane on Kettleman Lane. An additional SB through lane should be added to SR 88. (The fair share calculation of this project impact using Caltrans methodology is 11%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less than Significant**

14. SR 16 / Stonehouse Road – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the southbound approach of SR 16 and Stonehouse Road to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative D condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

15. SR 16 / Latrobe (Sacramento) – Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound and the southbound approaches of SR 16 and Latrobe Road (Sacramento) to continue to operate at an unacceptable LOS F under the Cumulative Plus Alternative D condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal

warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F

16. SR 16 / Dillard Road - Significant Impact

The SR 16 / Dillard intersection would operate at unacceptable LOS E during the Saturday PM peak hour. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this intersection from LOS D under the Cumulative (No Project) condition to LOS E under Cumulative Plus Alternative D condition. This degradation in LOS from D to E is considered a project-related effect and a significant impact.

Mitigation Measure:

- The EB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County LOS Threshold – LOS D
- LOS without Project – LOS D
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

17. SR 16 / Sloughhouse Road - Less-Than-Significant Impact

The addition of project-related traffic to traffic levels resulting from Cumulative (No Project) conditions would cause the northbound approach of SR 16 and Sloughhouse Road to continue to operate at an unacceptable LOS E or worse under the Cumulative Plus Alternative D condition during both the Friday and Saturday PM peak hour. However, this intersection does not meet the MUTCD peak hour signal warrants during either of the PM peak hours analyzed. Therefore as per Sacramento County's *Traffic Impact Study Guidelines*, this impact is considered less-than-significant.

Mitigation Measure: None required.

Impact Summary

- Sacramento County's LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

18. SR 16 / Grant Line Road - Significant Impact

The SR 16 / Grant Line Road intersection would operate at unacceptable LOS F under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 32%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

19. SR 16 / Sunrise Boulevard - Significant Impact

The SR 16 / Sunrise Boulevard intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the unacceptable operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D this is considered a significant impact per City of Rancho Cordova thresholds.

Mitigation Measure:

- The EB exclusive right-turn lane should be restriped to a combined through/right-turn lane on SR 16. Improvements to widen SR 16 between Sunrise Boulevard and Grant Line Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 35%).

Mitigation Summary

- City of Rancho Cordova LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less than Significant**

20. SR 16 / Bradshaw Road - Significant Impact

The SR 16 / Bradshaw Road intersection will continue to operate at unacceptable LOS F under this scenario. The addition of project generated traffic would degrade operating conditions at the intersection and increase delay by more than 5 seconds. Since the delay increases by more than 5 seconds from the Cumulative (No Project) condition to the Cumulative Plus Alternative D this is considered a significant impact per Sacramento County thresholds.

Mitigation Measure:

- An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. Two additional eastbound through lanes should be added to SR 16. An additional westbound through lane should be added to SR 16. The westbound right-turn lane should be converted into a combined through/right-turn lane on SR 16. An additional northbound and southbound through lane should be added to Bradshaw Road. Improvements to widen SR 16 between South Watt Road and Excelsior Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. Improvements to widen Bradshaw Road between Calvine Road and Old Placerville Road are included in the *Metropolitan Transportation Plan 2035* produced by SACOG. (The fair share calculation of this project impact using Caltrans methodology is 9%).
- The WB combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Sacramento County LOS Threshold – LOS E
- LOS Without Project – LOS F

- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less than Significant**

21. Latrobe Road / White Rock Road - Less-Than-Significant Impact

The Latrobe Road / White Rock Road intersection would operate at unacceptable LOS F during the Friday PM peak hour under this scenario. The project does not contribute more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be less-than-significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure: None Required

Impact Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F

22. US 50 Ramps / Missouri Flat Road – Less-Than-Significant Impact

The Missouri Flat Road / US 50 Ramps intersection would operate at unacceptable LOS F under this scenario with and without the proposed project. The addition of project generated traffic will not increase the average delay by more than 2% from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition during the Friday PM peak hour. Therefore according to Caltrans District 3, this impact is considered less-than significant.

Mitigation Measure: None required.

Impact Summary

- Caltran's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F

23. Pleasant Valley Road / SR 49– Significant Impact

The Pleasant Valley Road / SR 49 intersection would operate at unacceptable LOS F under this scenario during the Friday PM peak hour. The project contributes more than 10 trips to the intersection during the Friday PM peak hour. Therefore, the impact is considered to be significant as per El Dorado County's *Traffic Impact Study Protocols and Procedures* guidelines.

Mitigation Measure:

- The intersection should be signalized, since it meets the MUTCD peak hour signal warrant during both the Friday and Saturday PM peak hour, and coordinated with the intersection of Pleasant Valley Road / Forni Road if and when it becomes signalized. (The fair share calculation of this project impact using Caltrans methodology is 54%).

Mitigation Summary

- El Dorado County LOS Threshold – LOS E
- LOS Without Project – LOS F
- LOS With Project – LOS F
- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

24. SR 88(N) / Elliott Road - Significant Impact

The SR 88 (N) / Elliott Road intersection will continue to operate at unacceptable LOS E under this scenario. The addition of project generated traffic will exacerbate the already unacceptable operating conditions at the intersection. This is considered a significant impact per San Joaquin County LOS thresholds.

Mitigation Measure:

- The SB exclusive right-turn lane would need to be converted to a combined through/right-turn lane. (The fair share calculation of this project impact using Caltrans methodology is 6%).

Mitigation Summary

- San Joaquin County LOS Threshold – LOS D
- LOS Without Project – LOS E
- LOS With Project – LOS E
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

Roadway Segments

The following is a description of roadway segments that would operate at unacceptable LOS under the Cumulative Plus Alternative D condition. When significant impacts are identified, mitigation measures to reduce the impacts to a less-than-significant level are also described. The resulting improved roadway segment LOS is presented in **Table 44**. The mitigation measures for the roadway segments are shown in Figure 49.

25. SR 49 between Main Casino Entrance and Main Street - Significant Impact

The roadway segment of SR 49 between Casino Entrance and Main Street would operate at unacceptable LOS F during the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.12 and 0.16 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Widen SR 49 between the Main Casino Entrance and Main Street from two lanes to two lanes with a climbing lane. (The fair share calculation of this project impact using Caltrans methodology is 55%).

Mitigation Summary

- Amador County's LOS Threshold – LOS D
- LOS without Project – LOS E
- LOS with Project – LOS E
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

26. SR 16 between Bradshaw Road and Excelsior Road - Significant Impact

The roadway segment of SR 16 between Bradshaw Road and Excelsior Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.08 and 0.11 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 24%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS E
- LOS without Project – LOS F
- LOS with Project – LOS F

- Mitigated LOS – LOS E
- **Significance after Mitigation – Less-Than-Significant**

27. SR 16 between Sunrise Boulevard and Grant Line Road - Significant Impact

The roadway segment of SR 16 between Sunrise Boulevard and Grant Line Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.12 and 0.16 from Cumulative (No Project) condition to Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 43%).

Mitigation Summary

- City of Rancho Cordova's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

28. SR 16 between Grant Line Road and Dillard Road - Significant Impact

The roadway segment of SR 16 between Grant Line Road and Dillard Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.13 and 0.18 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 73%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

29. SR 16 between Dillard Road and Stonehouse Road - Significant Impact

The roadway segment of SR 16 between Dillard Road and Stonehouse Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.19 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Sacramento County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 53%).

Mitigation Summary

- Sacramento County's LOS Threshold – LOS D
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS D
- **Significance after Mitigation – Less-Than-Significant**

30. SR 16 between Latrobe Road (Amador) and SR 124 - Significant Impact

The roadway segment of SR 16 between Latrobe Road (Amador) and SR 124 would operate at unacceptable LOS E and LOS D during the Friday and Saturday, respectively. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.18 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratio is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 65%).

- In addition to 2013 Phase 1 & 2 mitigation, widen SR 16 between Latrobe Road (Amador) and SR 124 from 3 to 4 lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS D
- LOS with Project – LOS E
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

31. SR 16 between SR 124 and SR 49 - Significant Impact

The roadway segment of SR 16 between SR 124 and SR 49 would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.25 and 0.34 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 61%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS E
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

32. SR 104 between SR 124 and Main Street – Significant Impact

The roadway segment of SR 104 between SR 124 and Main Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.19 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador

County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 65%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

33. SR 104 between Main Street and Church Street – Significant Impact

The roadway segment of SR 104 between Main Street and Church Street would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.14 and 0.18 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for the Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 67%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

34. SR 124 between Main Street and SR 88 – Significant Impact

The roadway segment of SR 124 between Main Street and SR 88 would operate at unacceptable LOS D during the both Friday and Saturday. The addition of project generated traffic would contribute to the poor operation and degrade operating conditions at this roadway segment from LOS C under the Cumulative (No Project) condition to

LOS D under Cumulative Plus Alternative D condition. This degradation in LOS from C to D is considered a project-related effect and a significant impact.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 85%).

Mitigation Summary

- City of Ione's LOS Threshold – LOS C
- LOS without Project – LOS C
- LOS with Project – LOS D
- **Significance after Mitigation – Less-Than-Significant**

35. SR 88 between SR 124 and Liberty Road - Significant Impact

The roadway segment of SR 88 between SR 124 and Liberty Road would operate at unacceptable LOS F during both the Friday and Saturday. The addition of project generated traffic would result in the increase of the v/c ratio by 0.11 and 0.15 from the Cumulative (No Project) condition to the Cumulative Plus Alternative D condition for Friday and Saturday, respectively. According to the approach recommended in Amador County's *Traffic Impact Study Guidelines*, since the increase in the v/c ratios is over 0.05, this impact is considered significant.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 24%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between SR 124 and Liberty Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- Amador County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- **Significance after Mitigation – Less-Than-Significant**

There are currently no LOS criteria for six lane roadways in Amador County. However reviewing the volume thresholds for arterials with four lanes in Amador County and the

additional amount of vehicles added by the project to this roadway segment, a six-lane roadway would reasonably mitigate this impact to a less-than-significant level.

36. SR 88 between Liberty Road and SR 12 East - Significant Impact

The roadway segment of SR 88 between Liberty Road and SR 12 East would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 22%).
- However to bring this roadway segment back to an acceptable LOS, SR 88 between Liberty Road and SR 12 East would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS A
- **Significance after Mitigation – Less-Than-Significant**

37. SR 88 between SR 12 East and Tully Road –Significant Impact

The roadway segment of SR 88 between SR 12 East and Tully Road would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 East and Tully Road would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Impact Summary

- San Joaquin County's LOS Threshold – LOS C

- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**

38. SR 88 between Tully Road and SR 12 West (NB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (NB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

39. SR 88 between Tully Road and SR 12 West (SB couplet) - Significant Impact

The roadway segment of SR 88 between Tully Road and SR 12 West (SB couplet) would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- Same mitigation measures as identified in 2013 Phase 1 & 2. (The fair share calculation of this project impact using Caltrans methodology is 12%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F

- LOS with Project – LOS F
- Mitigated LOS – LOS C
- **Significance after Mitigation – Less-Than-Significant**

40. SR 88 between SR 12 West and Kettleman Lane - Significant Impact

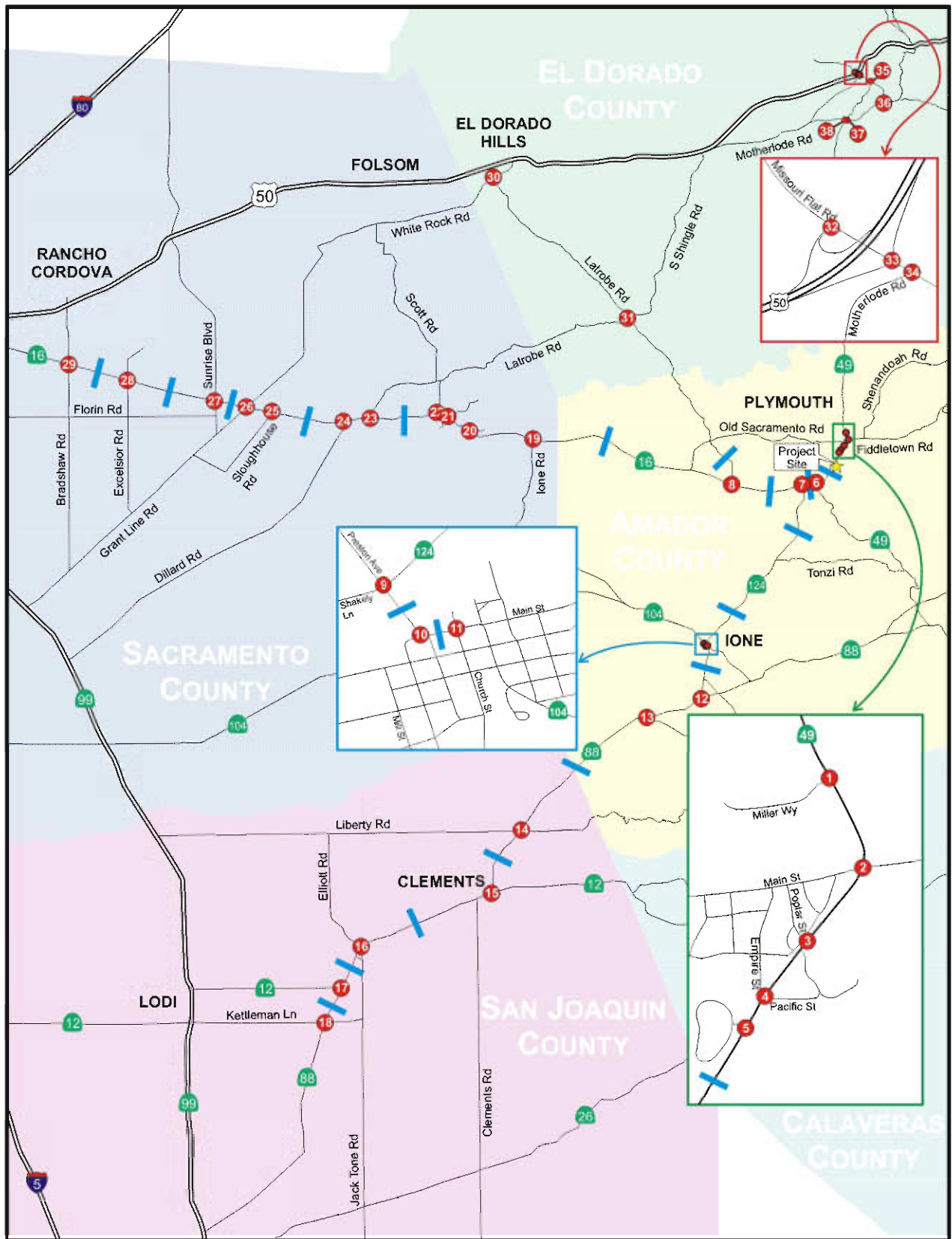
The roadway segment of SR 88 between SR 12 West and Kettleman Lane would operate at an unacceptable LOS F with or without the proposed project. The addition of project generated traffic will exacerbate the already unacceptable operations at this roadway segment and therefore it is considered to be a significant impact as per San Joaquin County significance criteria.

Mitigation Measure:

- SR 88 between SR 12 West and Kettleman Lane would need to be widened from 4-lanes to 6-lanes. (The fair share calculation of this project impact using Caltrans methodology is 100%).

Mitigation Summary

- San Joaquin County's LOS Threshold – LOS C
- LOS without Project – LOS F
- LOS with Project – LOS F
- Mitigated LOS – LOS B
- **Significance after Mitigation – Less-Than-Significant**



LEGEND

- 18 Study Intersection
- Study Segment

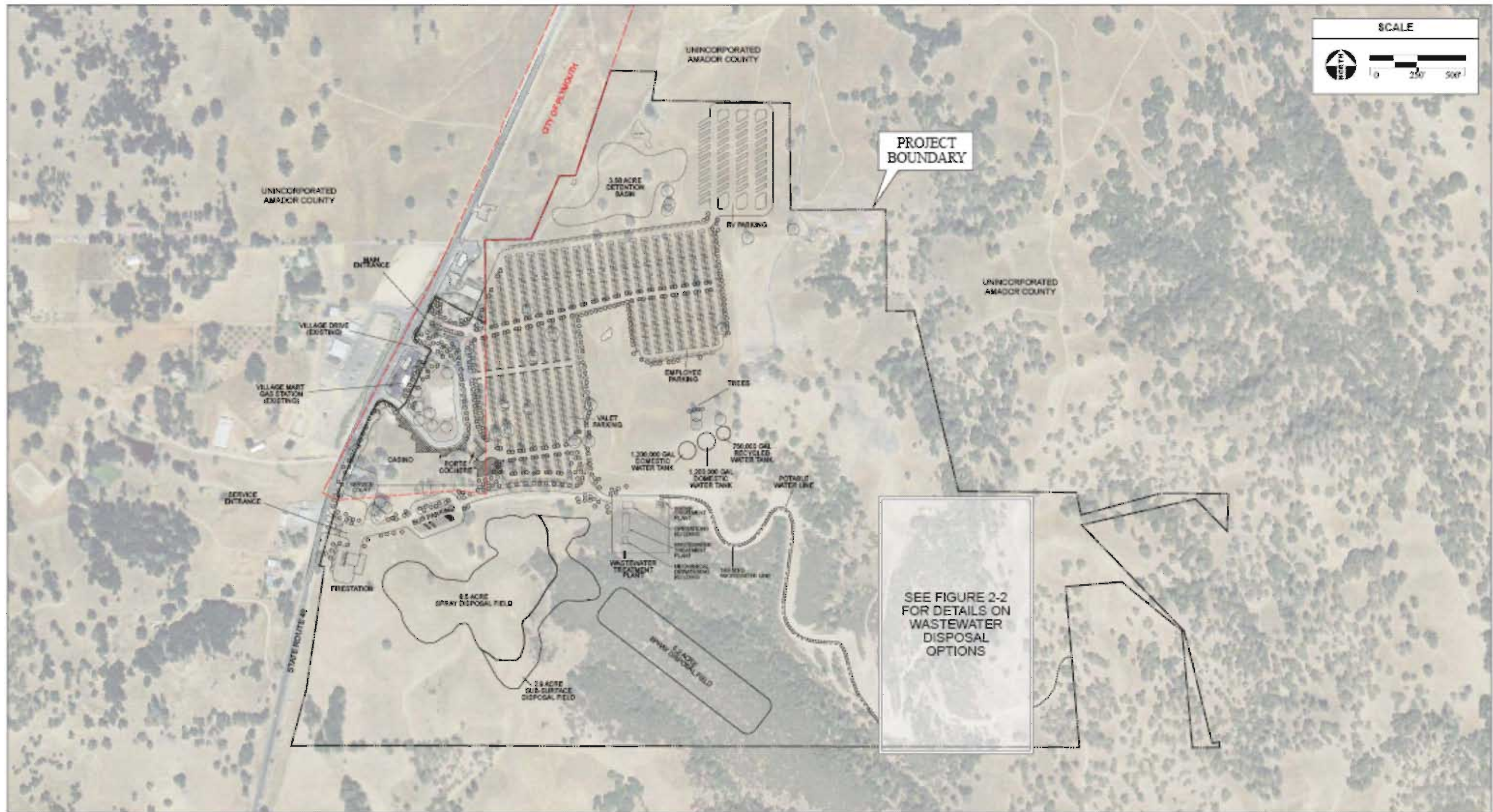


Not to Scale

Ione Casino
Traffic Impact Analysis

Figure 1
Vicinity Map



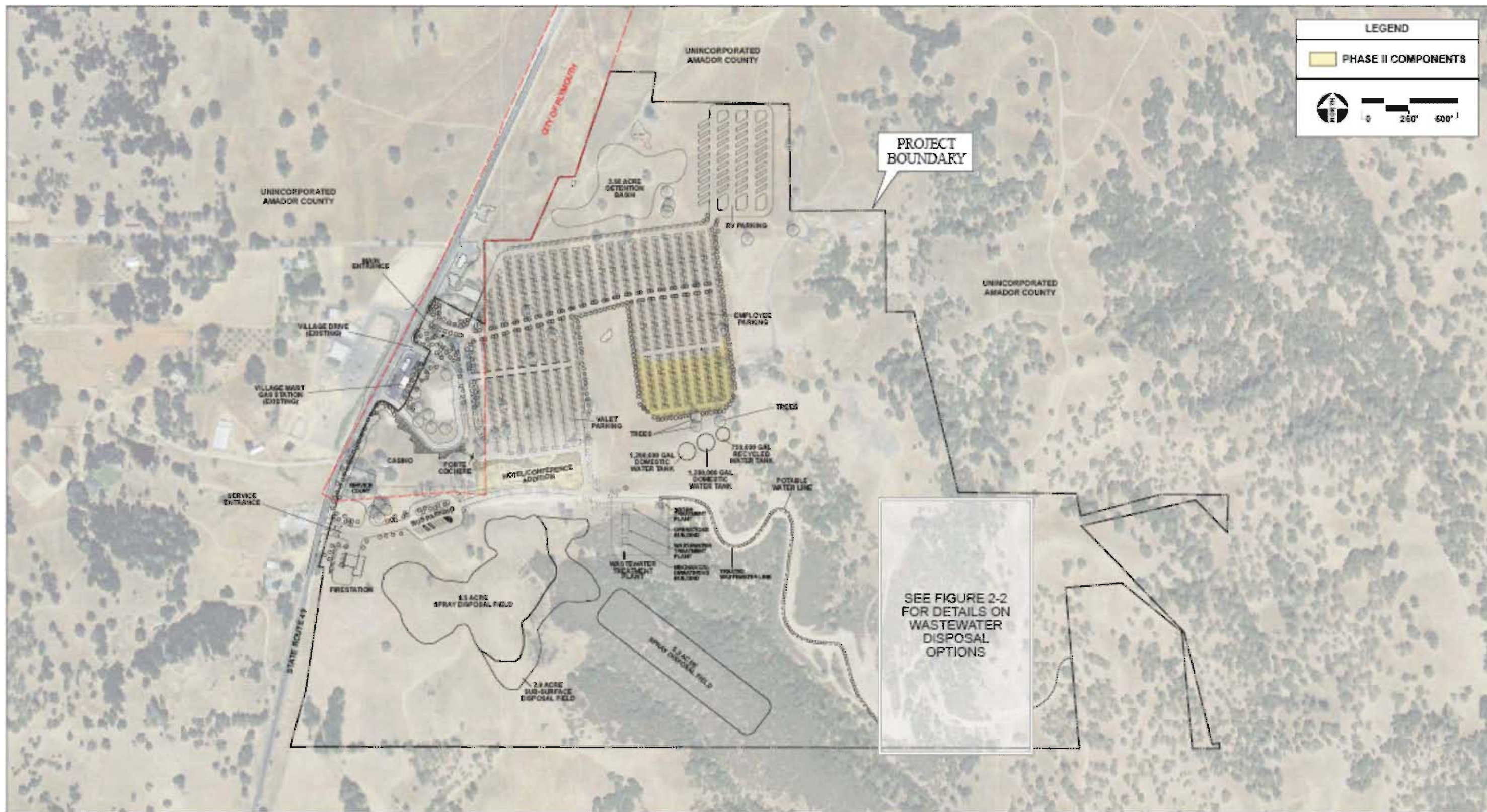


Source: AES Environmental



*Lone Casino
Traffic Impact Analysis*
Figure 2
Alternative A Phase 1
Site Plan

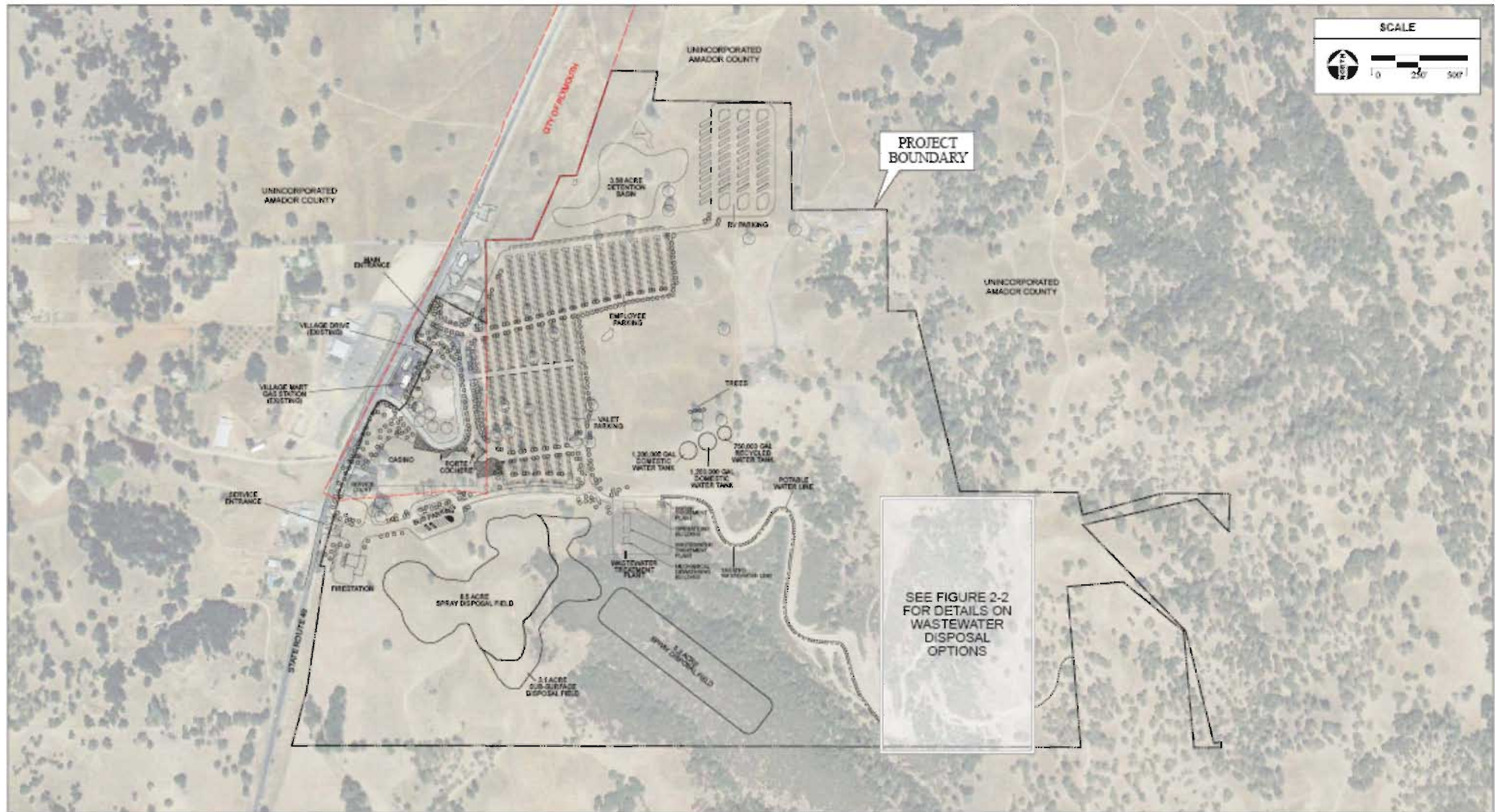




Source: AES Environmental



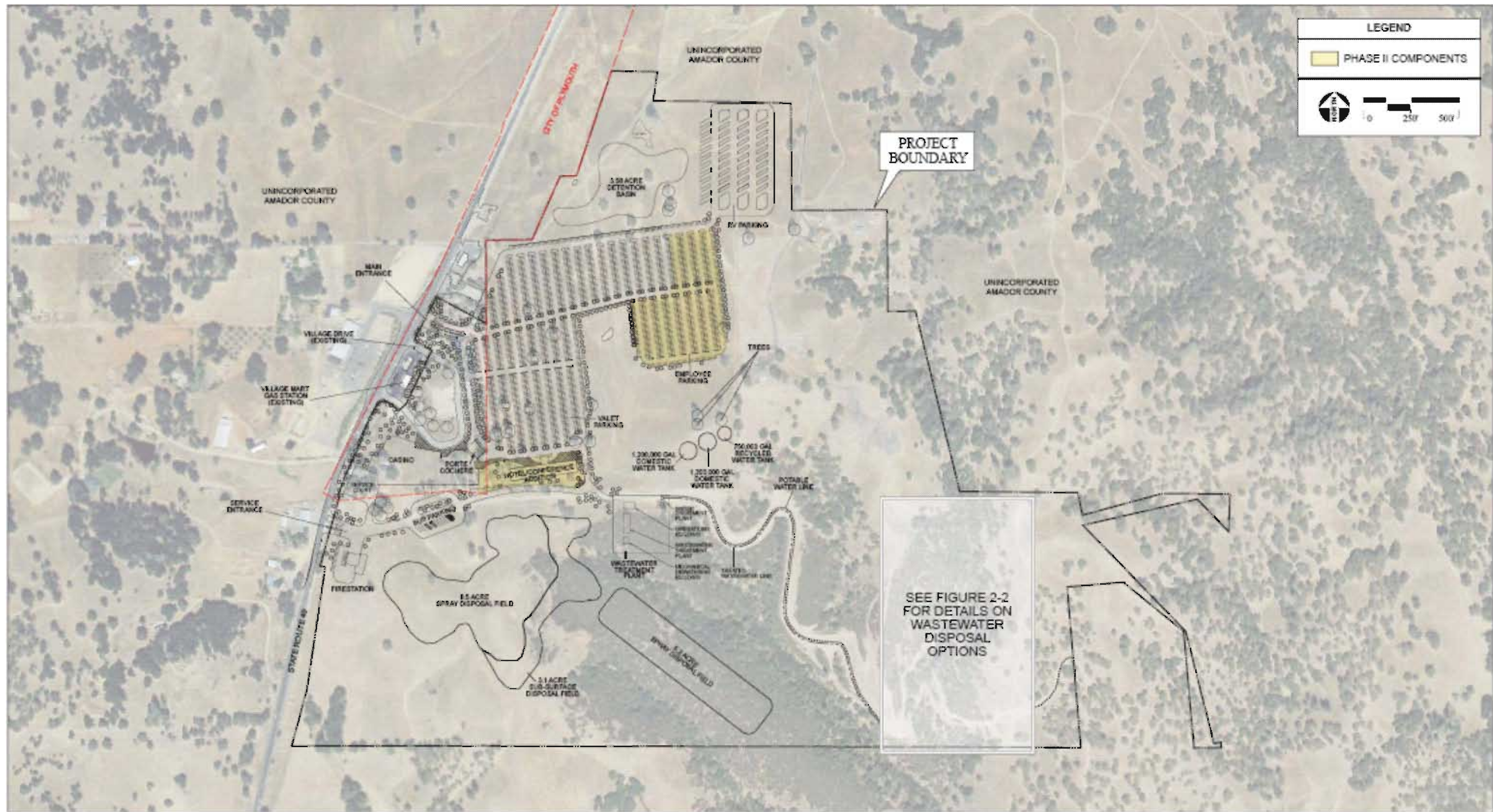
Lone Casino
 Traffic Impact Analysis
 Figure 3
 Alternative A Phase 2
 Site Plan



Source: AES Environmental



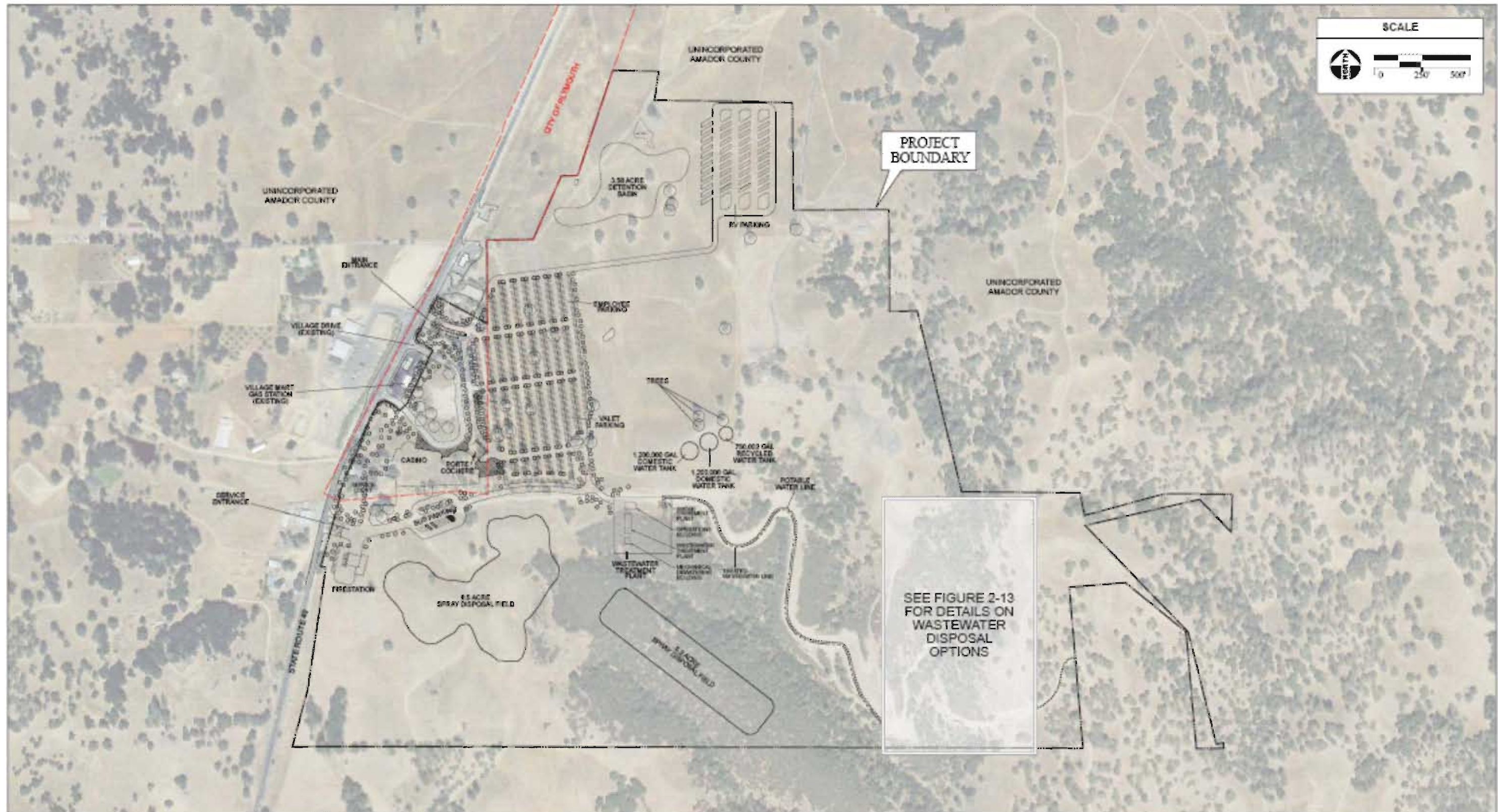
Lone Casino
 Traffic Impact Analysis
 Figure 4
 Alternative B Phase 1
 Site Plan



Source: AES Environmental



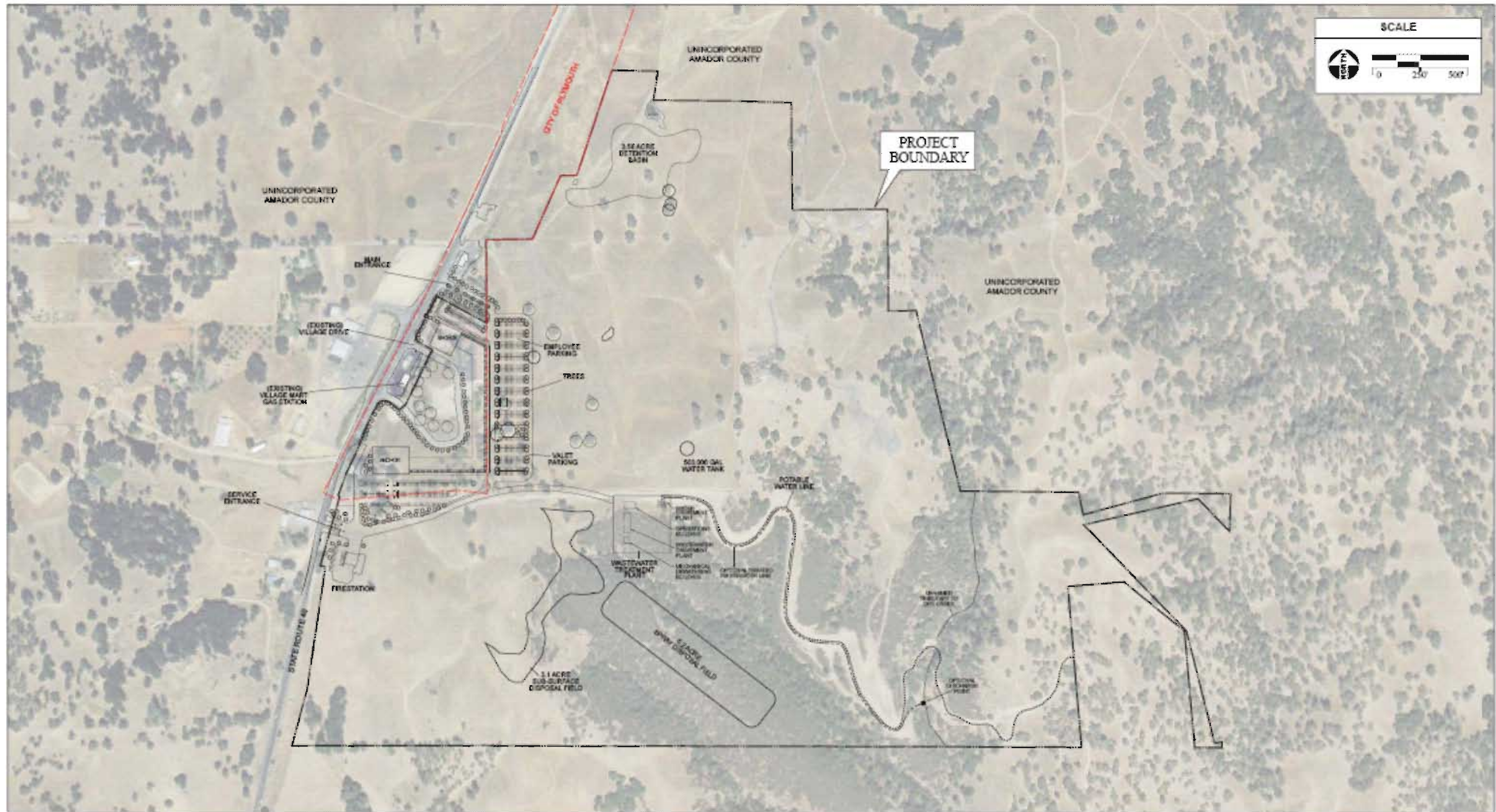
Lone Casino
 Traffic Impact Analysis
 Figure 5
 Alternative B Phase 2
 Site Plan



Source: AES Environmental



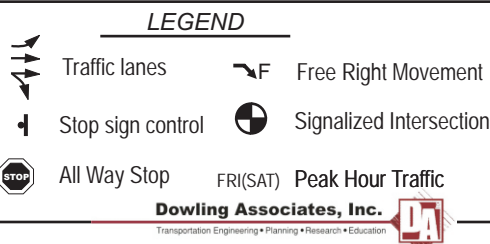
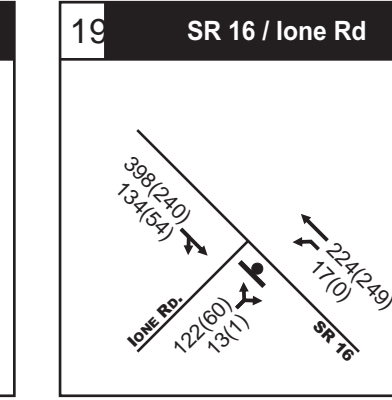
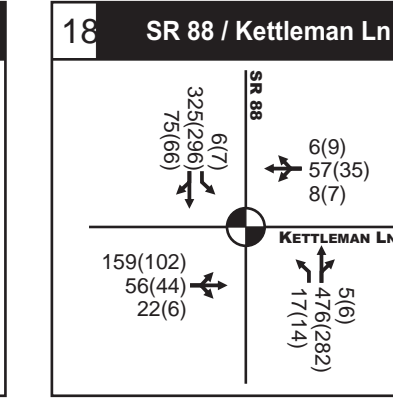
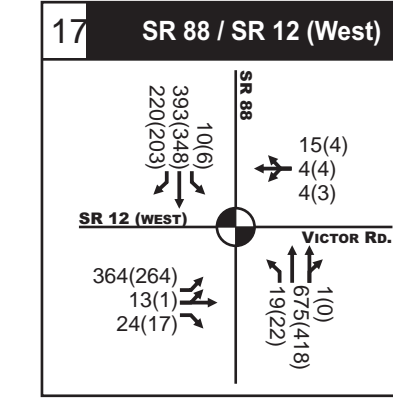
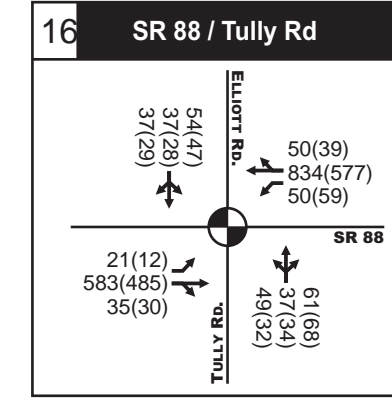
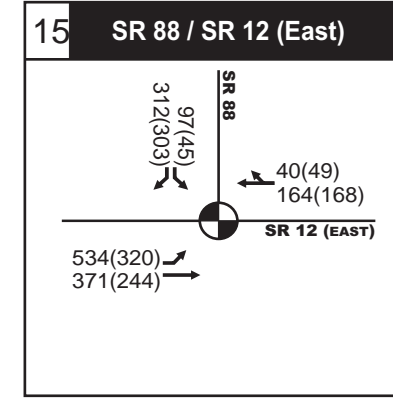
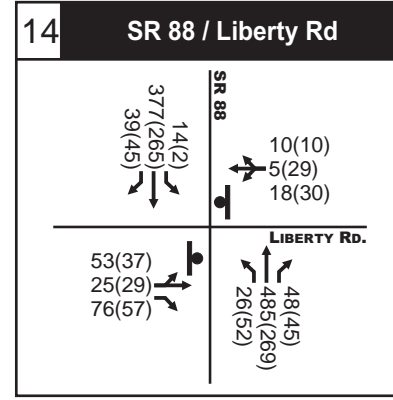
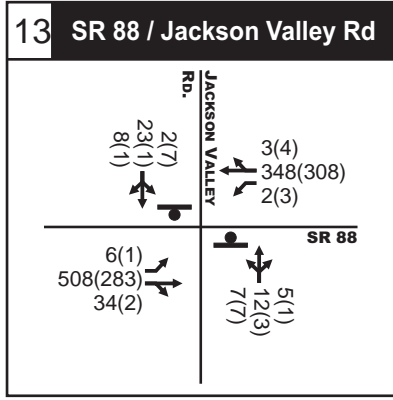
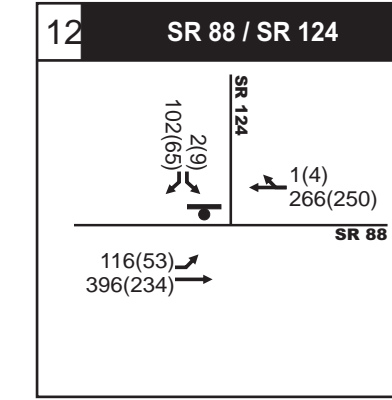
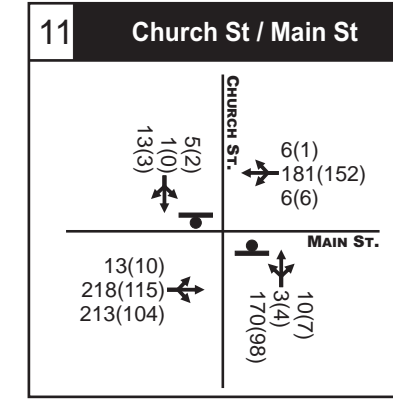
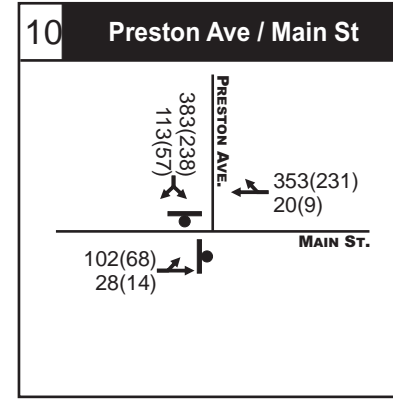
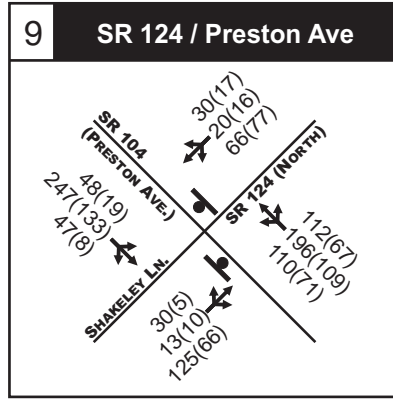
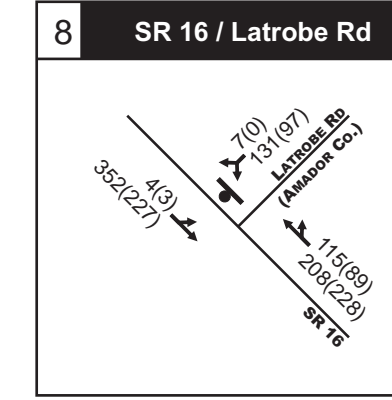
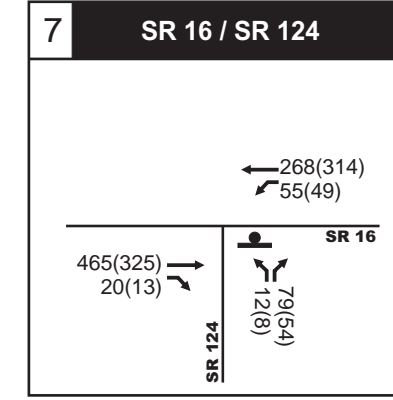
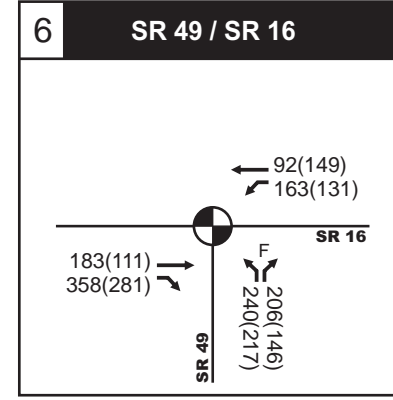
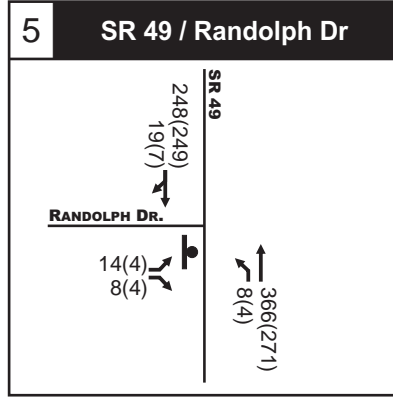
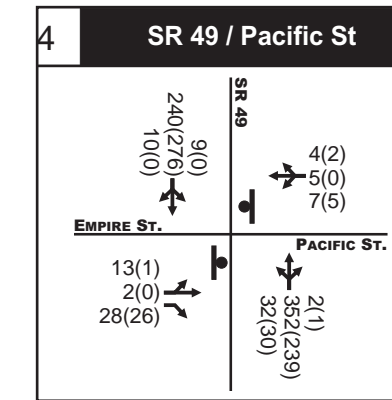
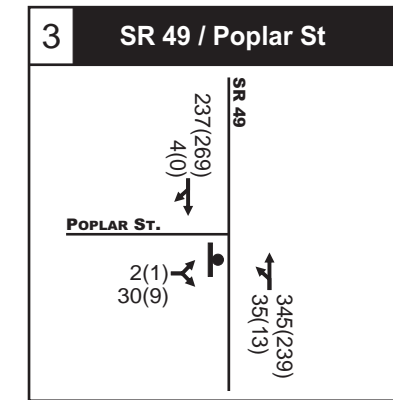
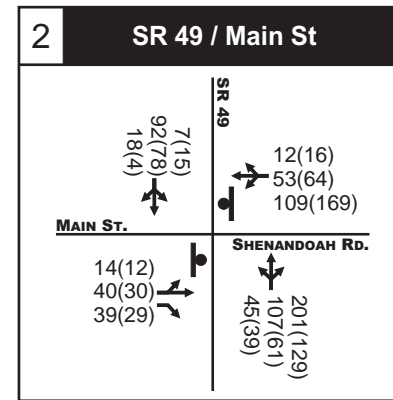
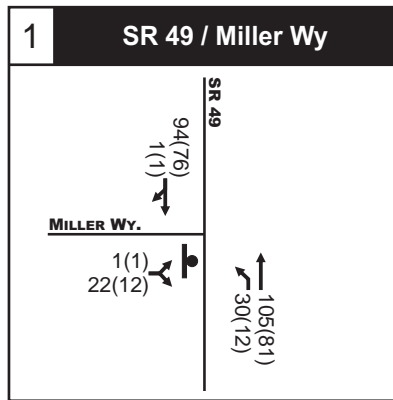
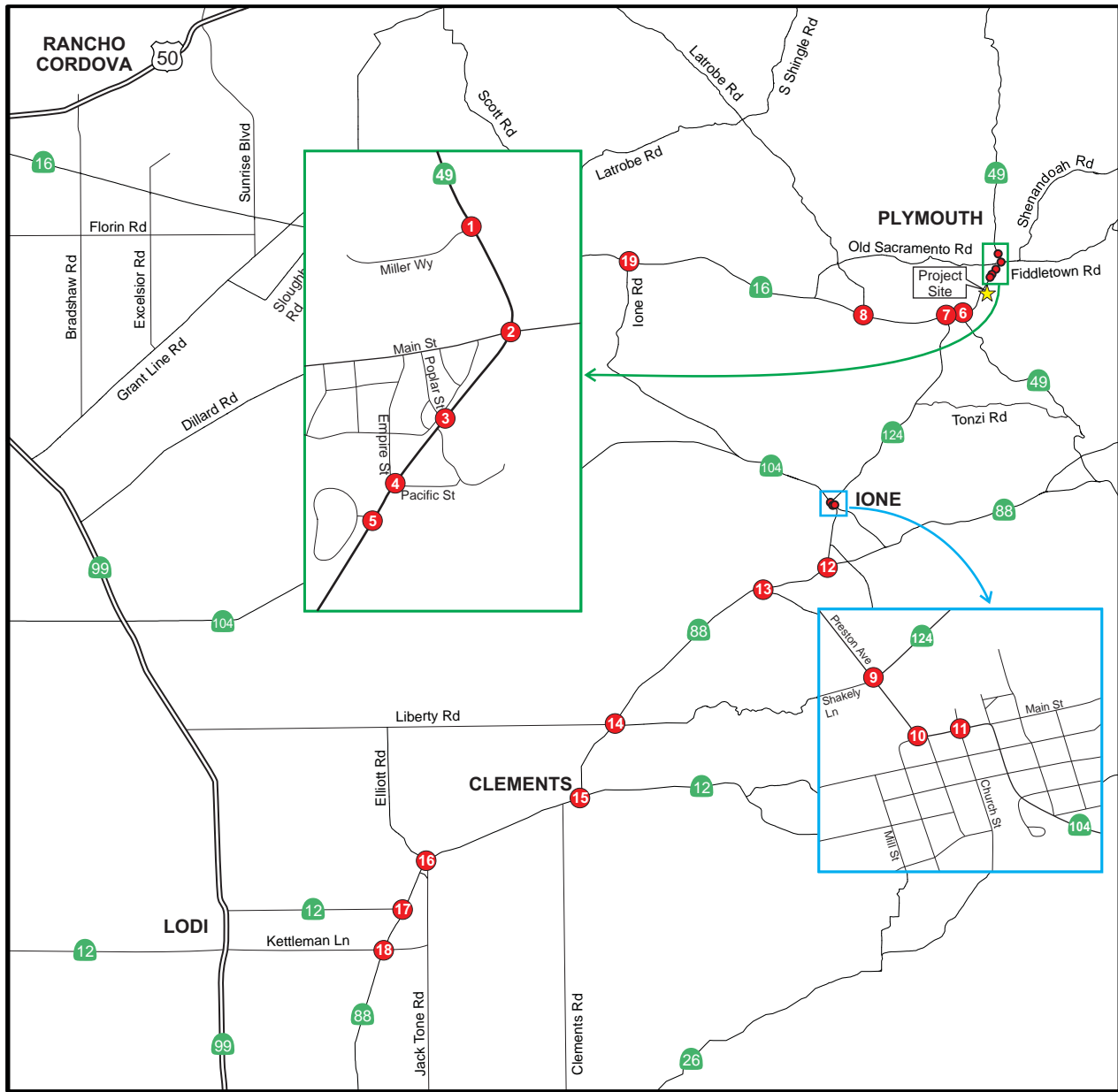
Lone Casino
 Traffic Impact Analysis
 Figure 6
 Alternative C
 Site Plan



Source: AES Environmental

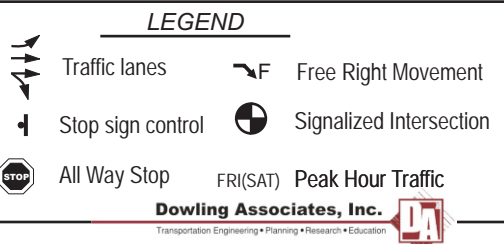
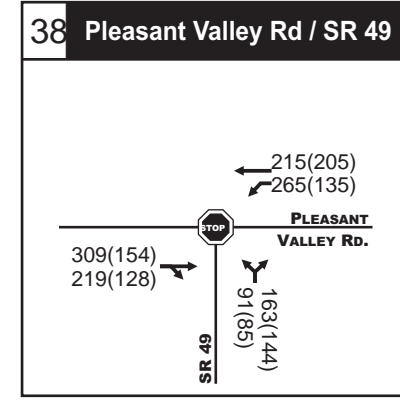
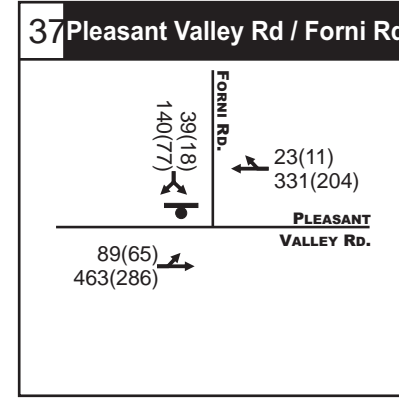
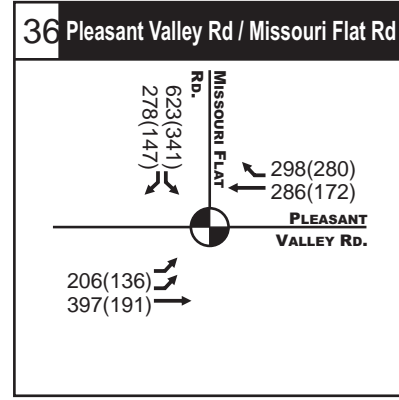
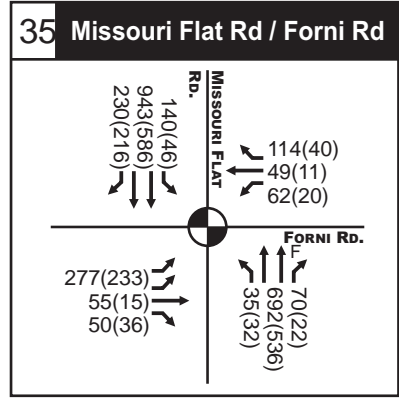
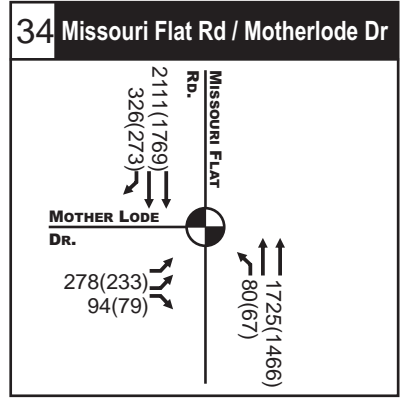
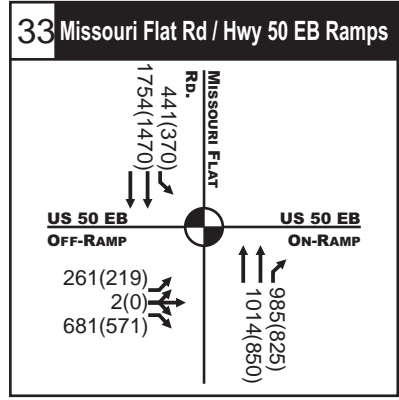
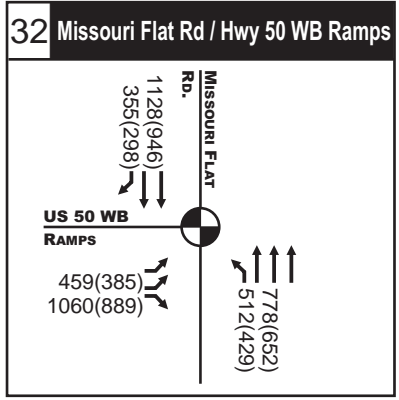
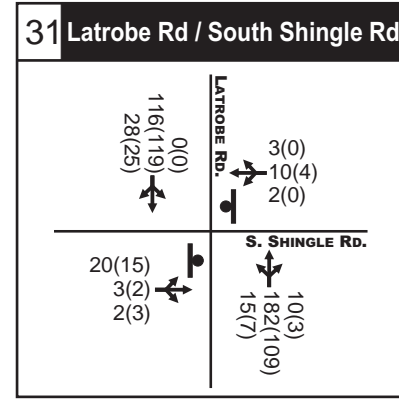
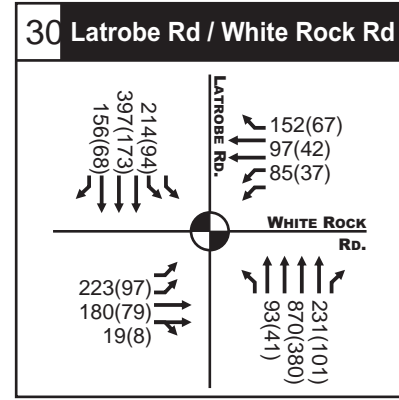
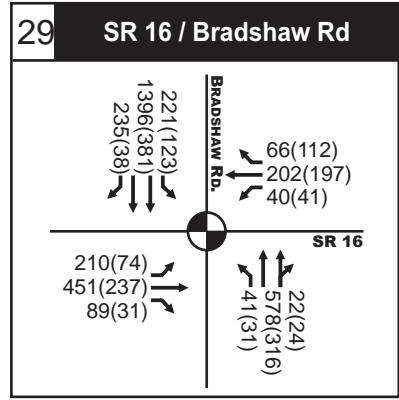
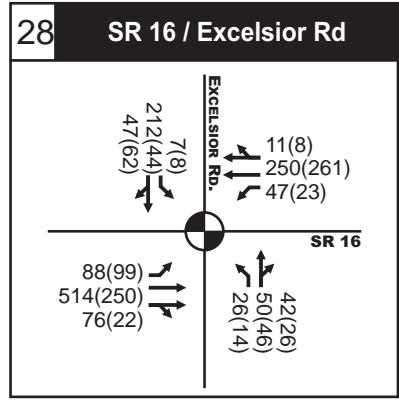
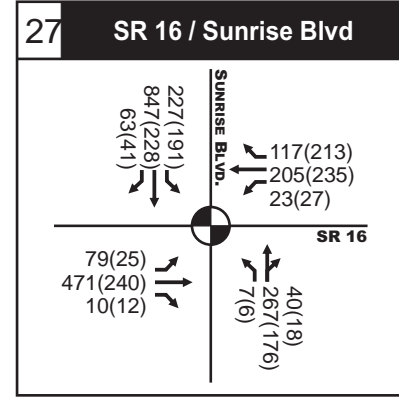
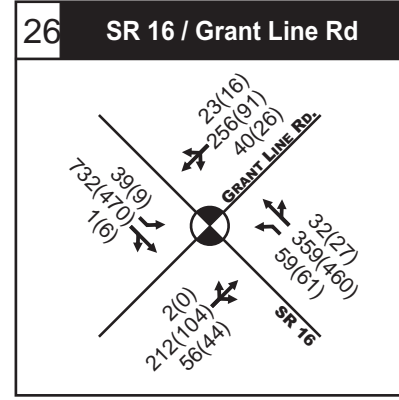
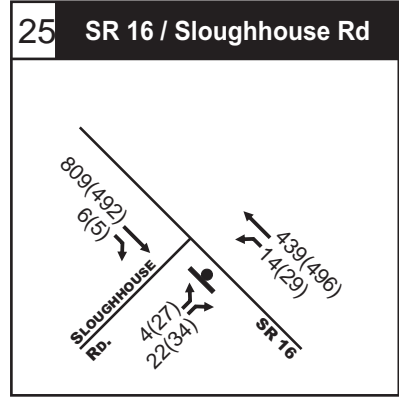
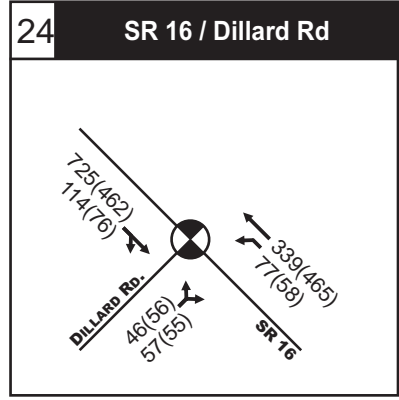
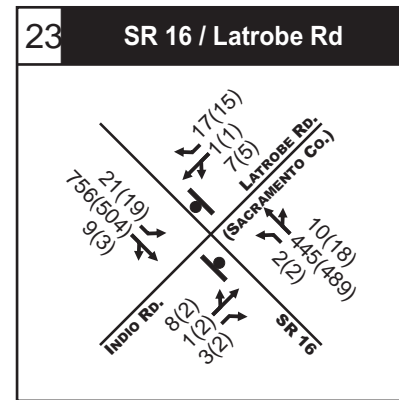
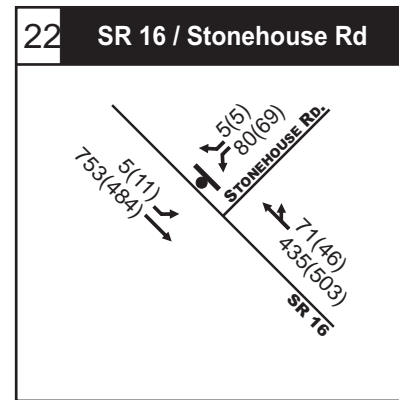
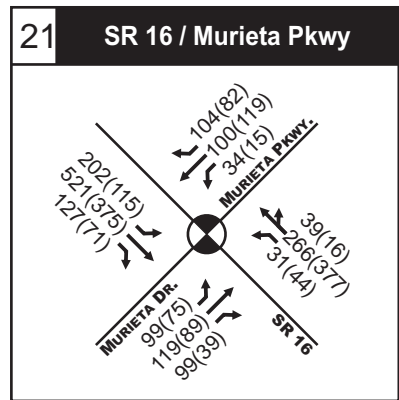
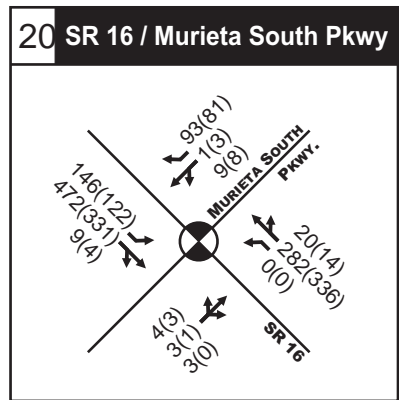
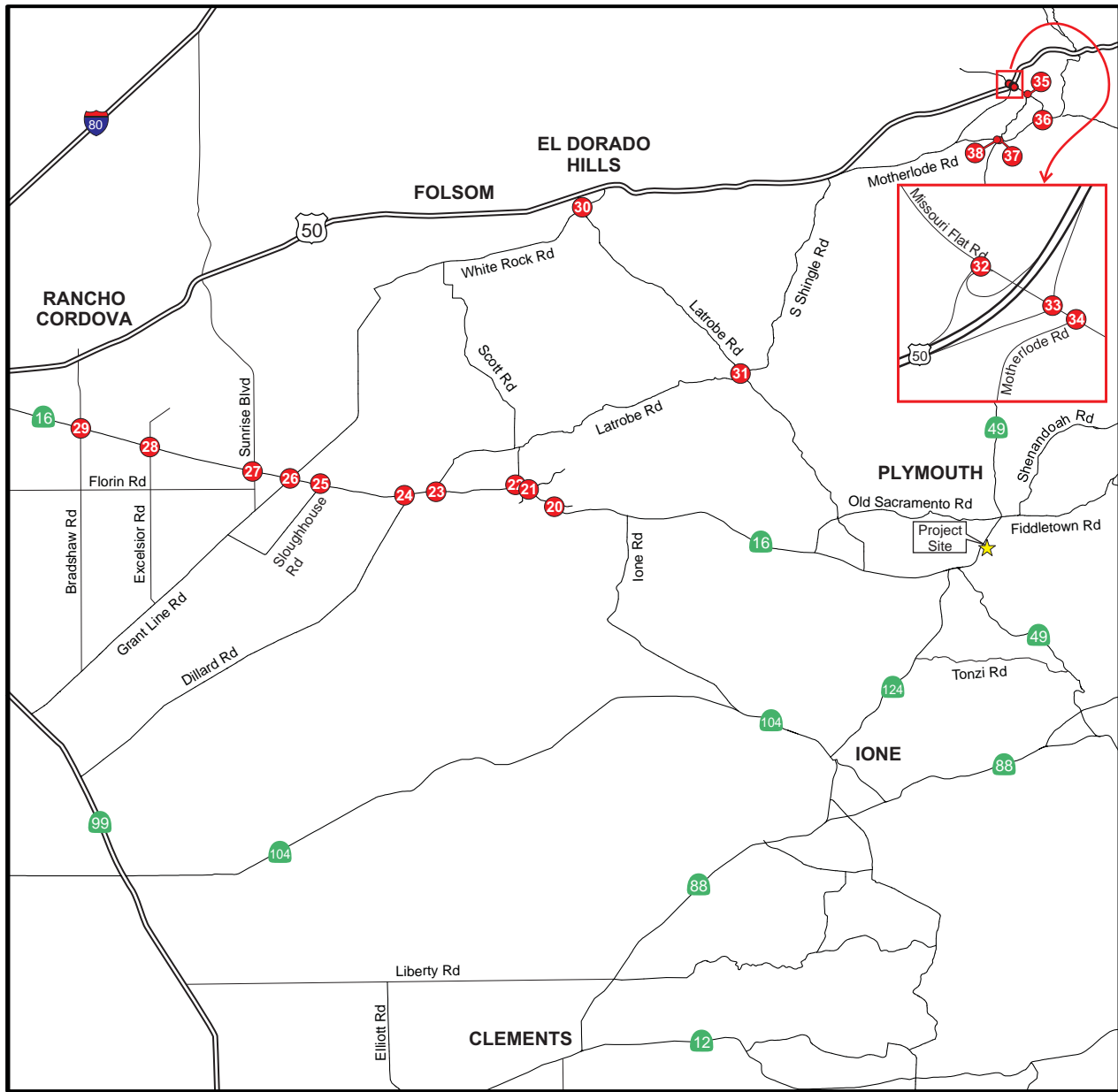


Lone Casino
 Traffic Impact Analysis
 Figure 7
 Alternative D
 Site Plan

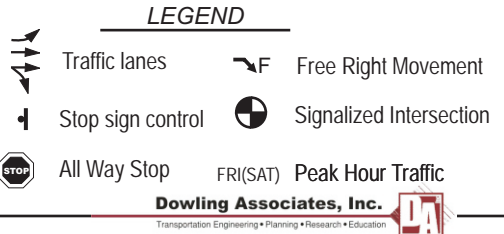
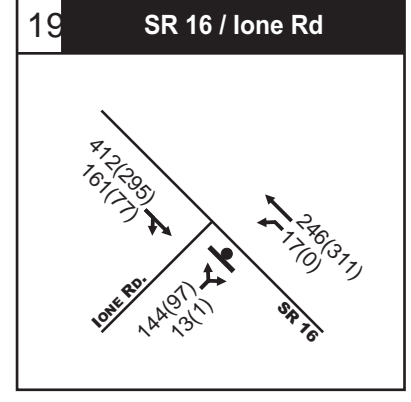
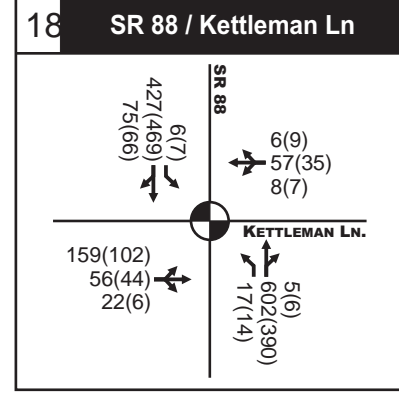
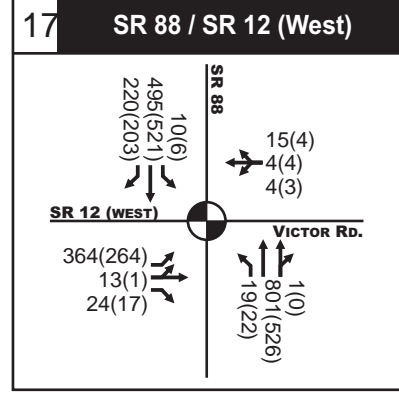
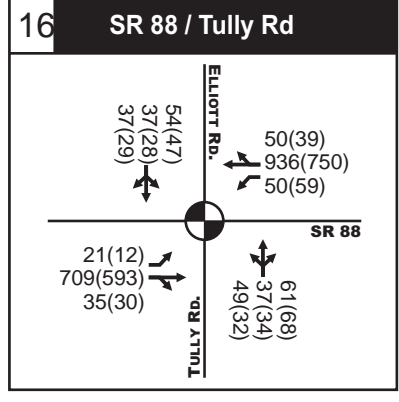
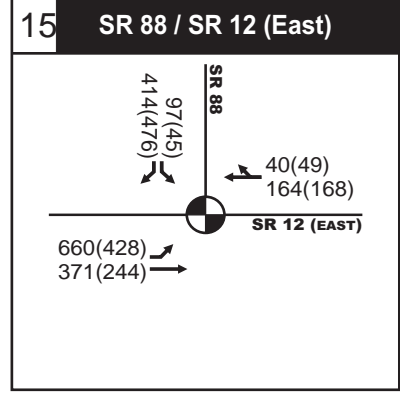
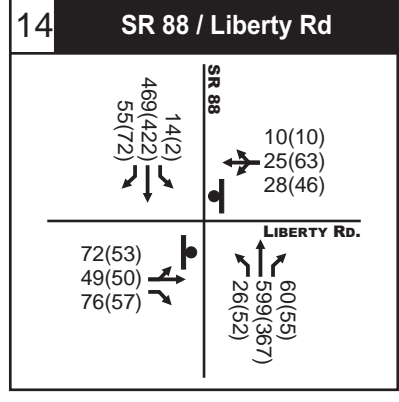
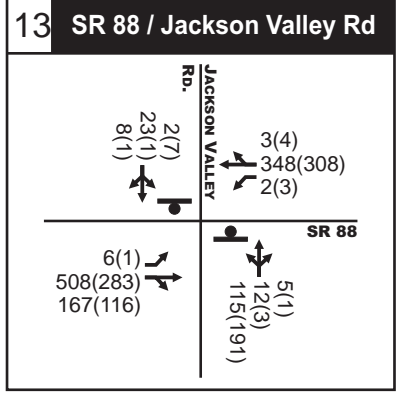
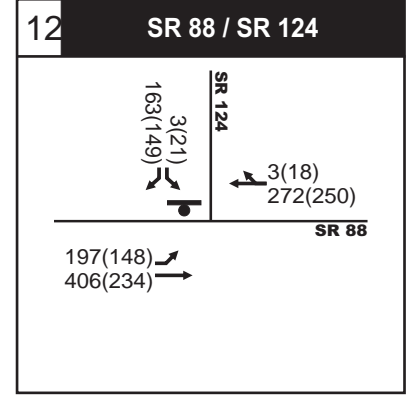
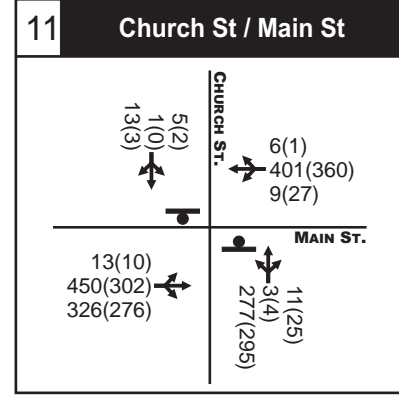
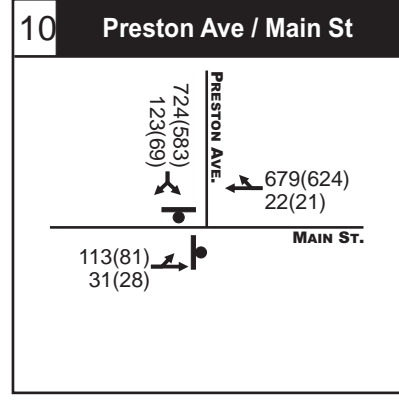
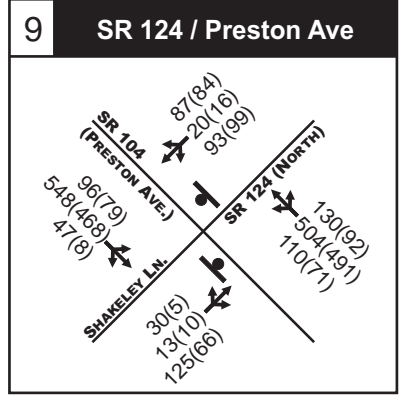
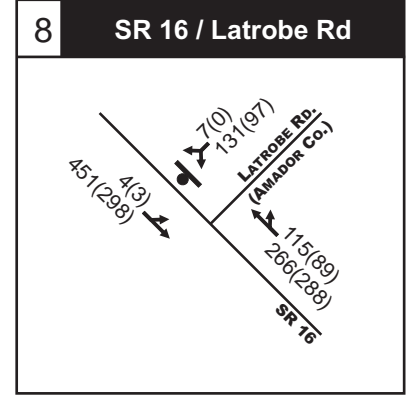
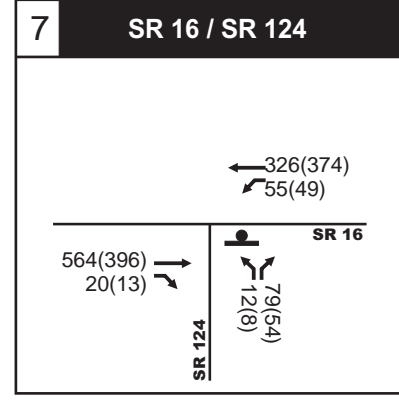
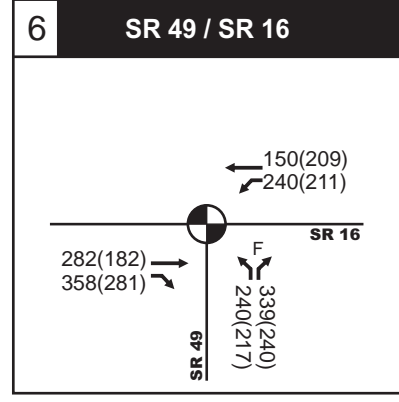
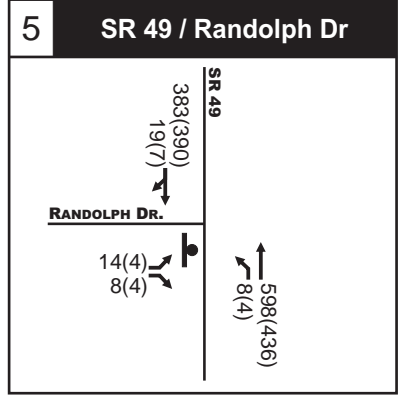
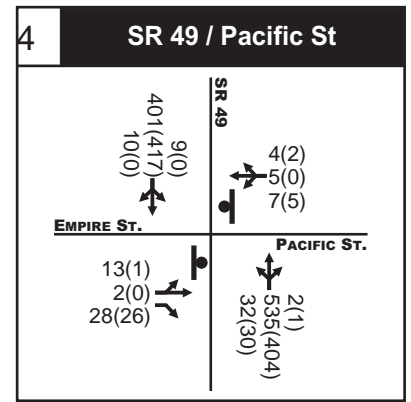
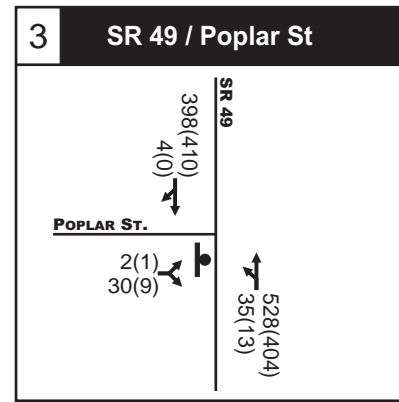
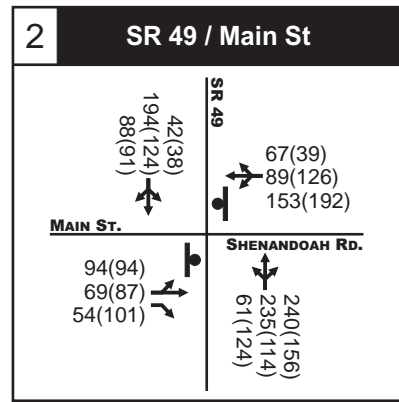
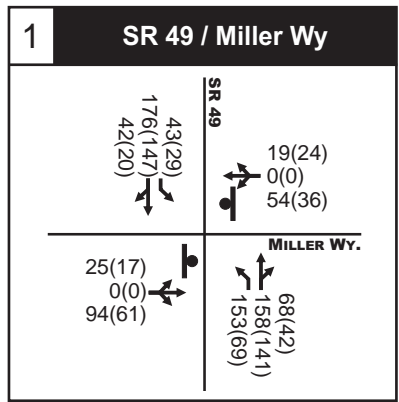
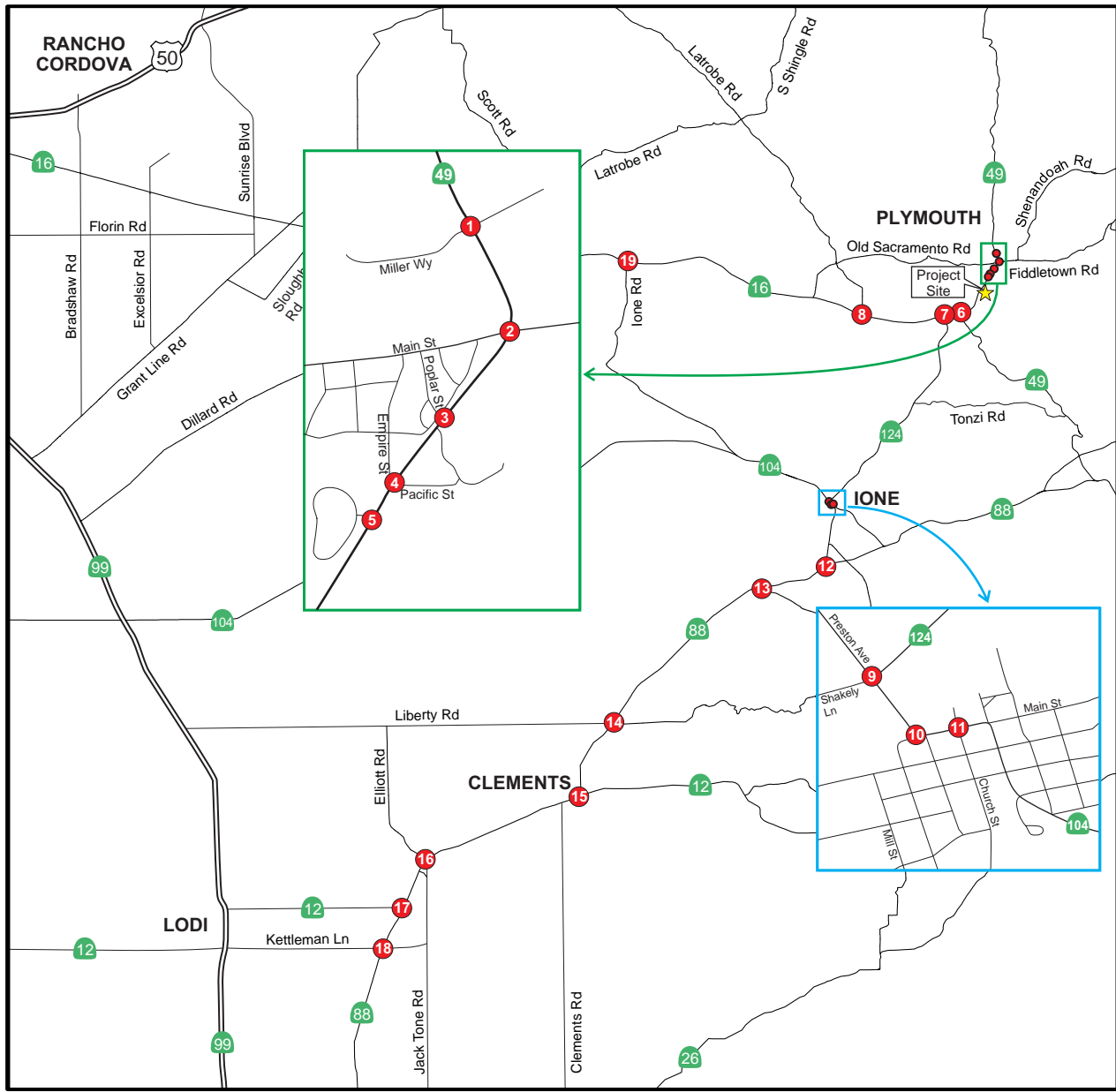


Ione Casino
Traffic Impact Analysis

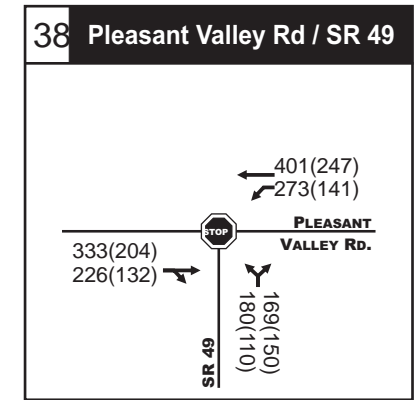
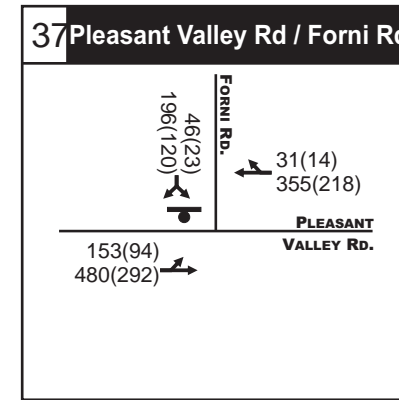
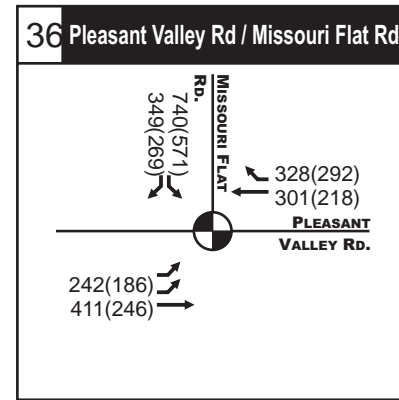
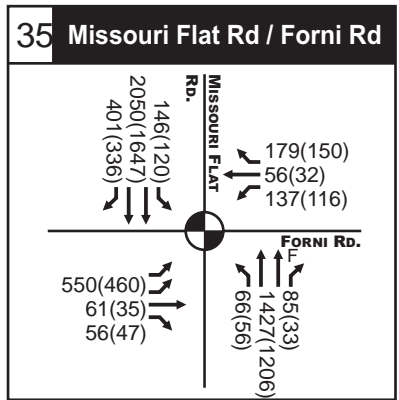
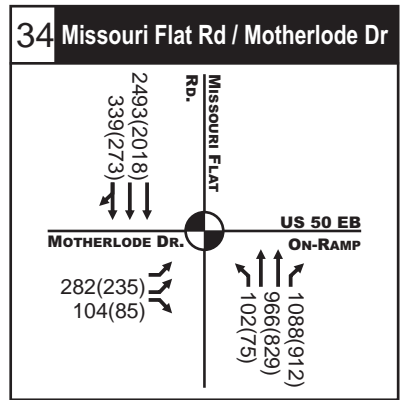
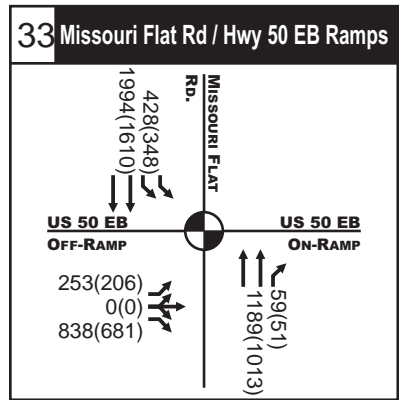
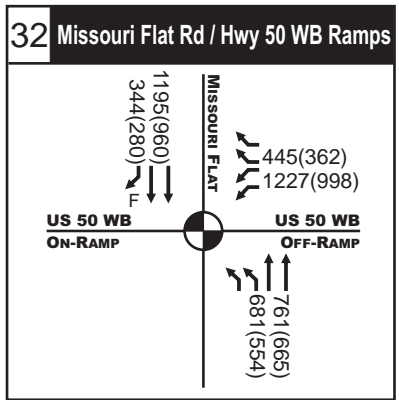
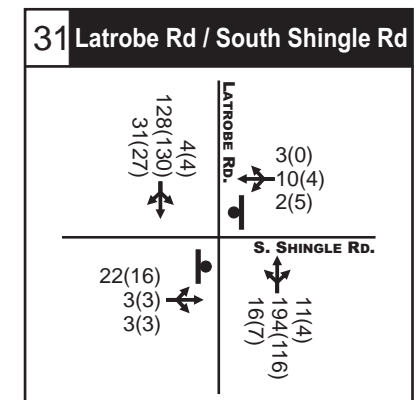
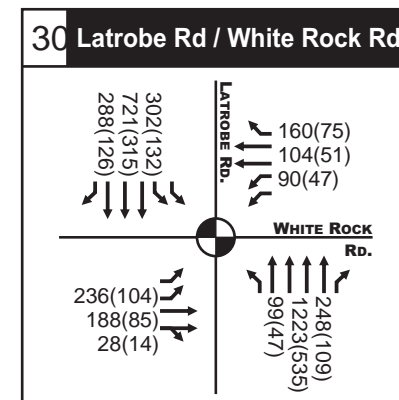
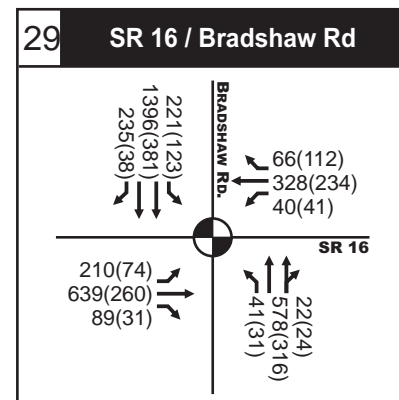
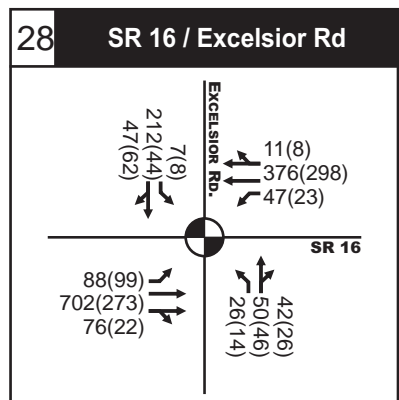
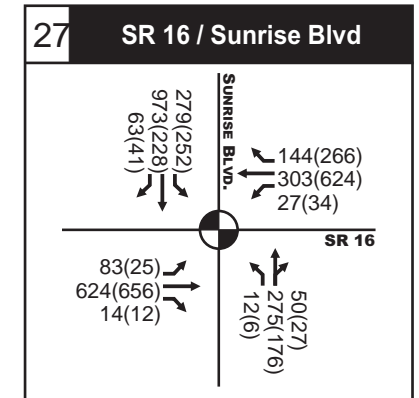
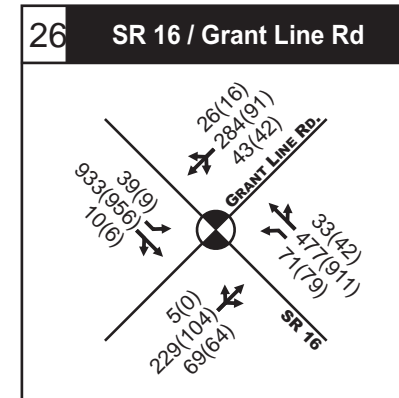
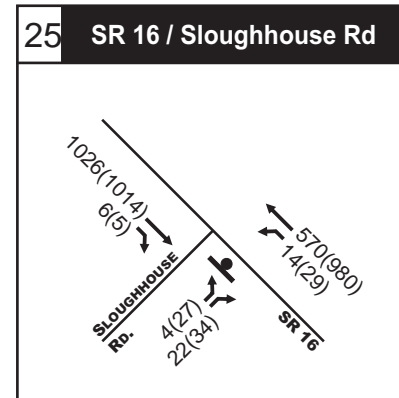
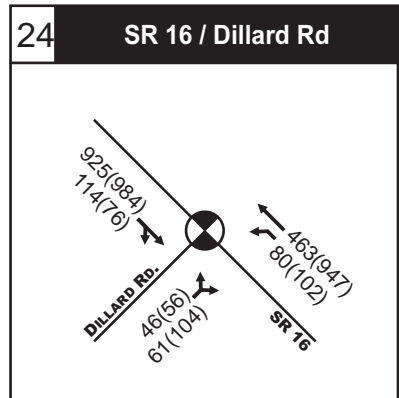
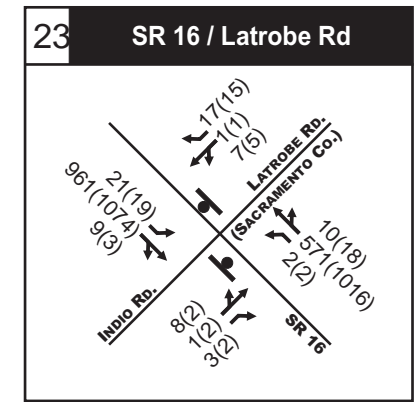
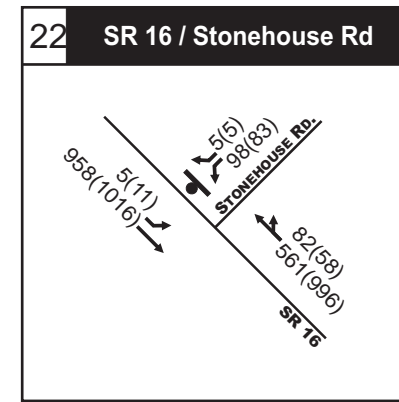
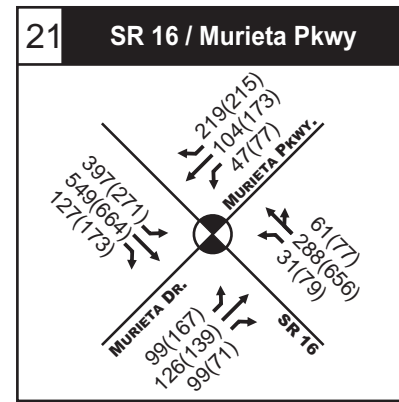
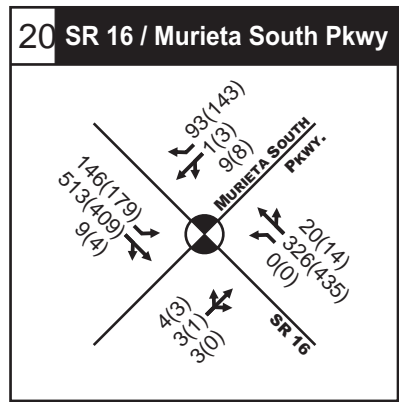
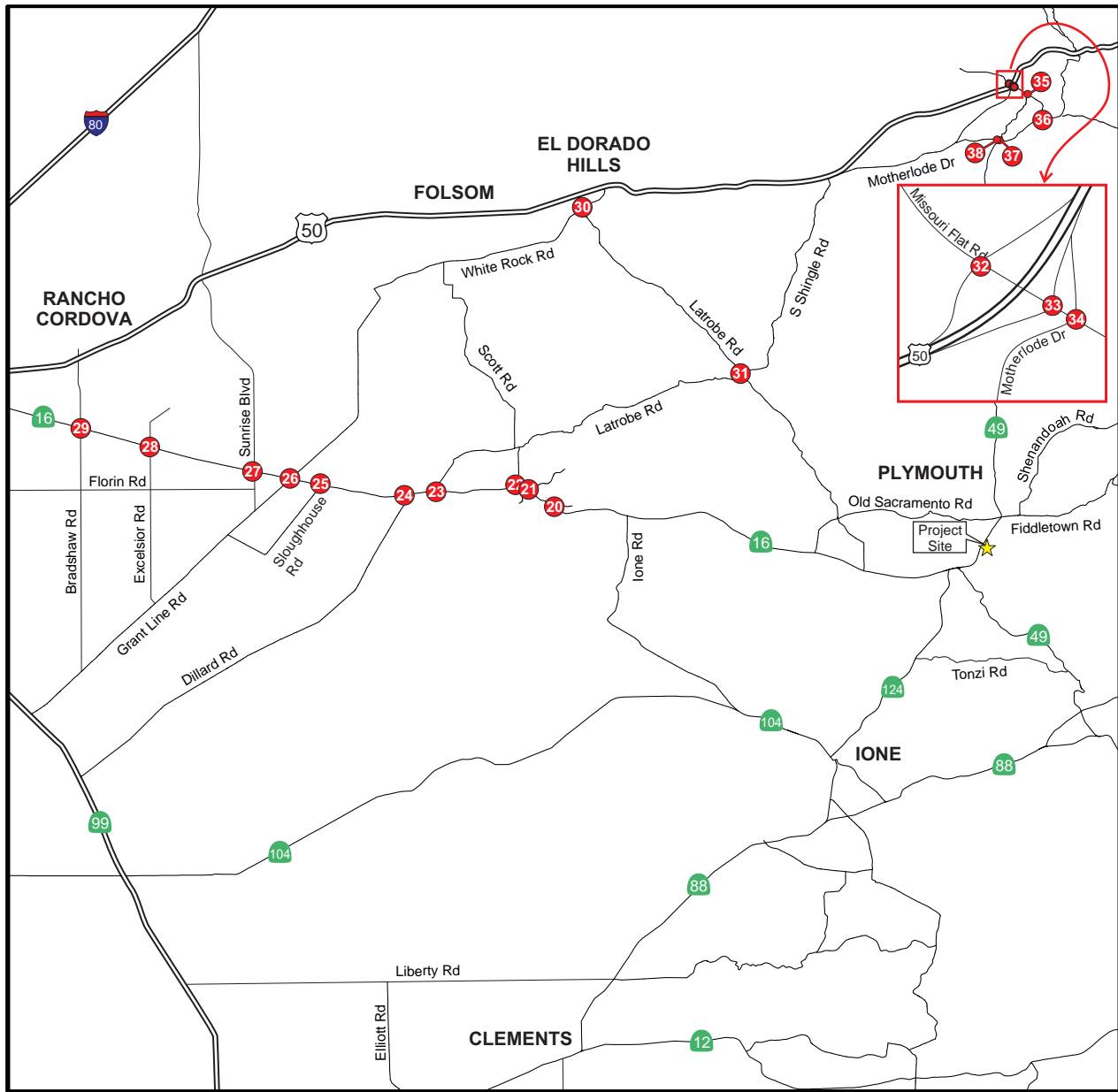
Figure 8
Existing No Project Lane Geometry
& PM Peak Hour Volume



Ione Casino
Traffic Impact Analysis
Figure 8a
Existing No Project Lane Geometry
& PM Peak Hour Volumes (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 9
2010 EPAP No Project Lane Geometry
& PM Peak Hour Volumes



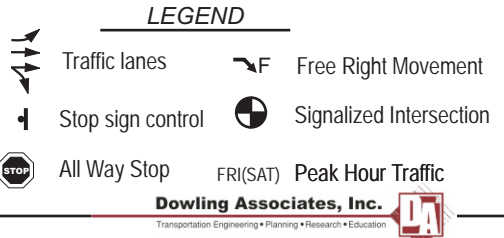
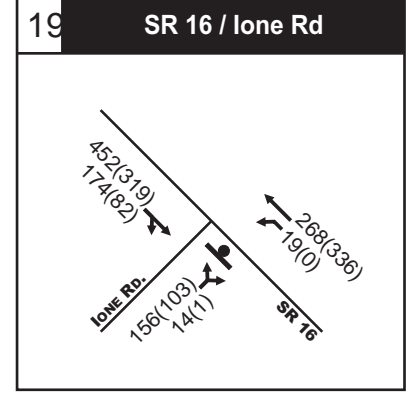
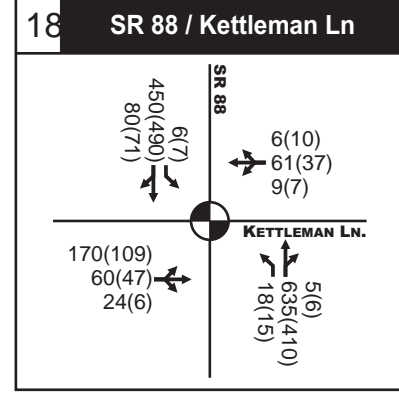
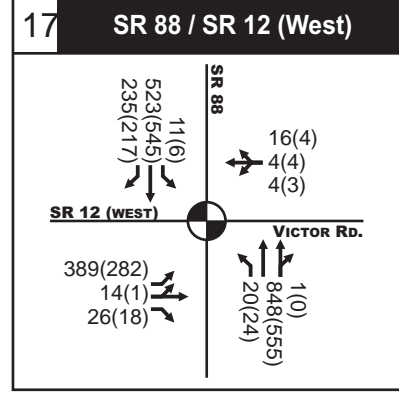
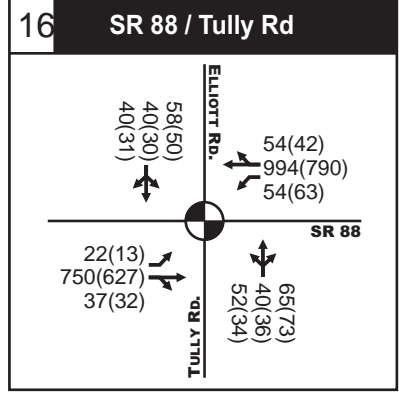
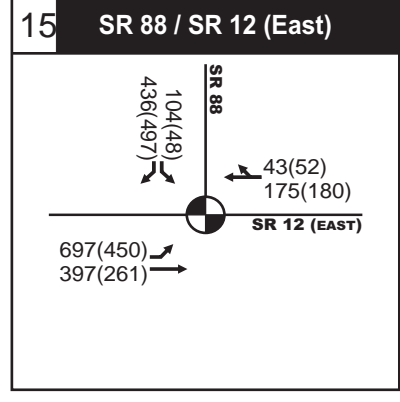
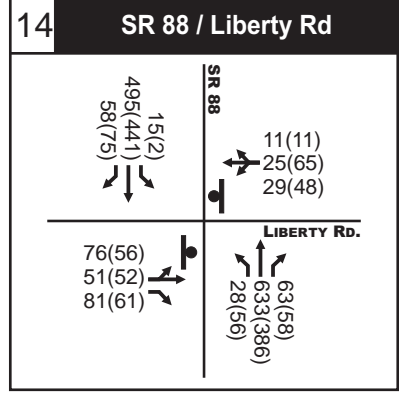
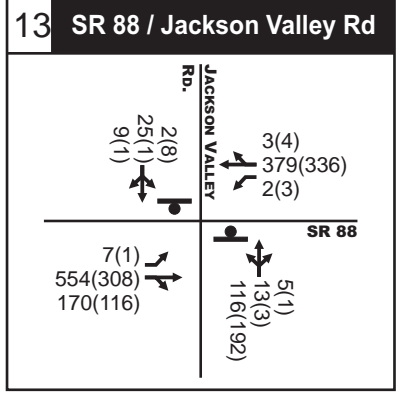
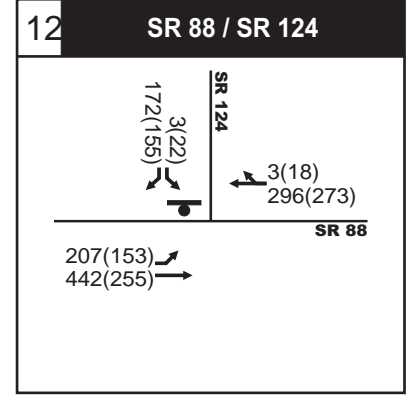
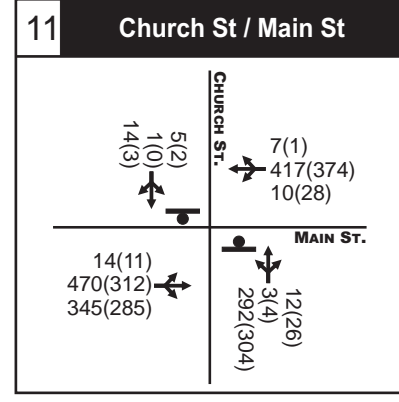
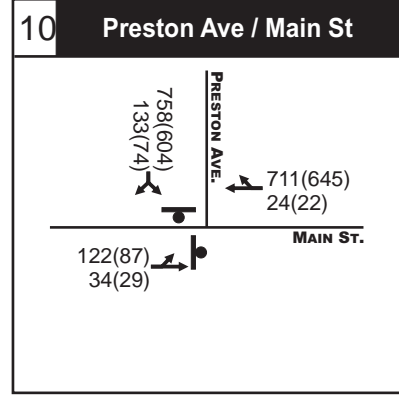
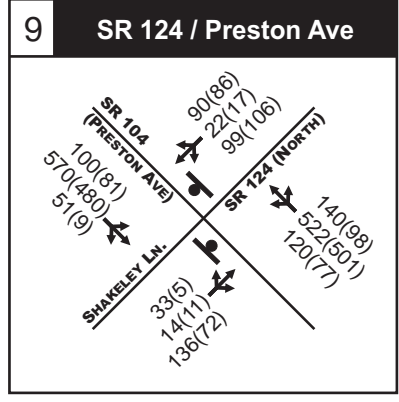
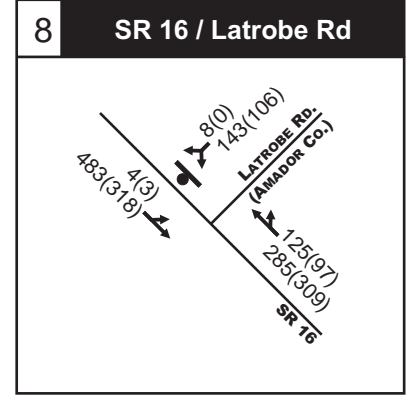
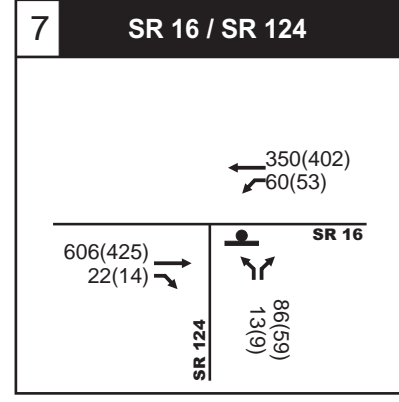
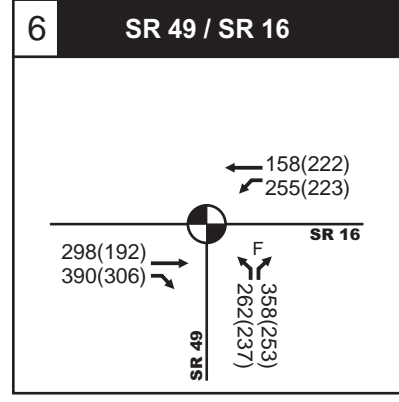
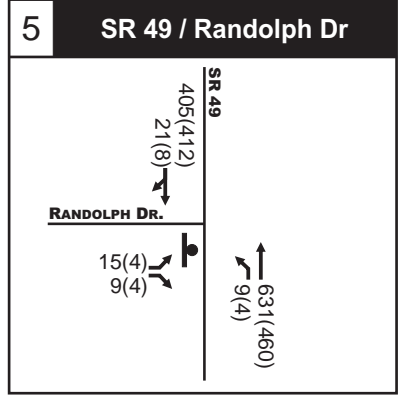
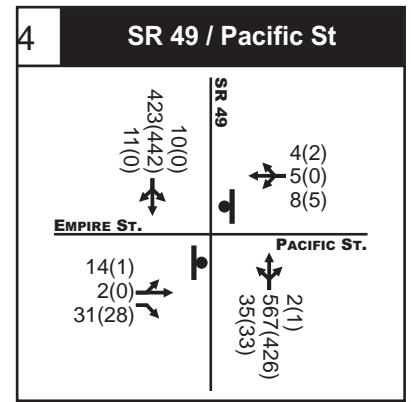
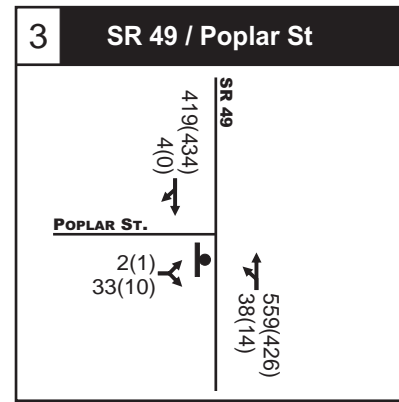
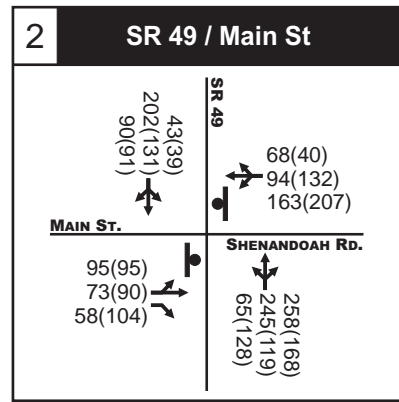
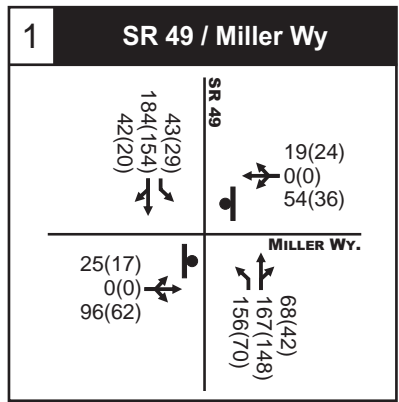
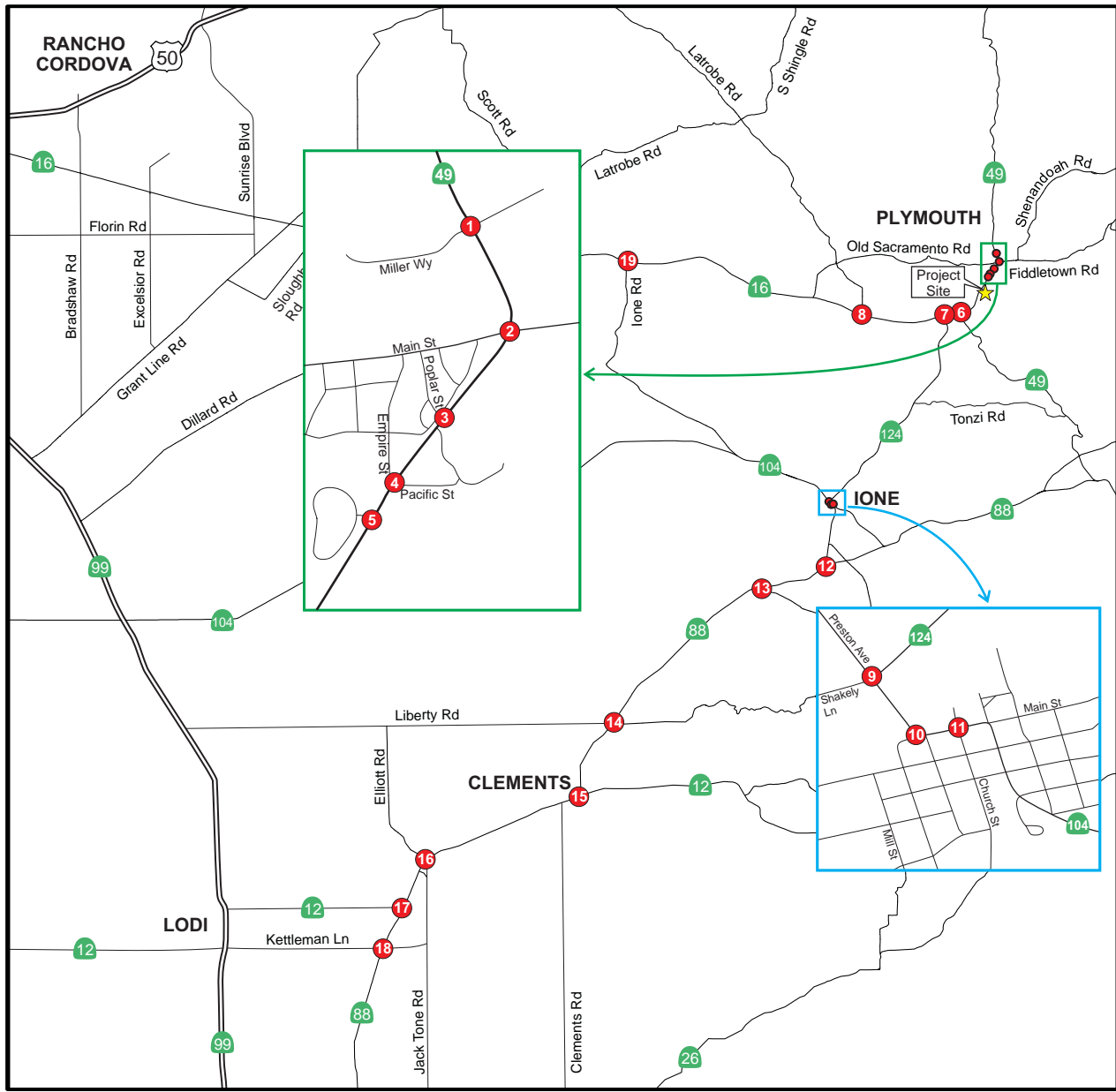
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

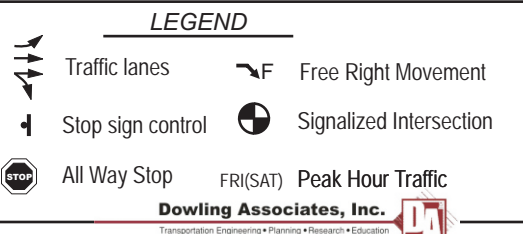
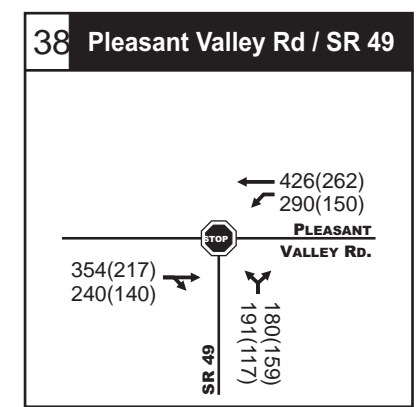
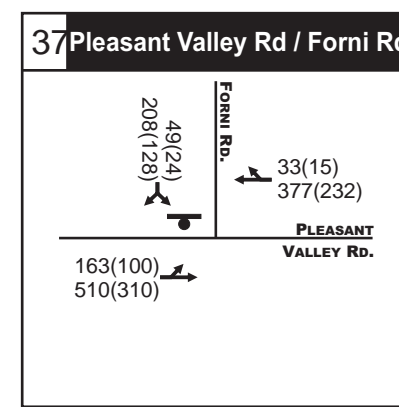
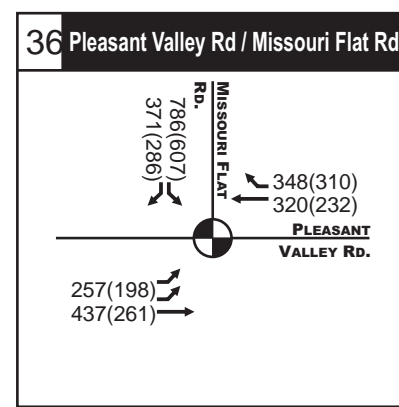
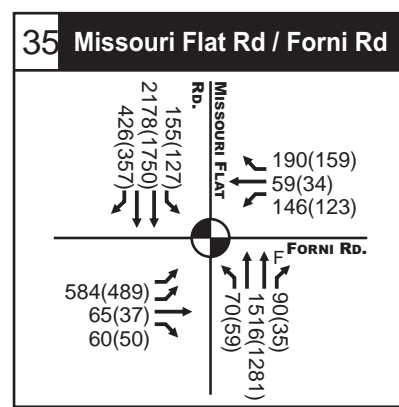
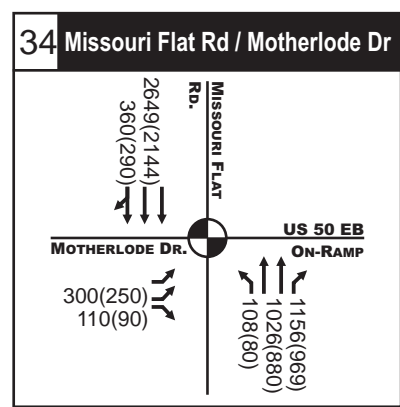
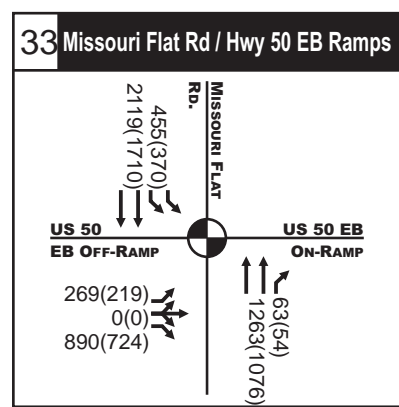
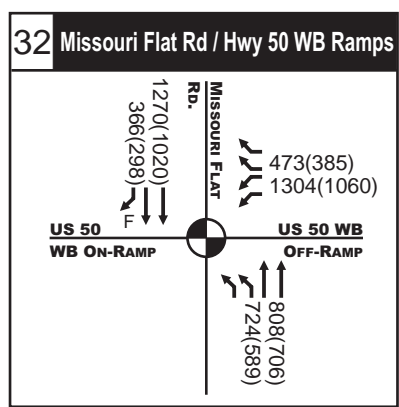
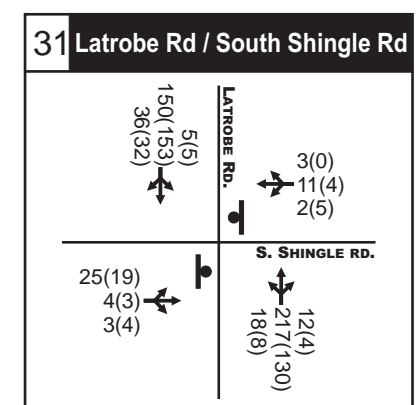
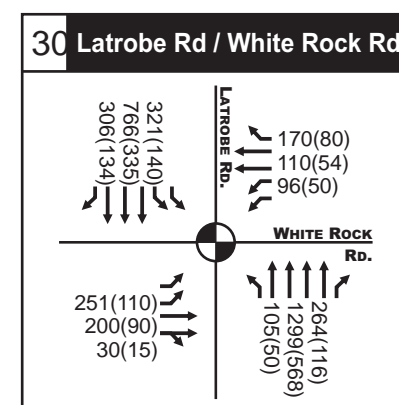
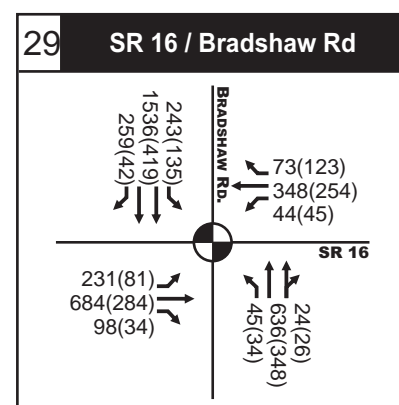
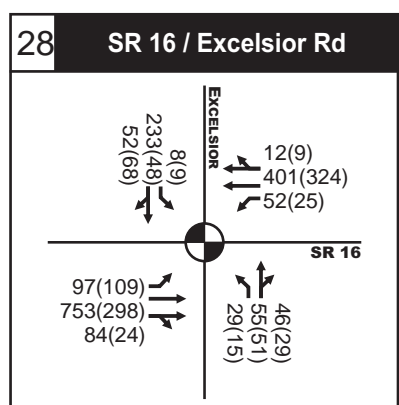
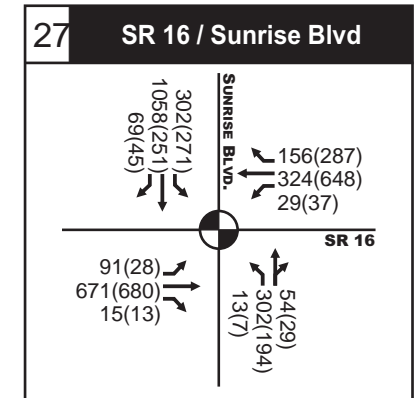
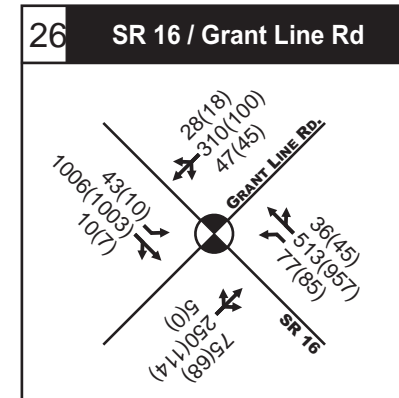
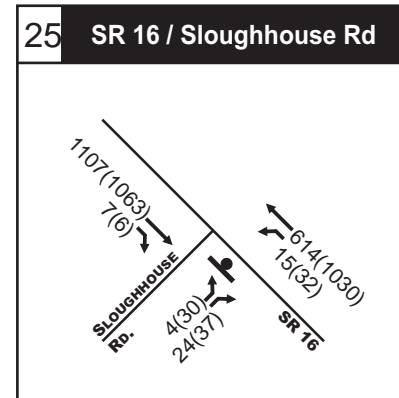
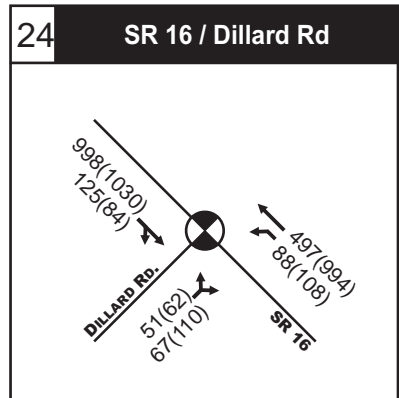
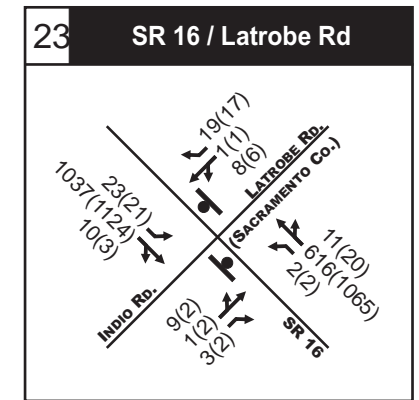
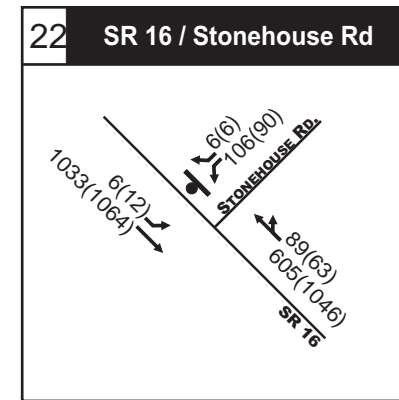
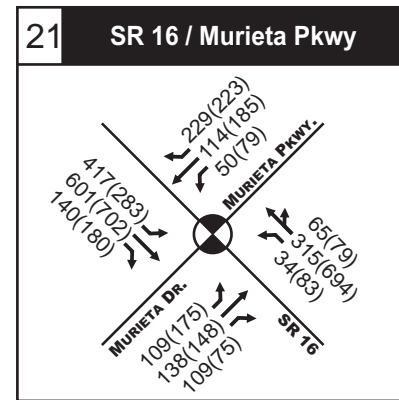
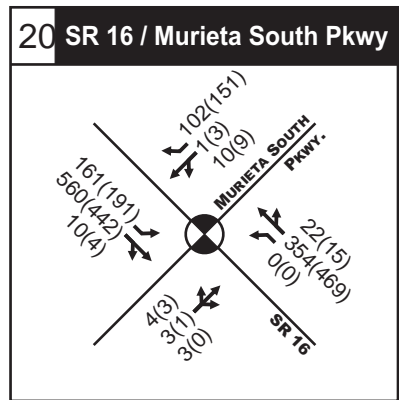
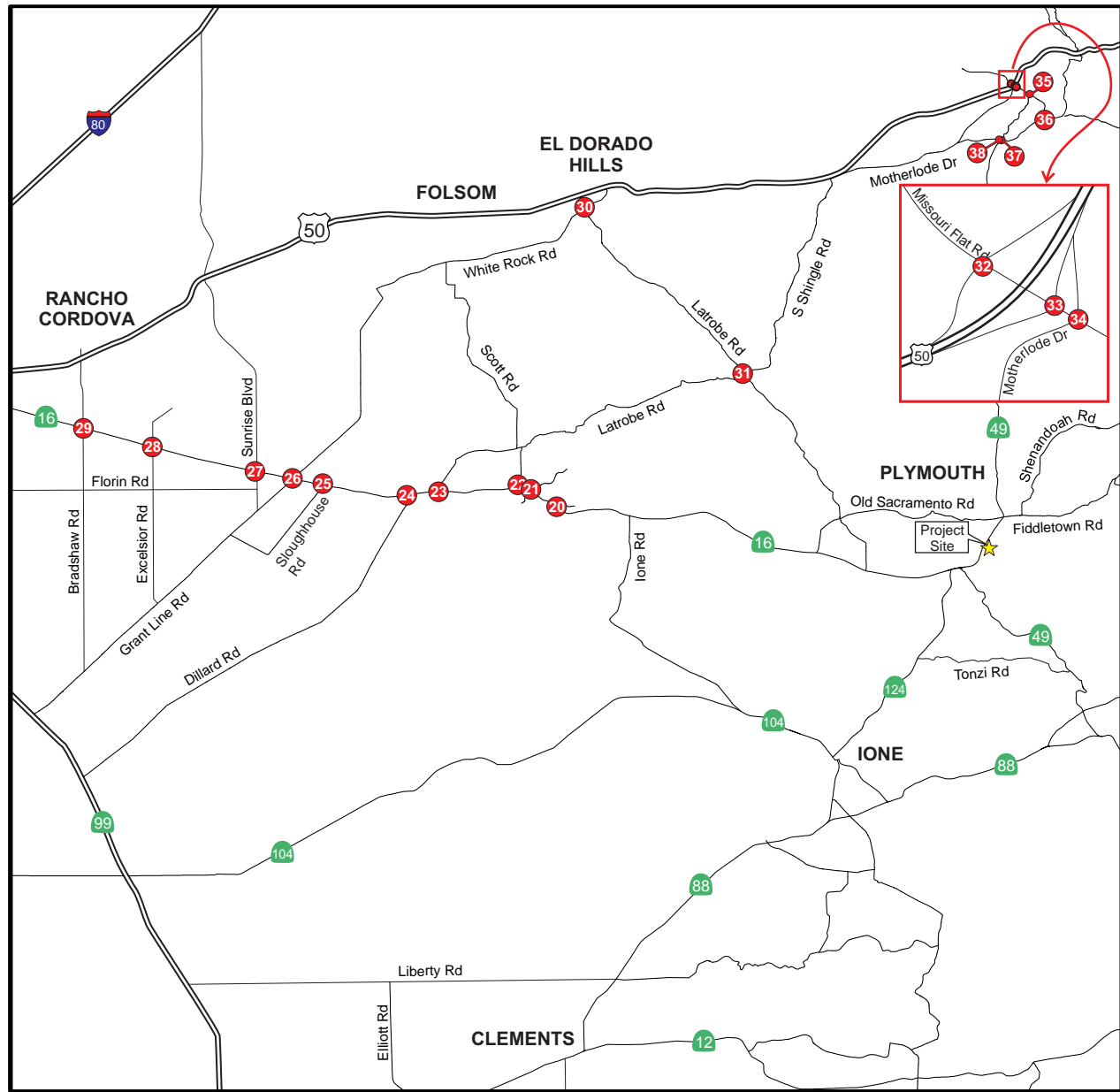
Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



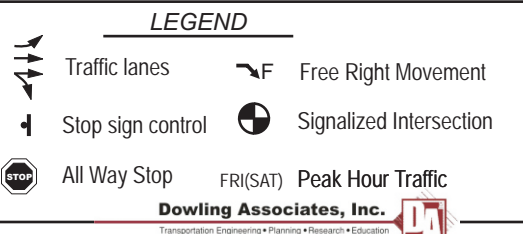
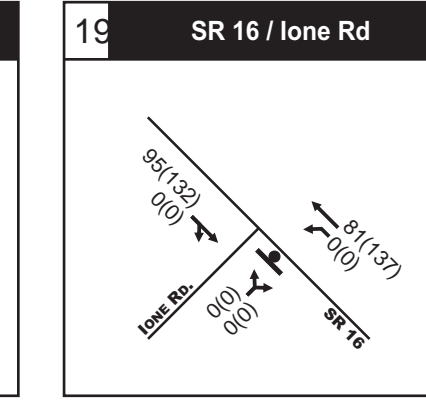
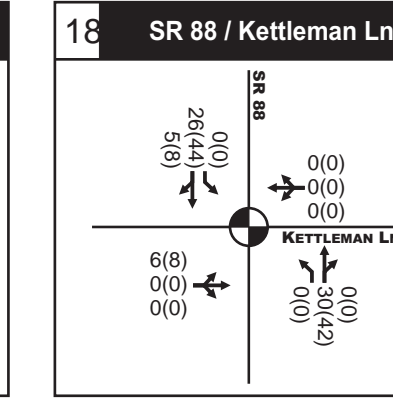
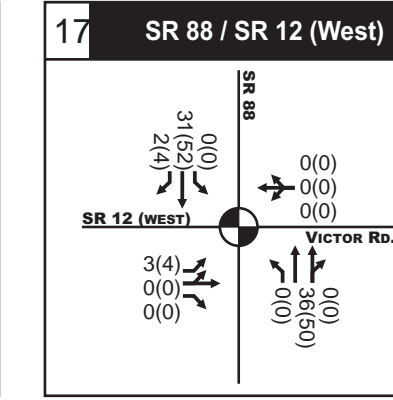
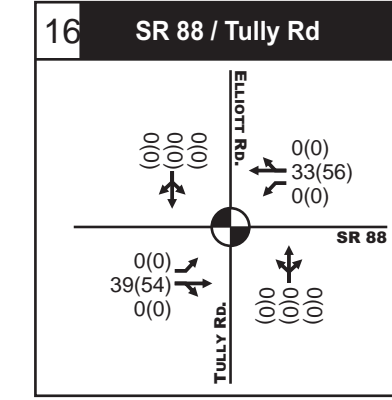
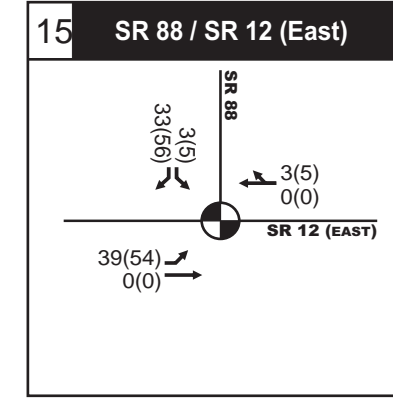
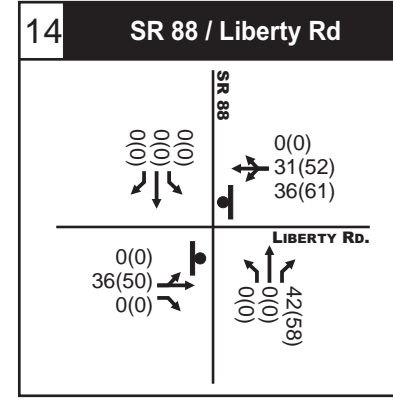
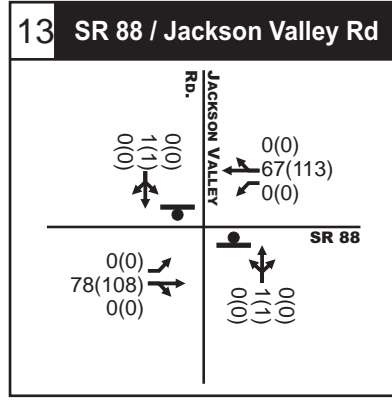
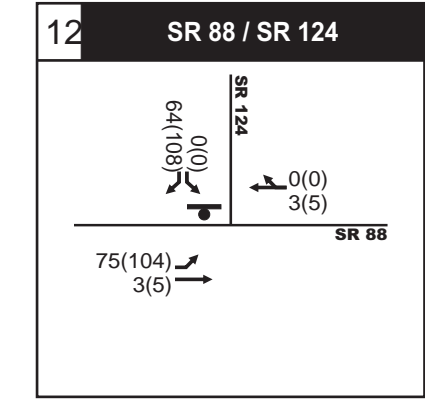
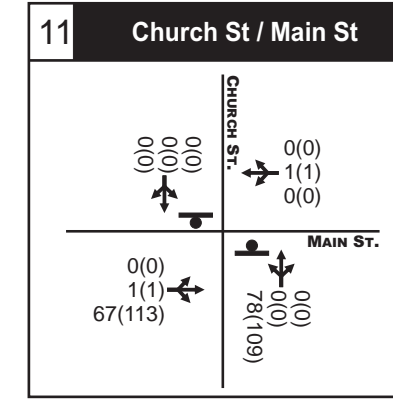
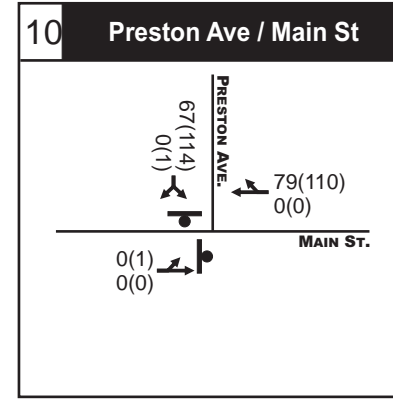
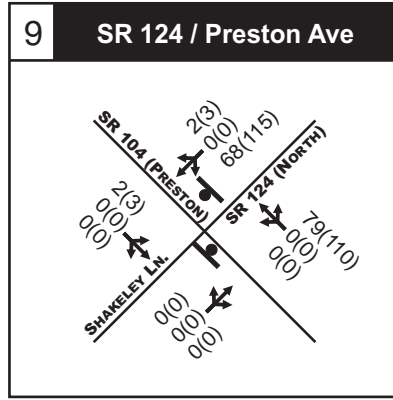
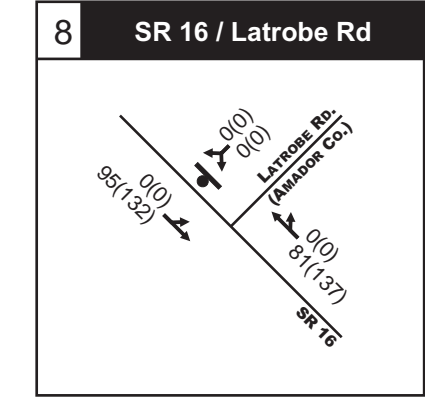
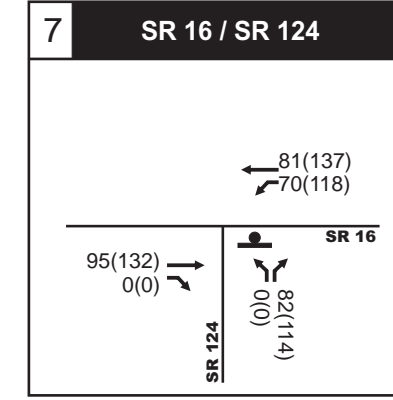
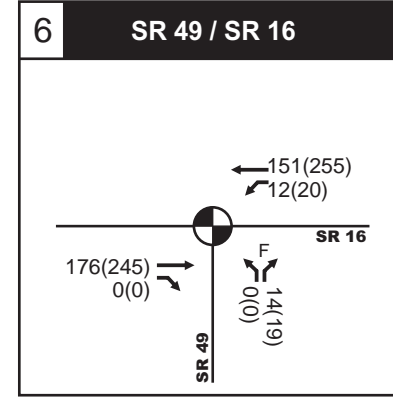
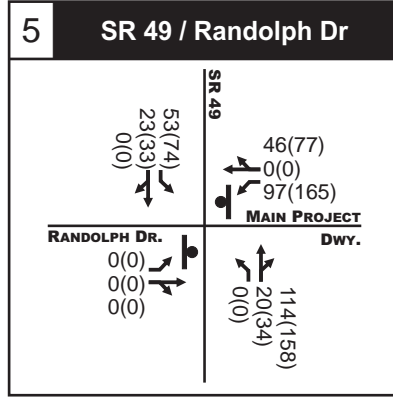
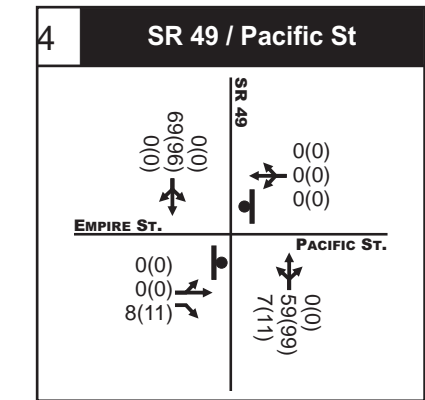
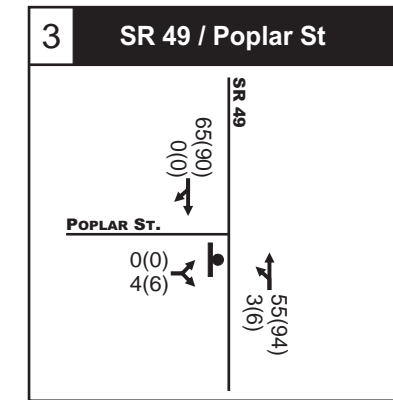
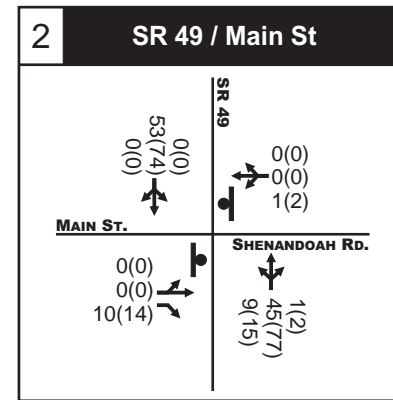
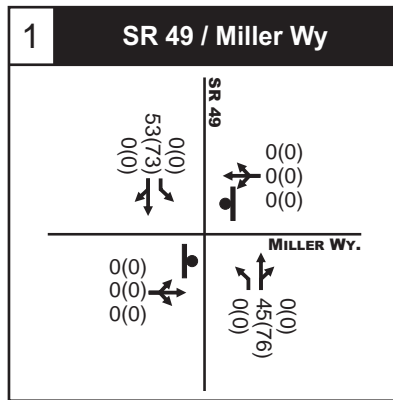
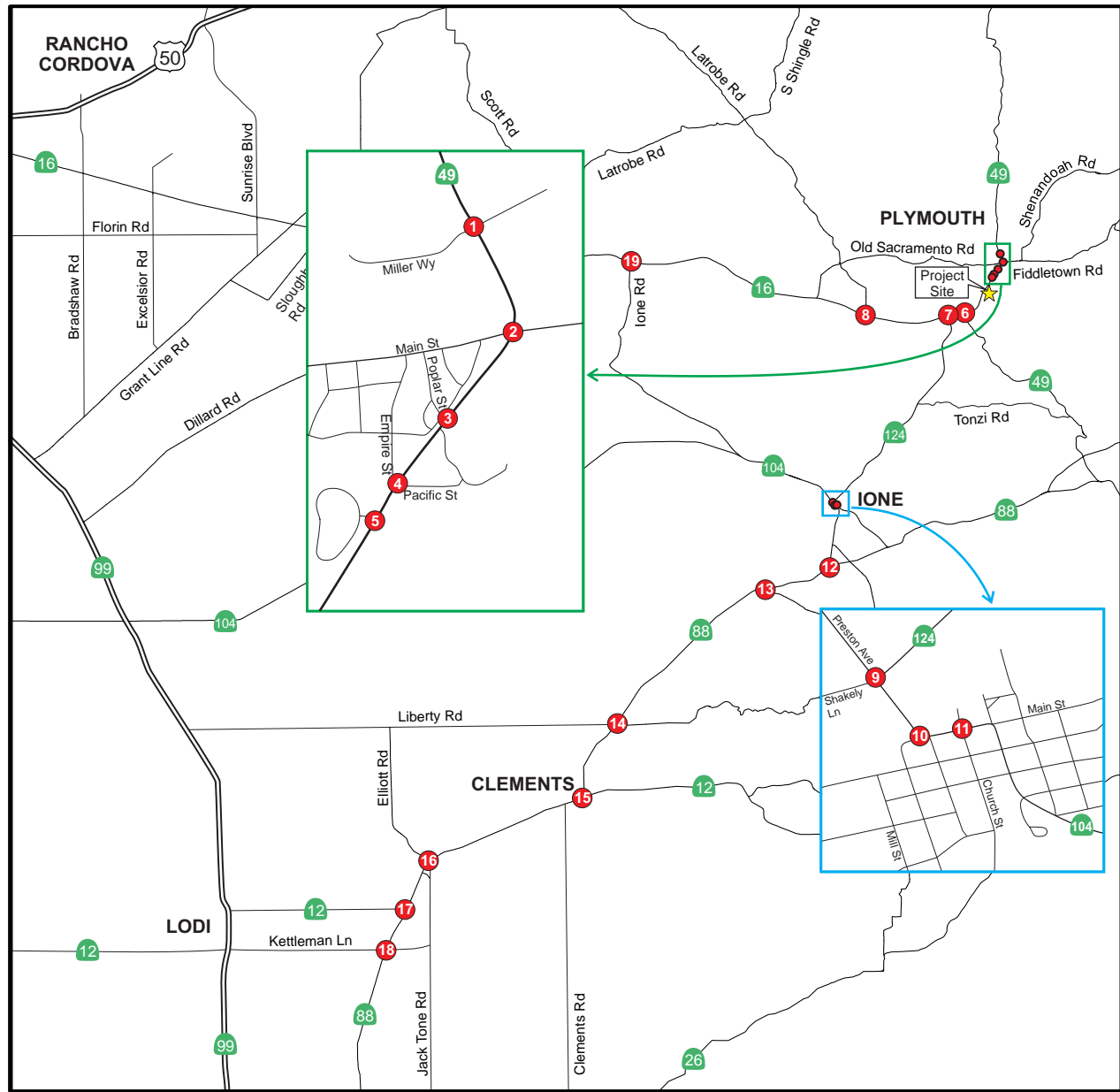
Ione Casino
 Traffic Impact Analysis
Figure 9a
 2010 EPAP No Project Lane Geometry
 & PM Peak Hour Volumes (Cont.)



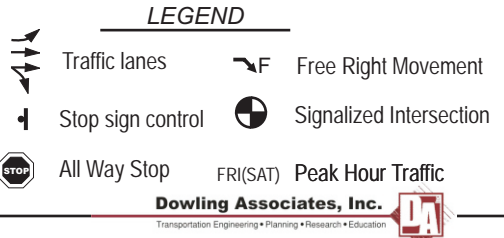
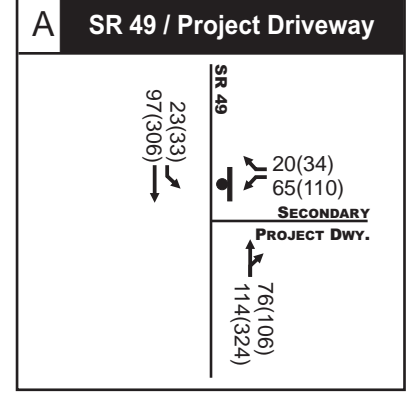
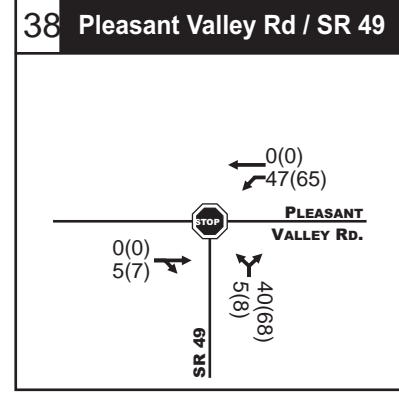
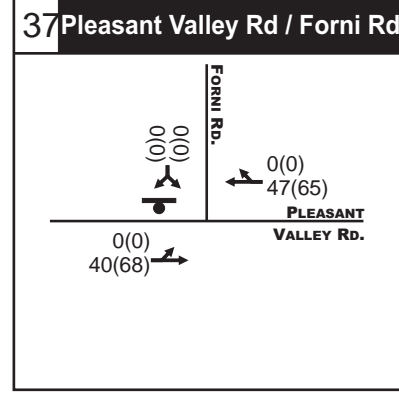
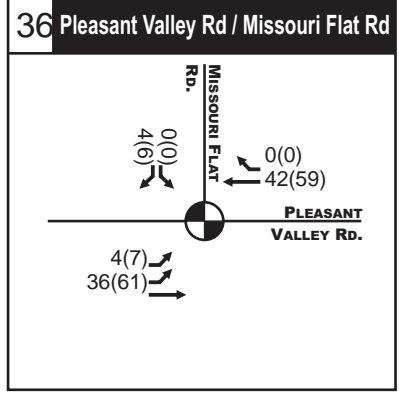
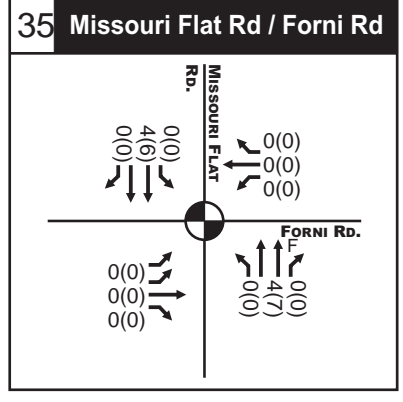
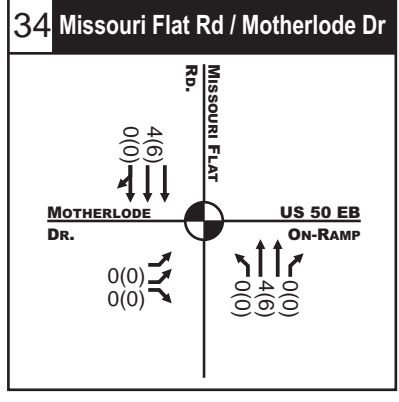
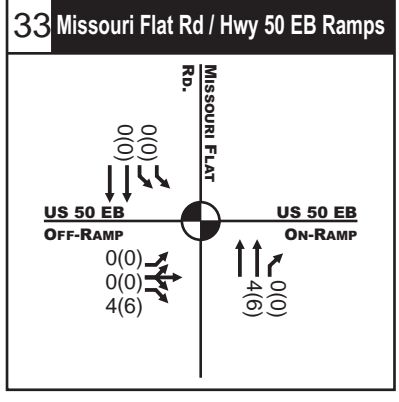
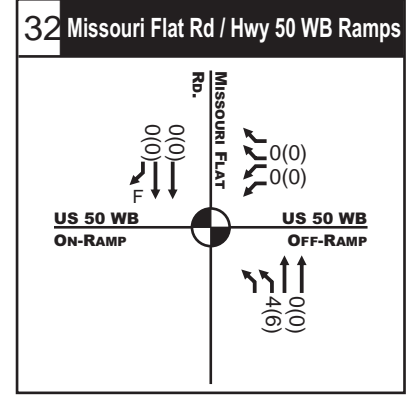
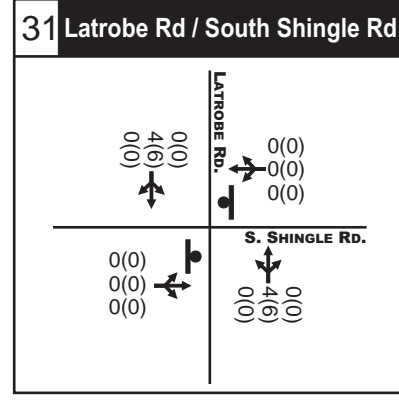
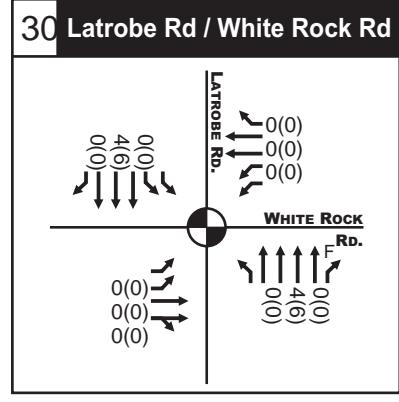
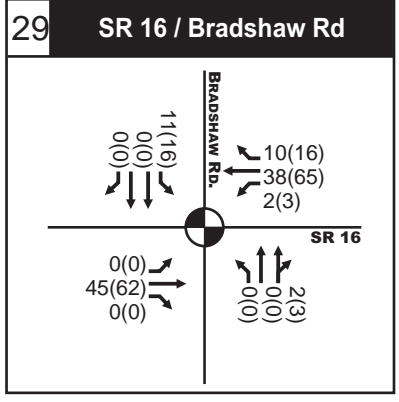
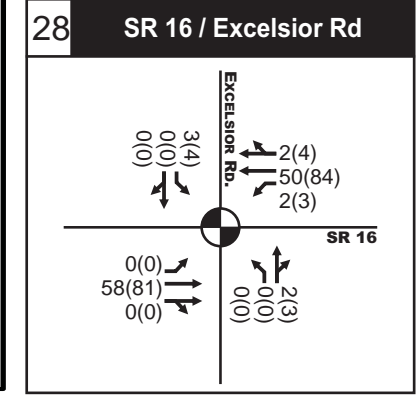
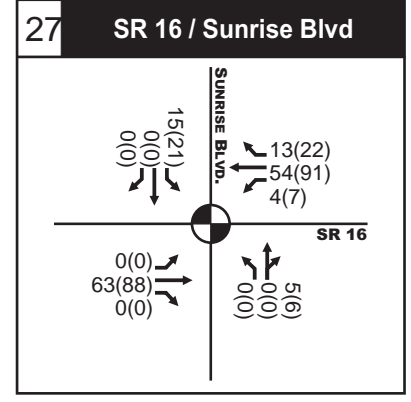
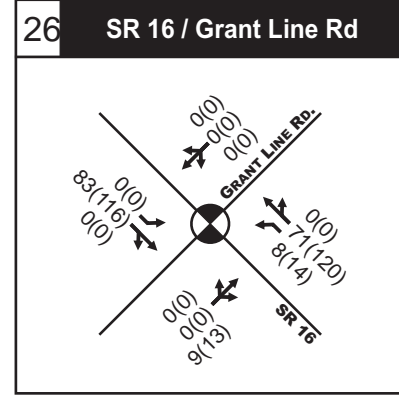
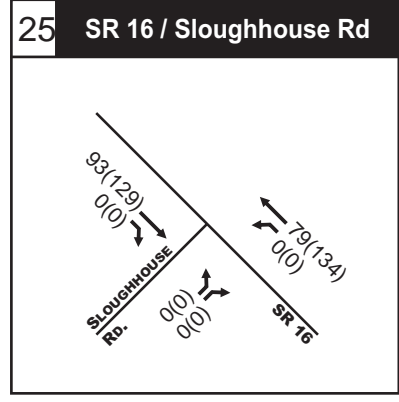
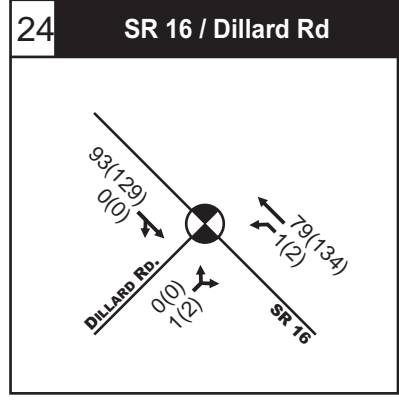
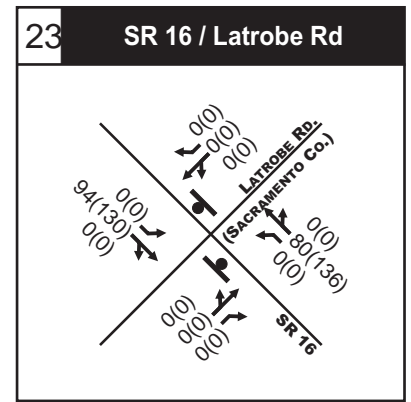
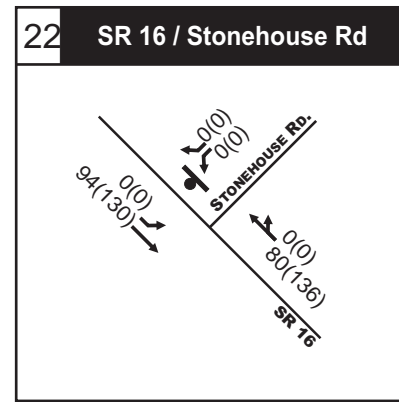
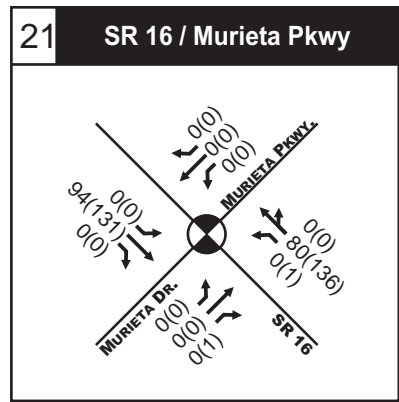
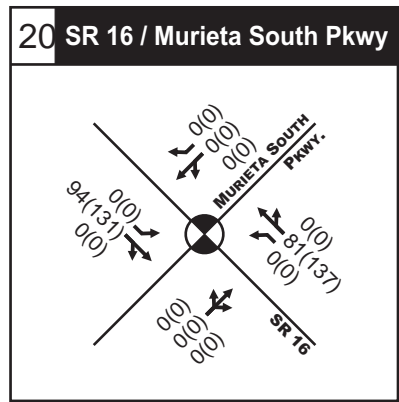
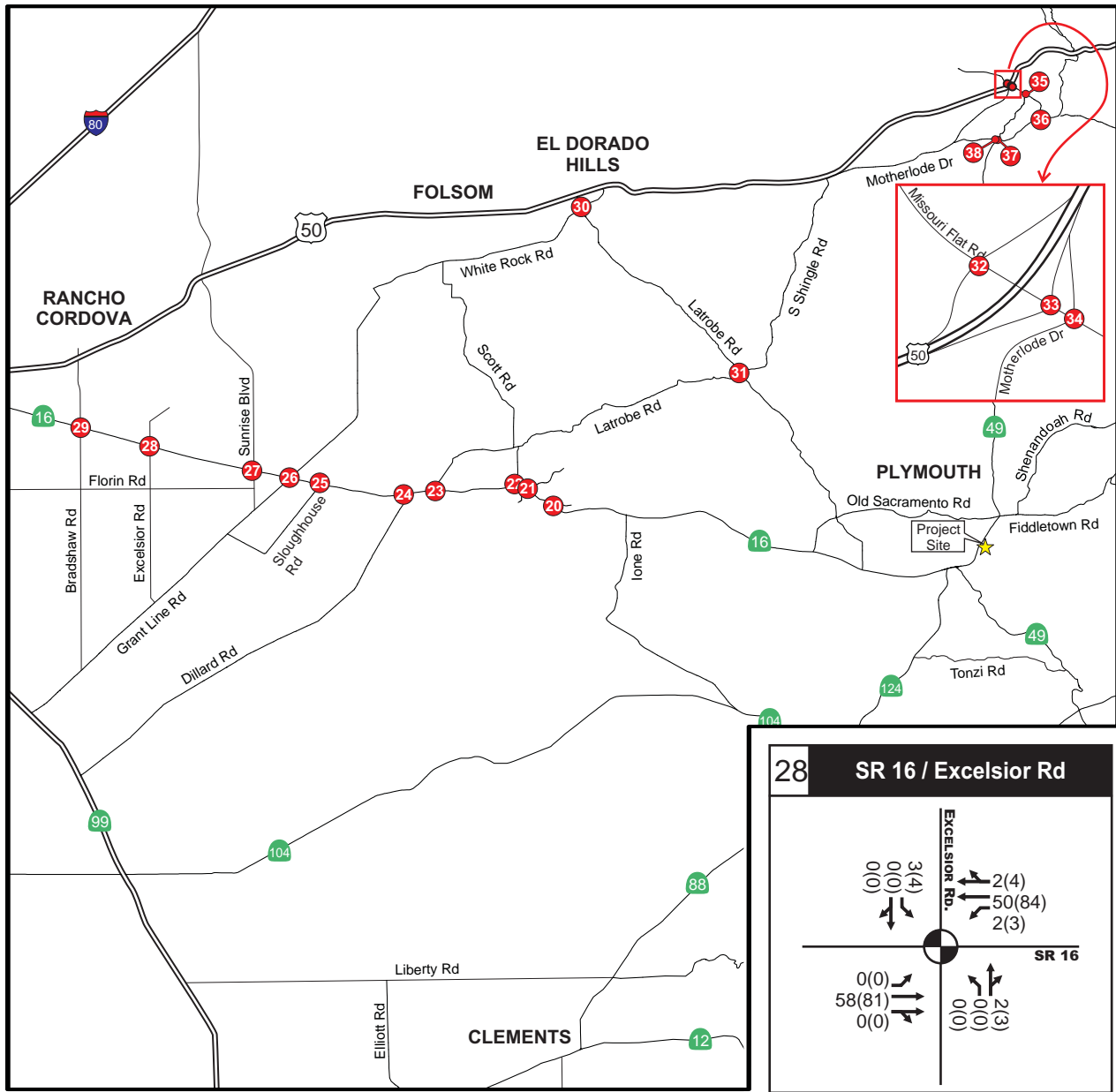
Ione Casino
Traffic Impact Analysis
Figure 10
2013 EPAP No Project Lane Geometry
& PM Peak Hour Volumes



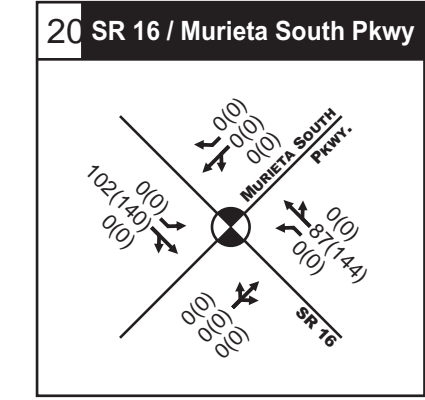
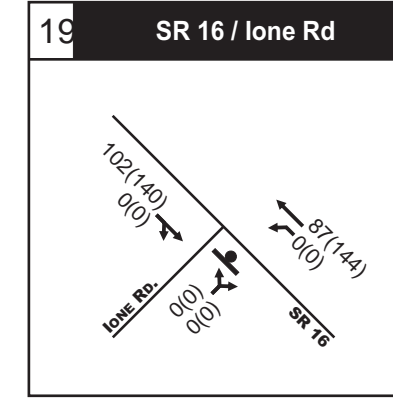
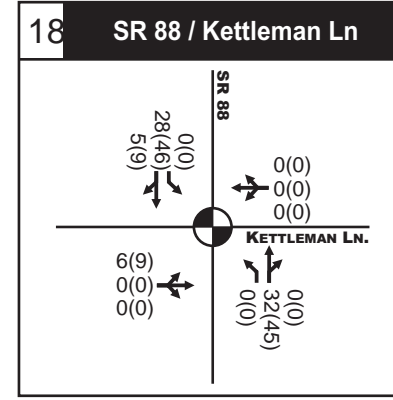
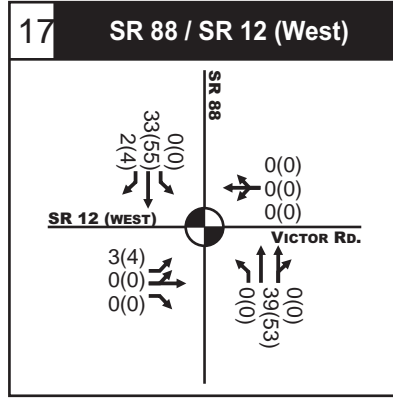
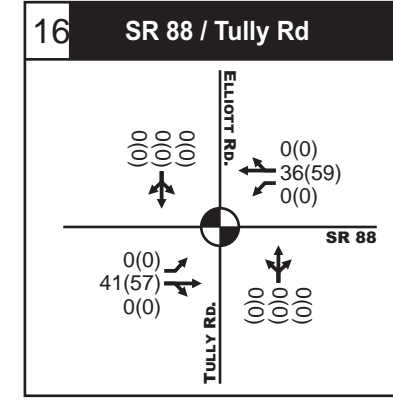
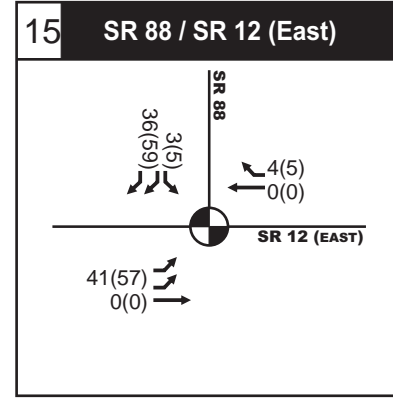
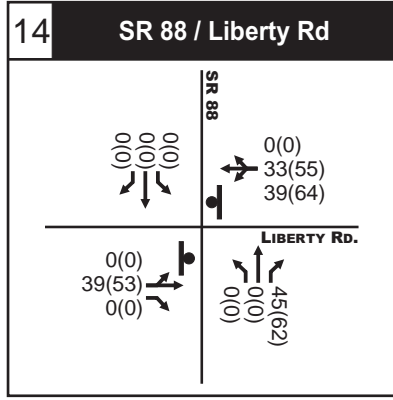
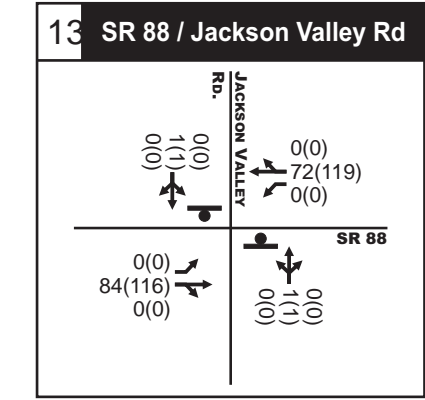
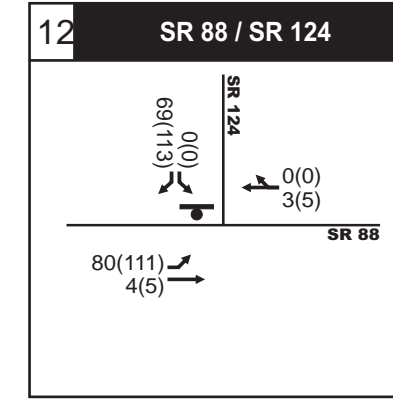
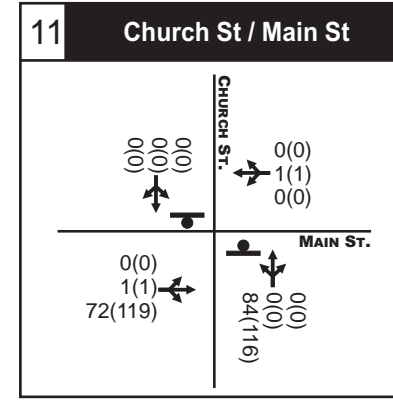
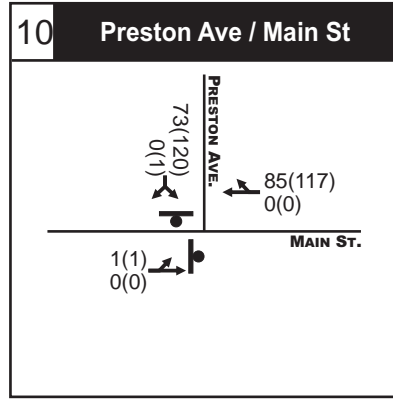
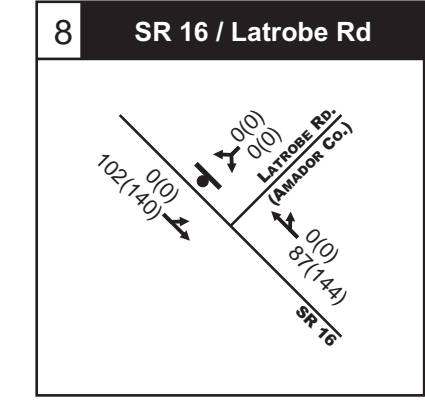
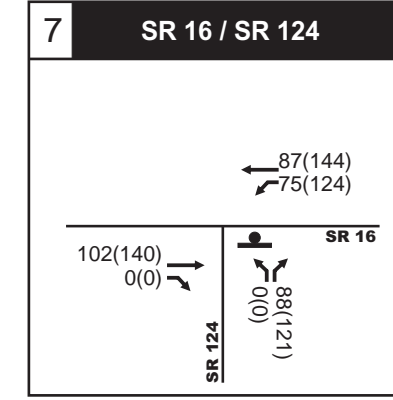
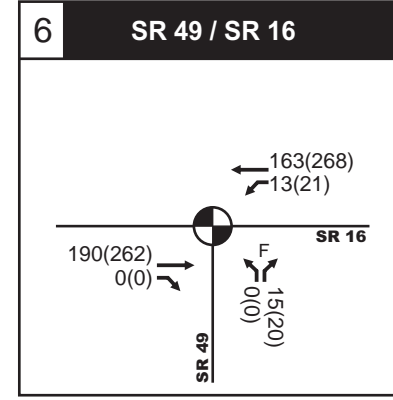
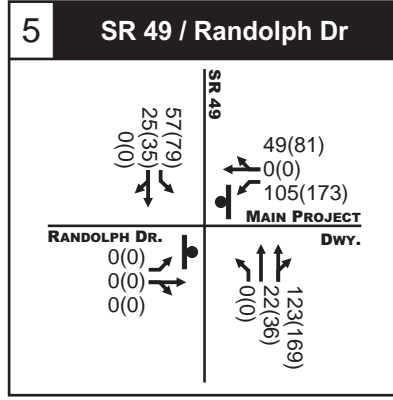
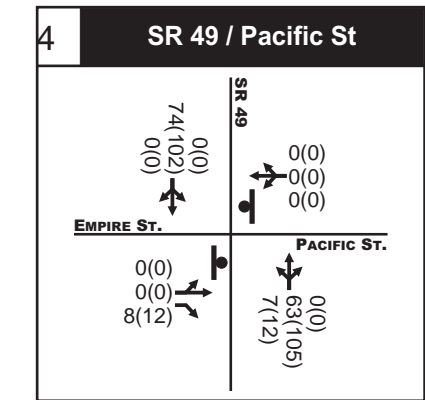
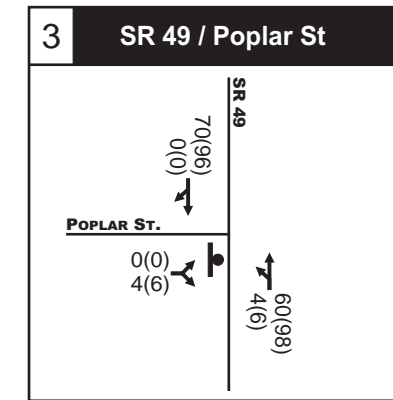
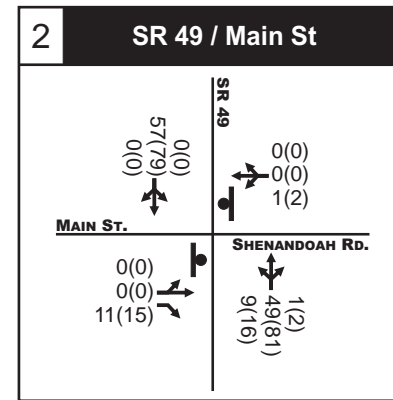
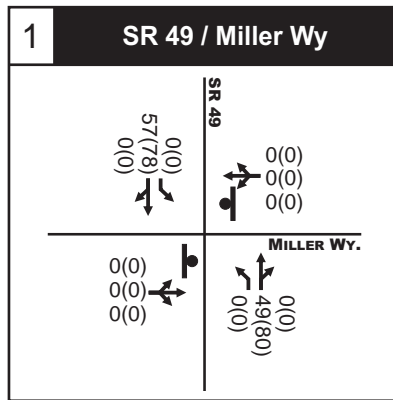
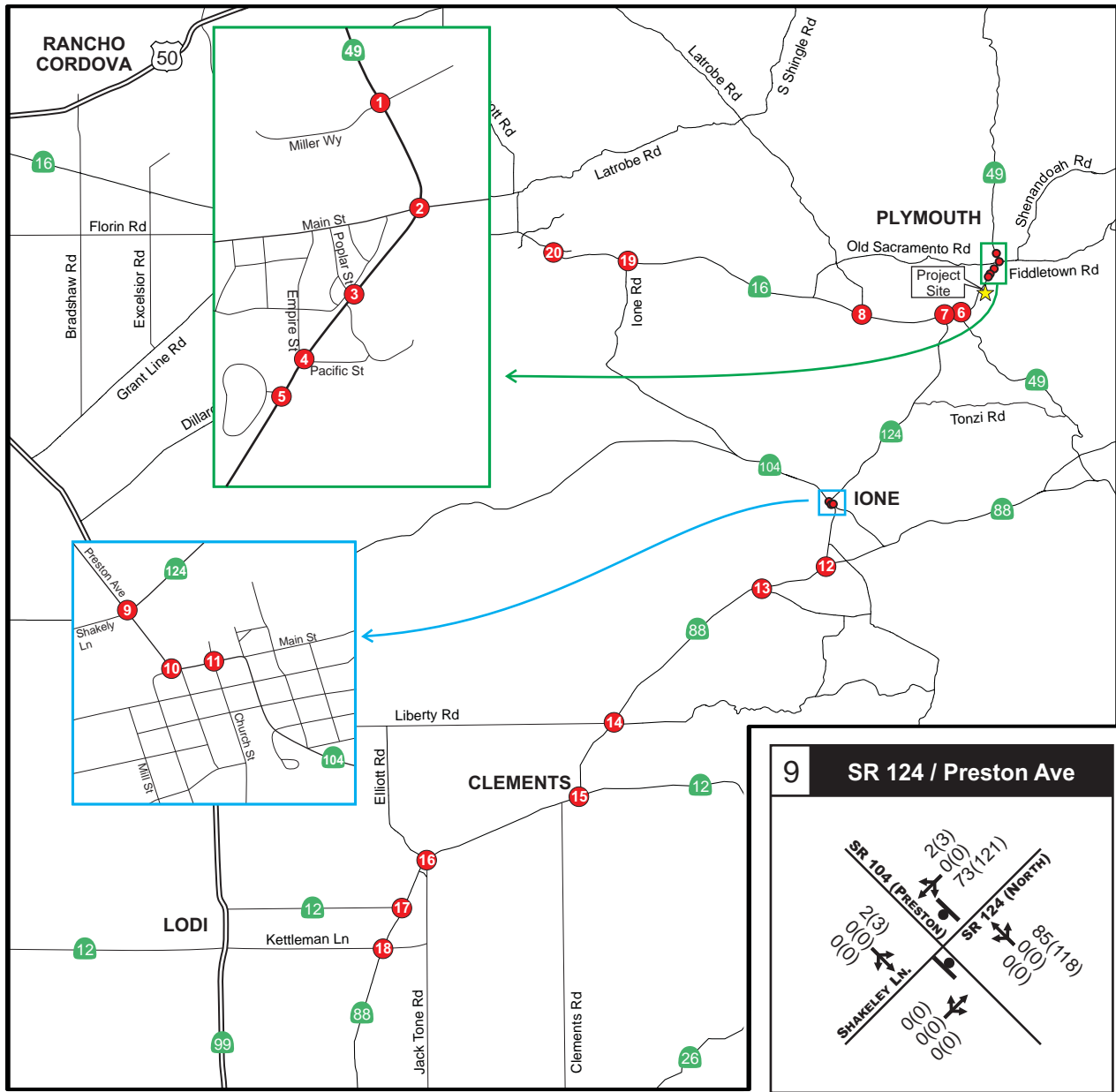
Ione Casino
Traffic Impact Analysis
Figure 10a
2013 EPAP No Project Lane Geometry
& PM Peak Hour Volumes (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 13
Project Only PM Peak Hour Trips
Alternative A Phase 1



Ione Casino
Traffic Impact Analysis
Figure 13a
Project Only PM Peak Hour Trips
Alternative A Phase 1 (Cont.)



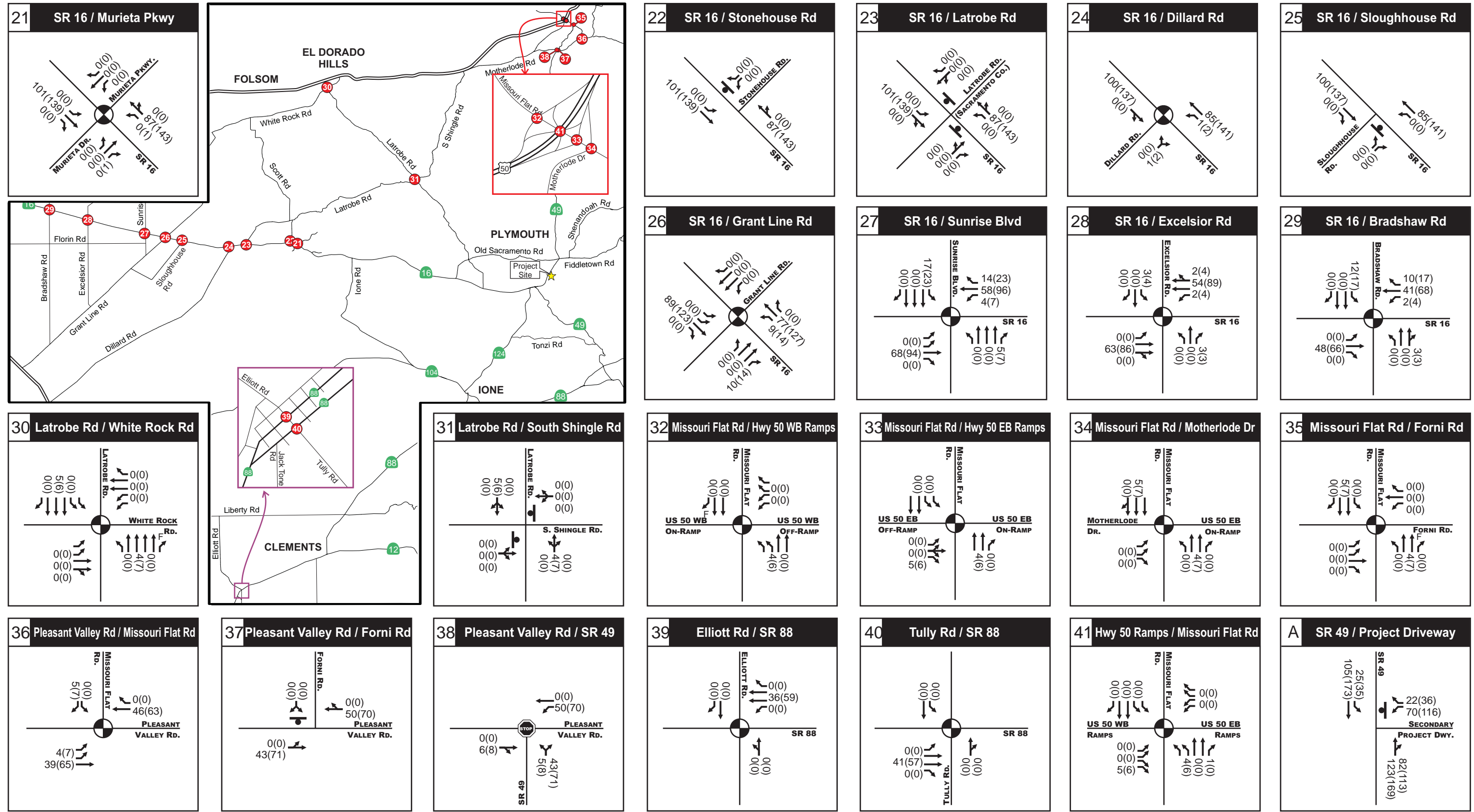
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



Ione Casino
 Traffic Impact Analysis
Figure 14
 Project Only PM Peak Hour Trips
 Alternative A Phase 1 & 2

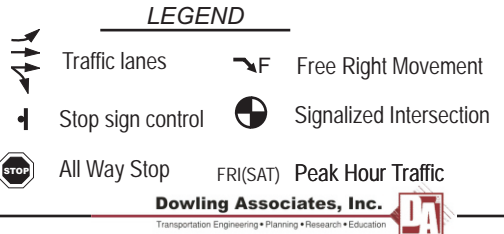
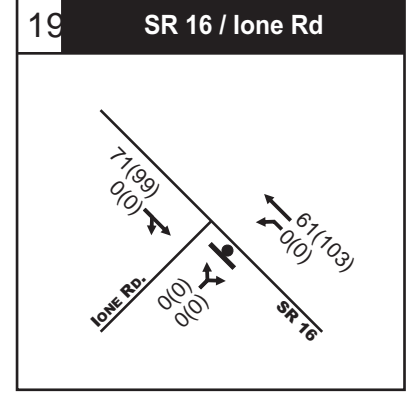
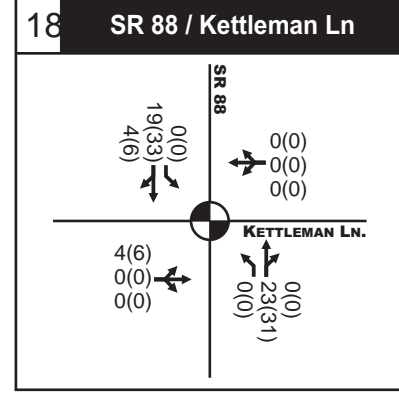
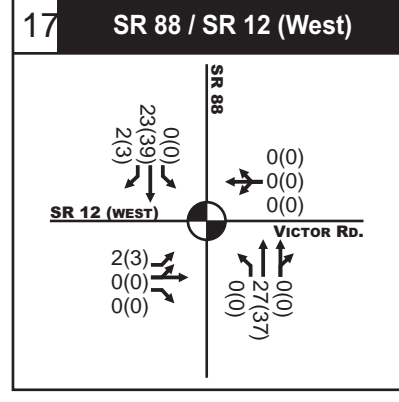
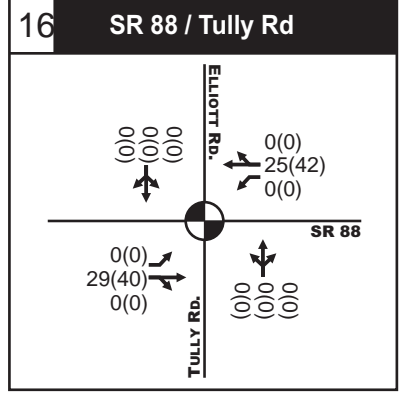
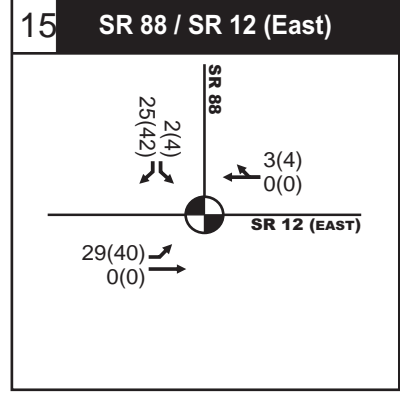
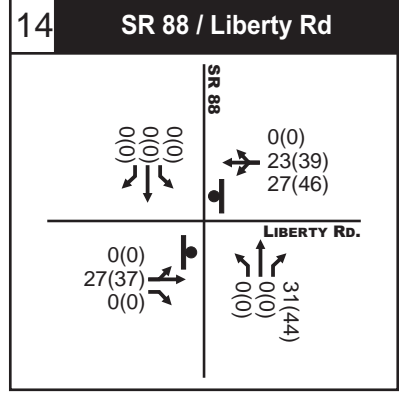
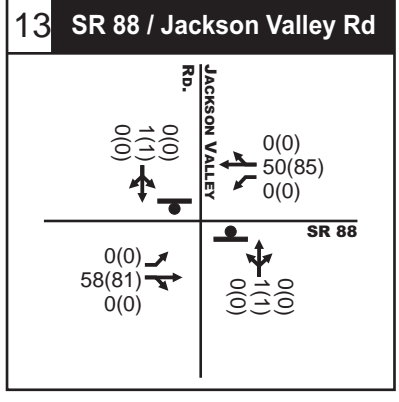
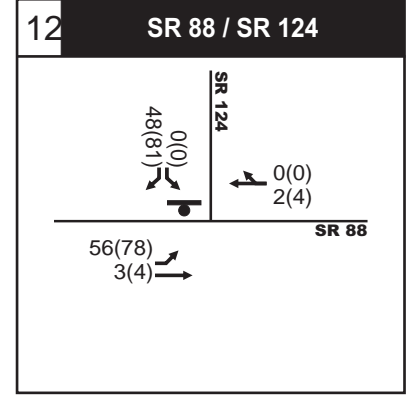
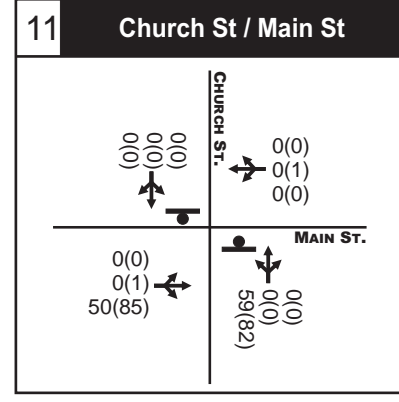
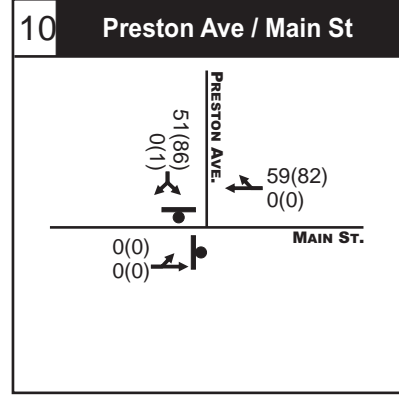
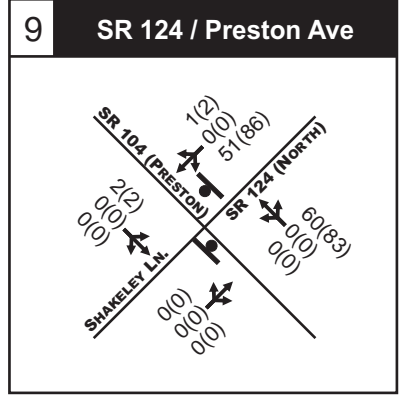
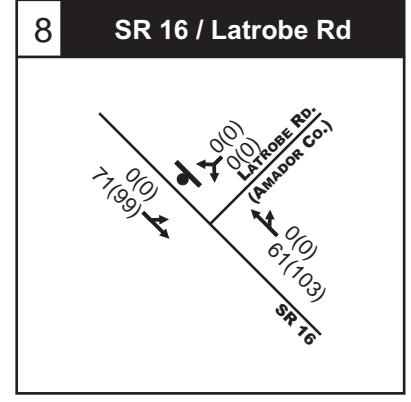
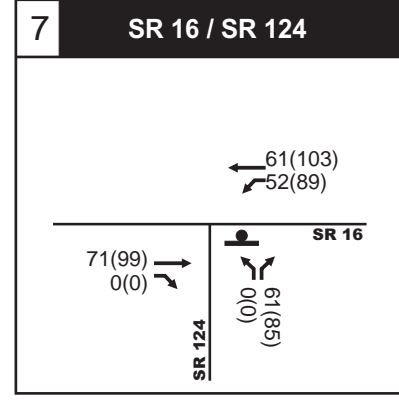
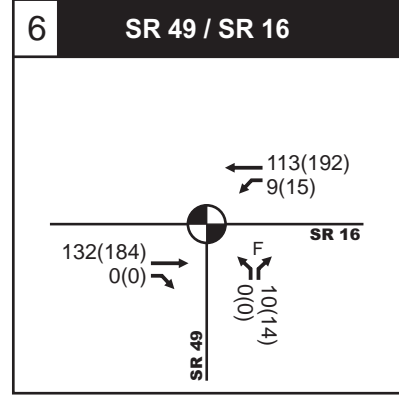
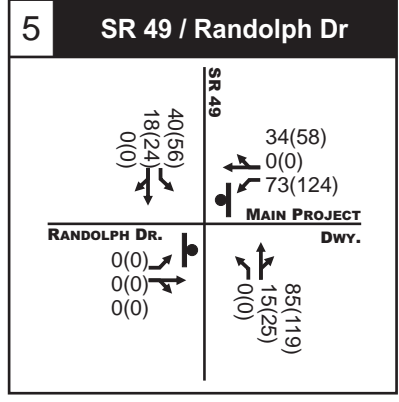
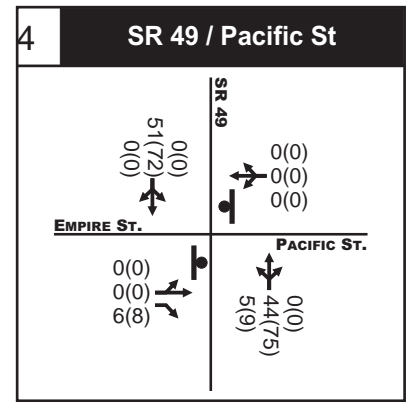
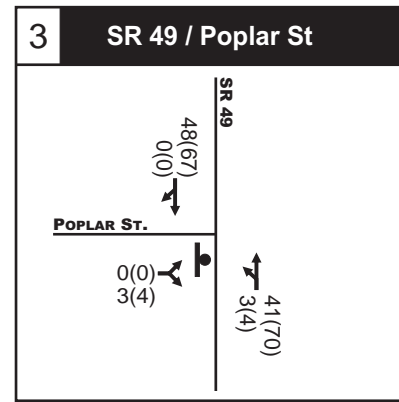
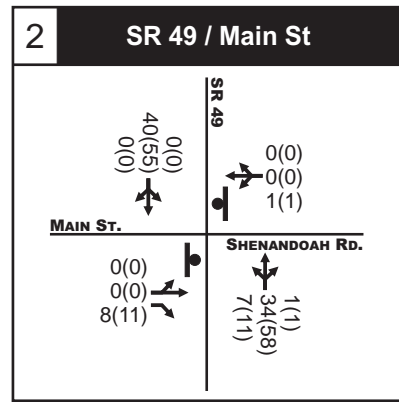
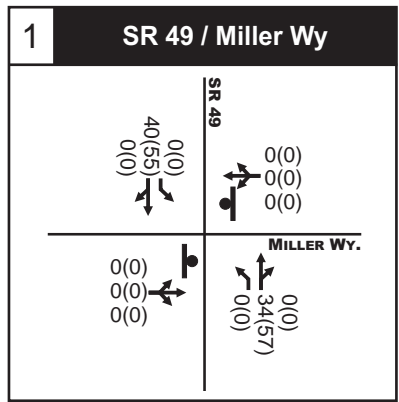
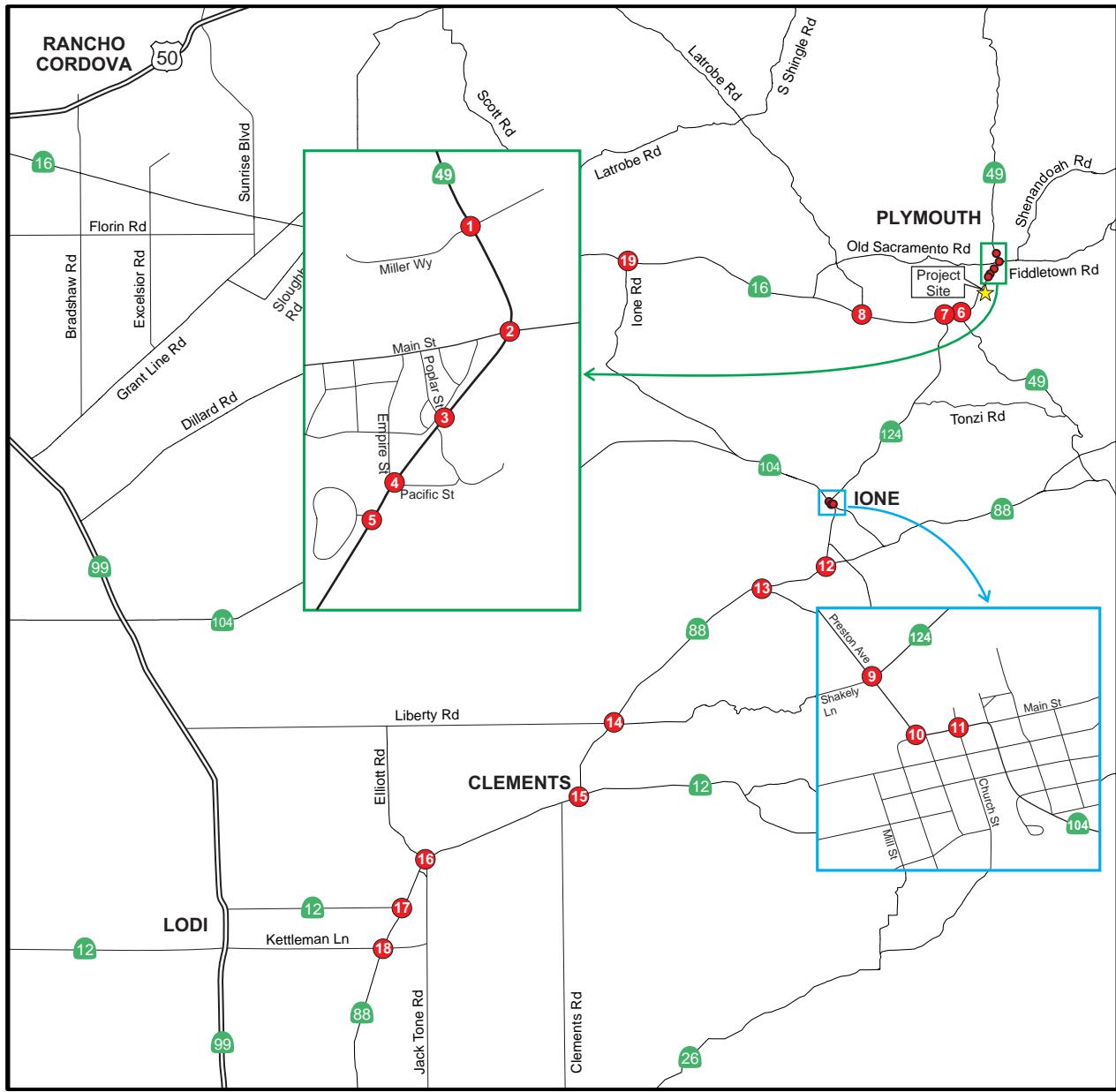


LEGEND

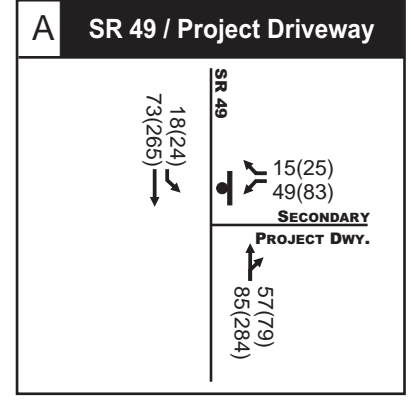
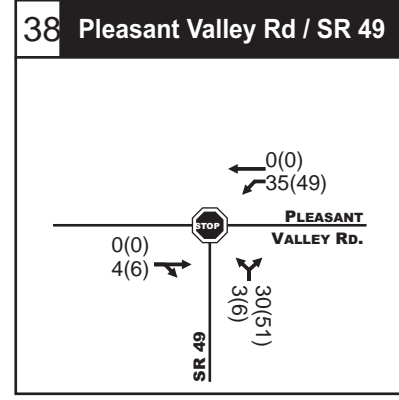
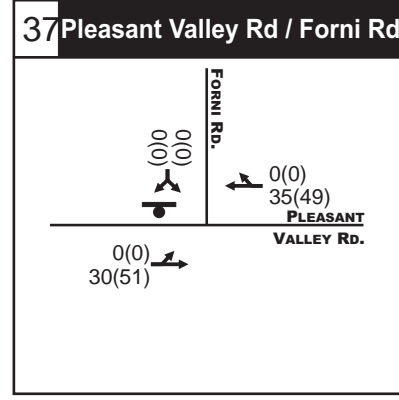
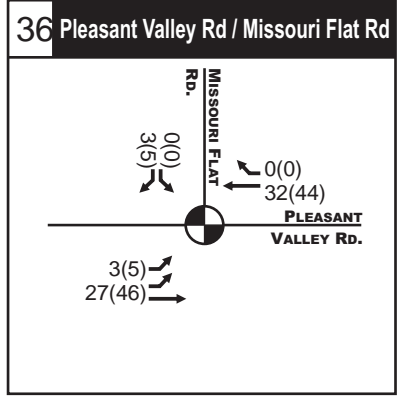
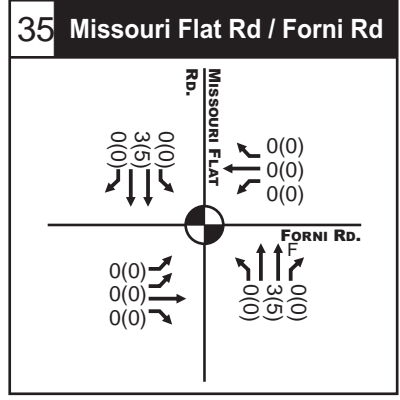
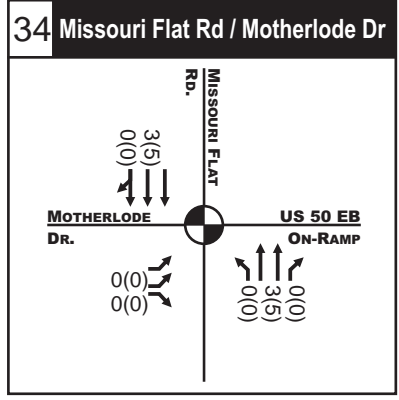
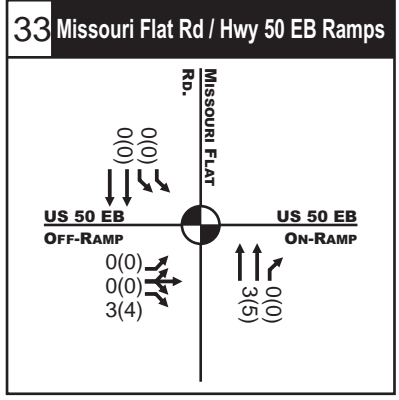
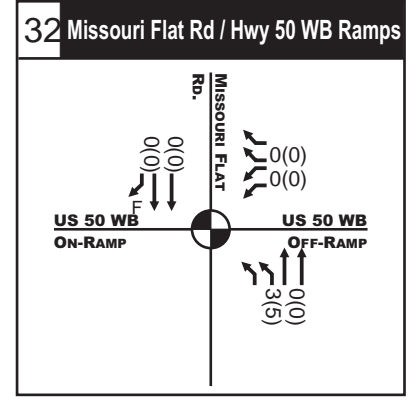
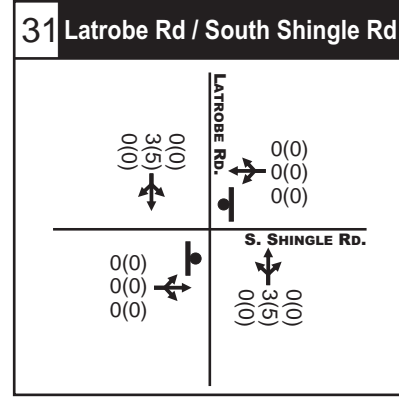
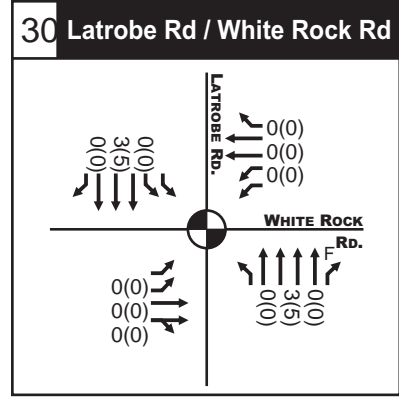
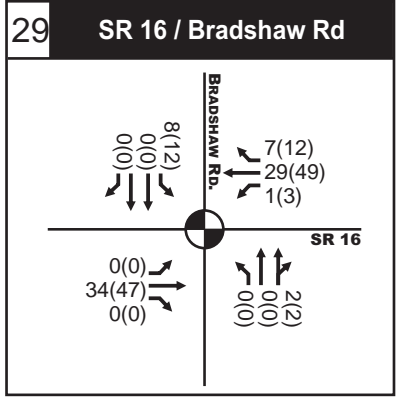
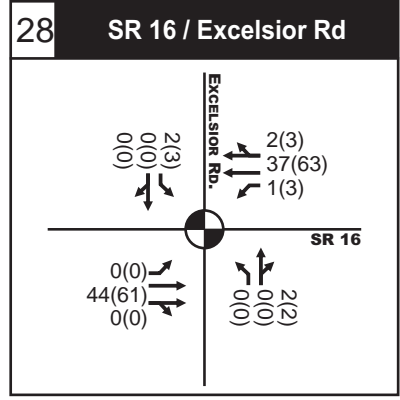
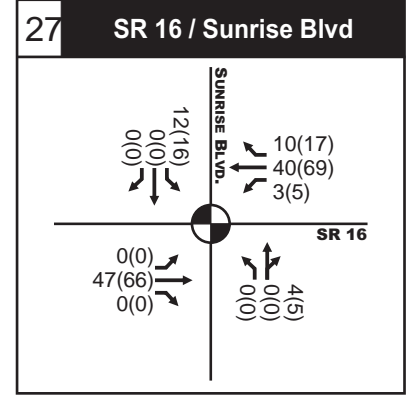
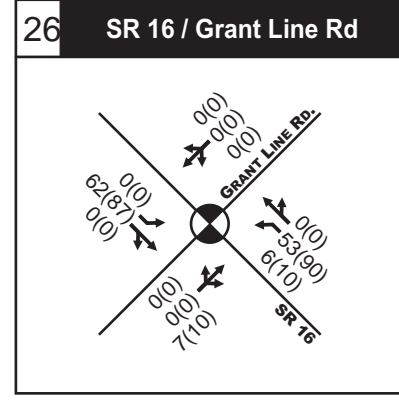
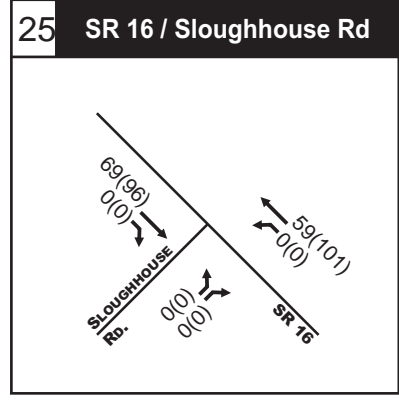
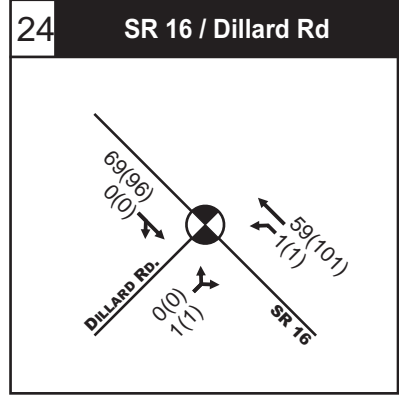
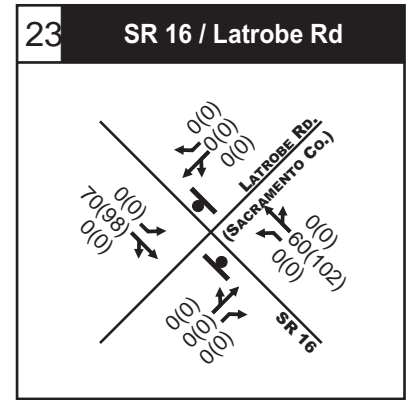
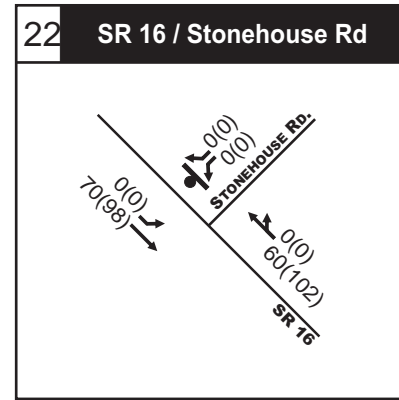
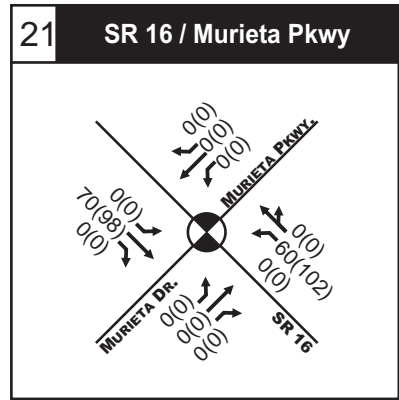
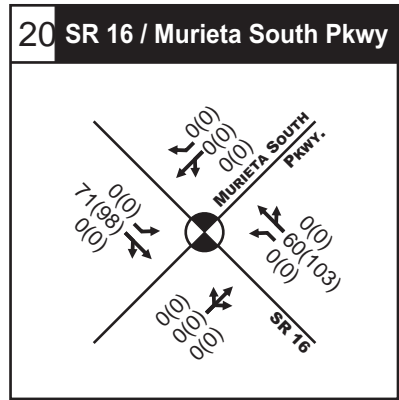
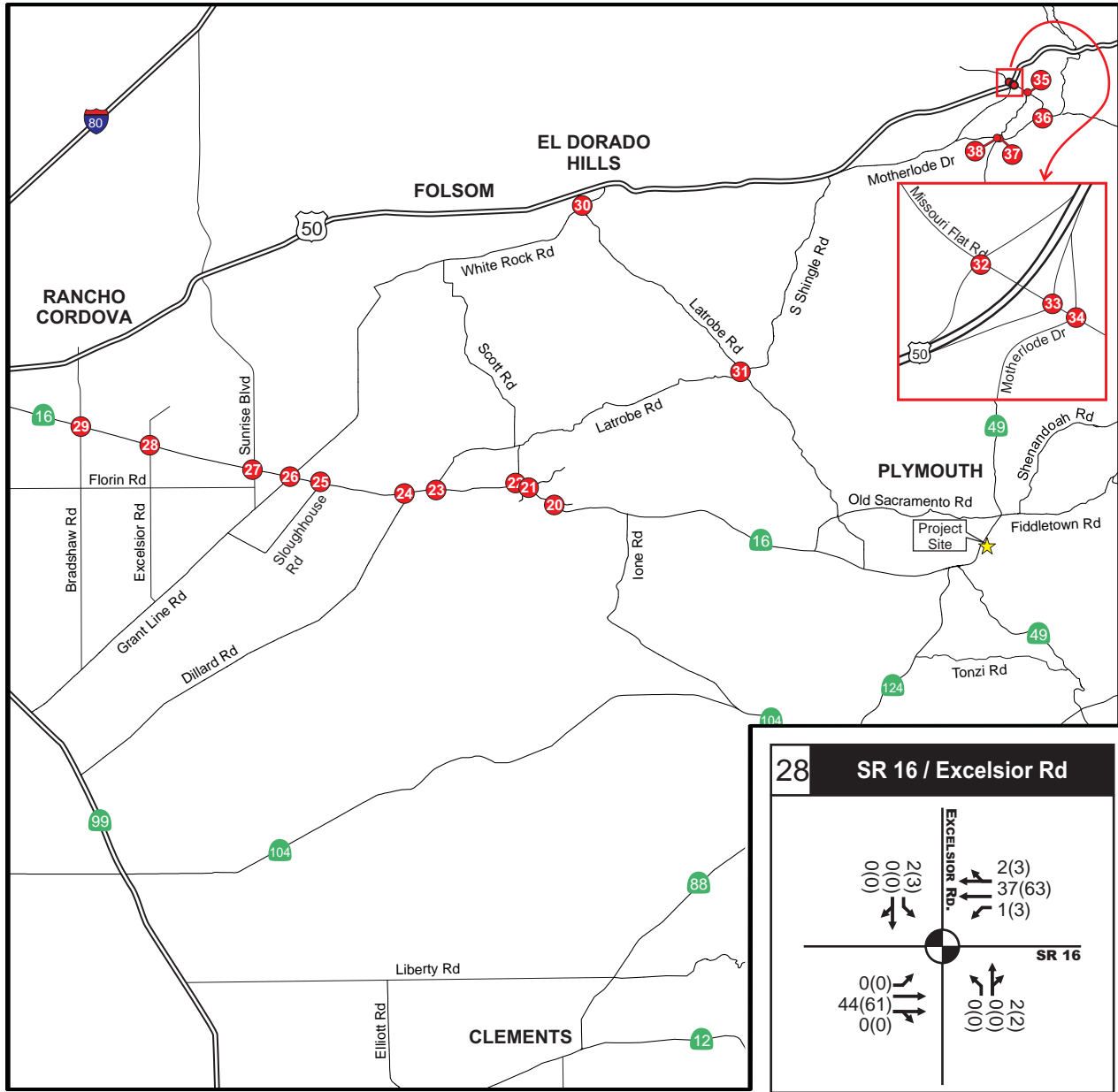
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic



Ione Casino
Traffic Impact Analysis
Figure 14a
Project Only PM Peak Hour Trips
Alternative A Phase 1 & 2 (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 15
Project Only PM Peak Hour Trips
Alternative B Phase 1



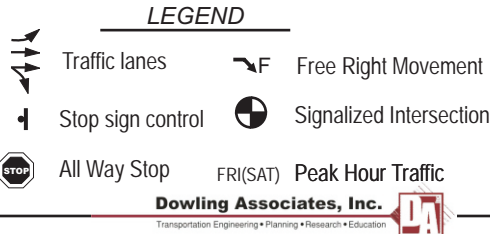
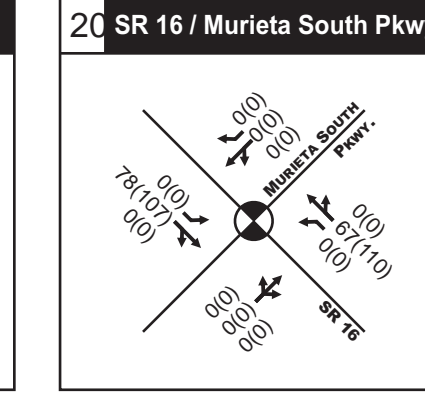
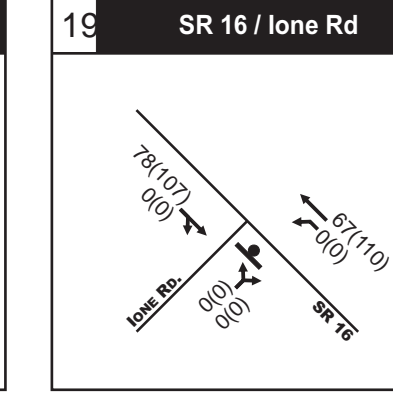
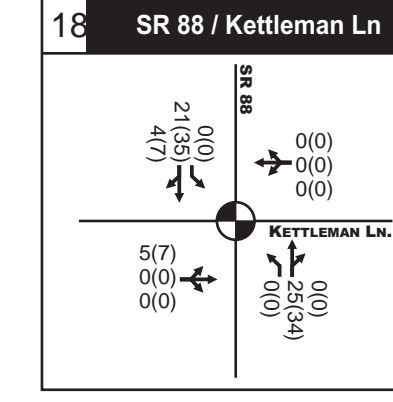
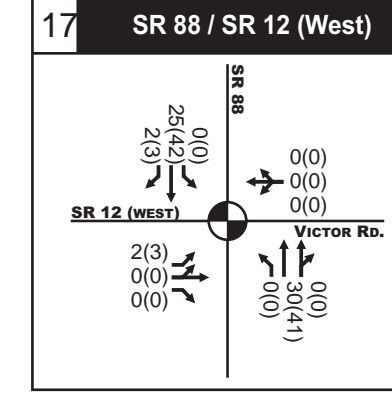
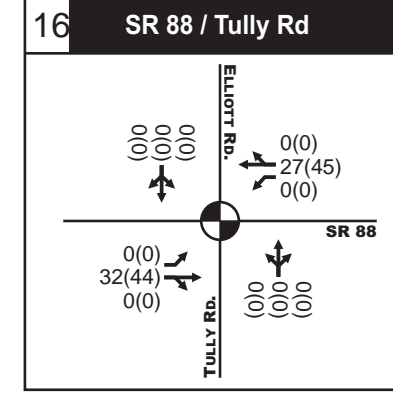
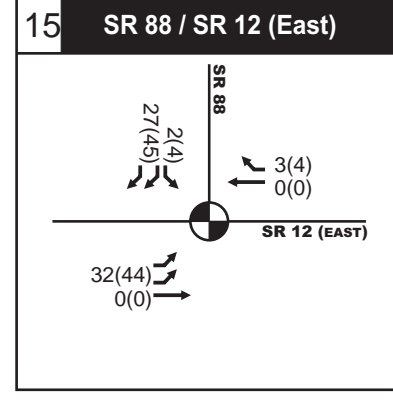
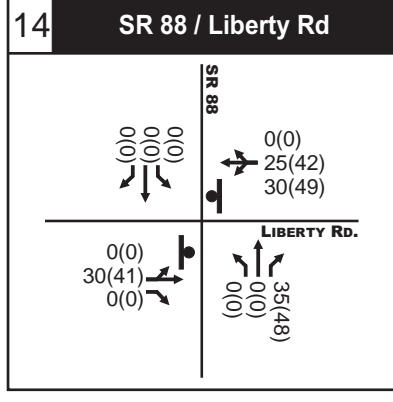
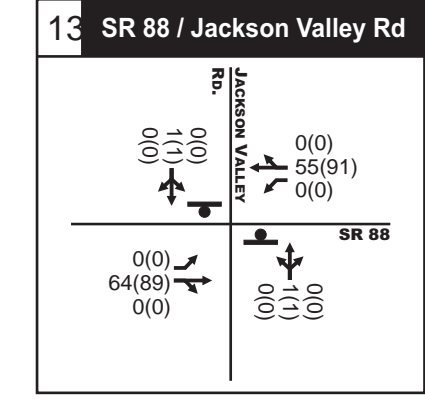
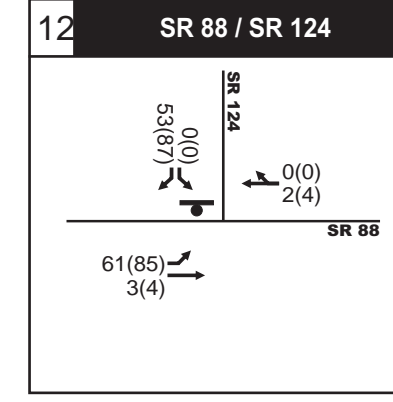
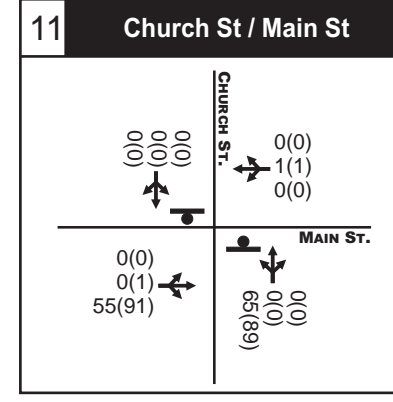
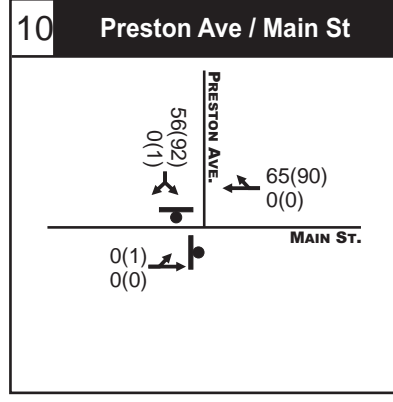
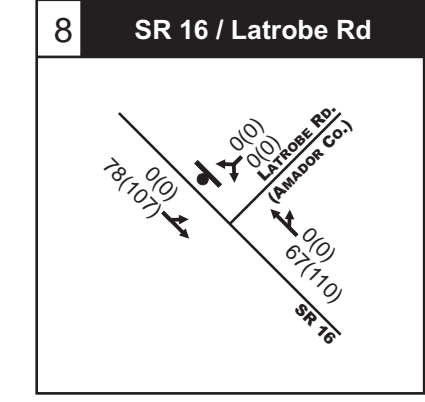
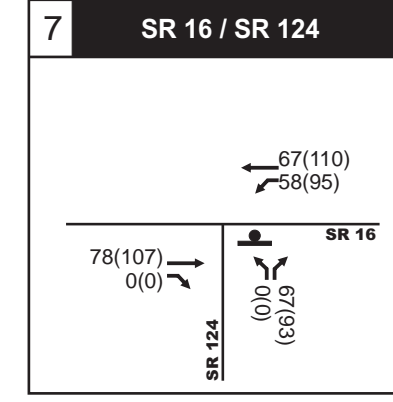
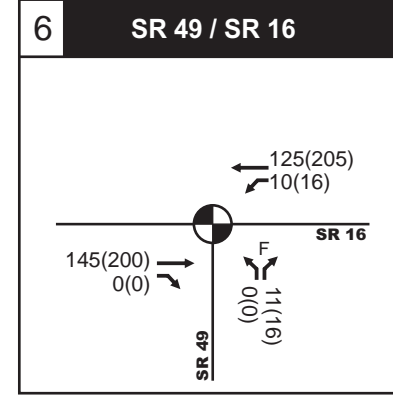
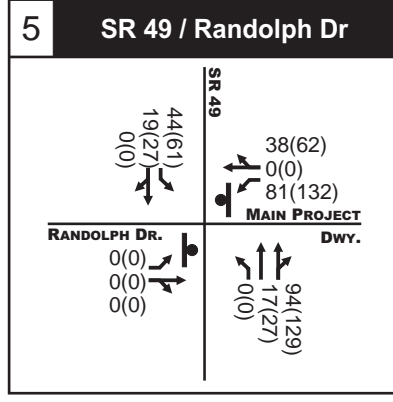
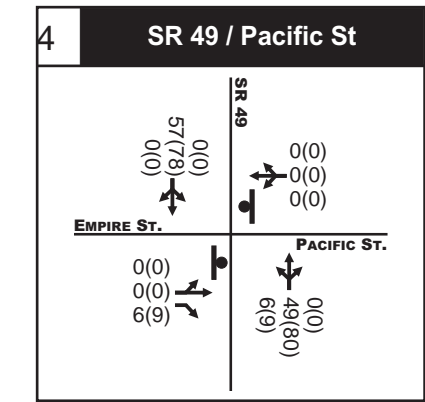
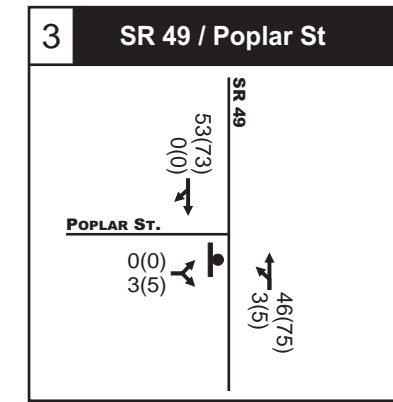
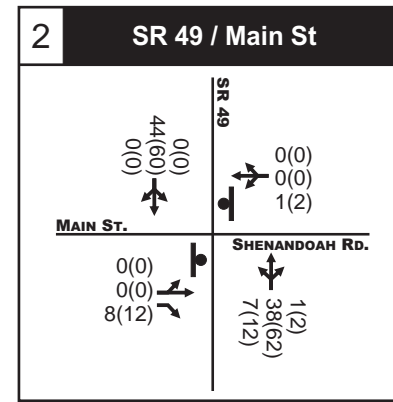
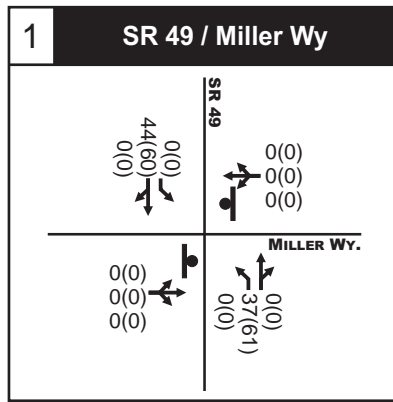
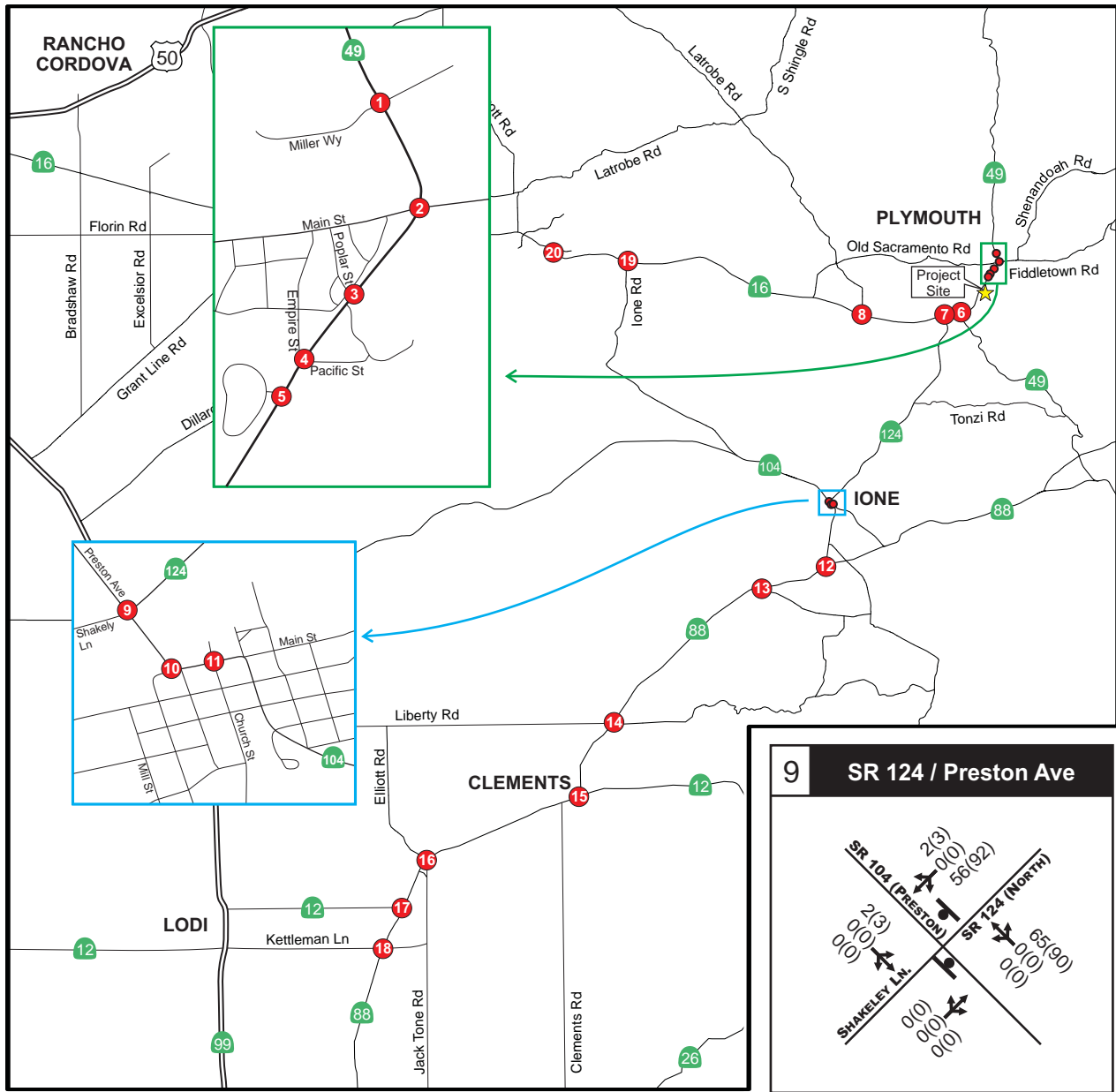
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

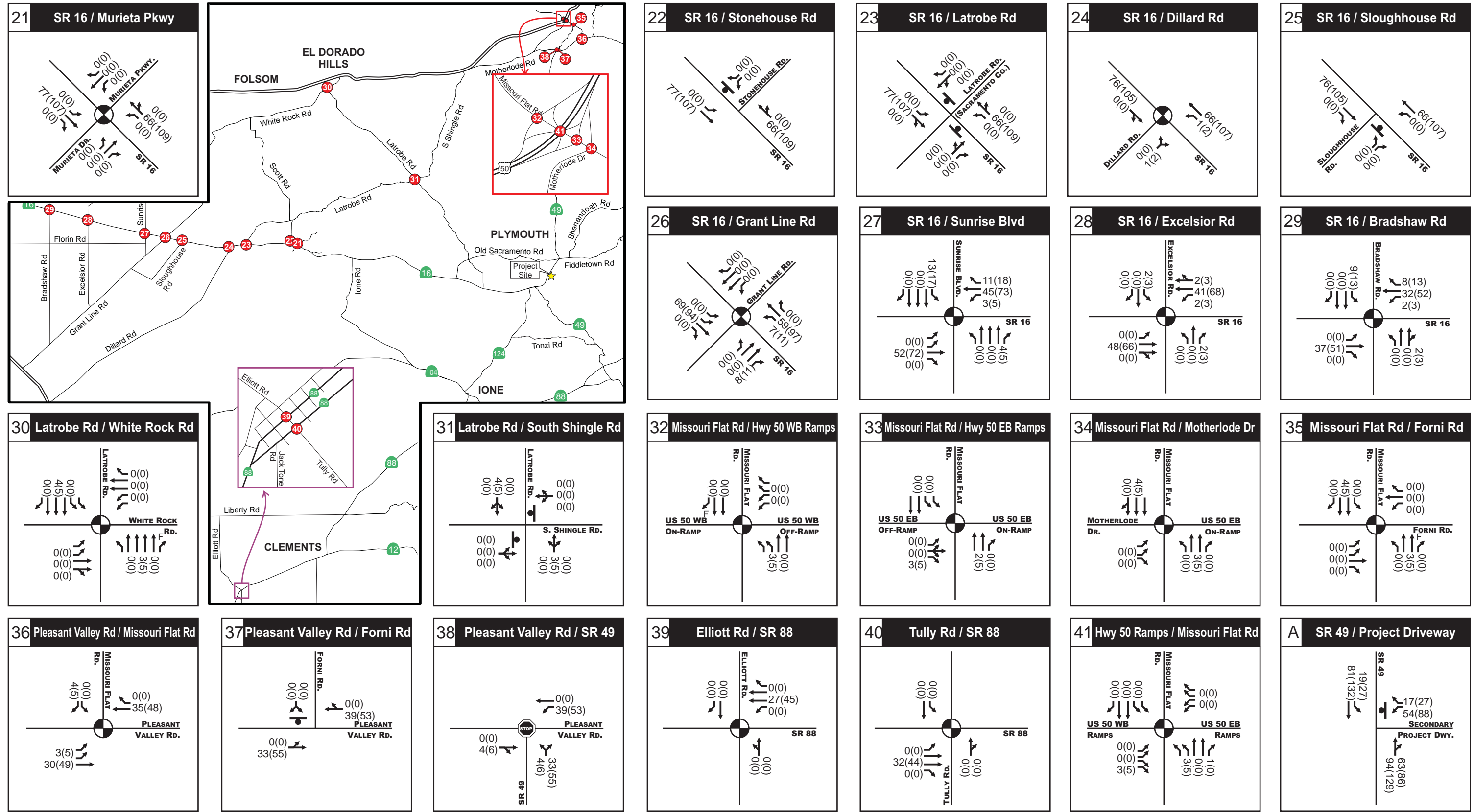
Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



Ione Casino
 Traffic Impact Analysis
Figure 15a
 Project Only PM Peak Hour Trips
 Alternative B Phase 1 (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 16
Project Only PM Peak Hour Trips
Alternative B Phase 1 & 2

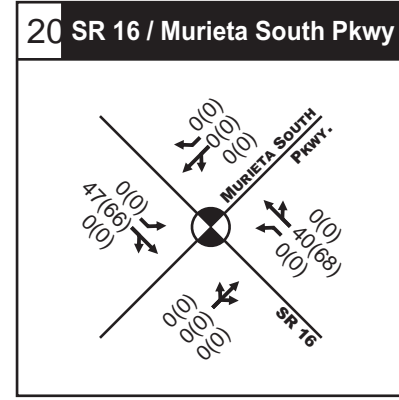
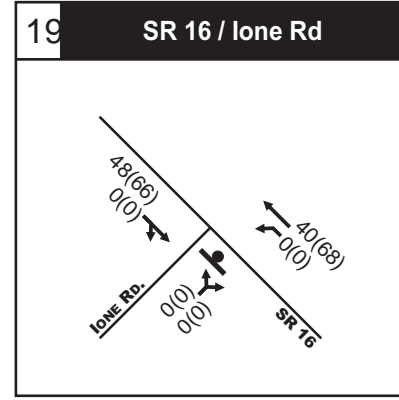
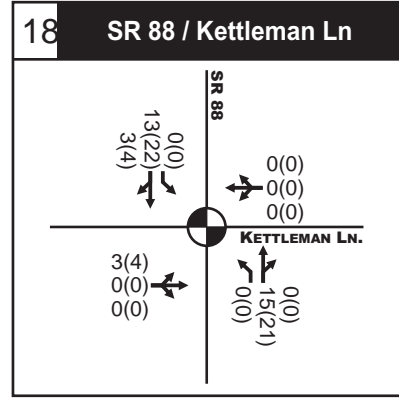
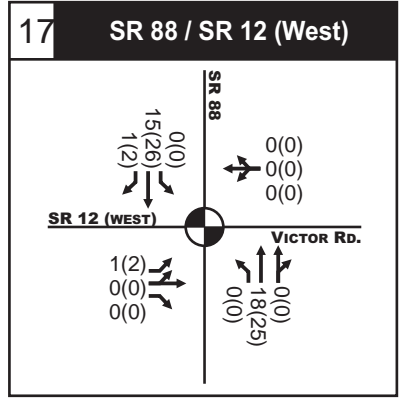
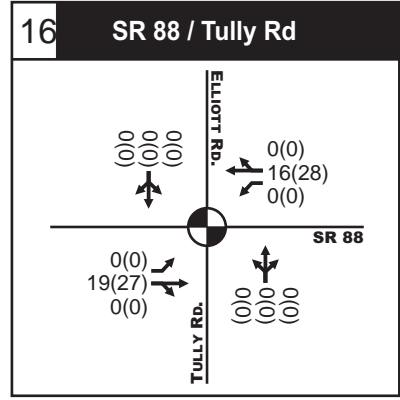
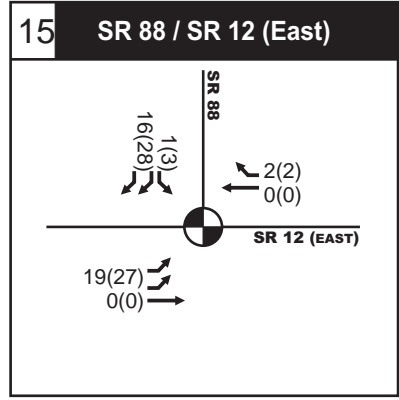
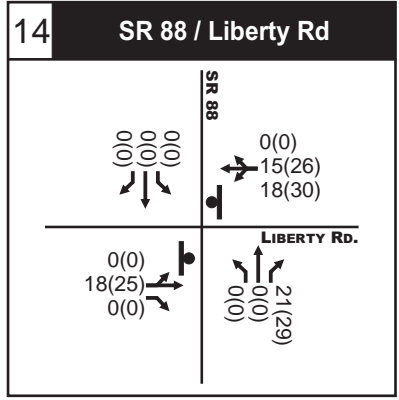
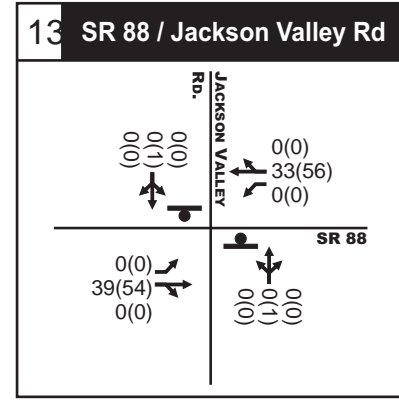
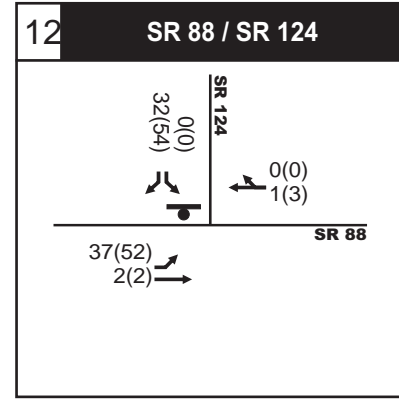
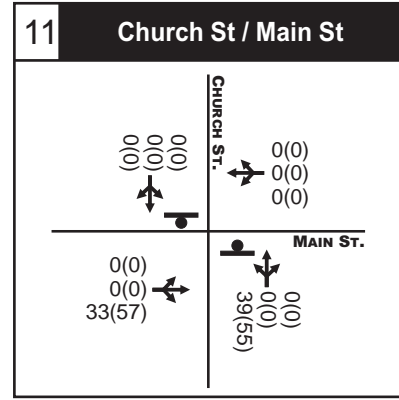
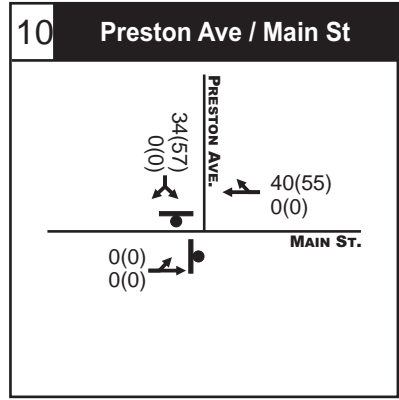
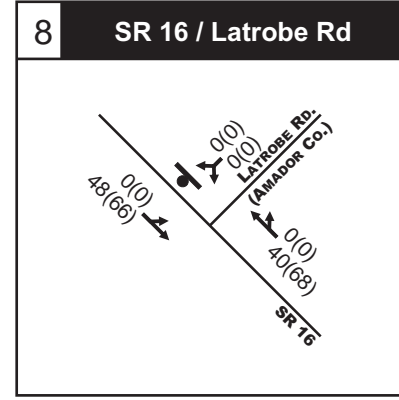
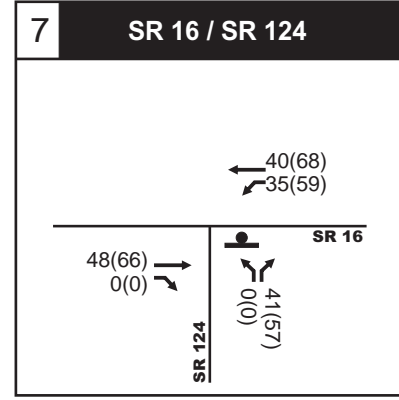
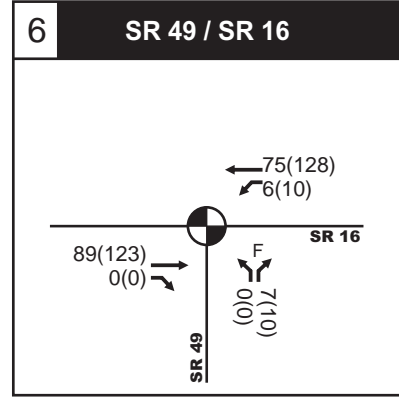
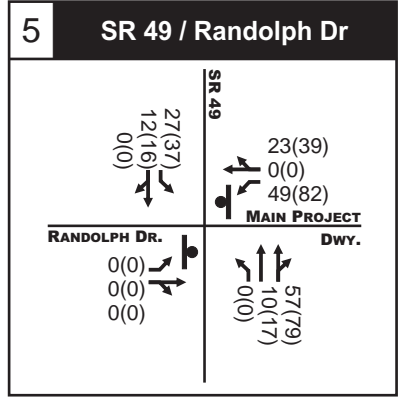
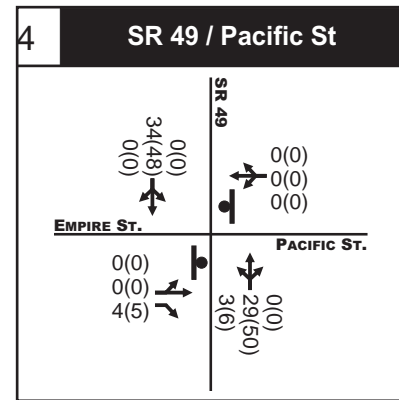
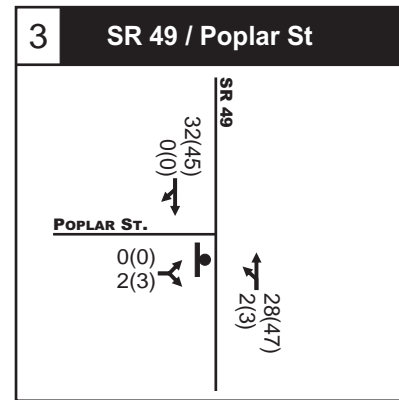
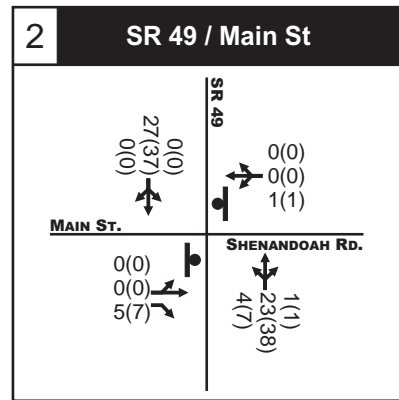
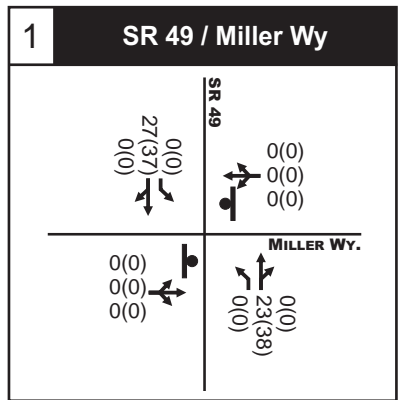
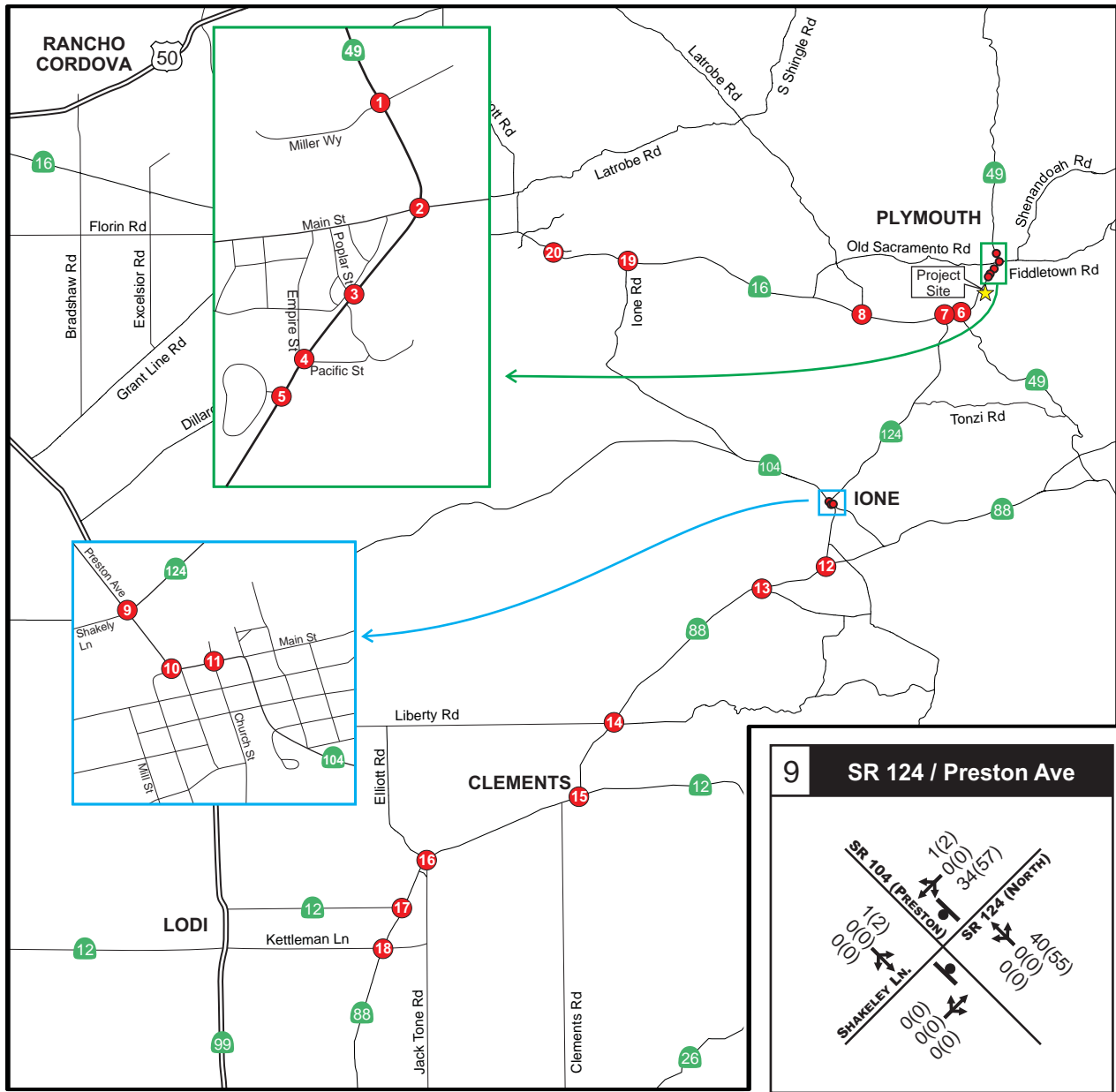


LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic



Ione Casino
Traffic Impact Analysis
Figure 16a
Project Only PM Peak Hour Trips
Alternative B Phase 1 & 2 (Cont.)



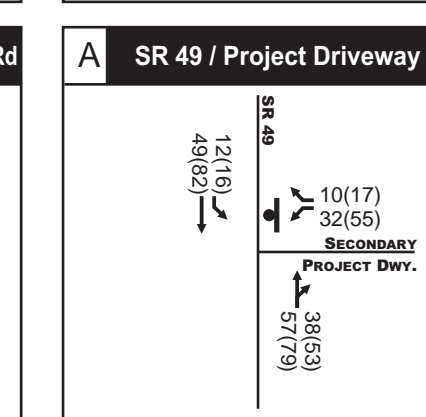
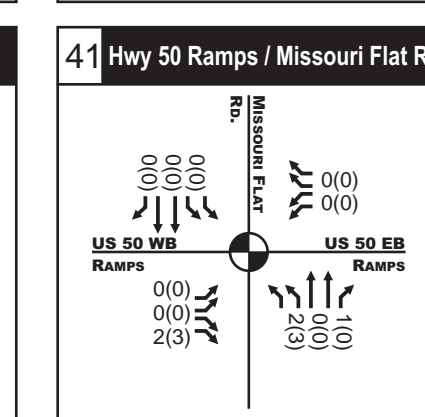
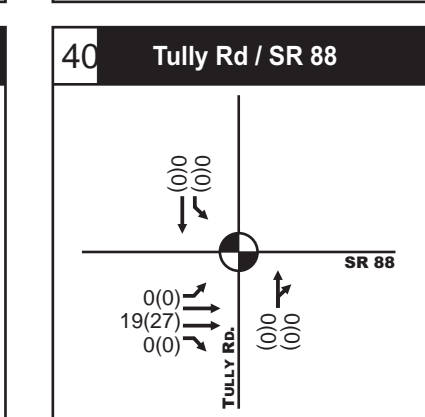
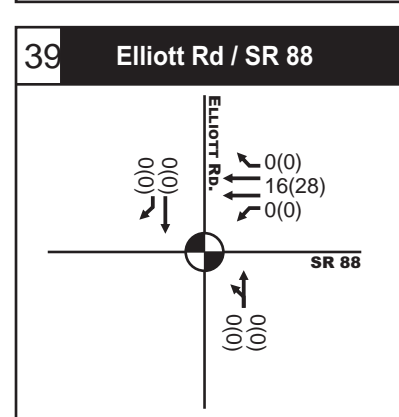
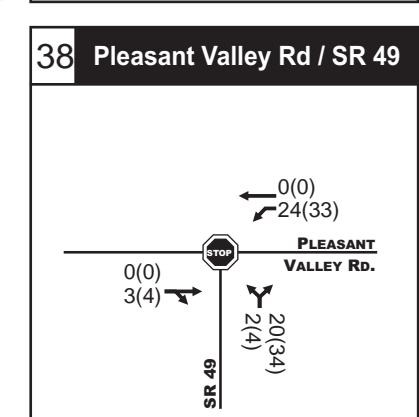
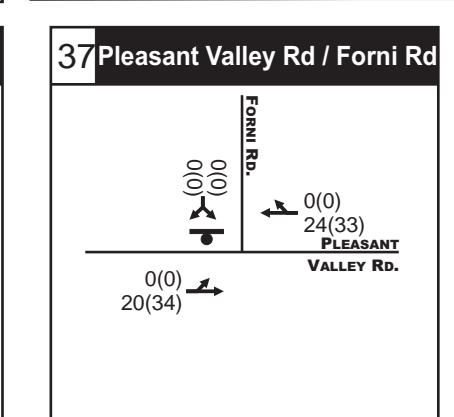
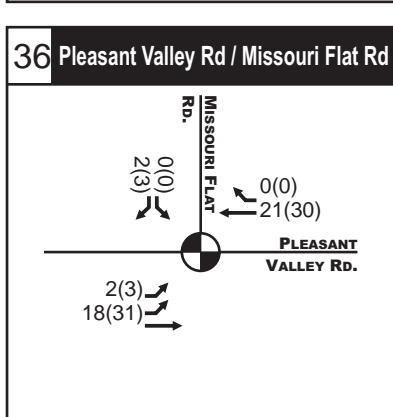
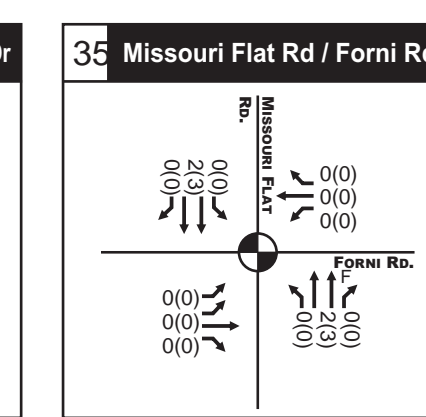
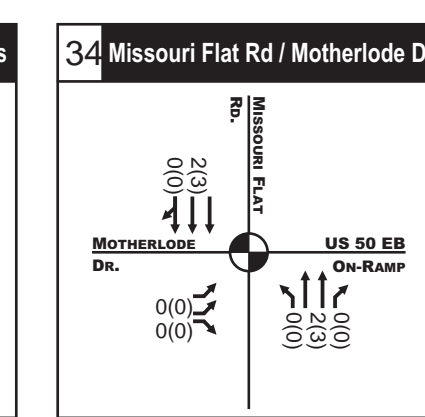
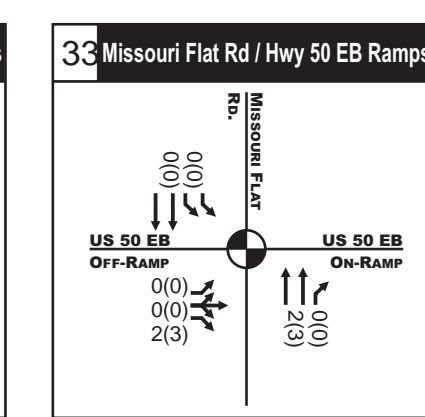
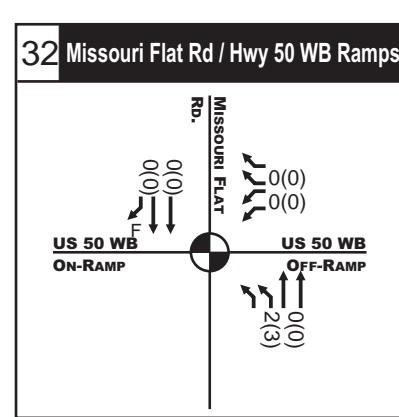
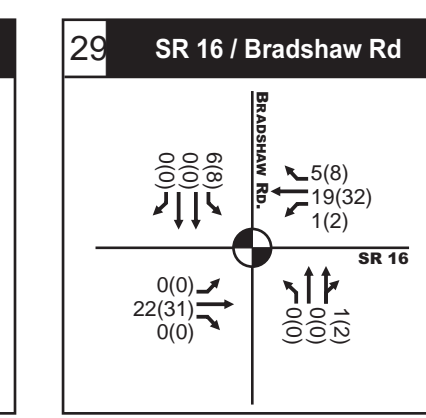
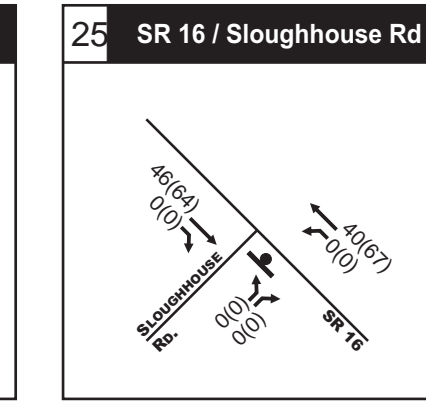
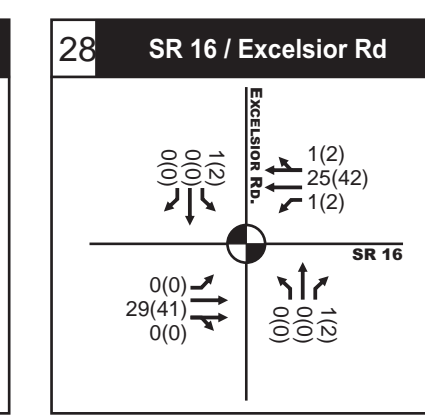
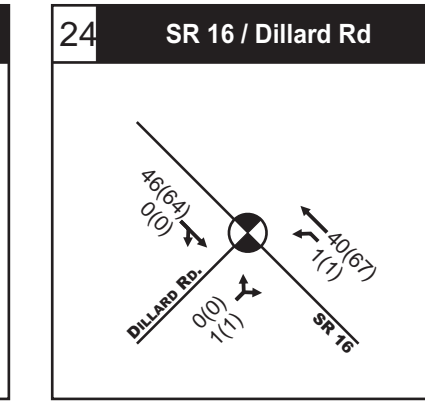
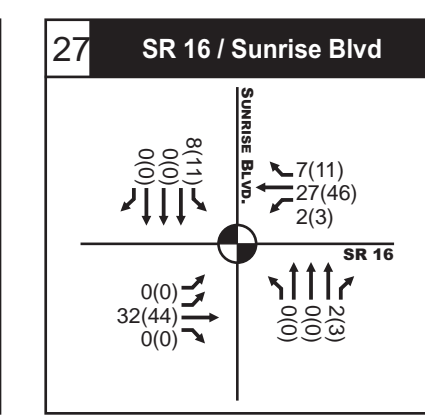
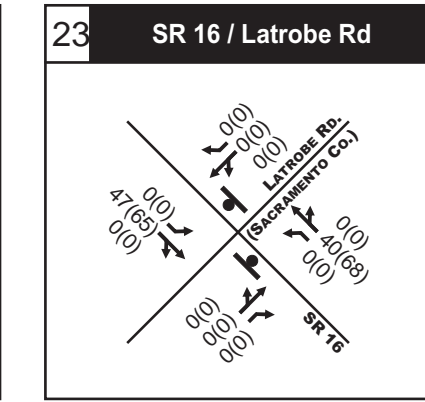
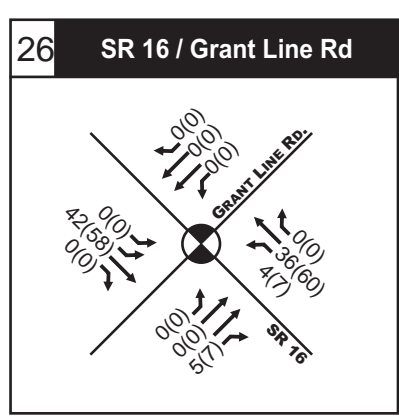
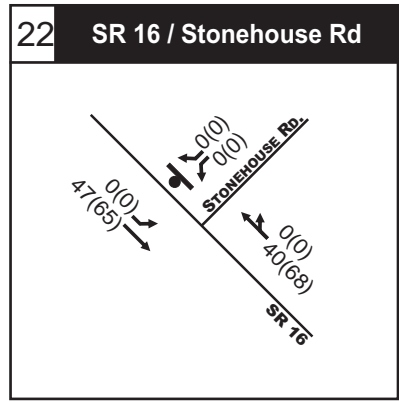
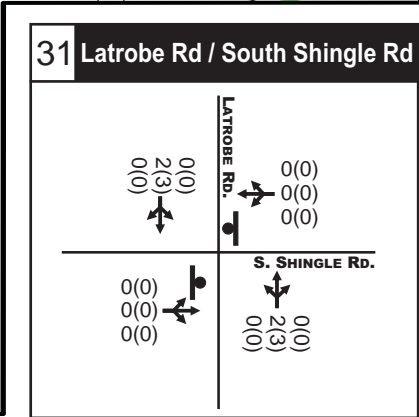
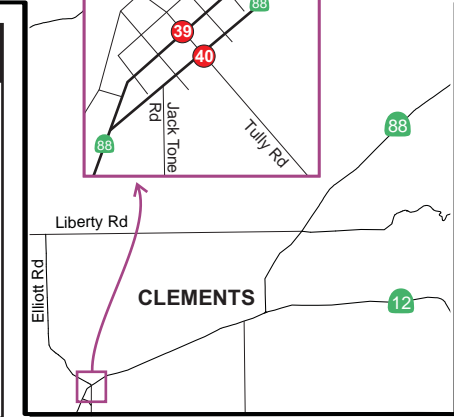
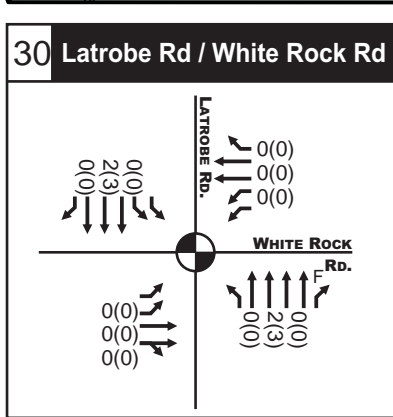
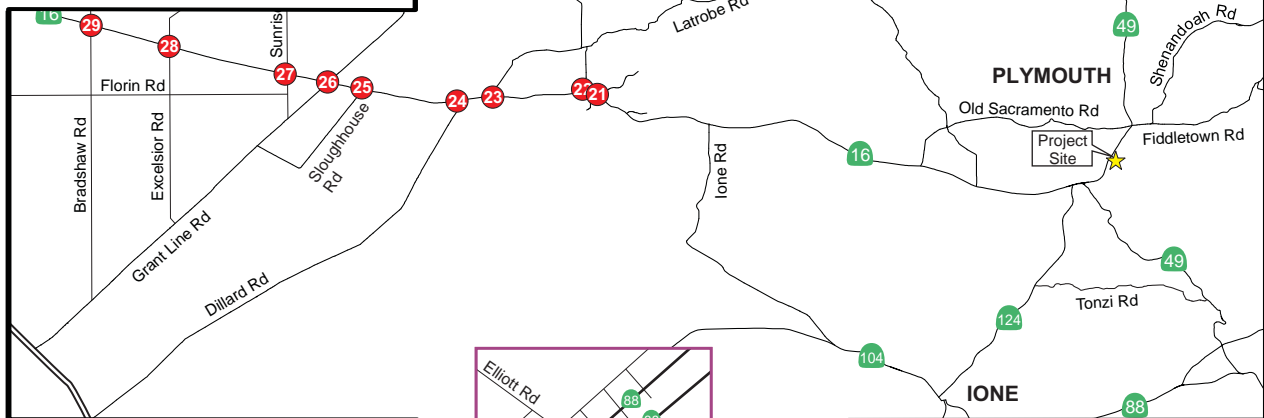
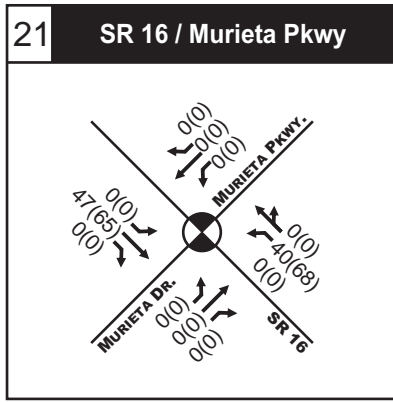
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



Ione Casino
 Traffic Impact Analysis
Figure 17
 Project PM Peak Hour Only Trips
 Alternative C

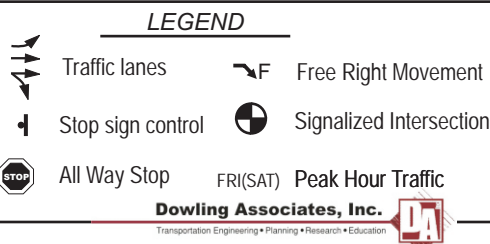
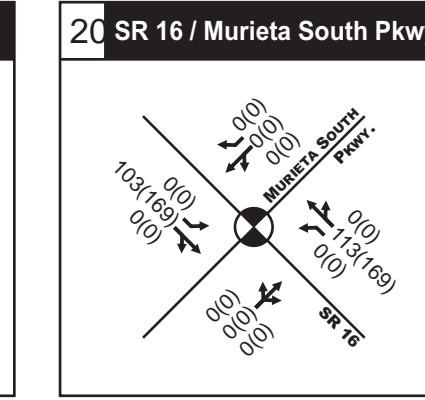
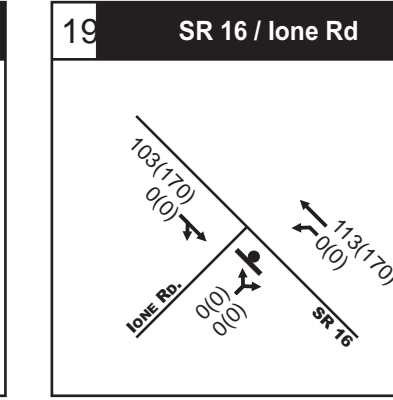
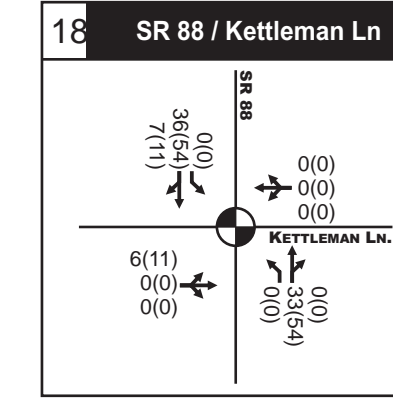
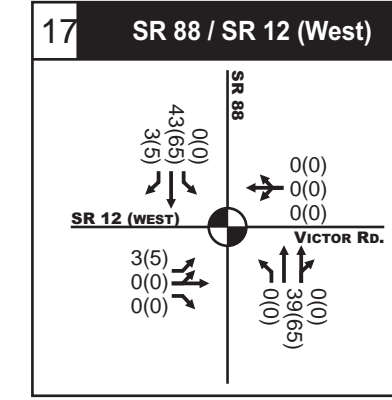
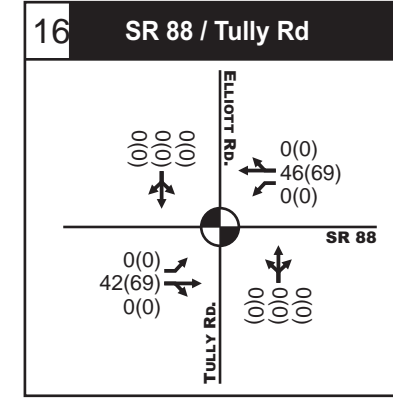
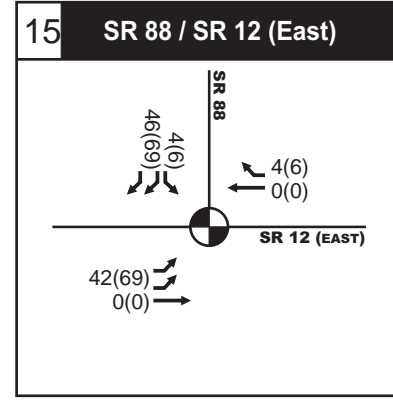
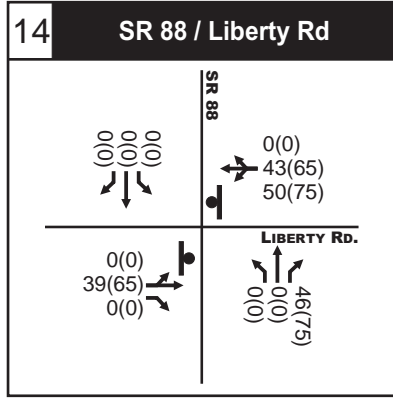
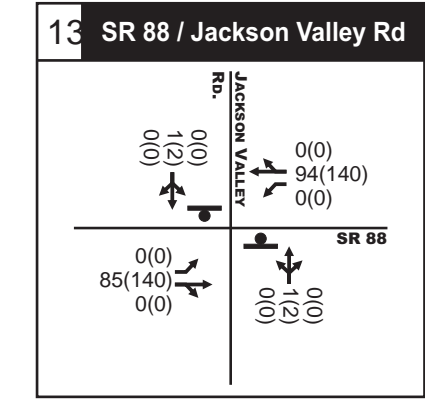
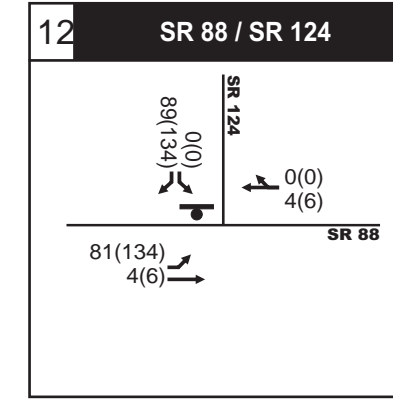
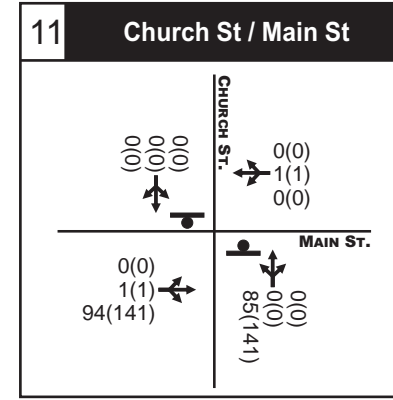
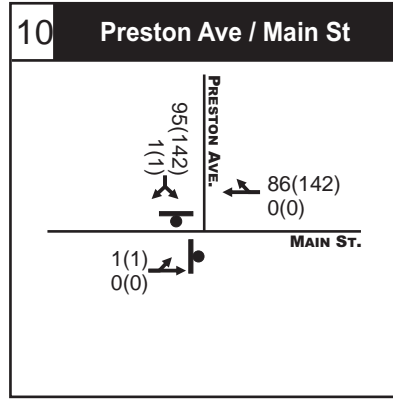
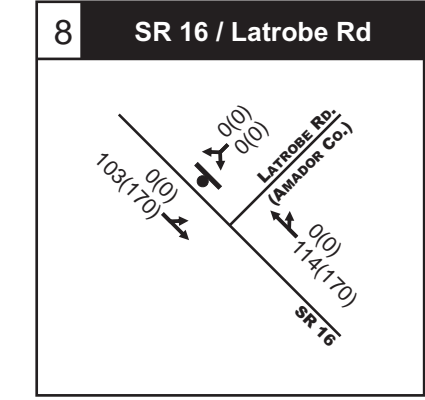
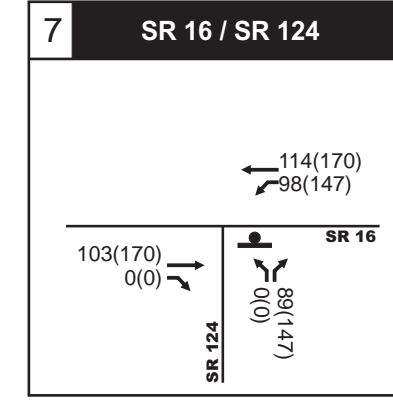
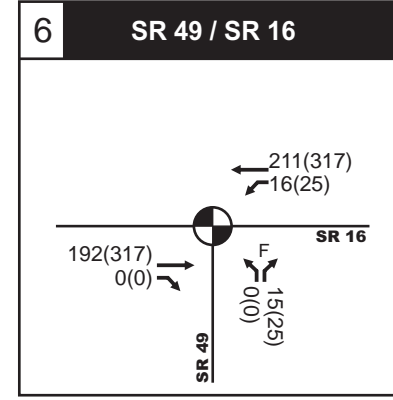
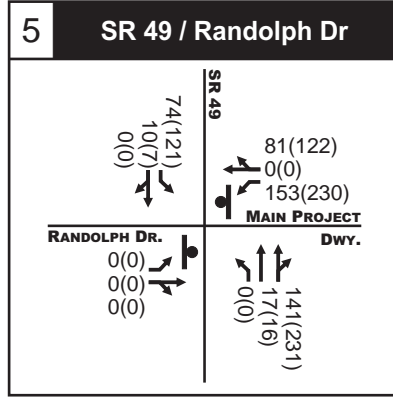
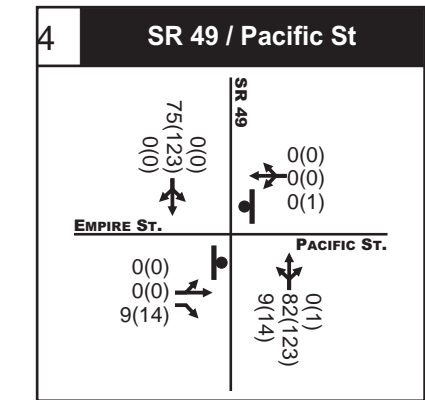
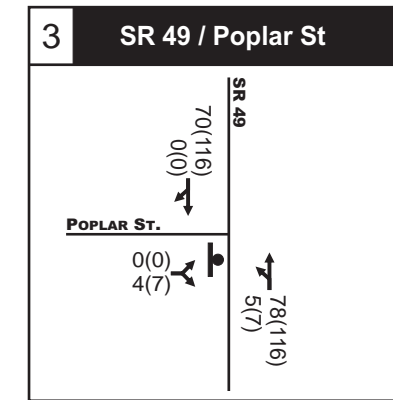
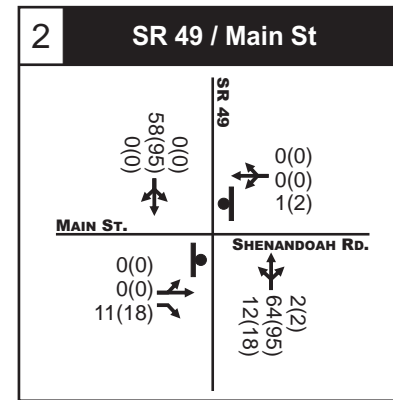
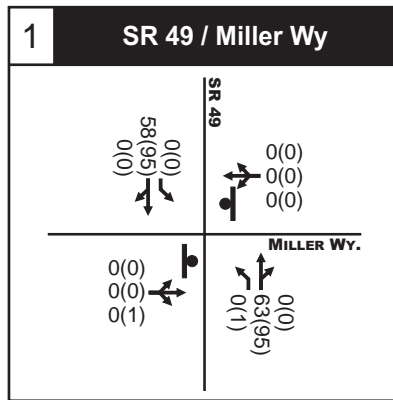
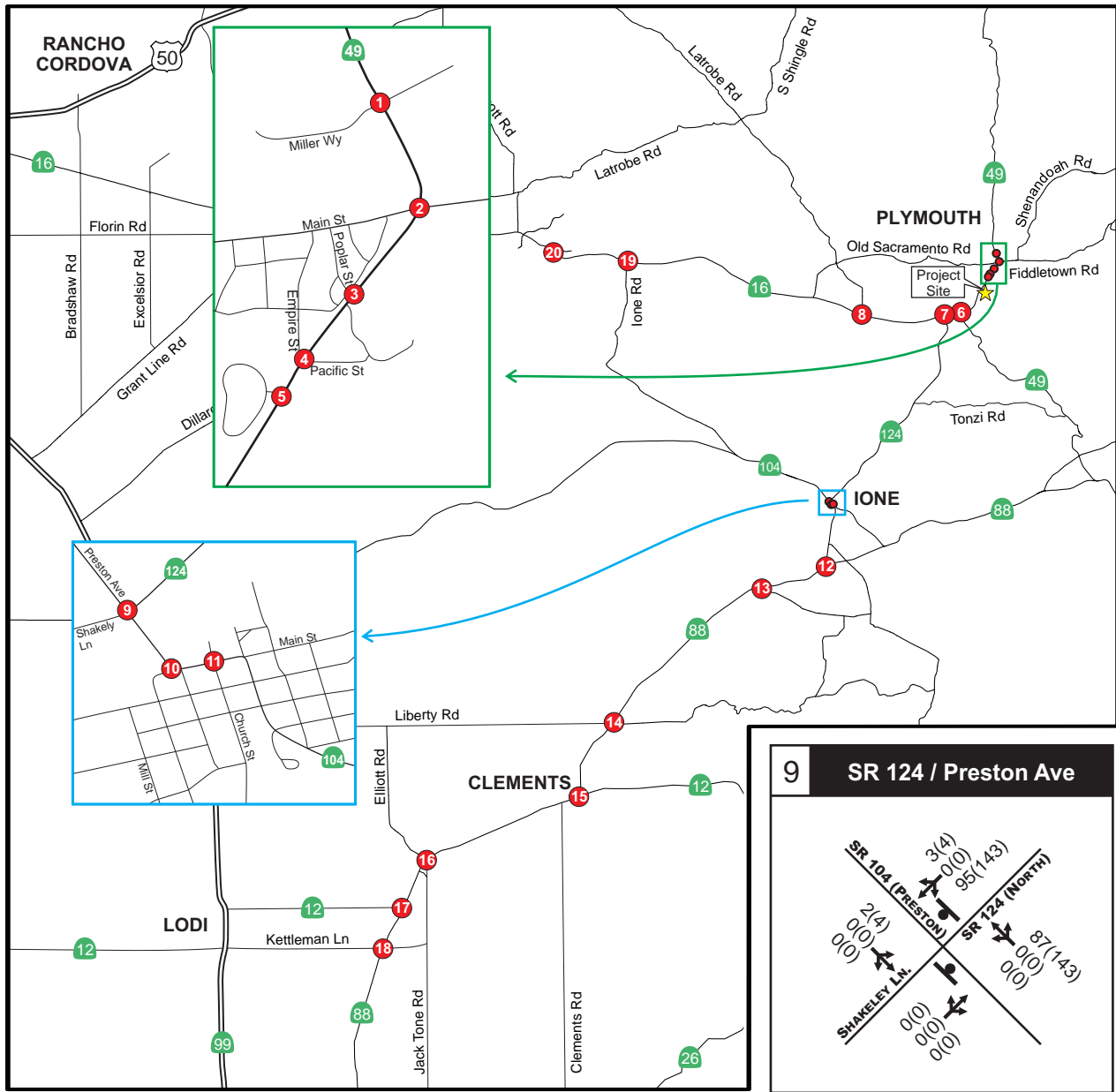


LEGEND

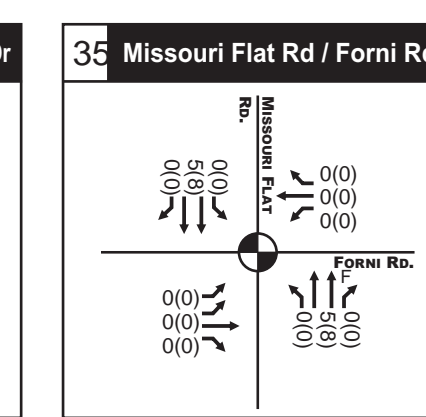
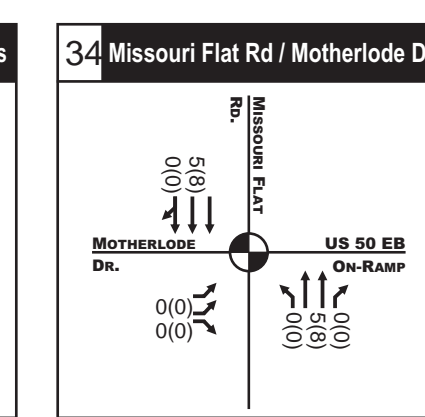
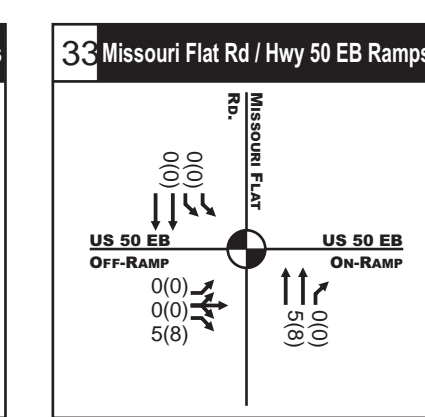
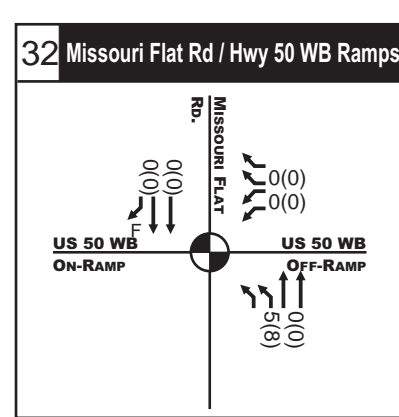
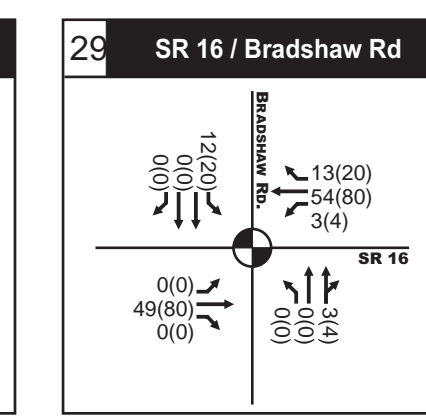
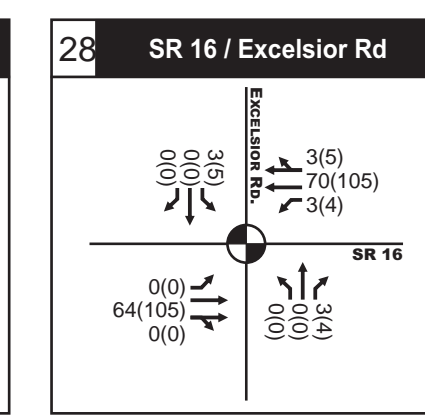
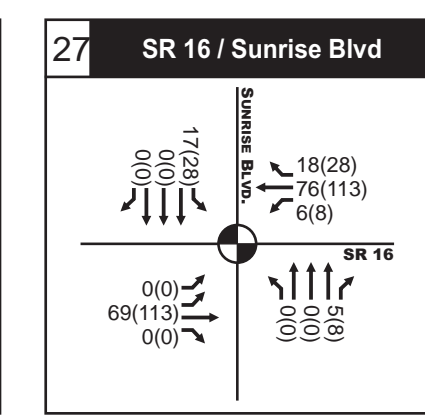
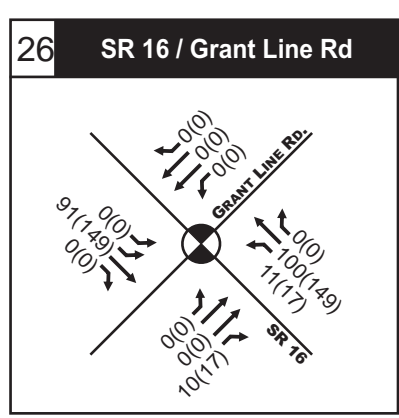
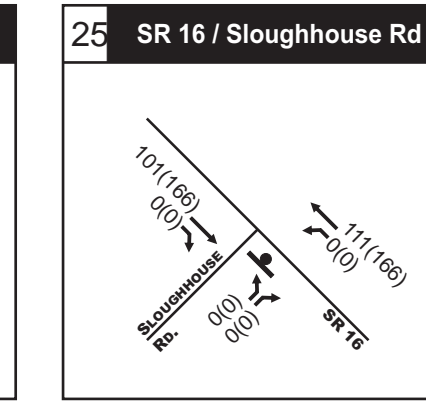
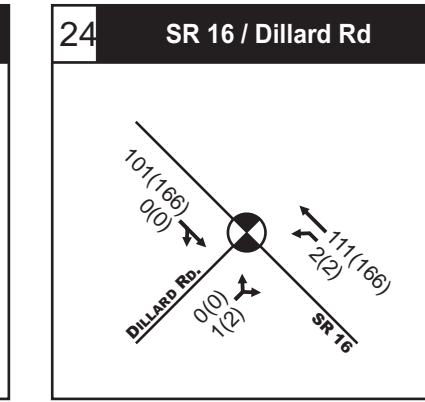
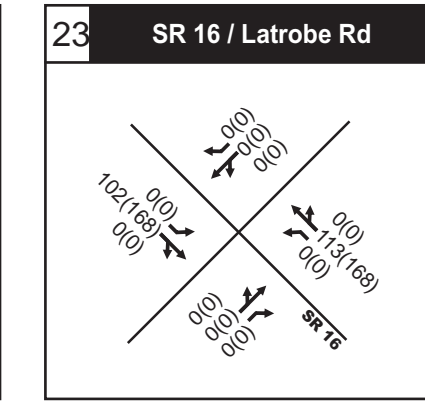
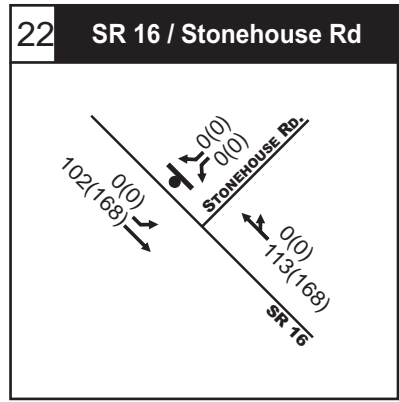
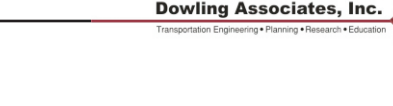
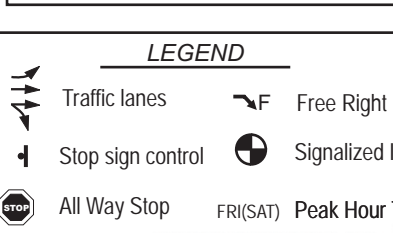
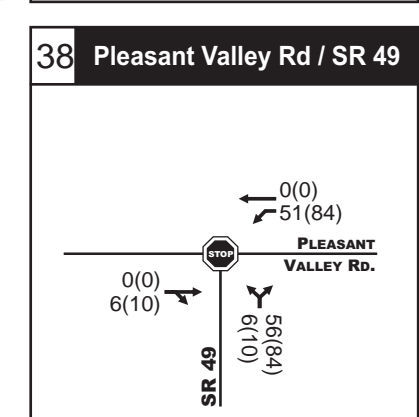
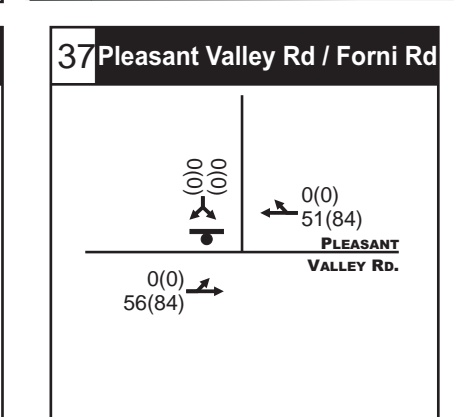
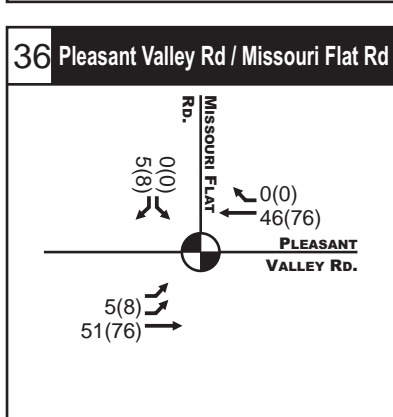
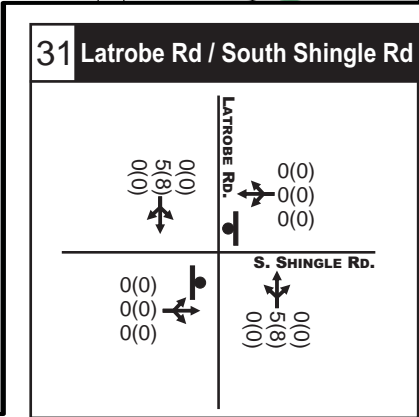
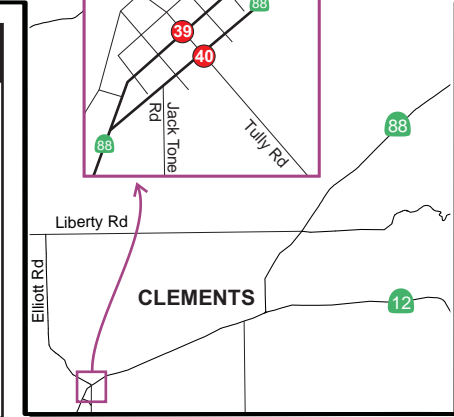
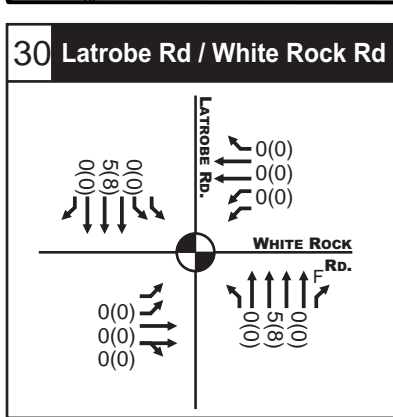
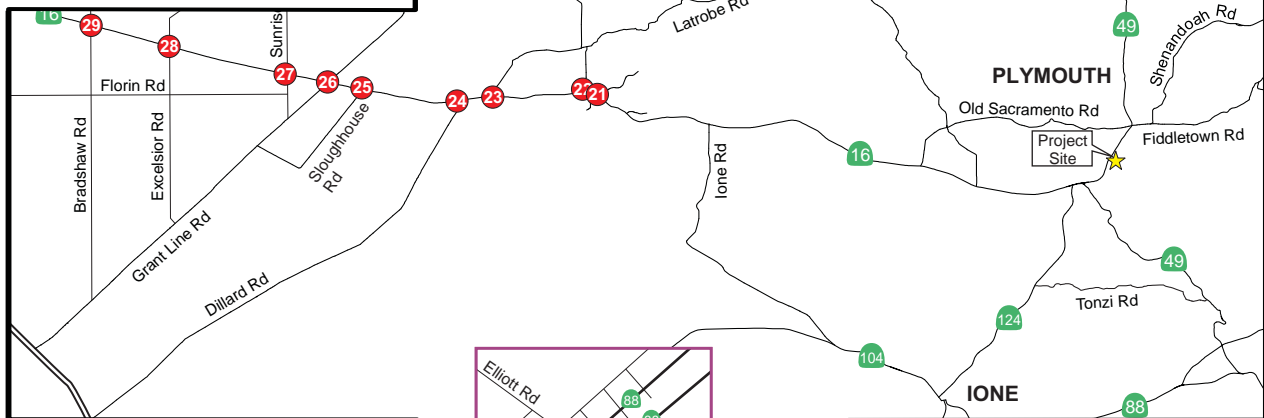
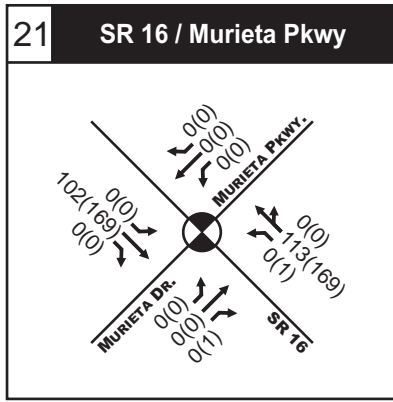
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic



Ione Casino
Traffic Impact Analysis
Figure 17a
Project PM Peak Hour Only Trips
Alternative C (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 18
Project Only PM Peak Hour Trips
Alternative D

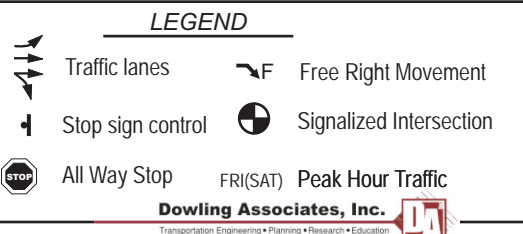
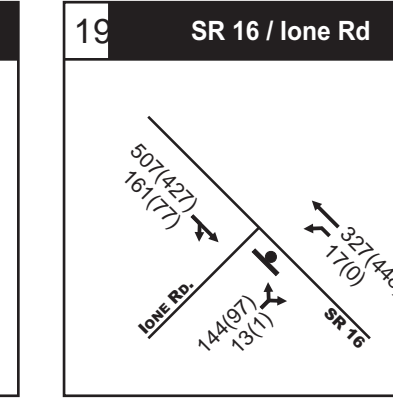
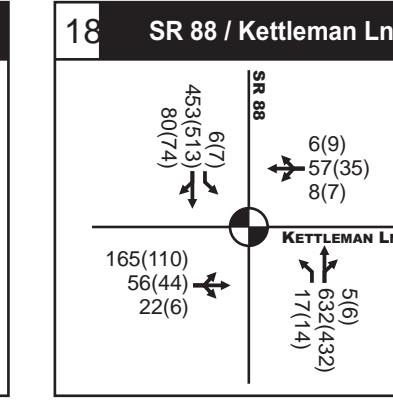
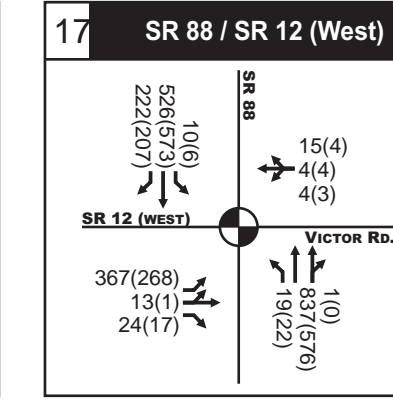
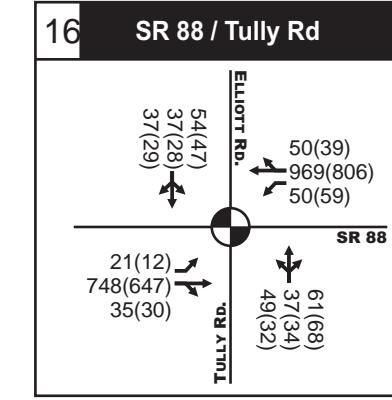
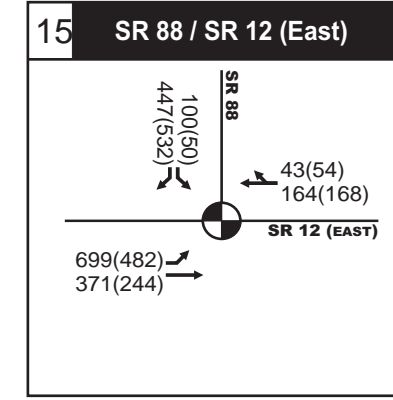
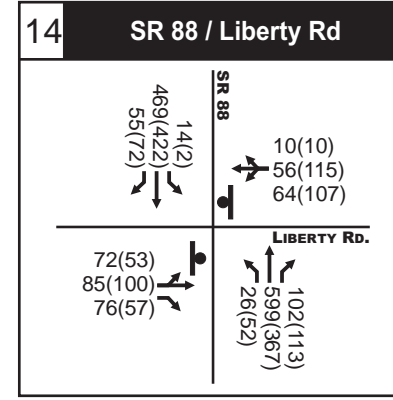
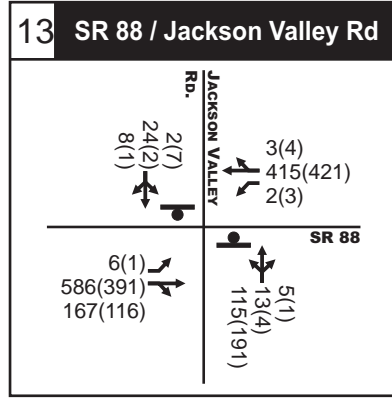
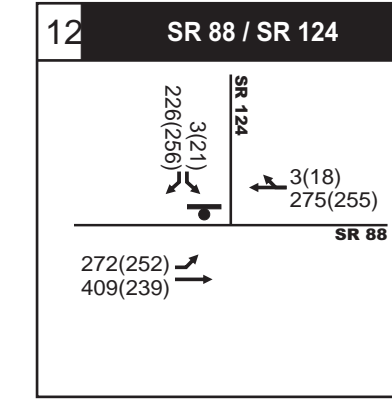
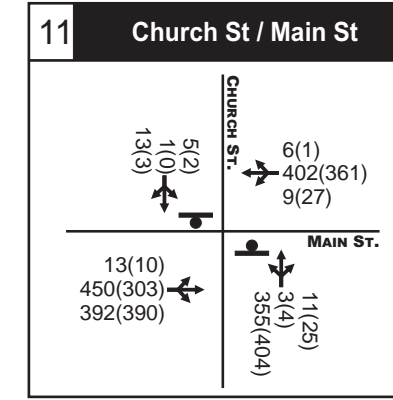
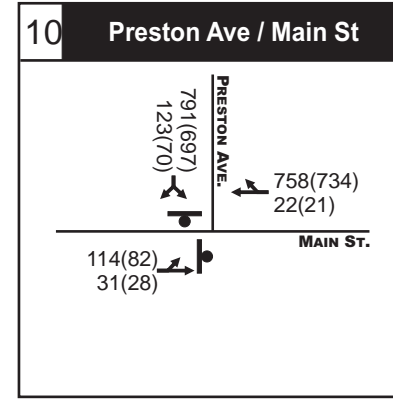
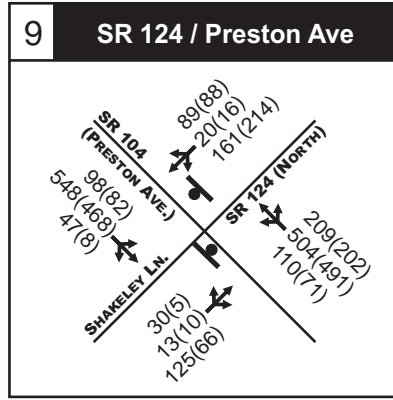
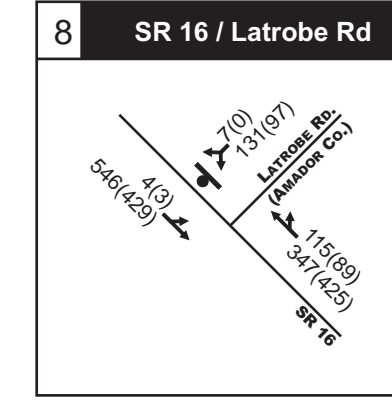
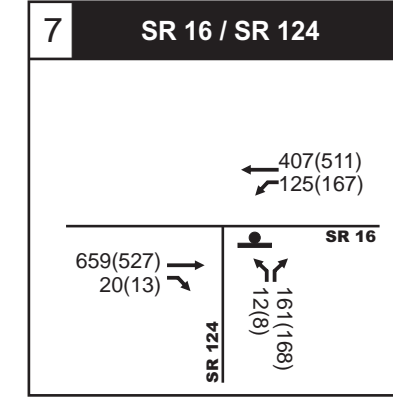
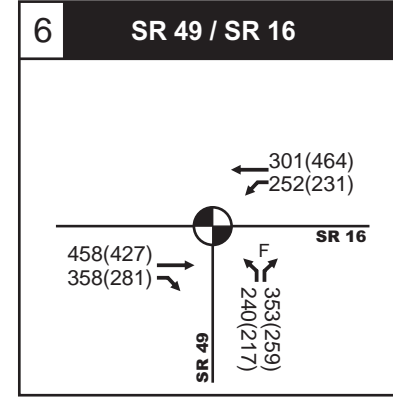
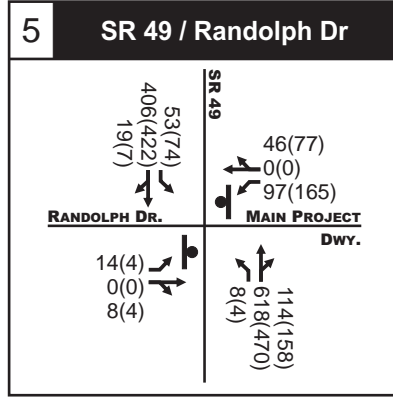
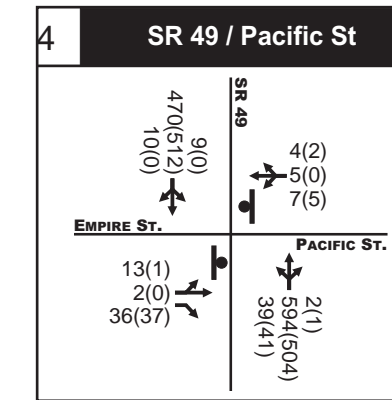
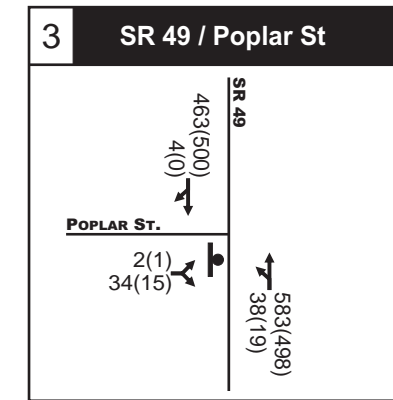
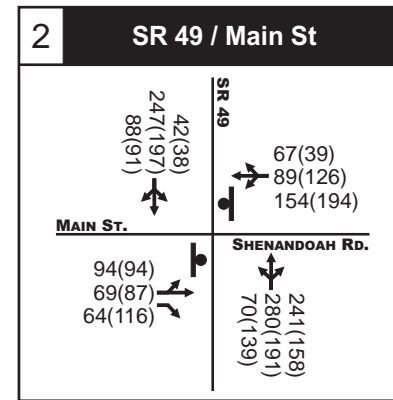
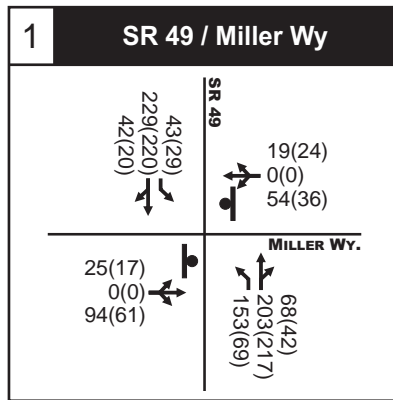
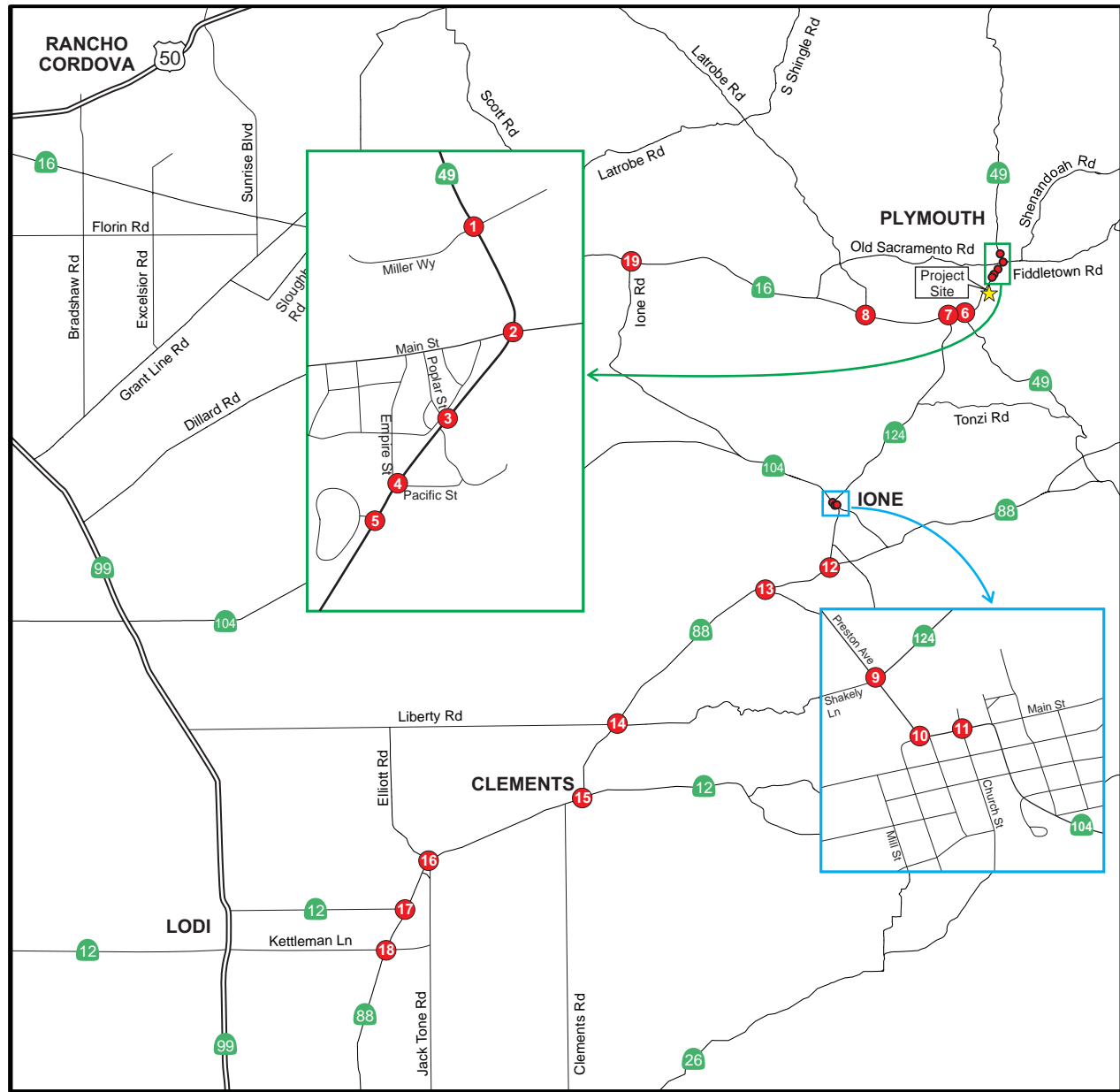


LEGEND

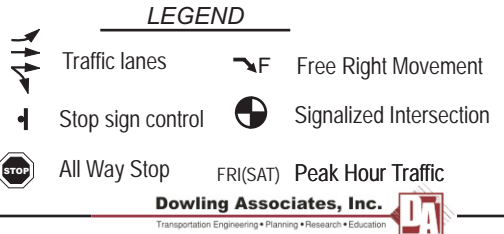
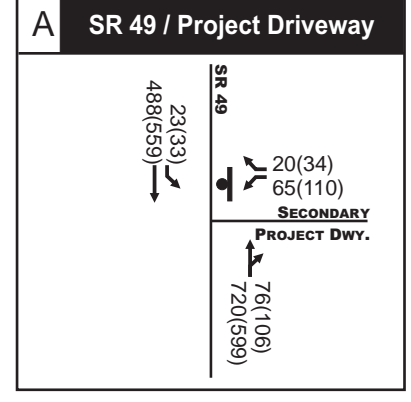
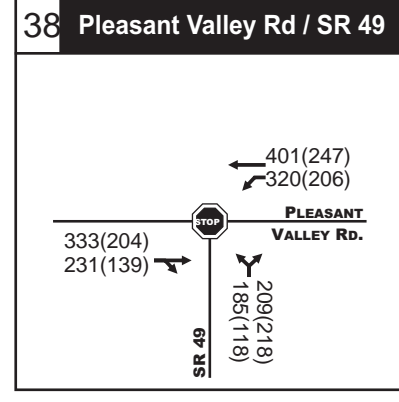
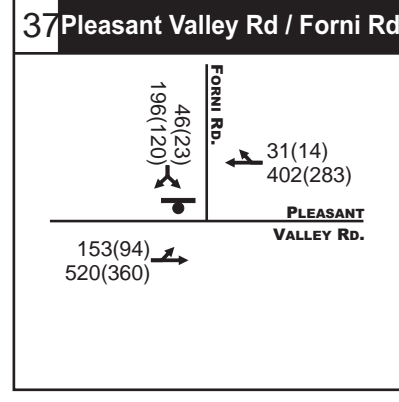
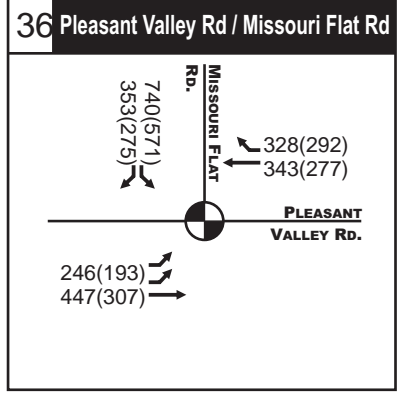
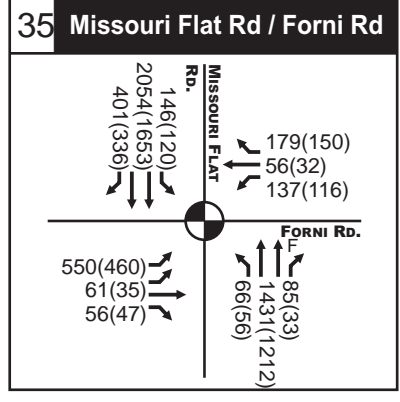
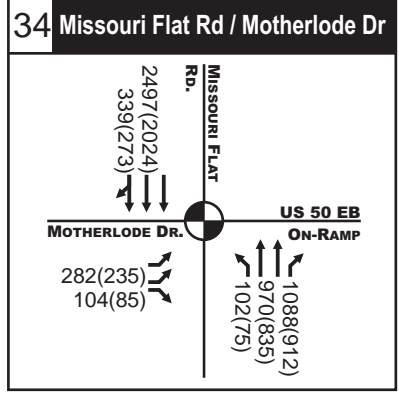
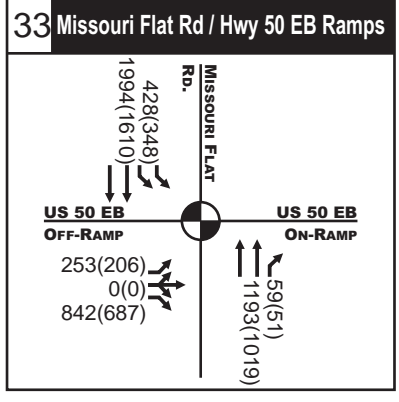
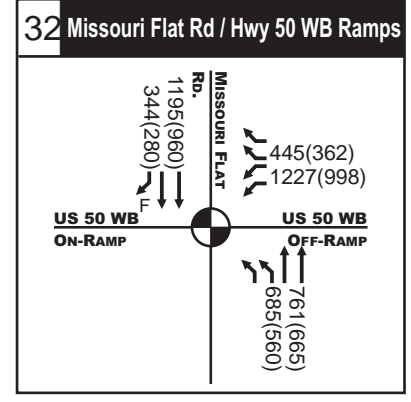
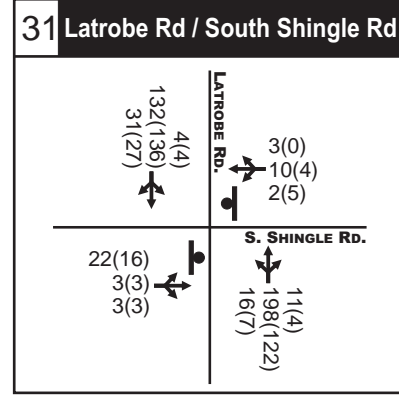
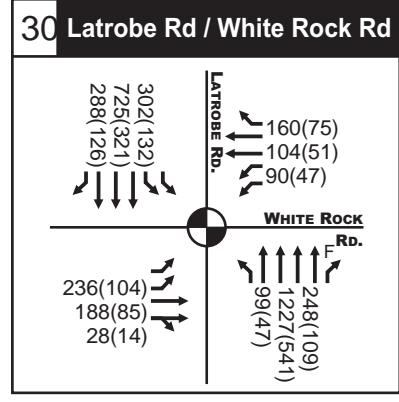
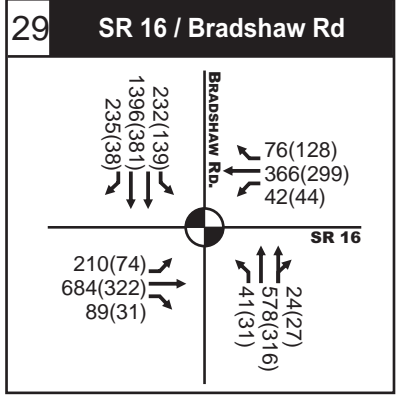
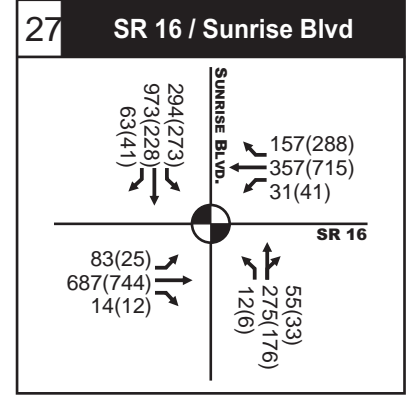
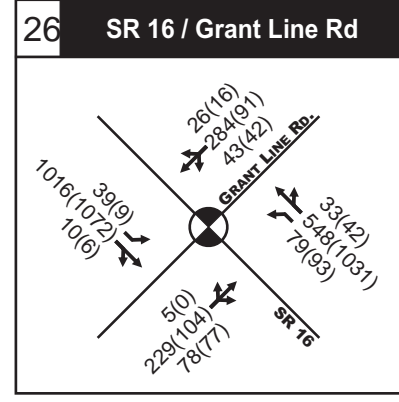
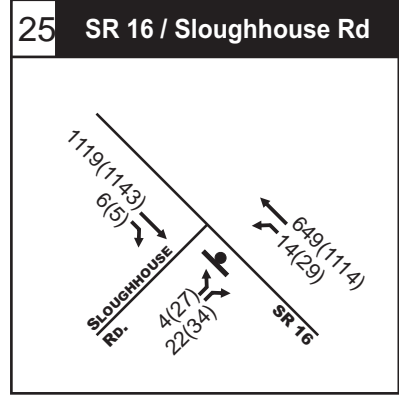
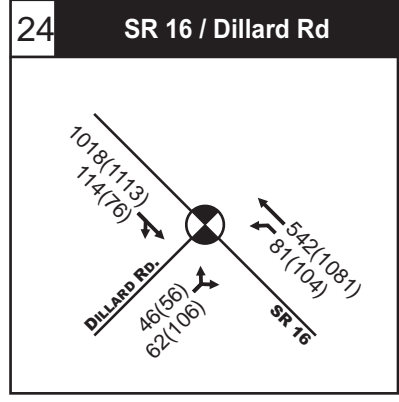
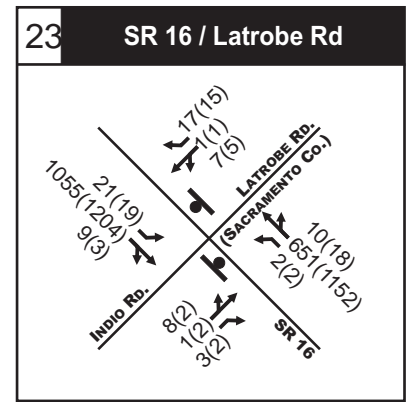
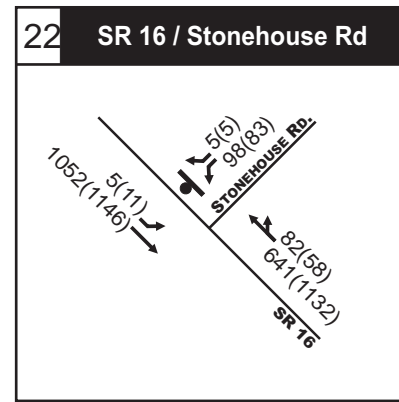
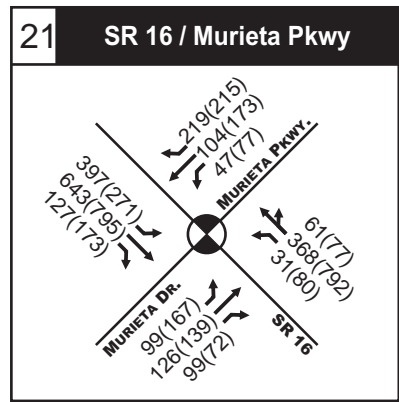
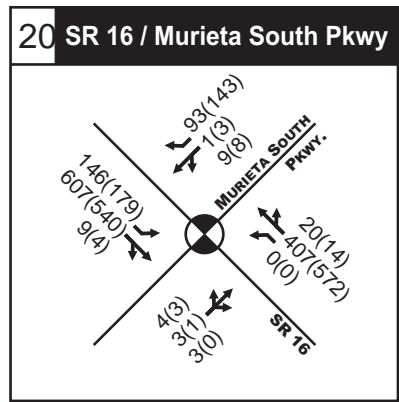
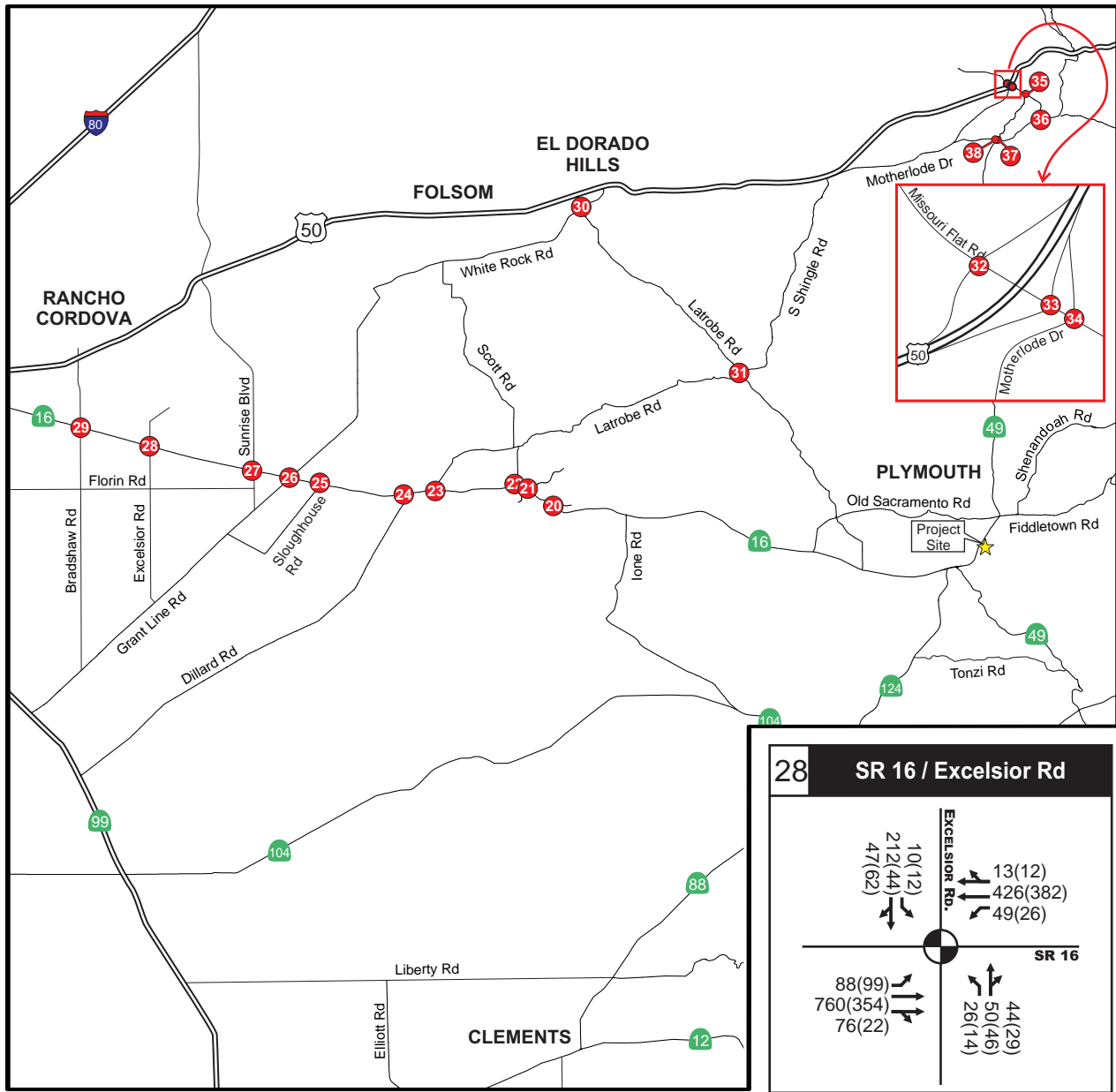
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic



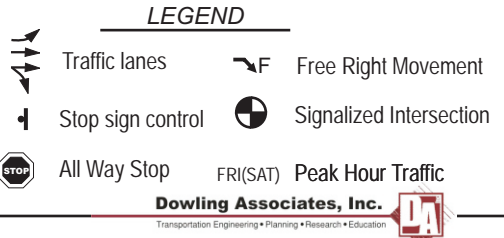
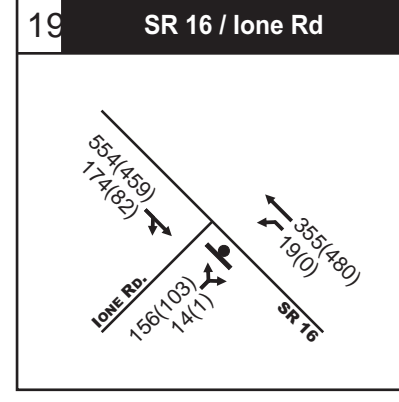
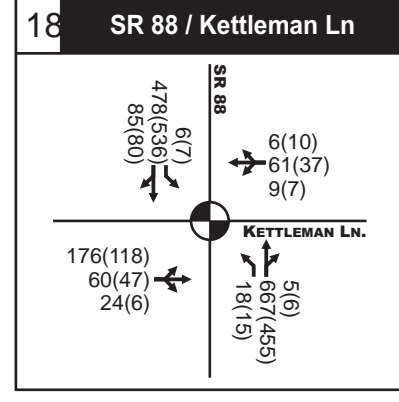
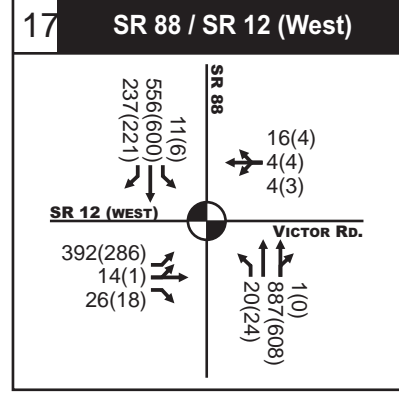
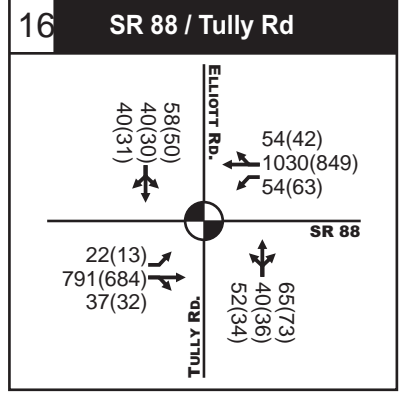
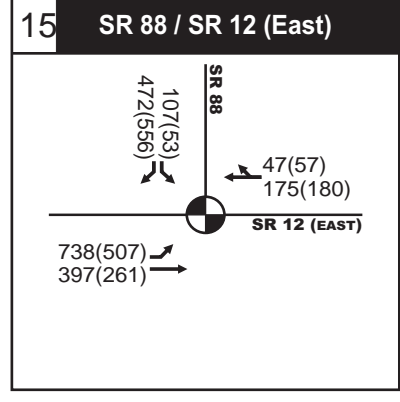
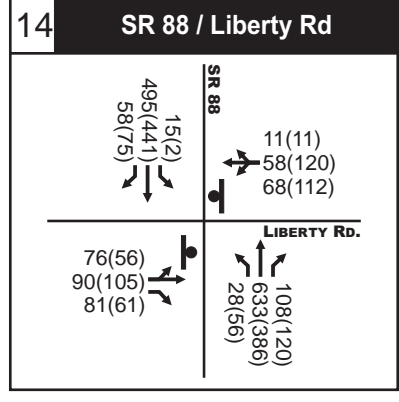
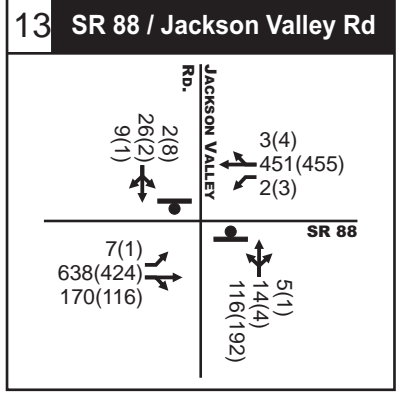
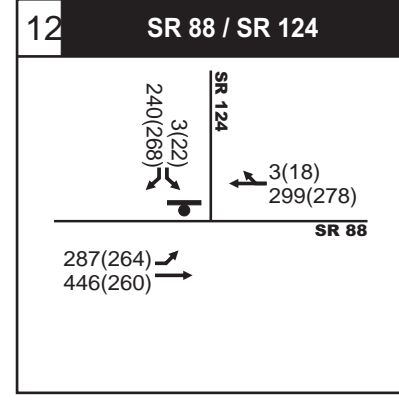
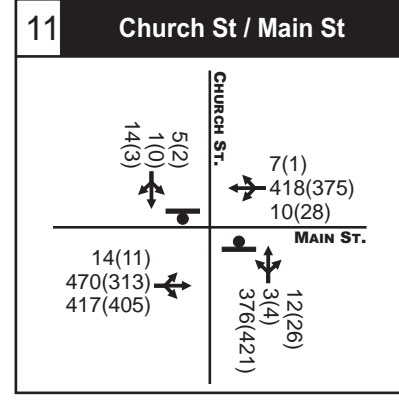
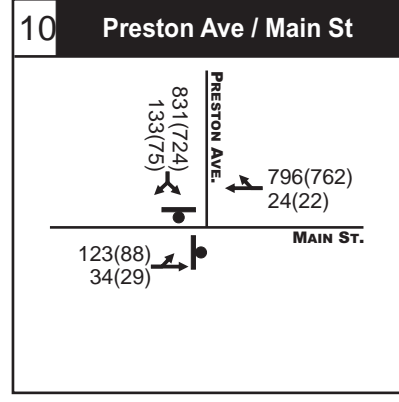
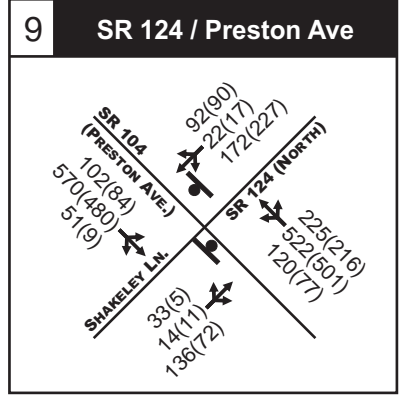
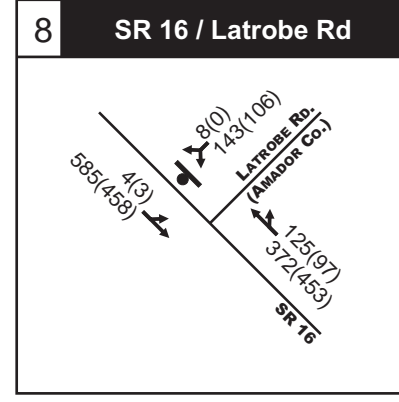
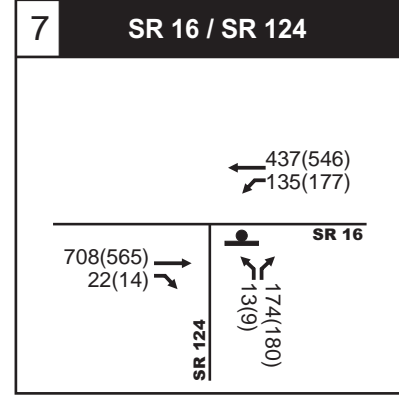
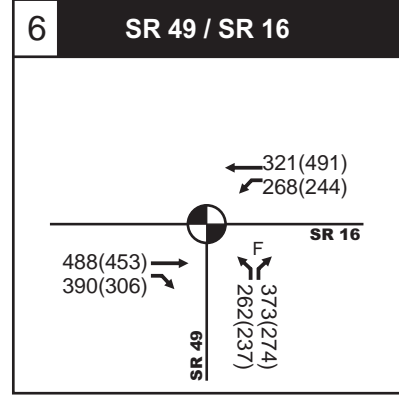
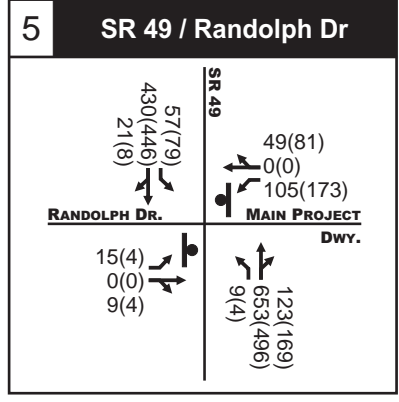
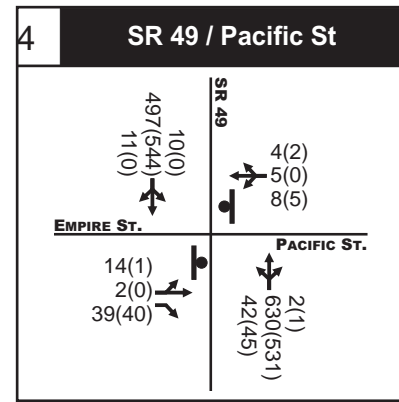
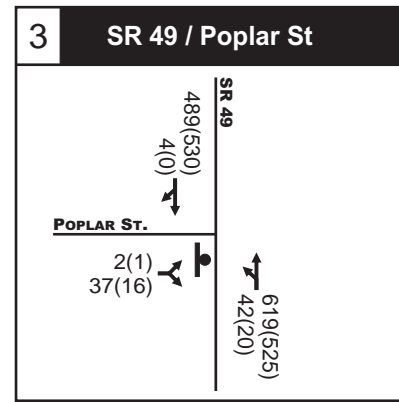
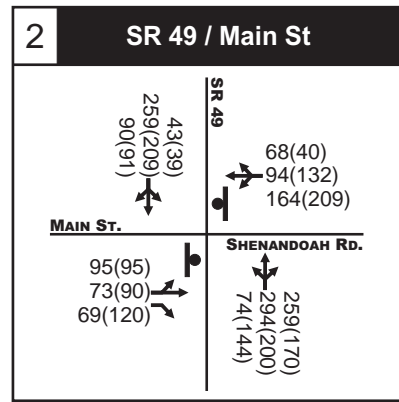
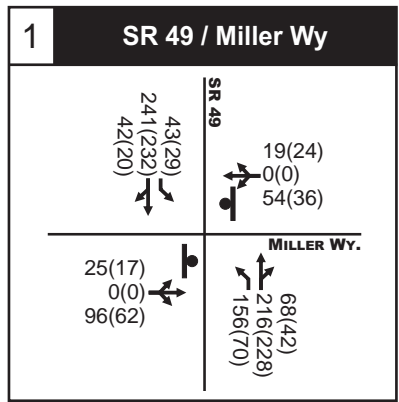
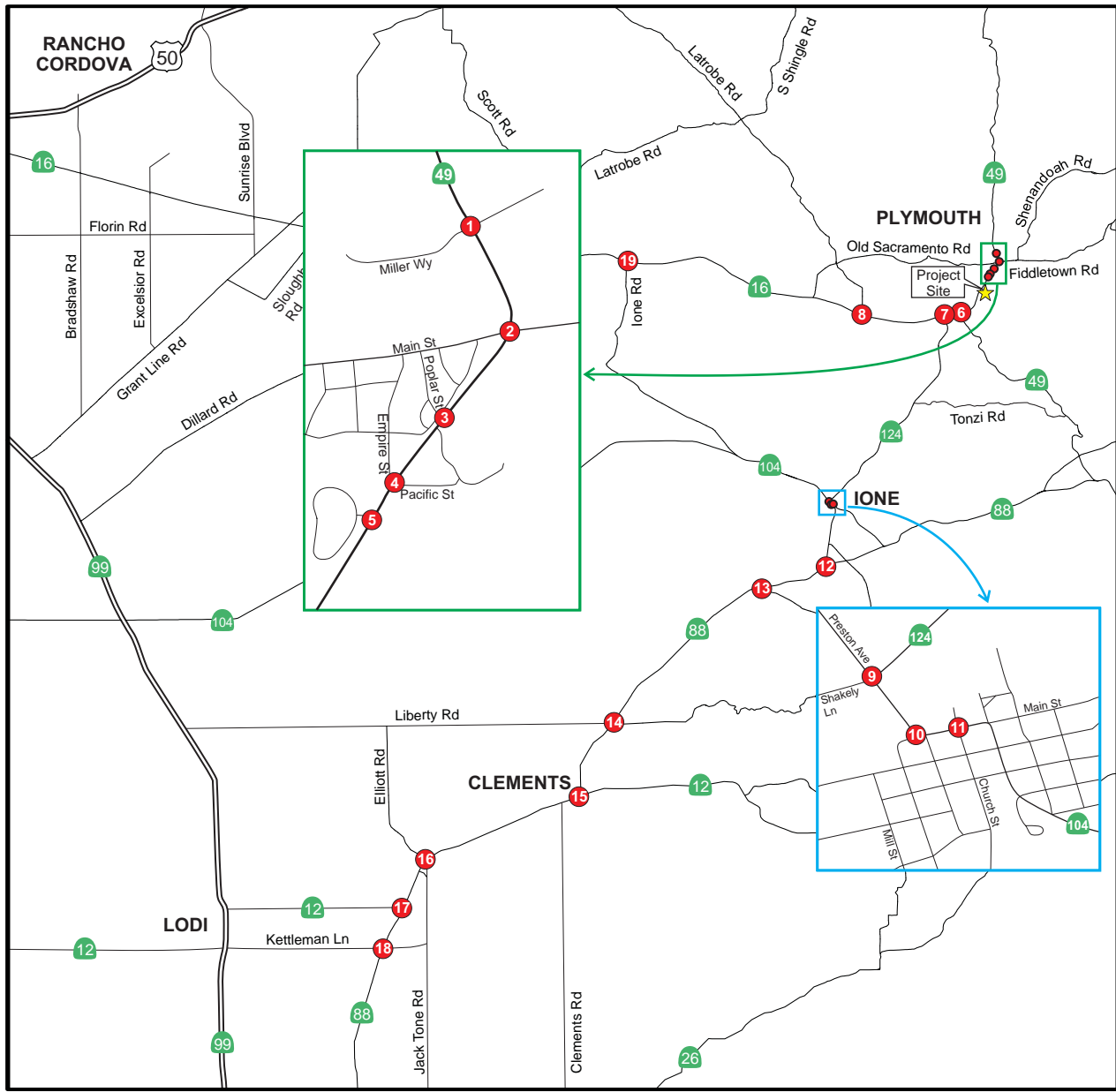
Ione Casino
Traffic Impact Analysis
Figure 18a
Project Only PM Peak Hour Trips
Alternative D (Cont.)



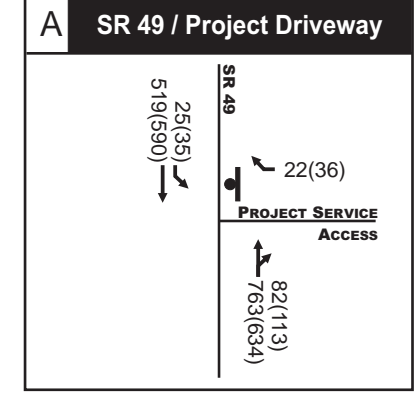
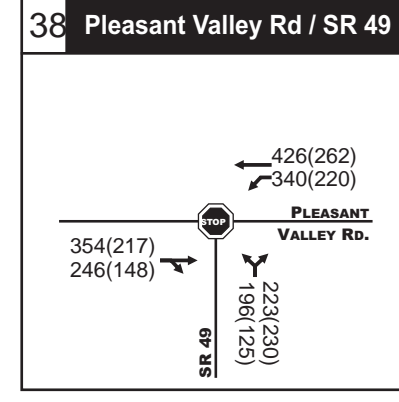
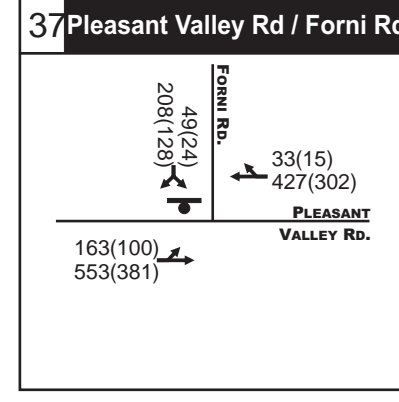
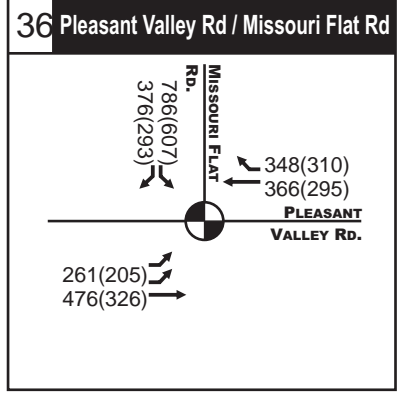
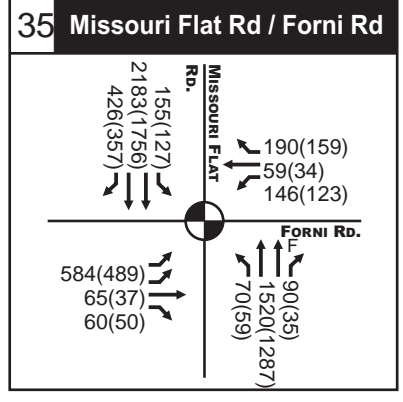
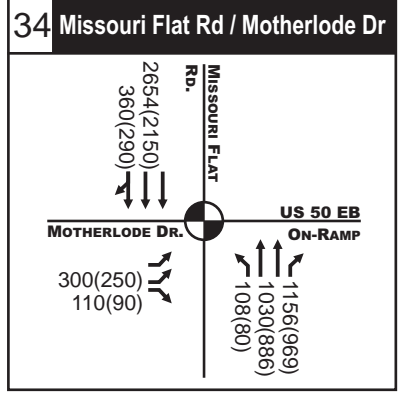
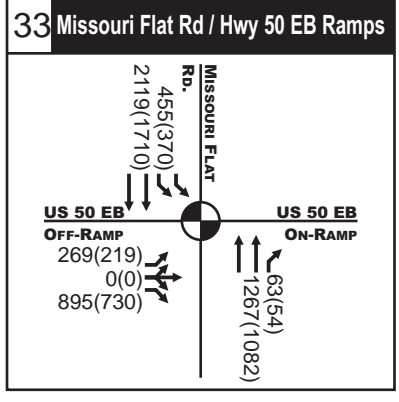
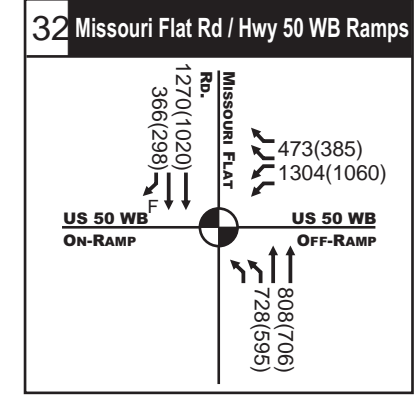
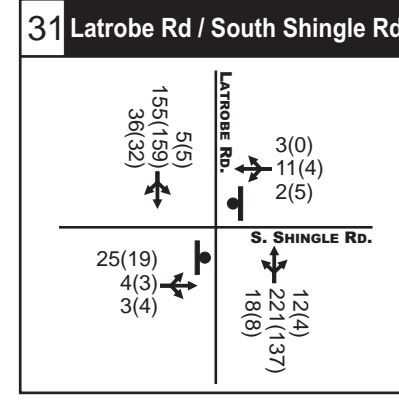
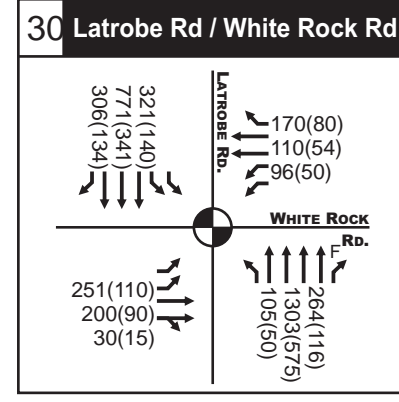
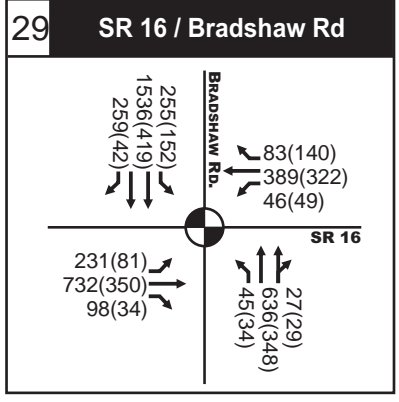
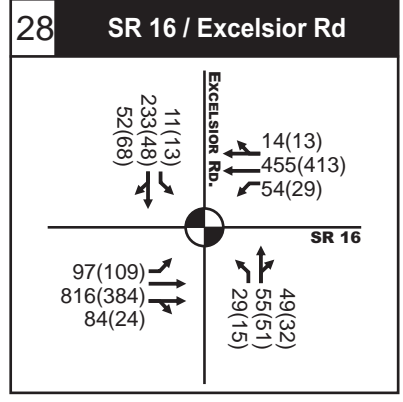
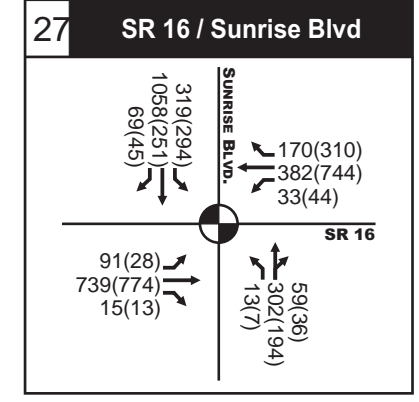
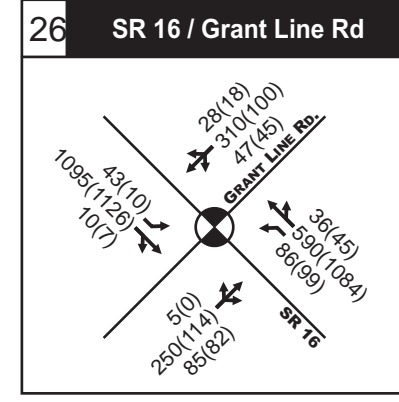
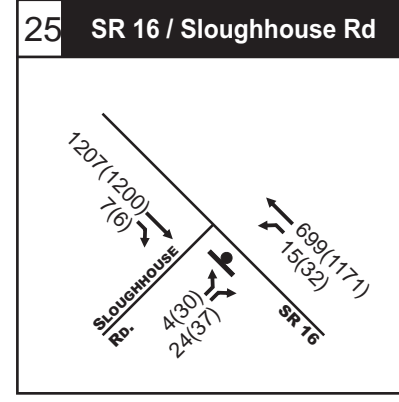
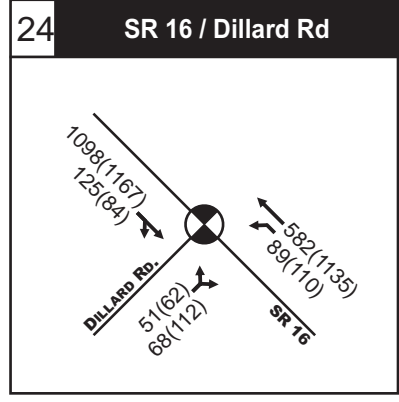
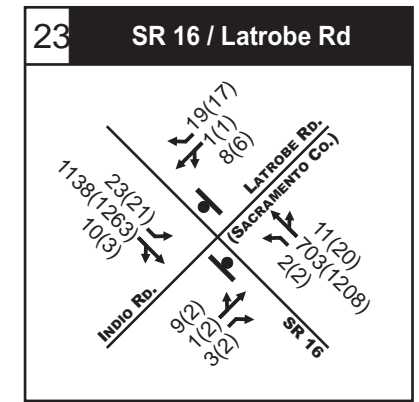
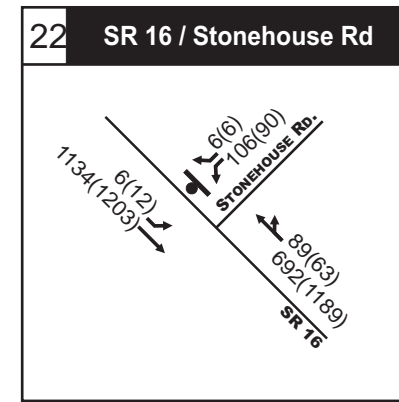
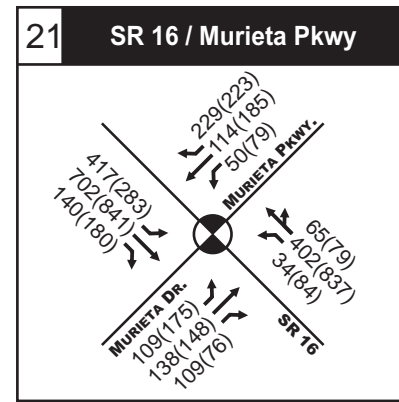
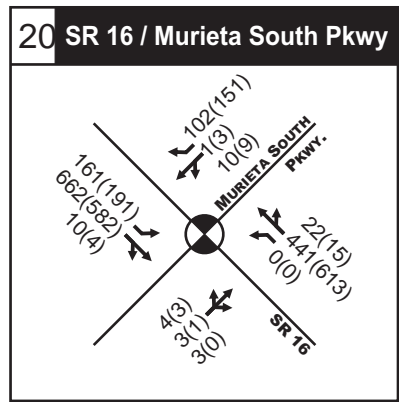
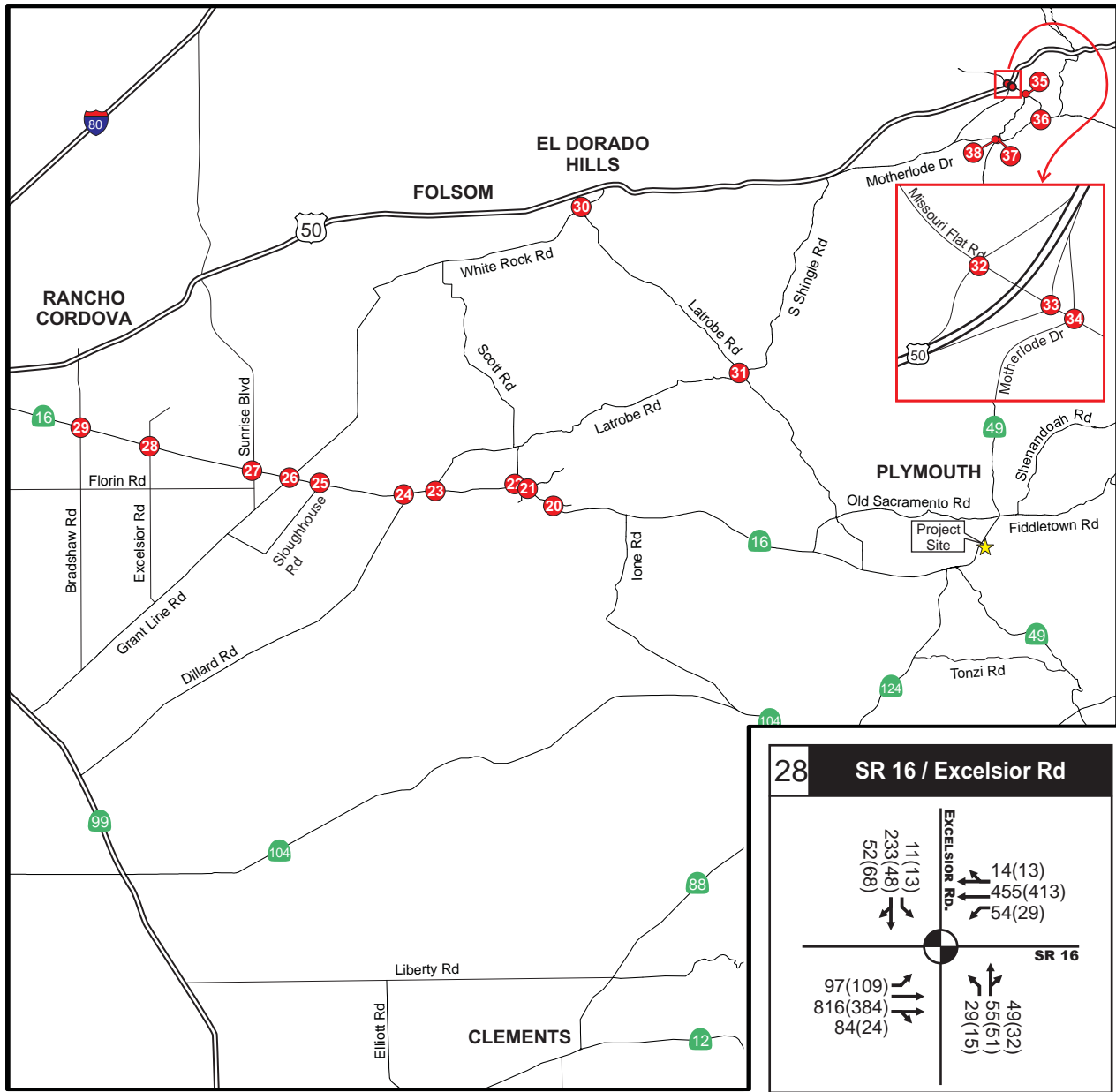
Ione Casino
Traffic Impact Analysis
Figure 19
2010 EPAP Plus Project Alternative A Phase 1
Lane Geometry & PM Peak Hour Volumes



Ione Casino
 Traffic Impact Analysis
Figure 19a
 2010 EPAP Plus Project Alternative A Phase 1
 Lane Geometry & PM Peak Hour Volumes (Cont.)



Ione Casino
Traffic Impact Analysis
Figure 20
2013 EPAP Plus Project Alternative A Phase 1 & 2
Lane Geometry & PM Peak Hour Volumes



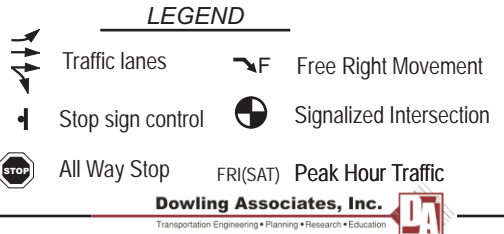
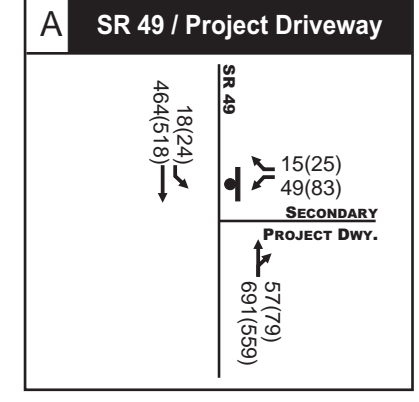
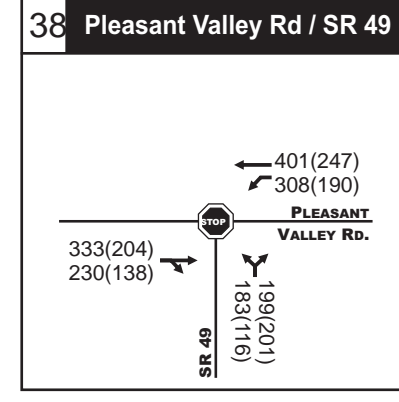
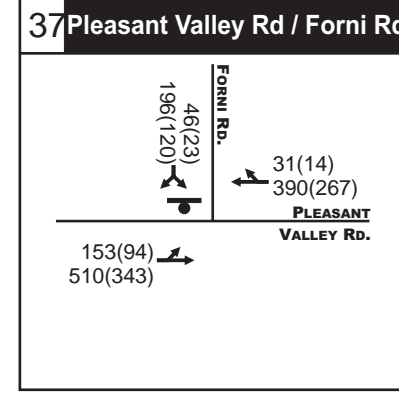
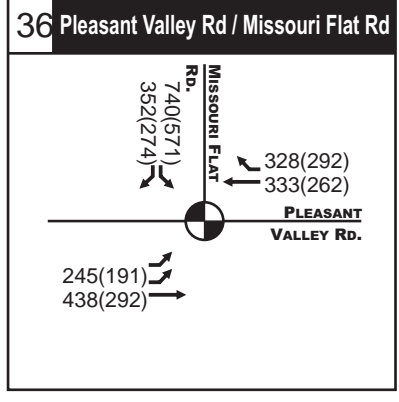
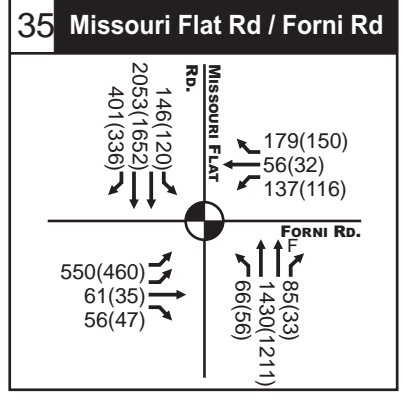
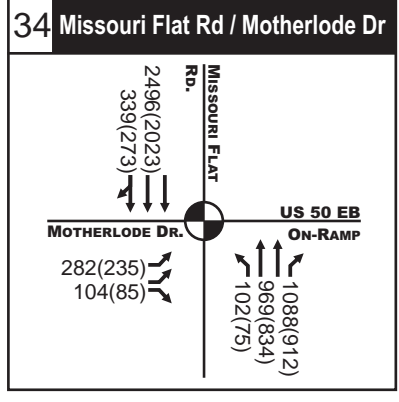
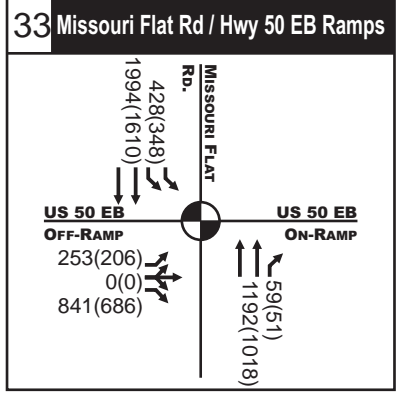
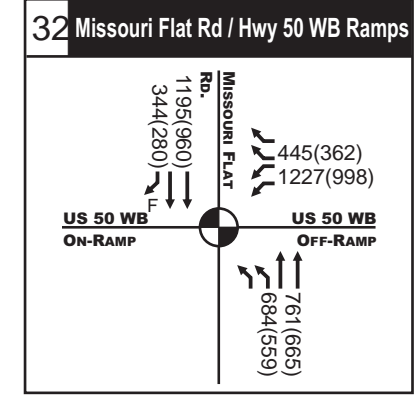
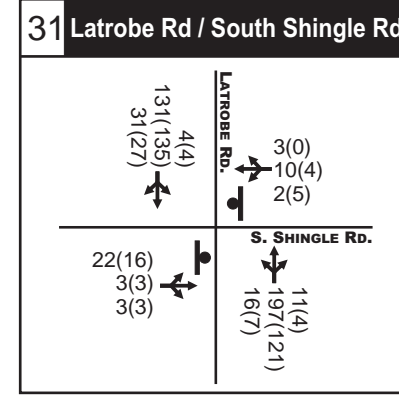
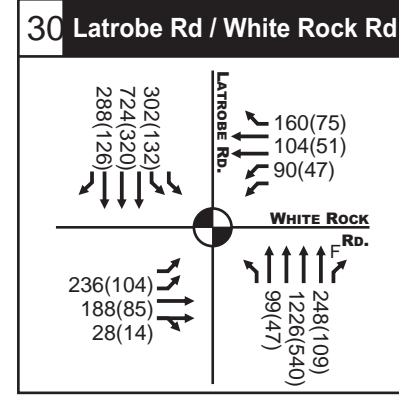
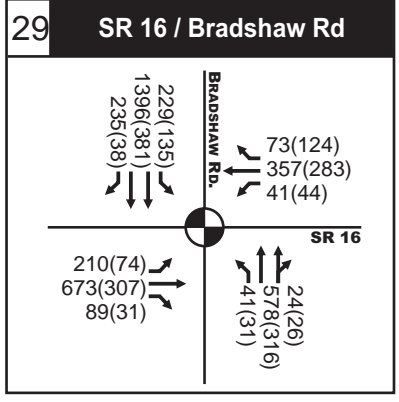
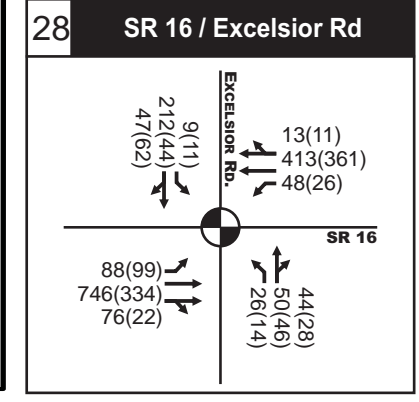
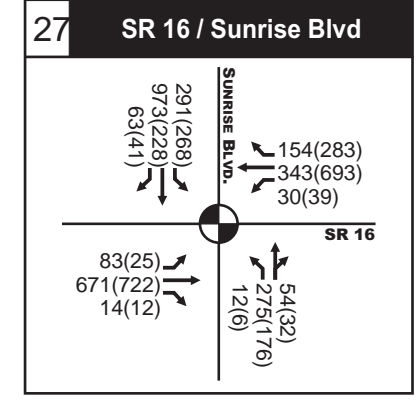
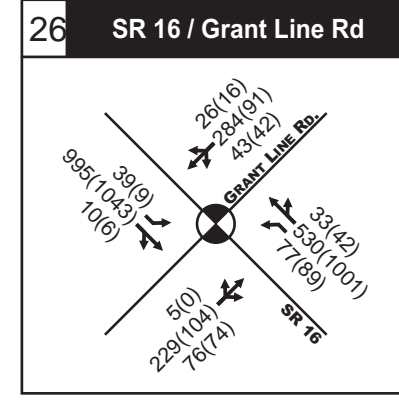
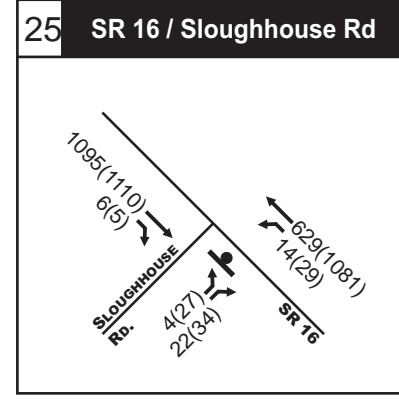
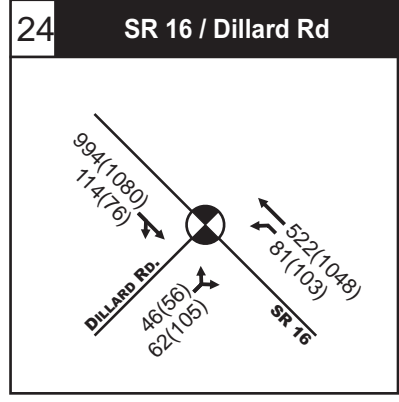
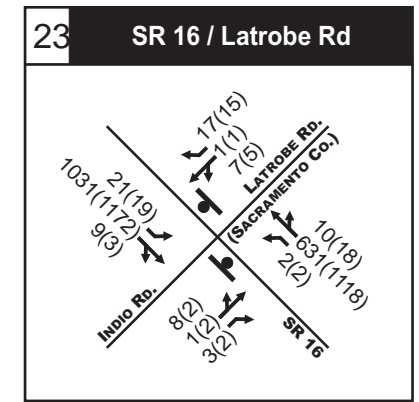
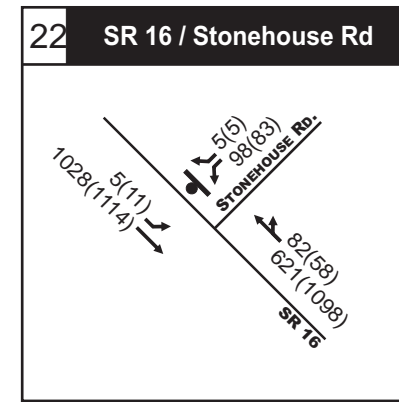
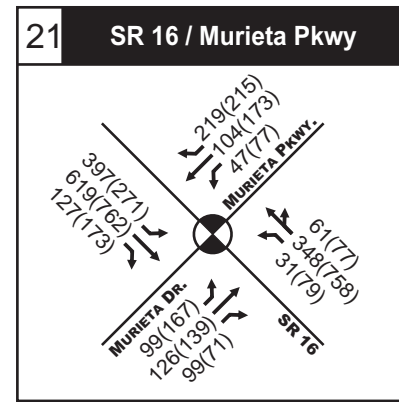
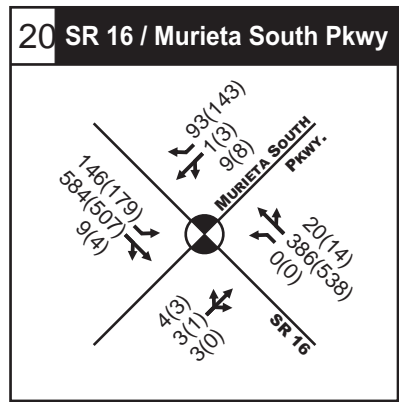
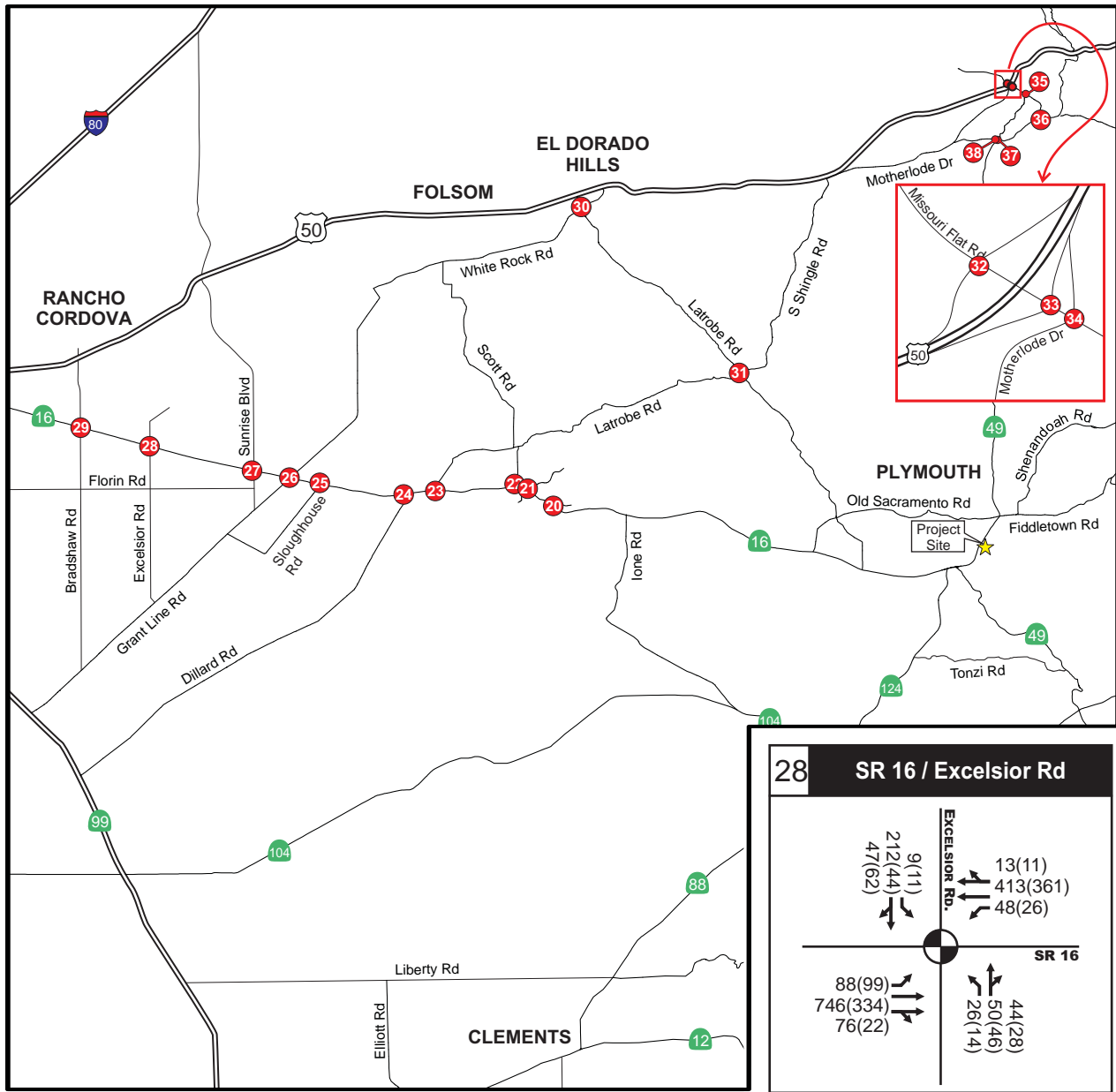
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

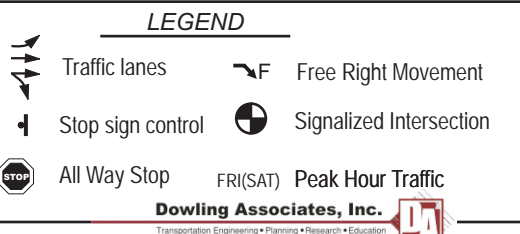
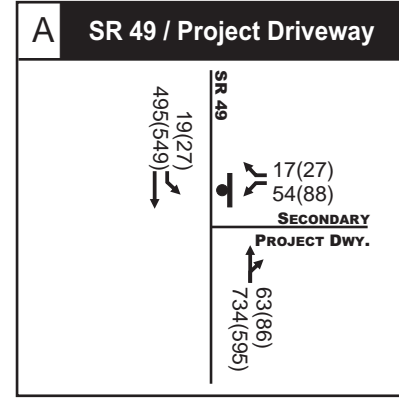
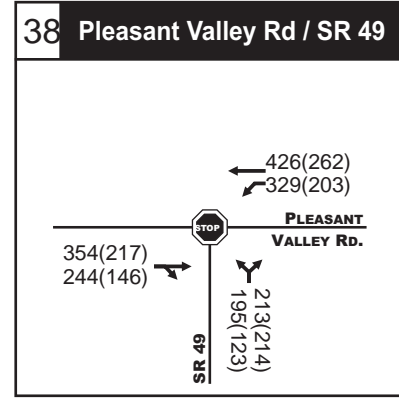
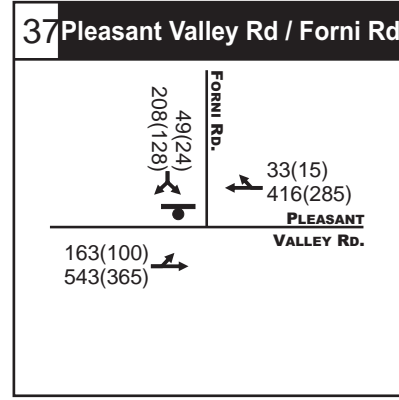
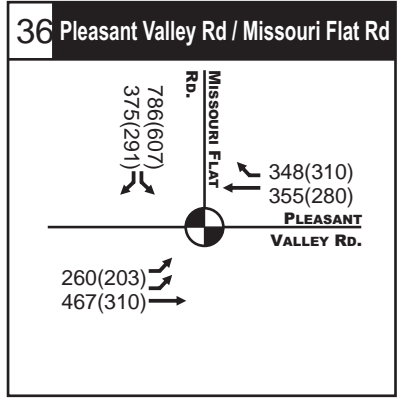
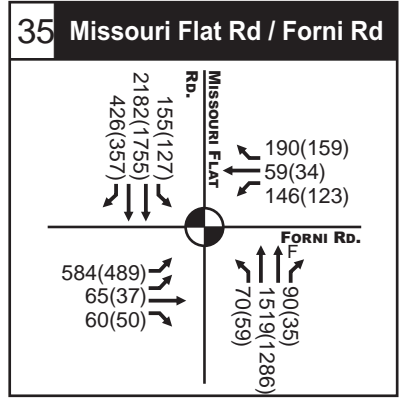
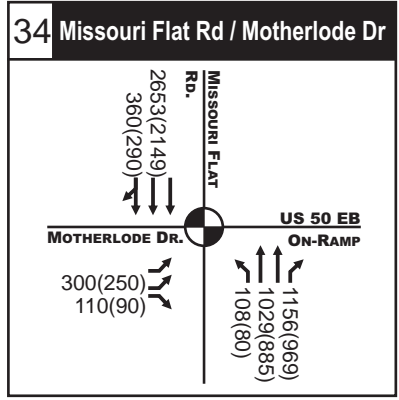
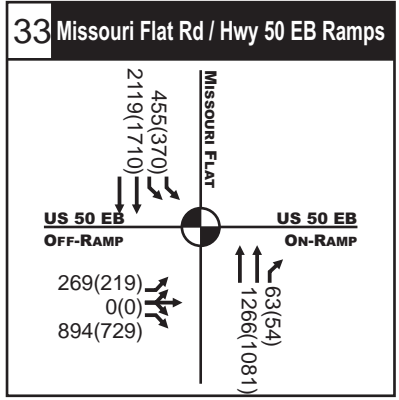
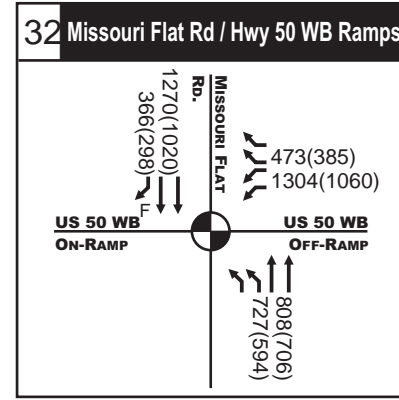
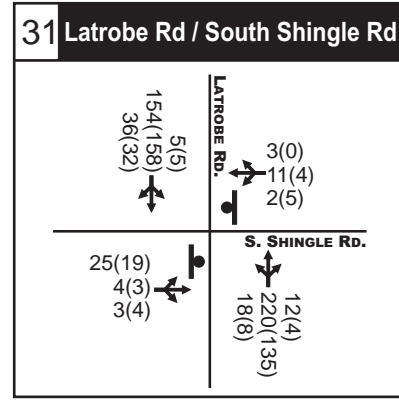
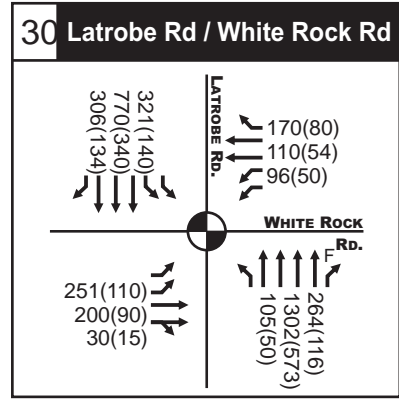
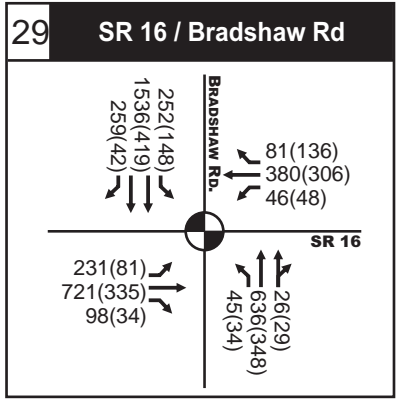
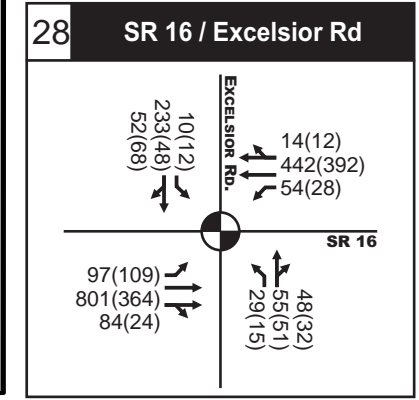
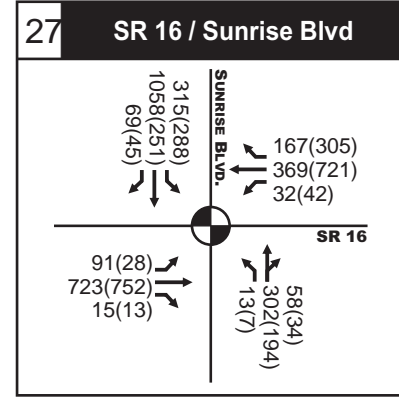
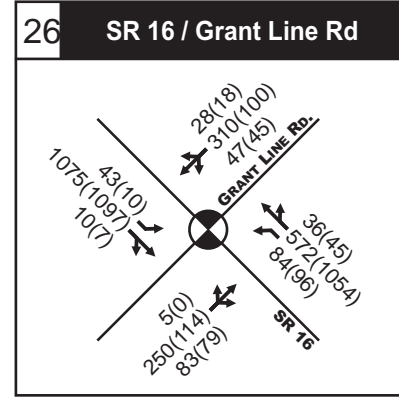
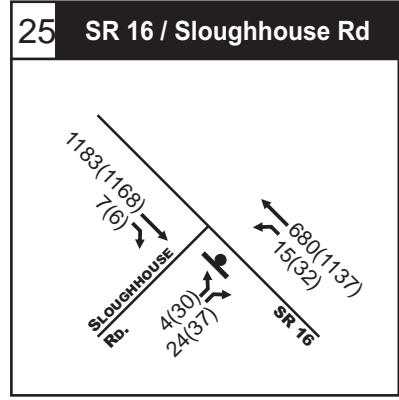
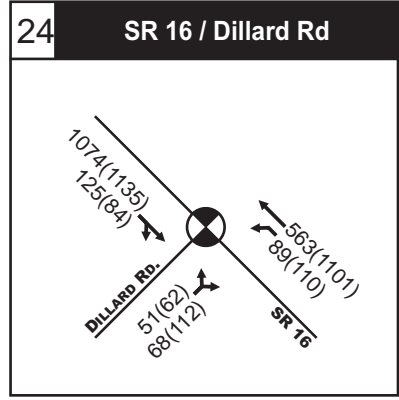
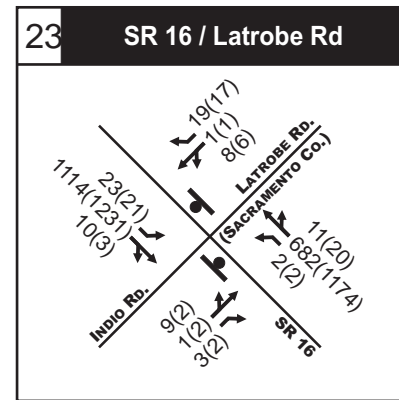
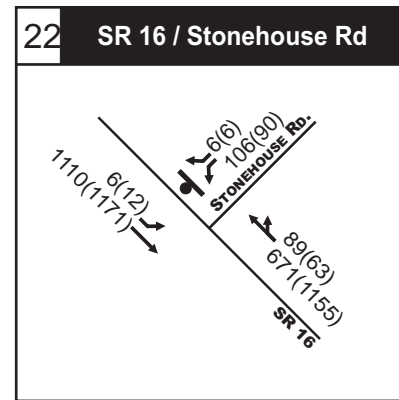
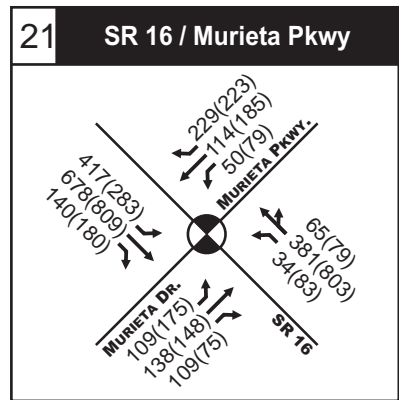
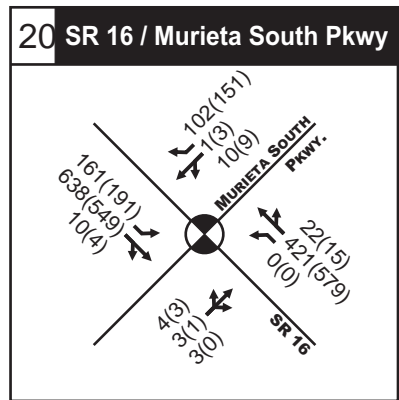
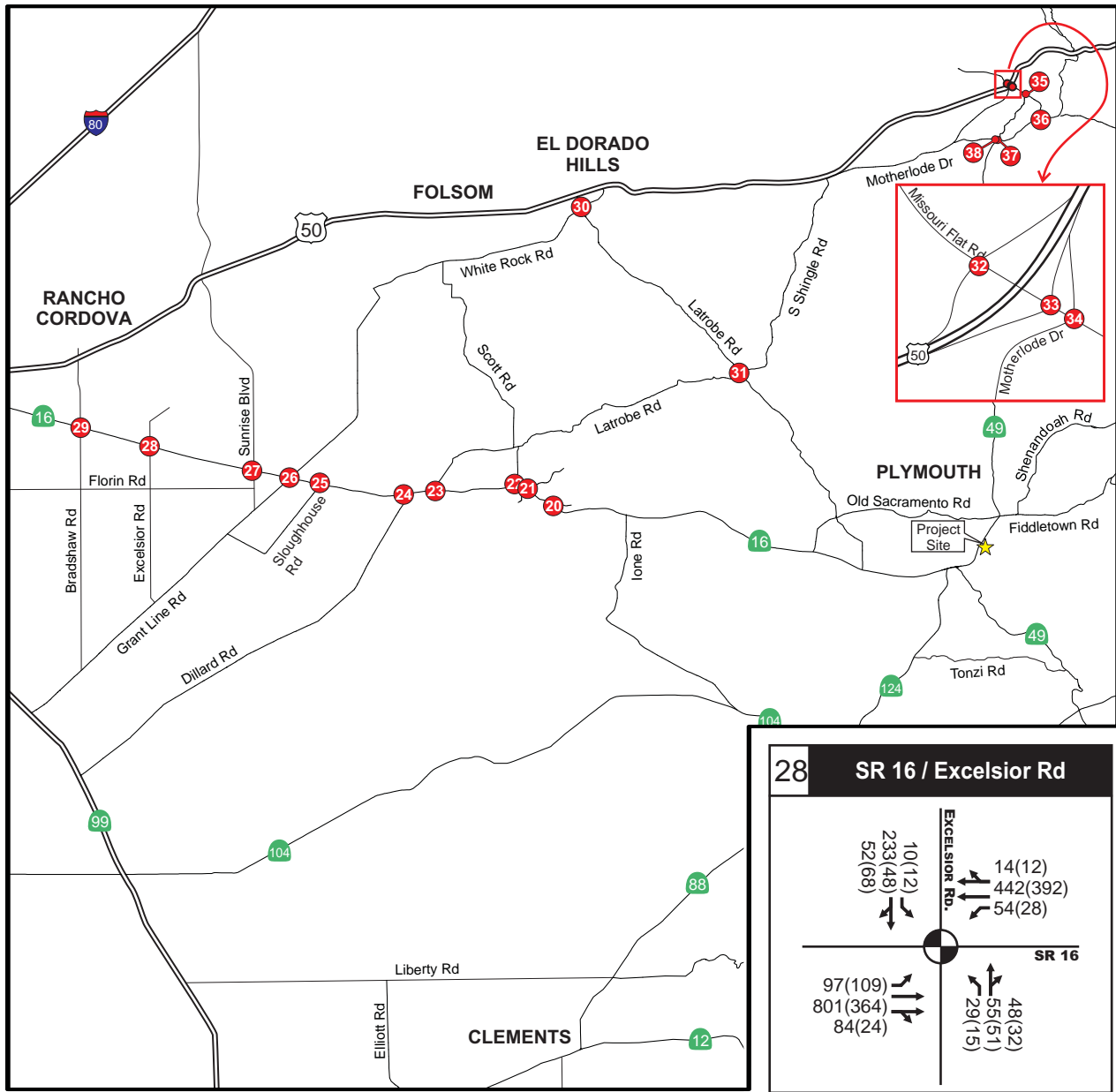
Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



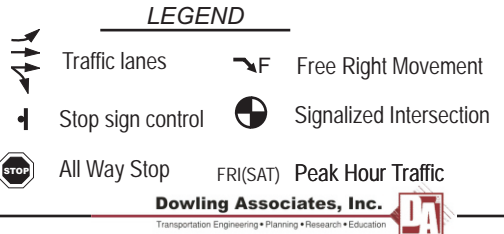
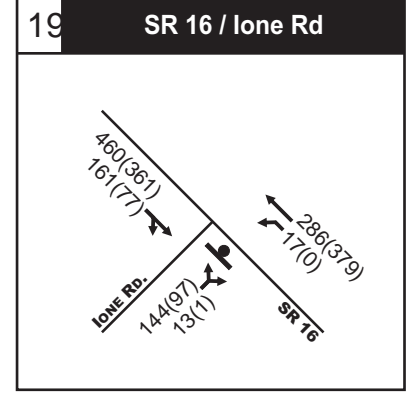
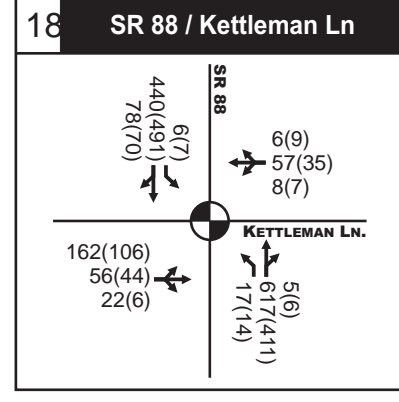
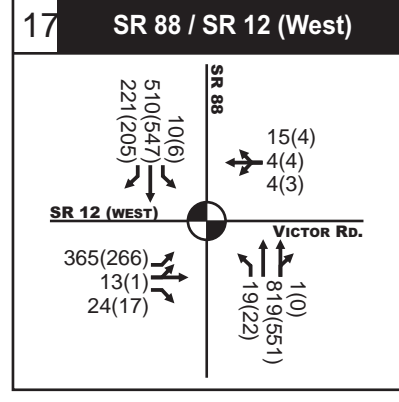
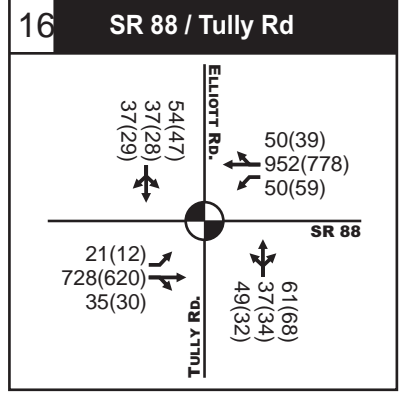
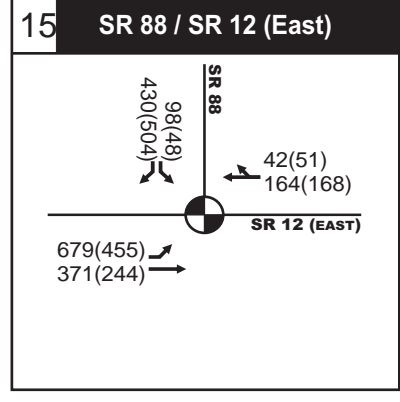
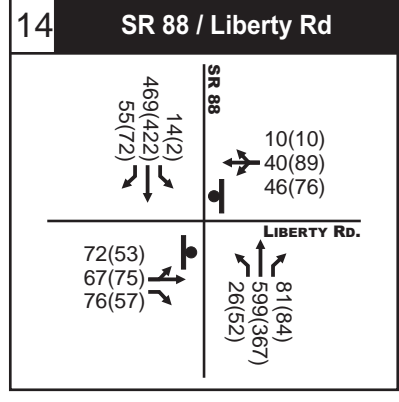
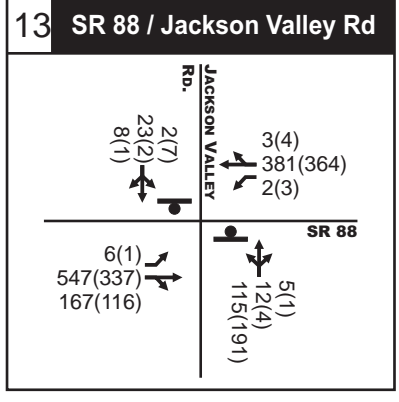
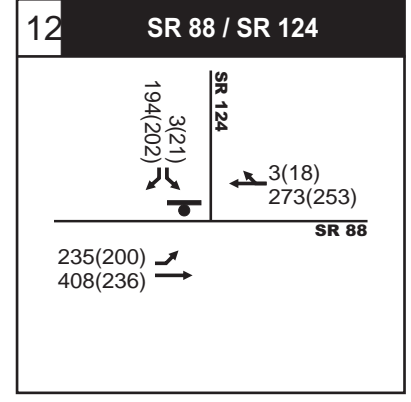
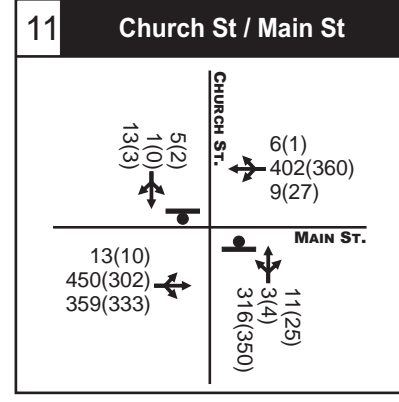
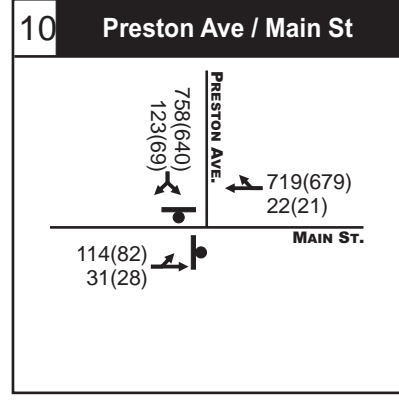
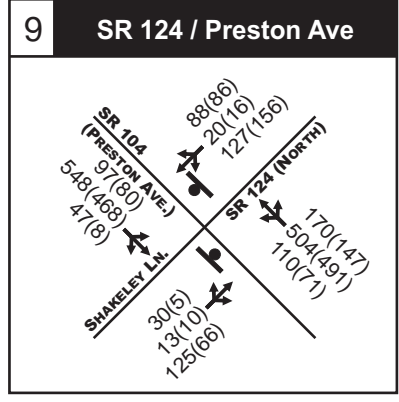
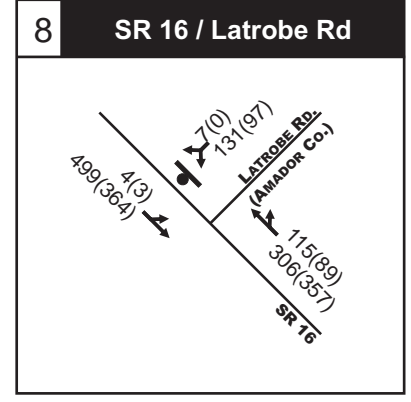
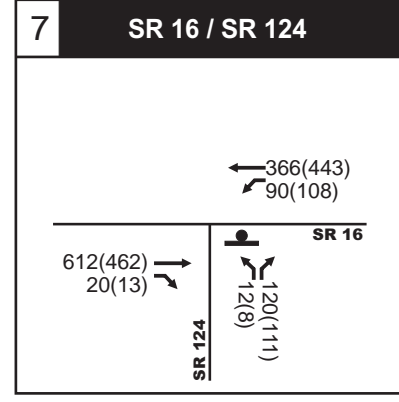
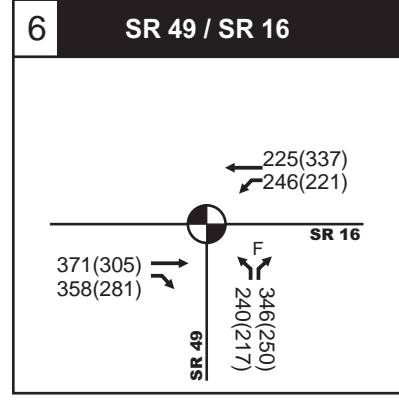
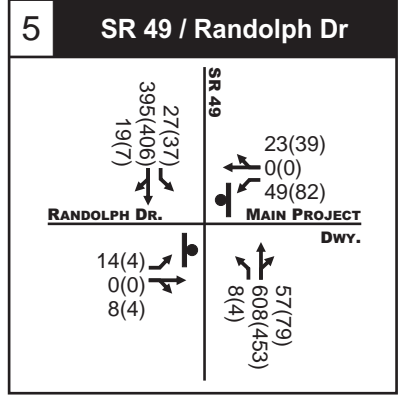
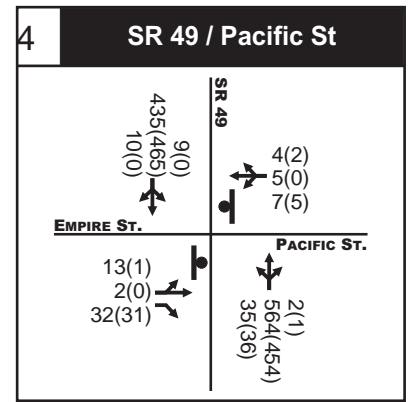
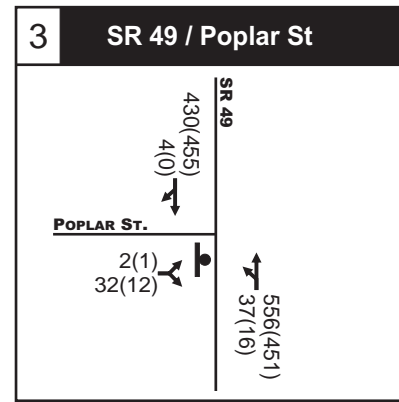
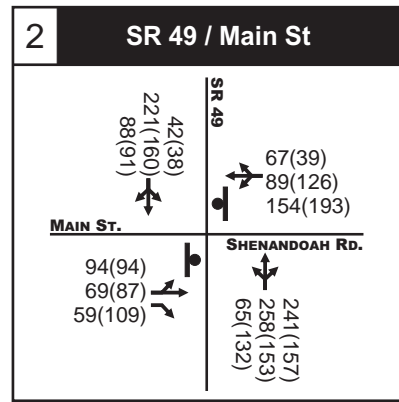
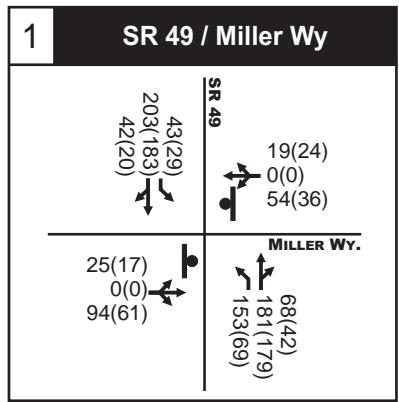
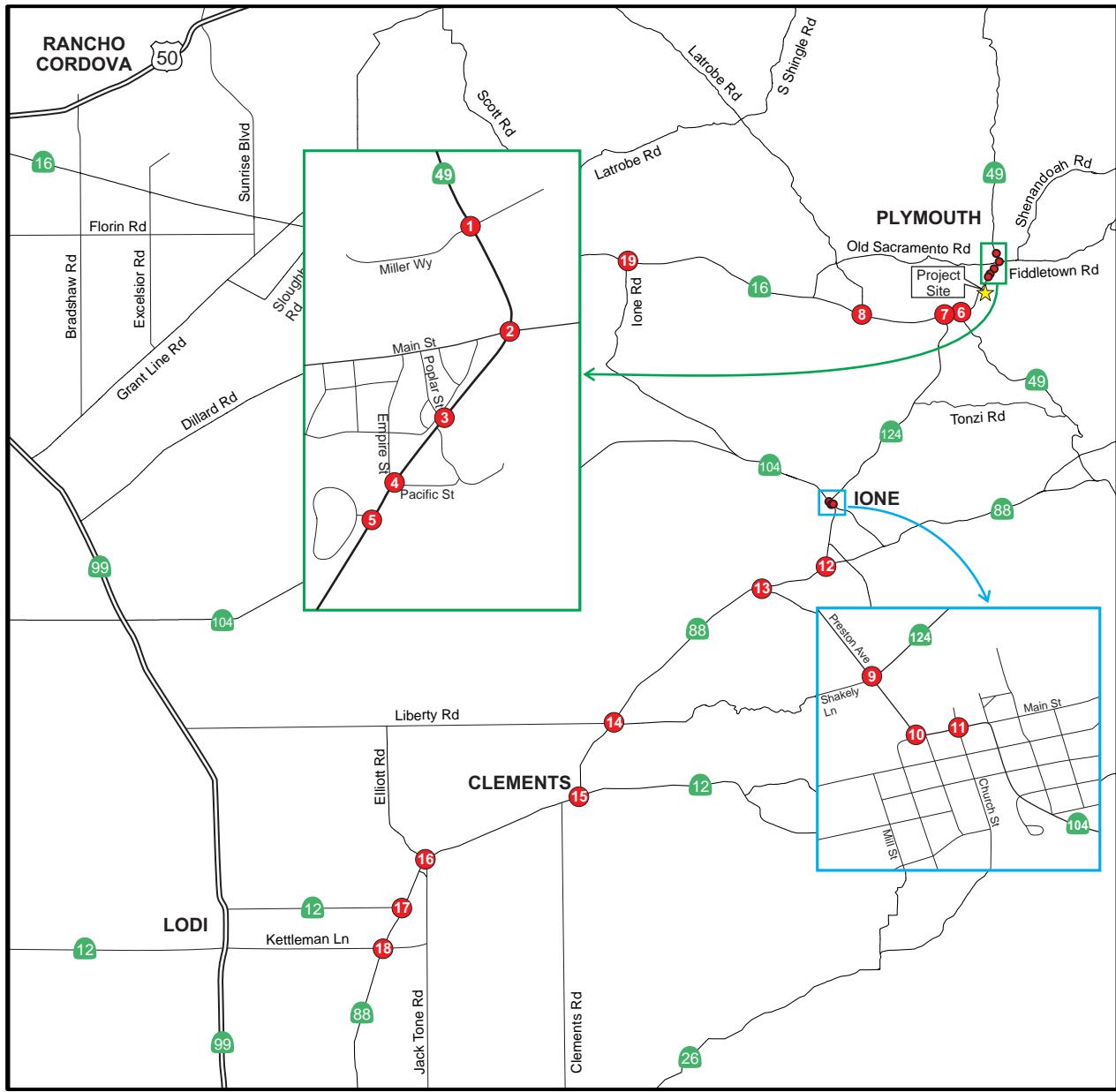
Ione Casino
 Traffic Impact Analysis
Figure 20a
 2013 EPAP Plus Project Alternative A Phase 1 & 2
 Lane Geometry & PM Peak Hour Volumes (Cont.)



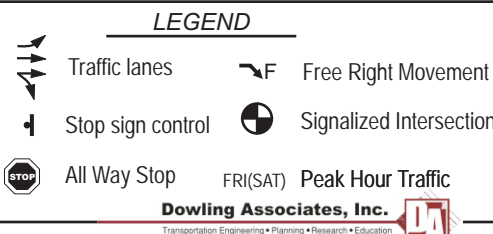
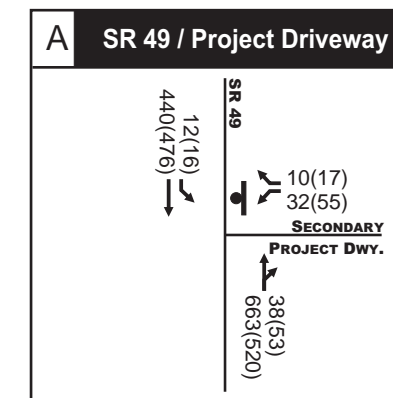
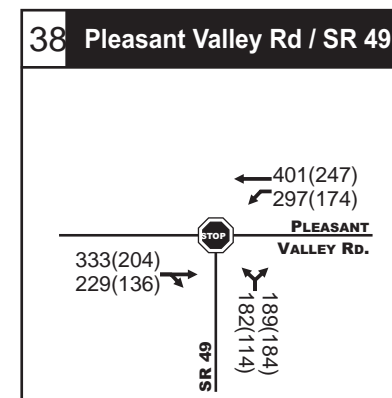
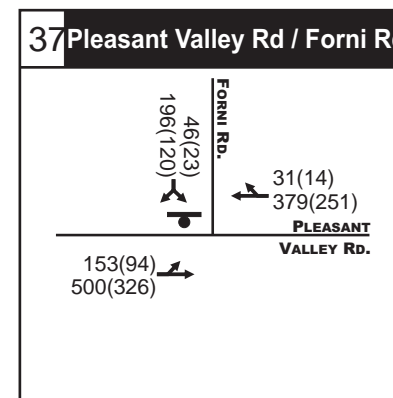
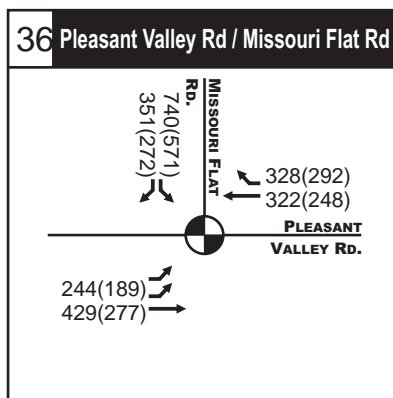
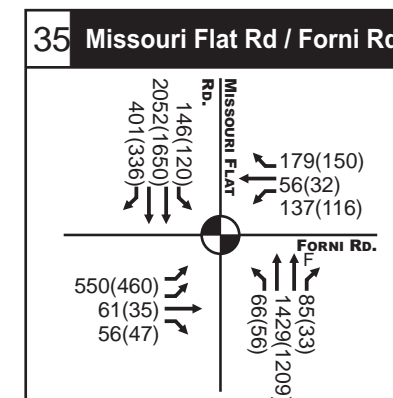
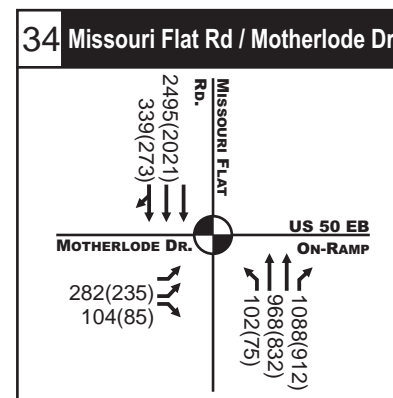
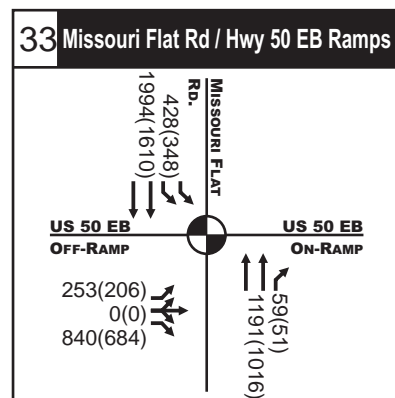
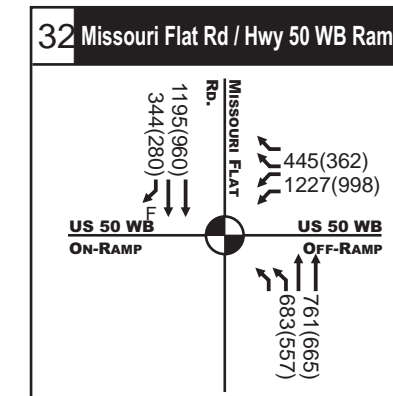
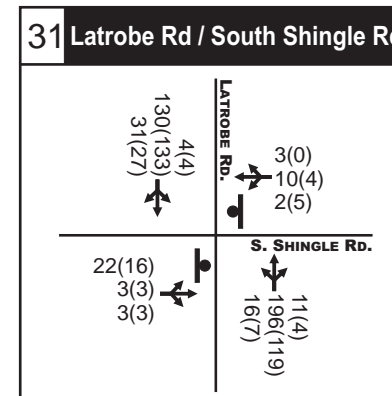
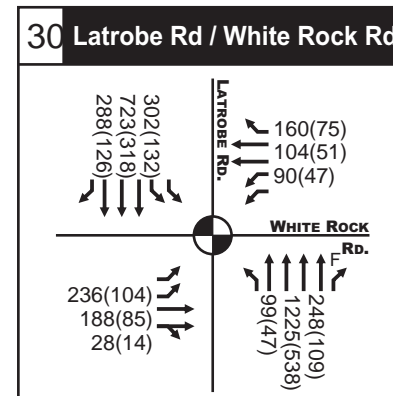
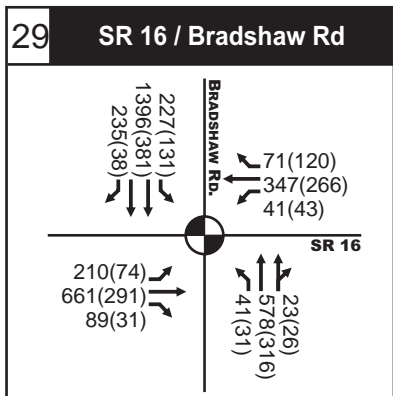
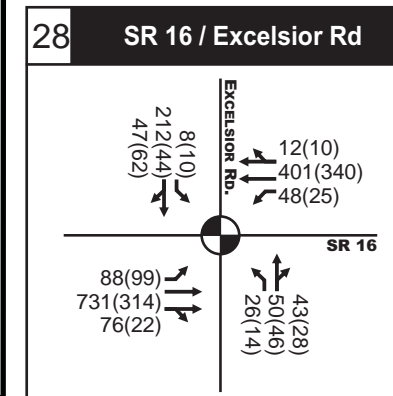
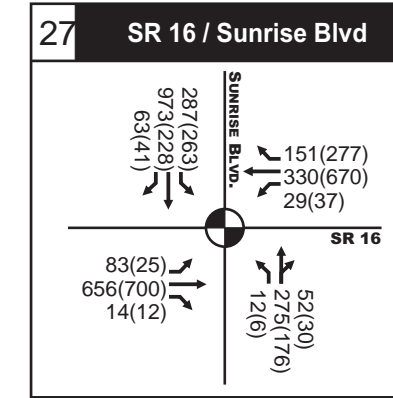
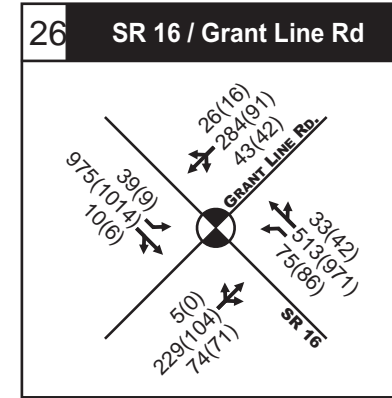
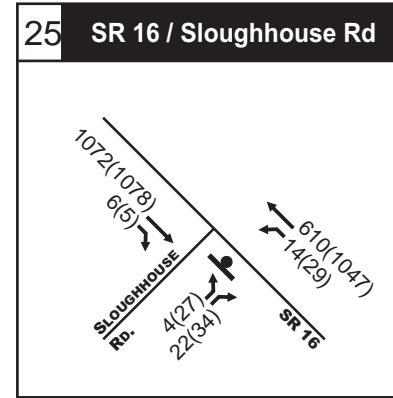
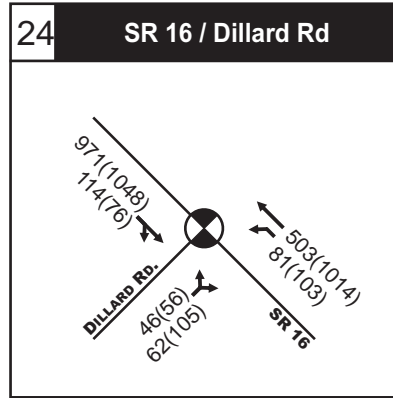
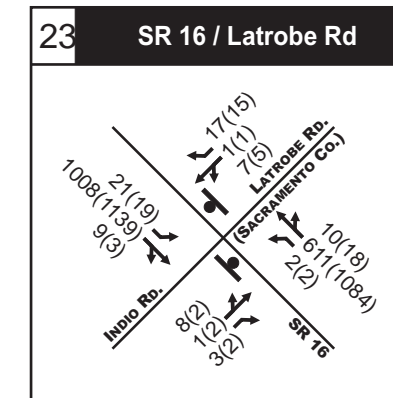
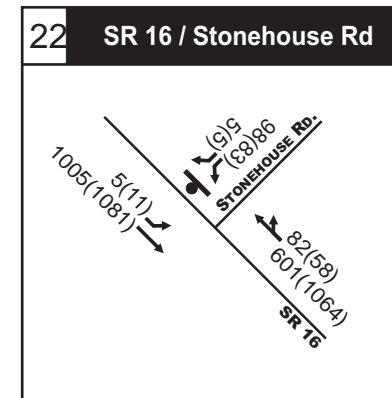
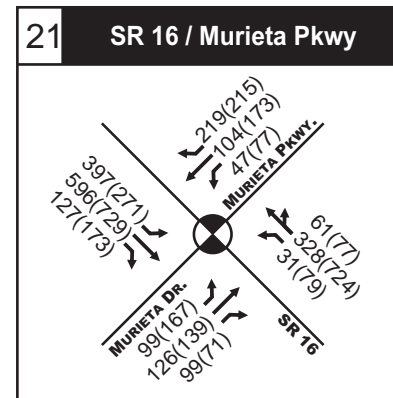
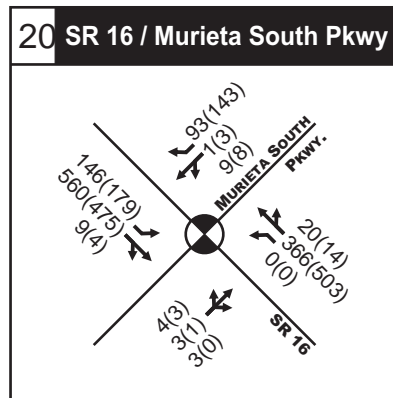
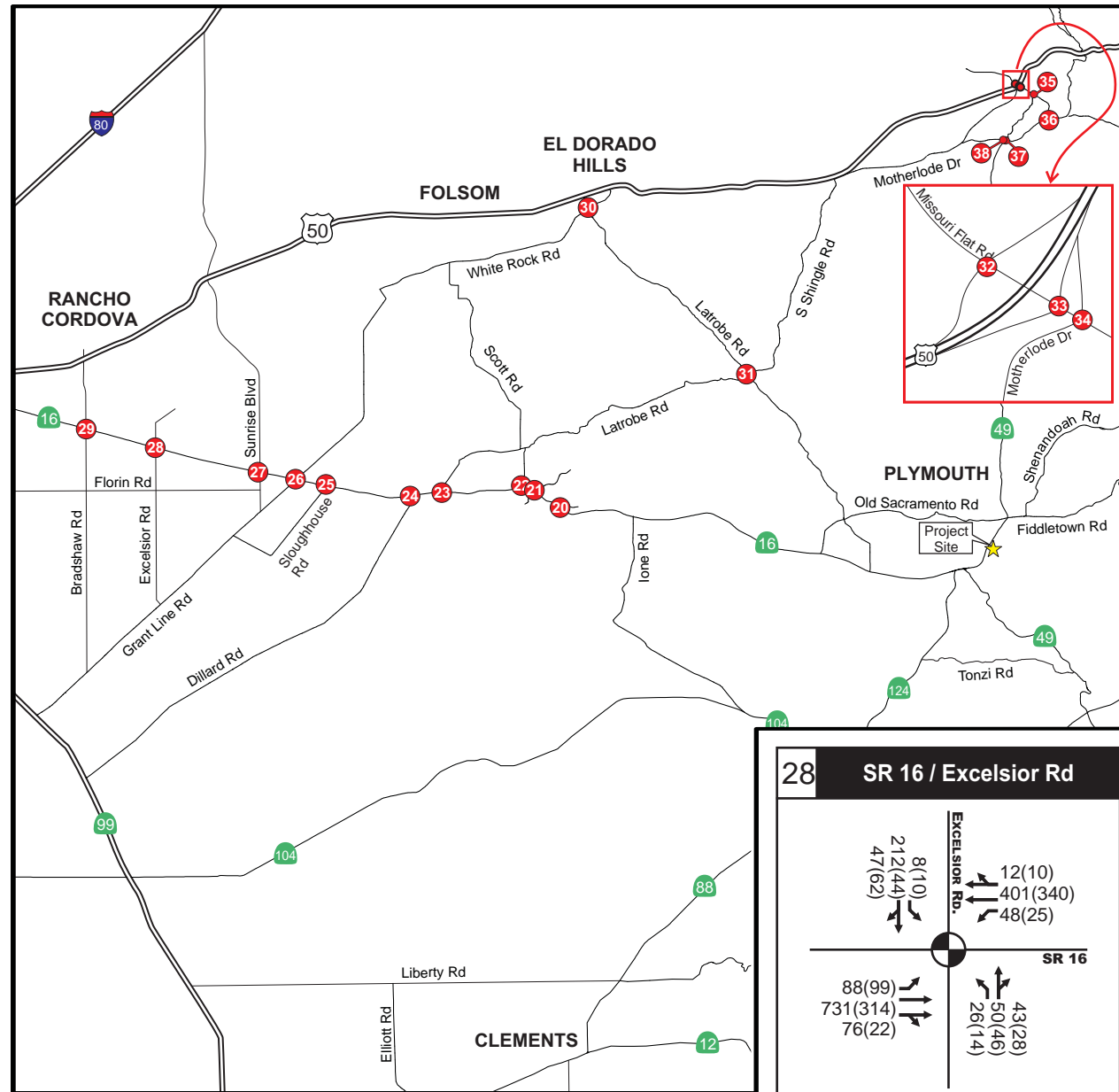
Ione Casino
Traffic Impact Analysis
Figure 21a
2010 EPAP Plus Project Alternative B Phase 1
Lane Geometry & PM Peak Hour Volumes (Cont.)



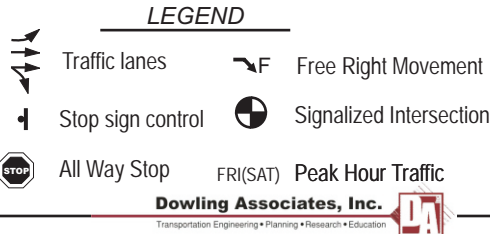
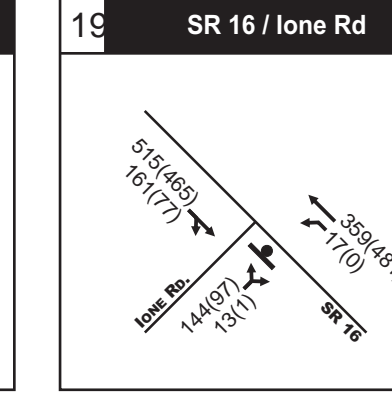
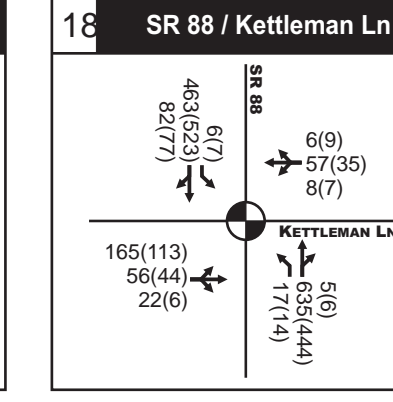
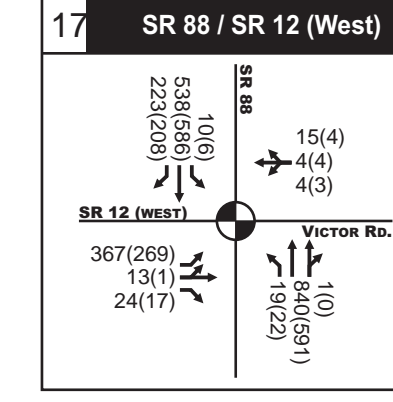
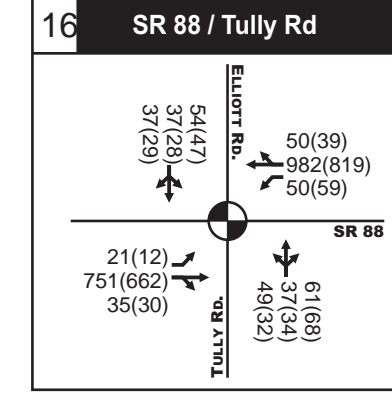
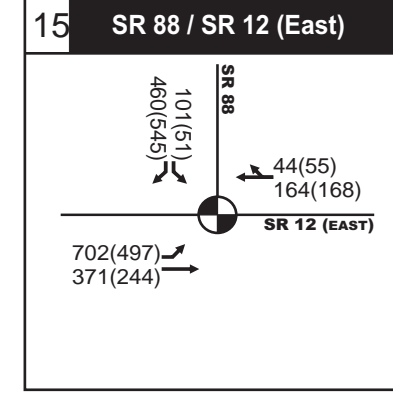
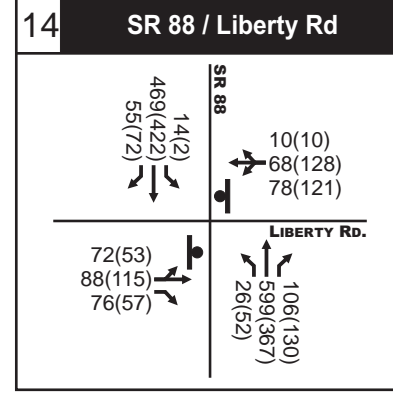
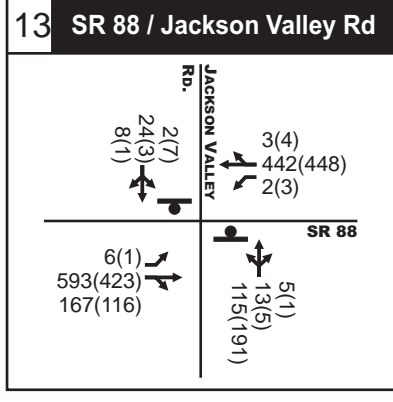
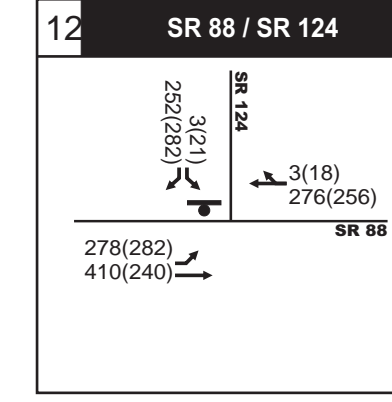
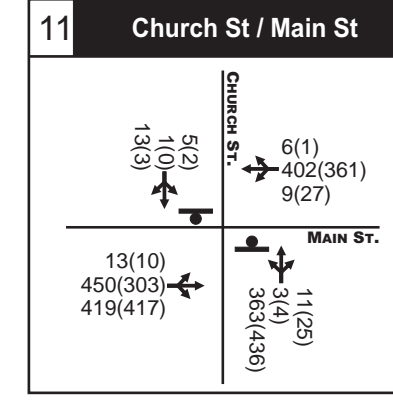
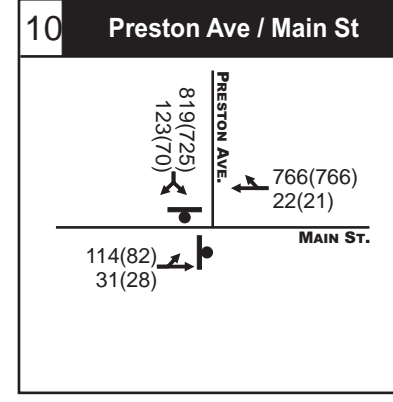
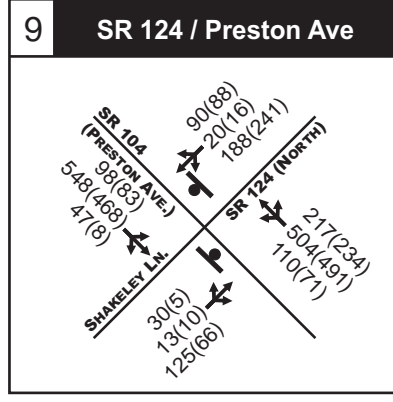
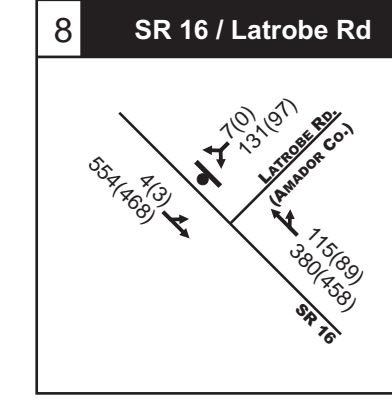
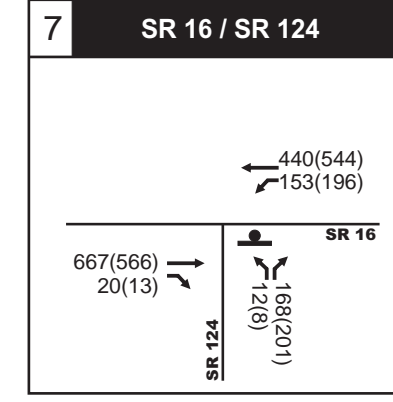
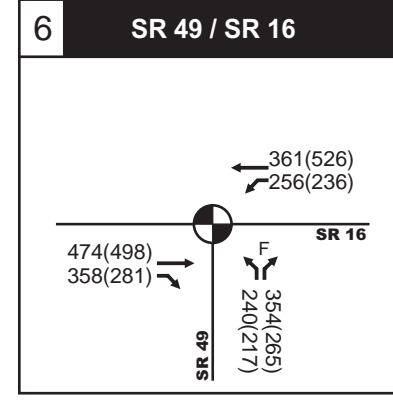
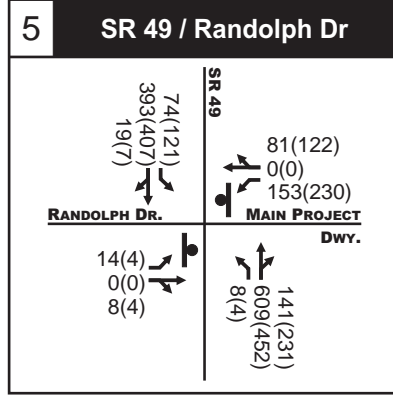
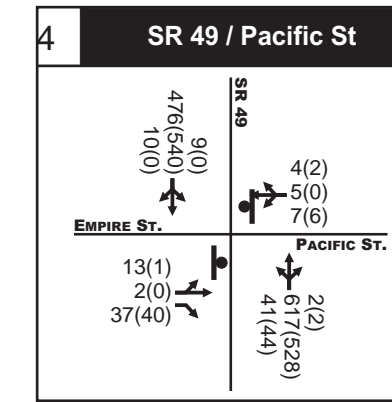
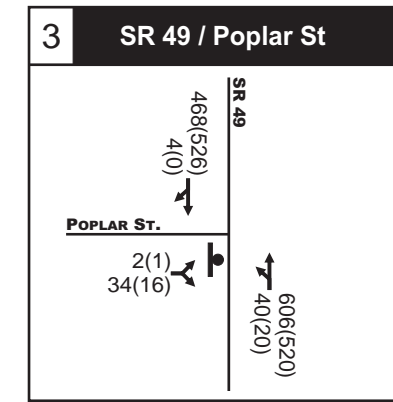
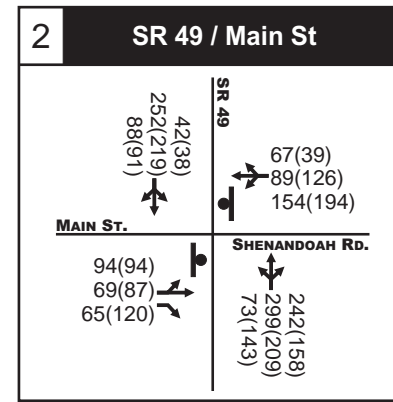
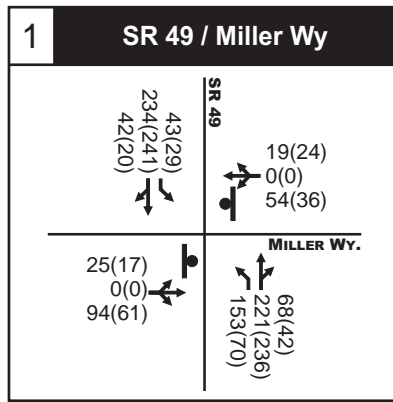
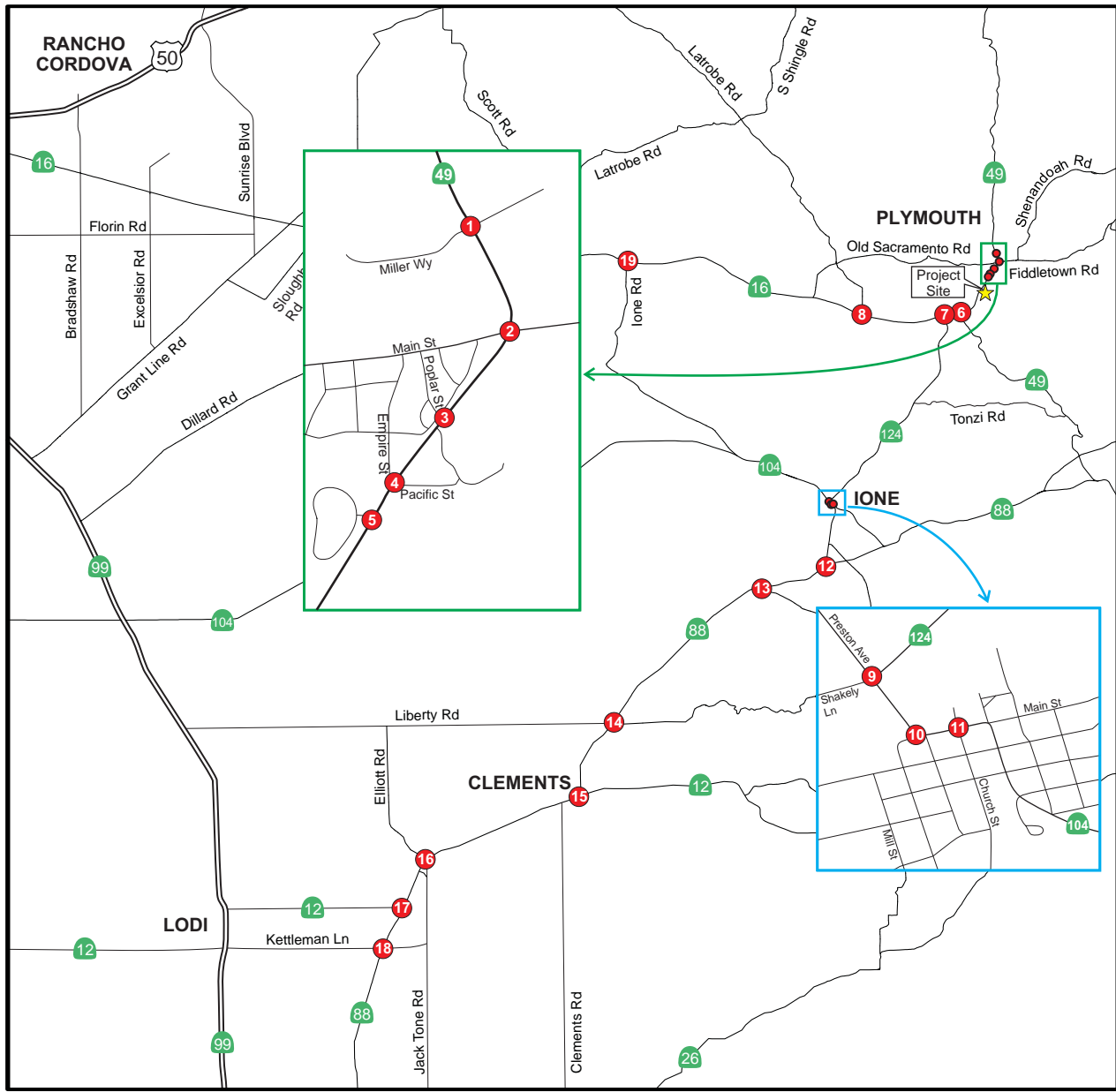
Ione Casino
Traffic Impact Analysis
Figure 22a
2013 EPAP Plus Project Alternative B Phase 1 & 2
Lane Geometry & PM Peak Hour Volumes (Cont.)



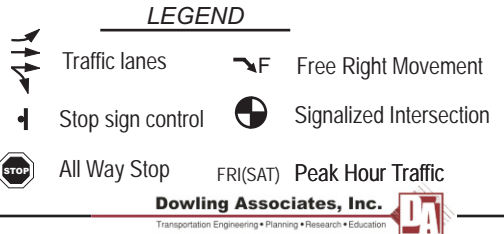
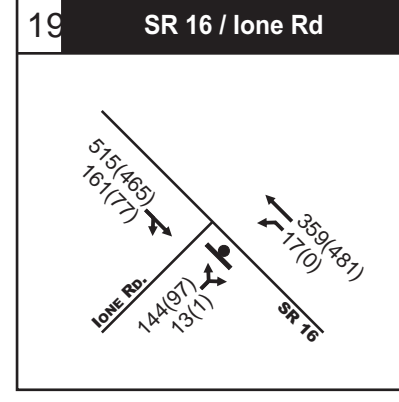
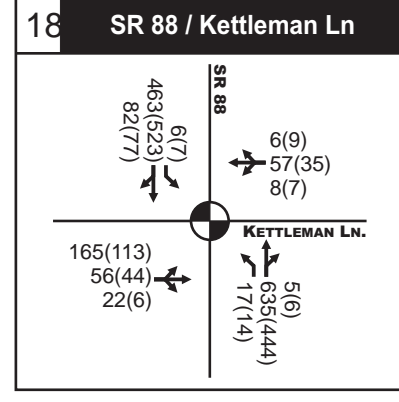
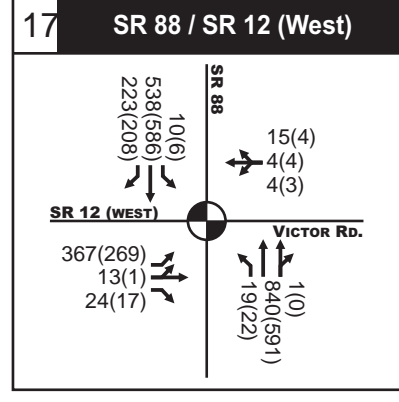
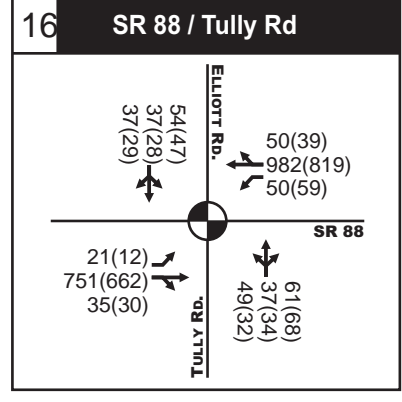
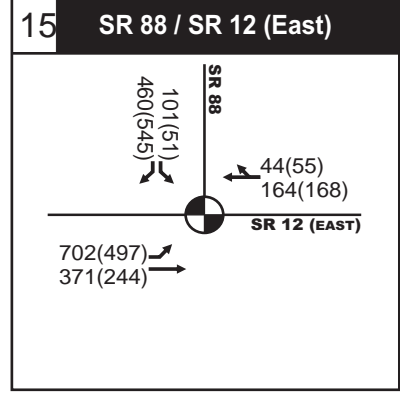
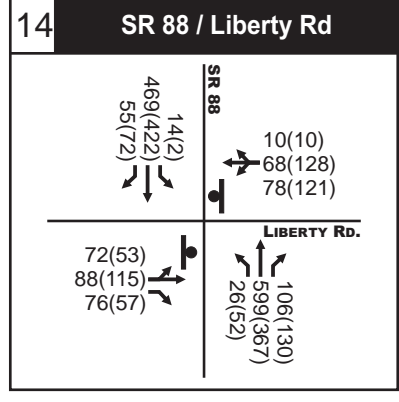
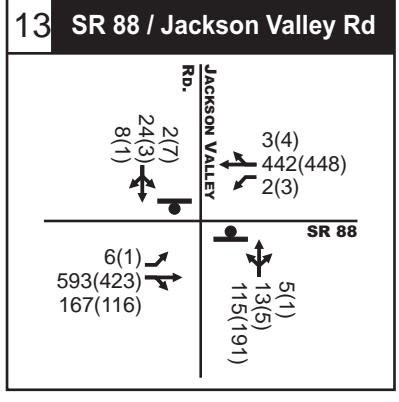
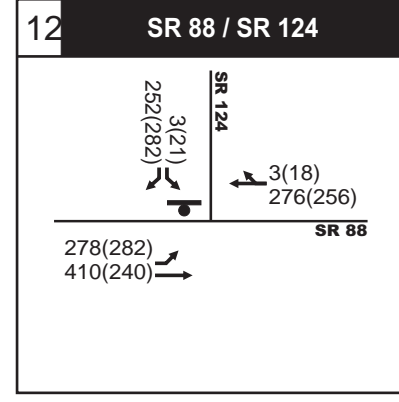
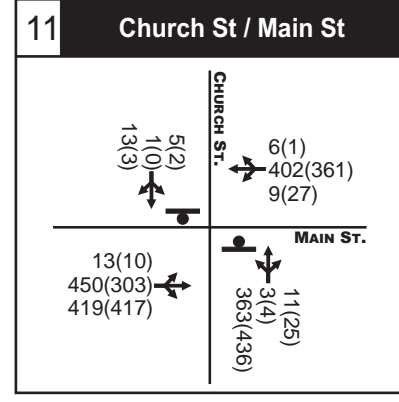
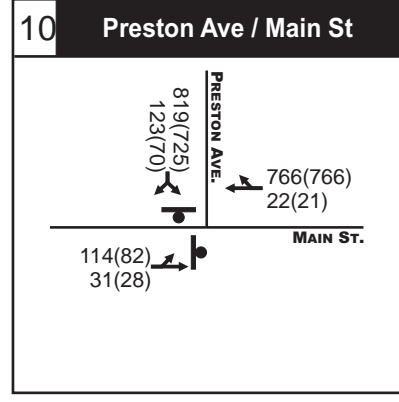
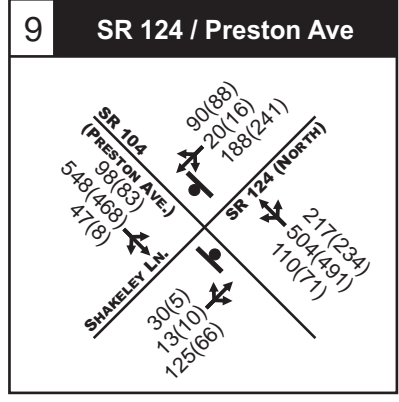
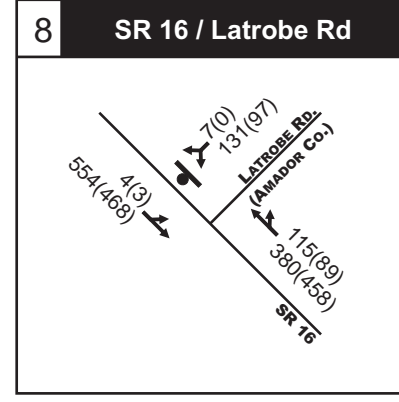
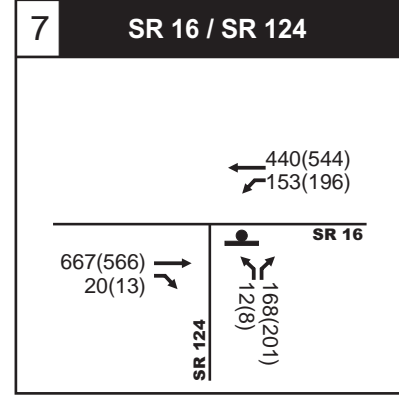
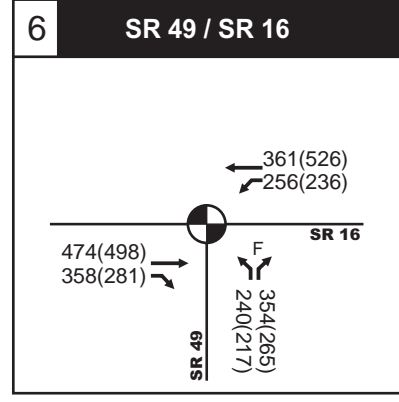
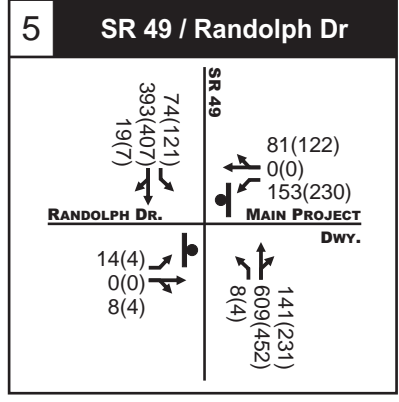
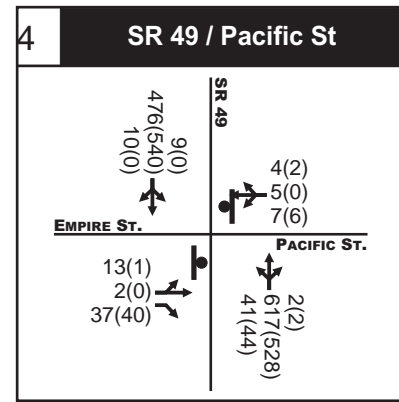
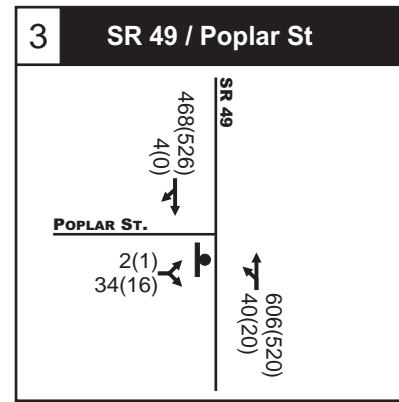
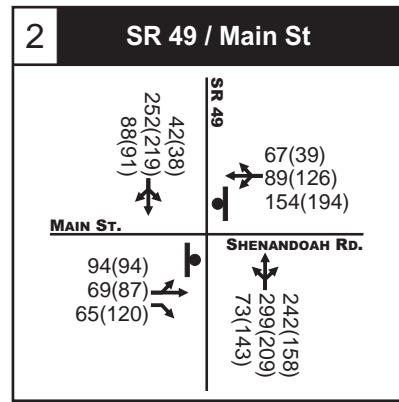
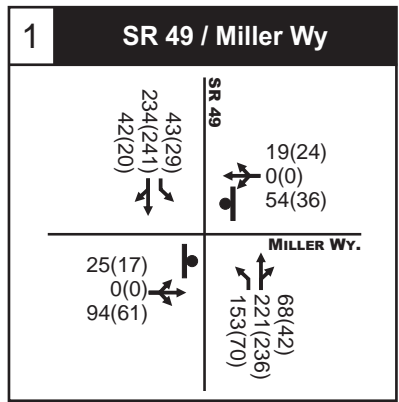
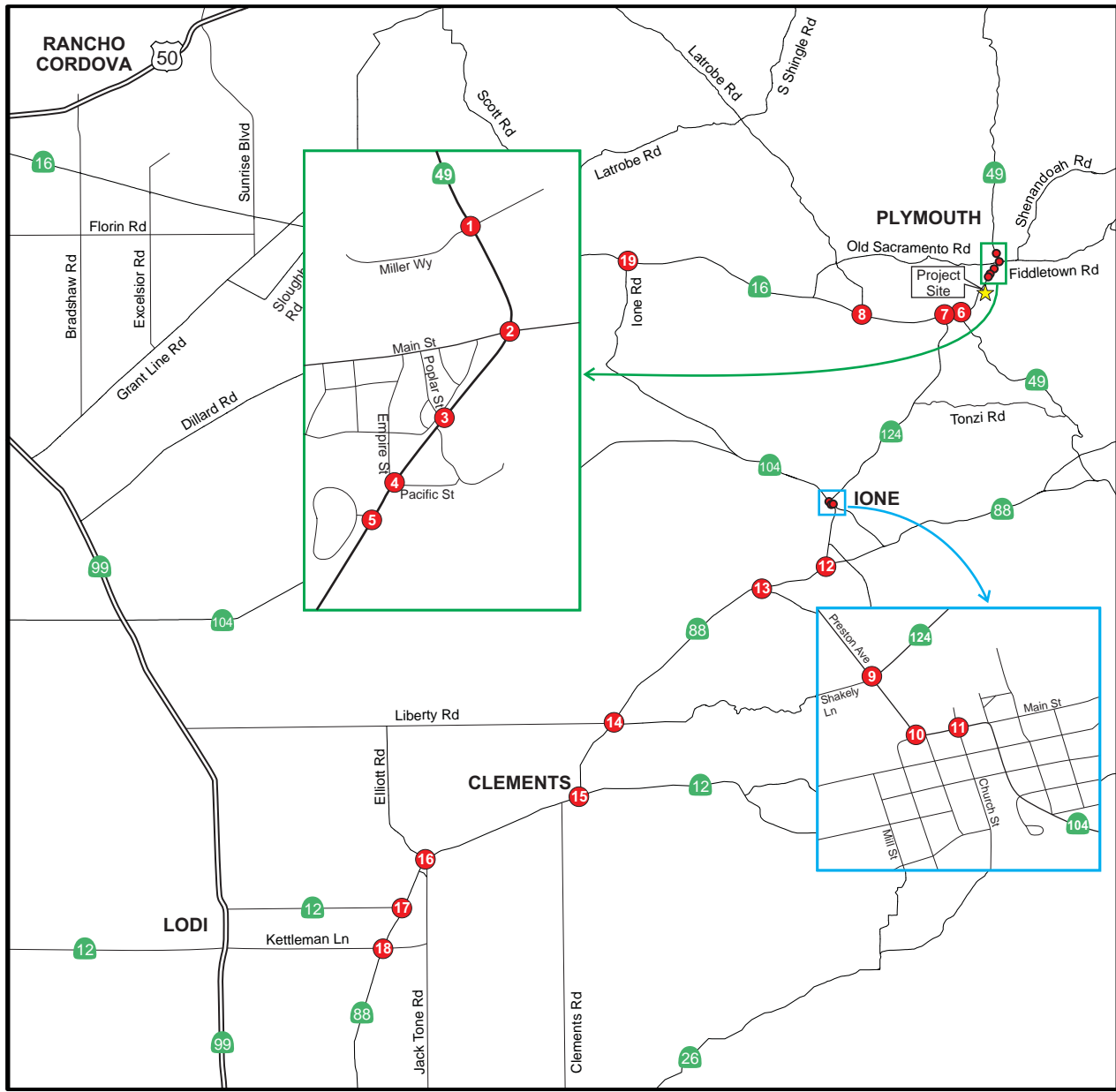
Ione Casino
Traffic Impact Analysis
Figure 23
2010 EPAP Plus Project Alternative C
Lane Geometry & PM Peak Hour Volumes



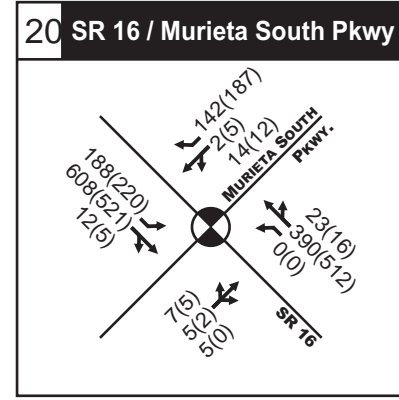
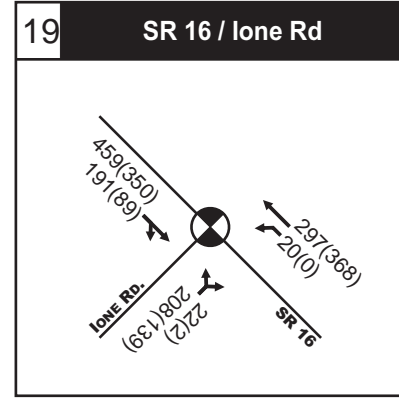
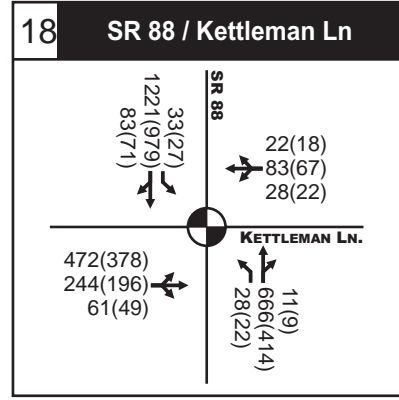
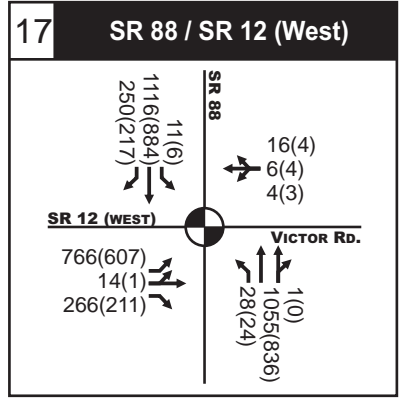
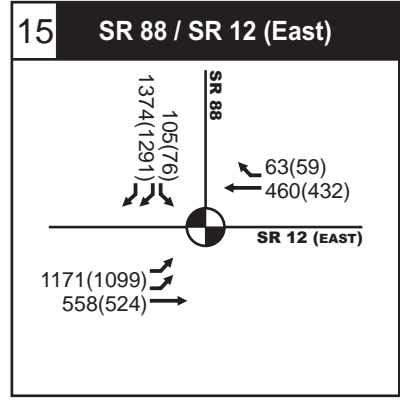
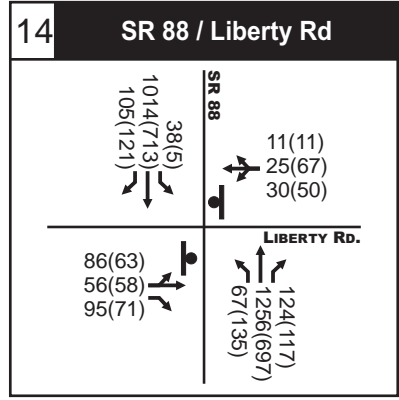
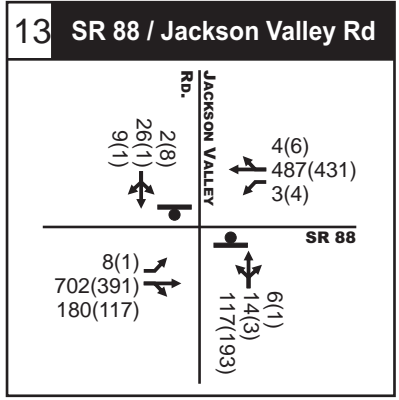
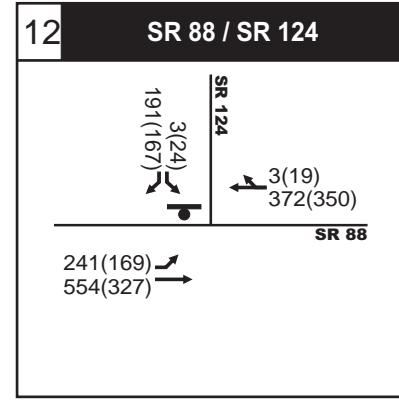
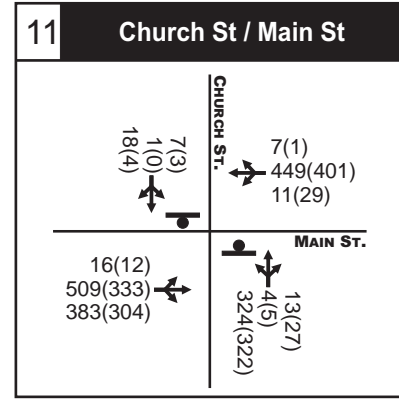
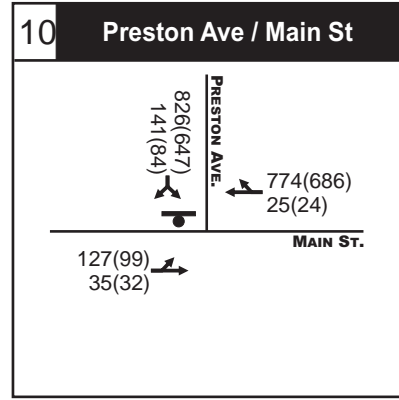
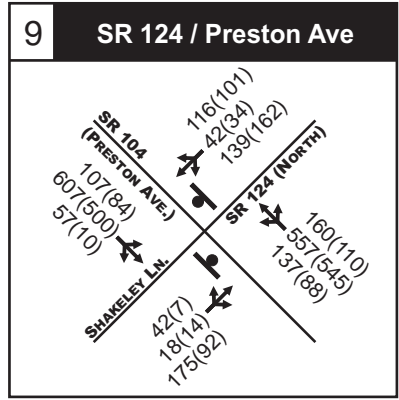
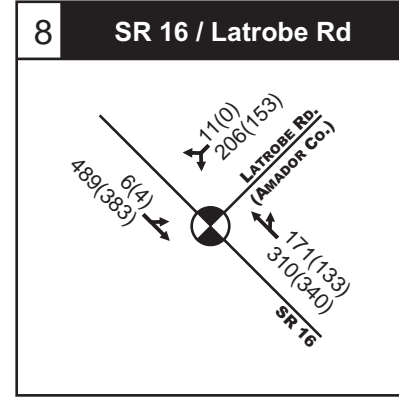
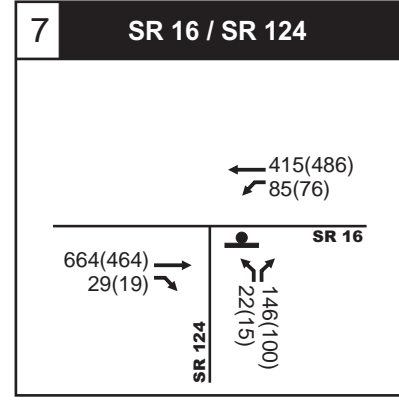
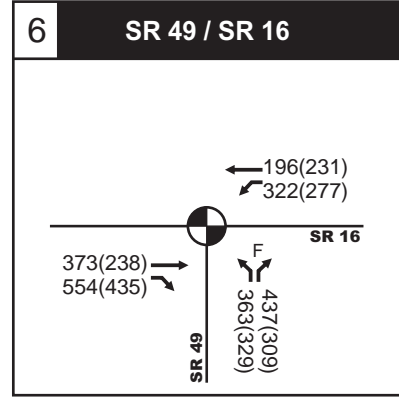
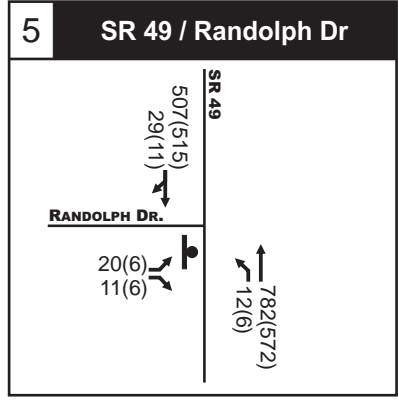
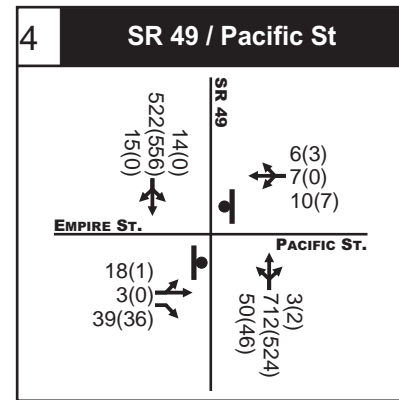
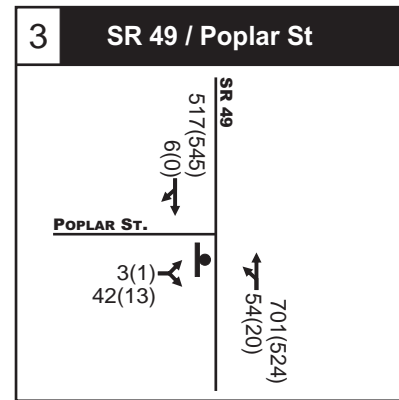
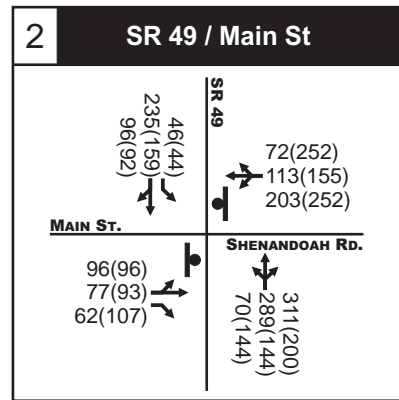
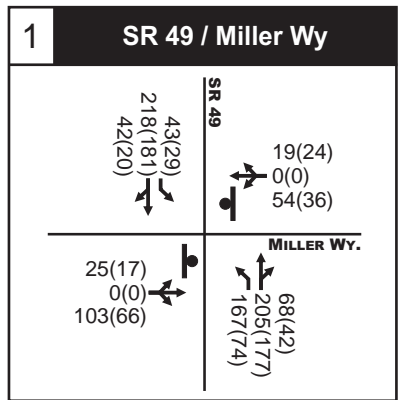
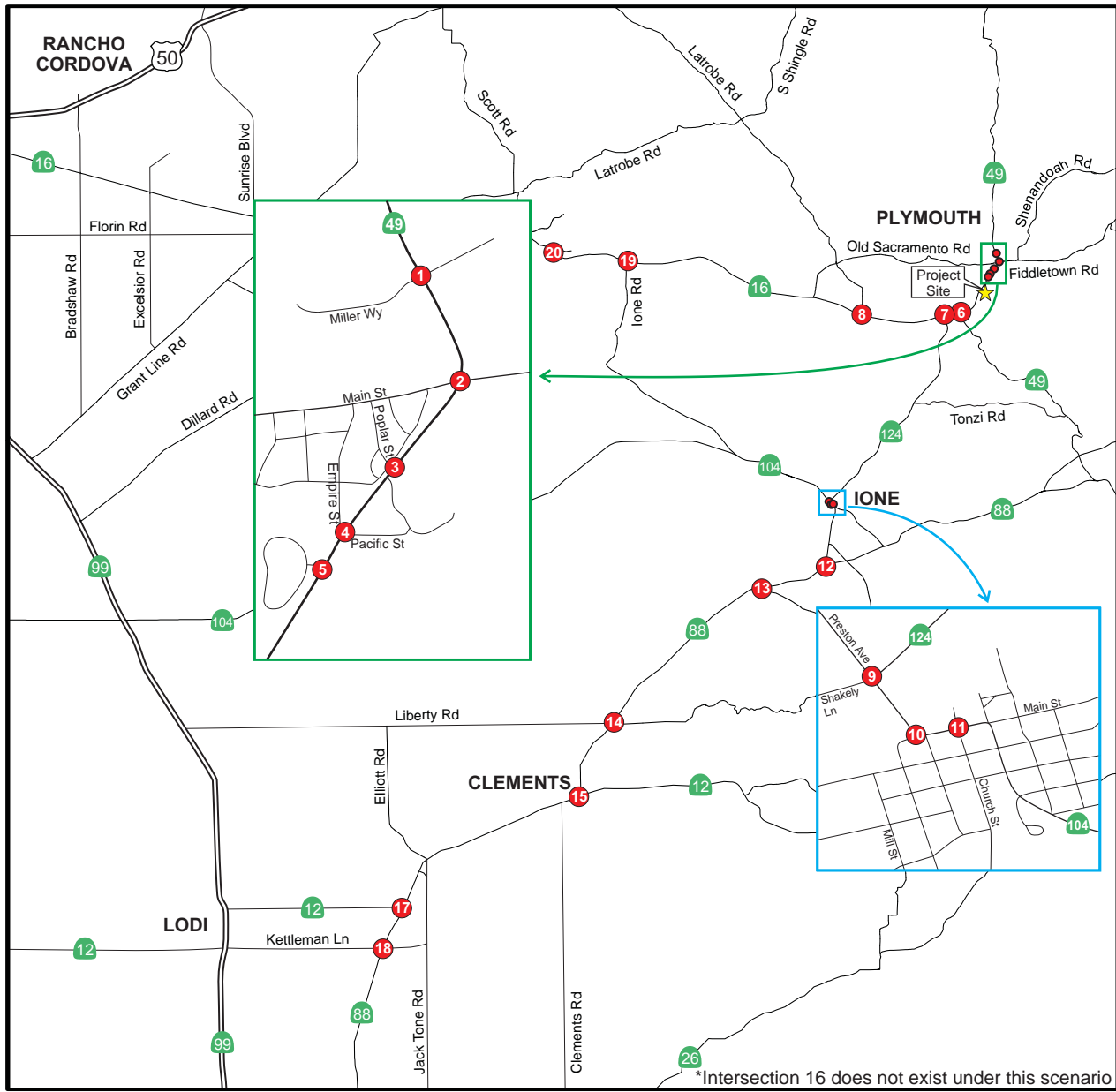
Ione Casino
Traffic Impact Analysis
Figure 23a
2010 EPAP Plus Project Alternative C
Lane Geometry & PM Peak Hour Volumes(Cont.)



Ione Casino
Traffic Impact Analysis
Figure 24
2010 EPAP Plus Project Alternative D
Lane Geometry & PM Peak Hour Volumes



Ione Casino
Traffic Impact Analysis
Figure 24a
2010 EPAP Plus Project Alternative D
Lane Geometry & PM Peak Hour Volumes



LEGEND

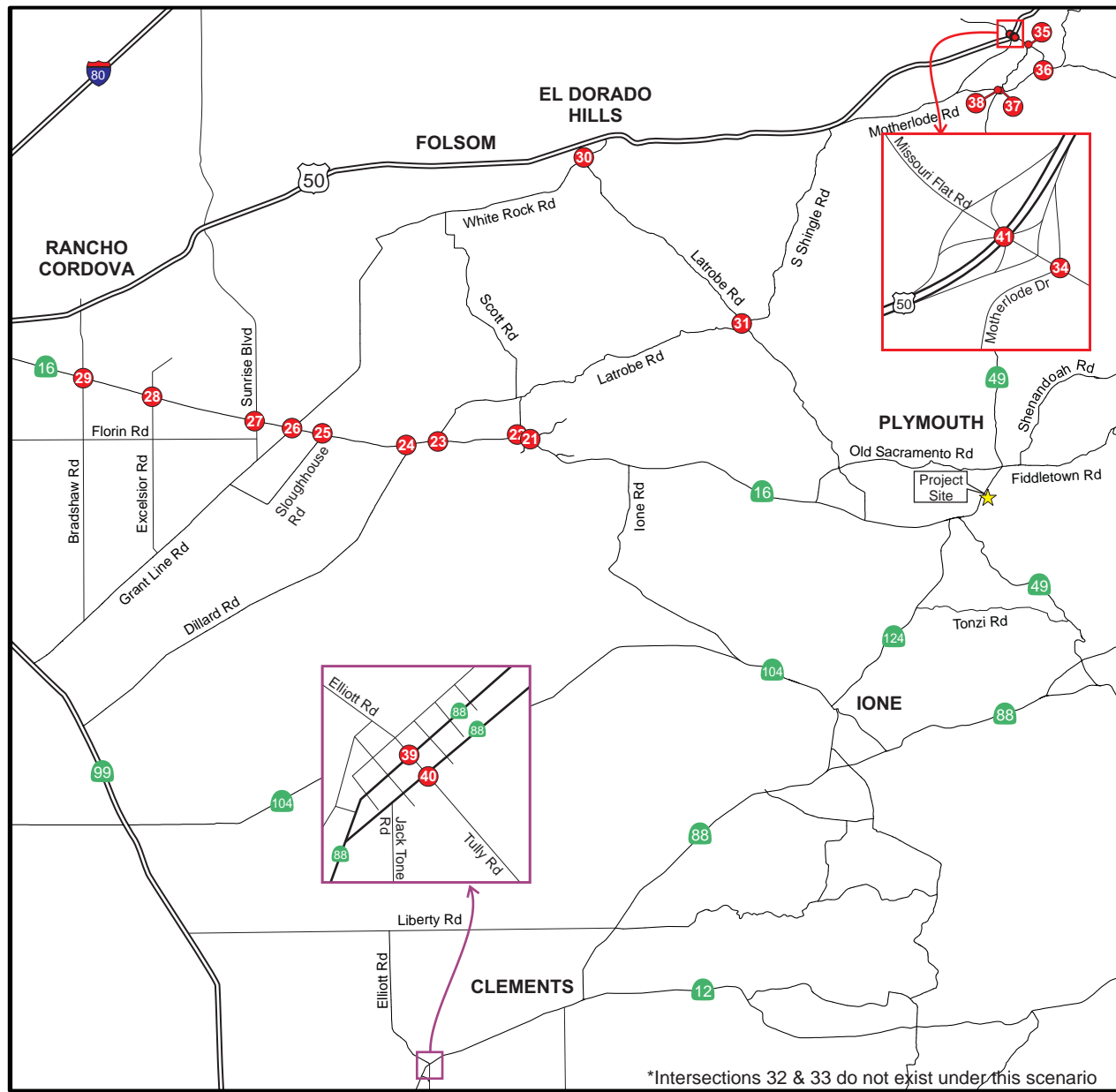
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.

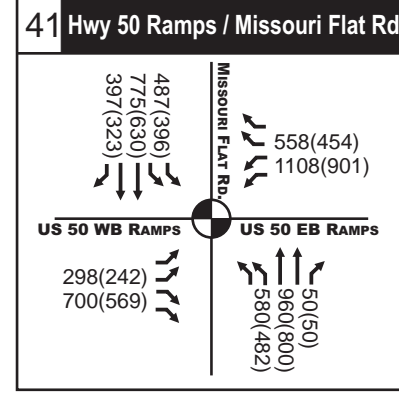
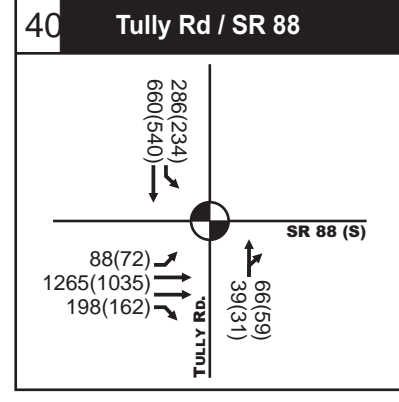
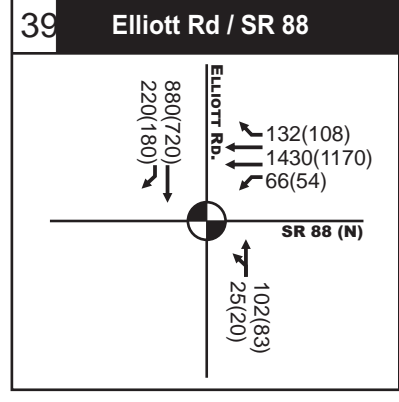
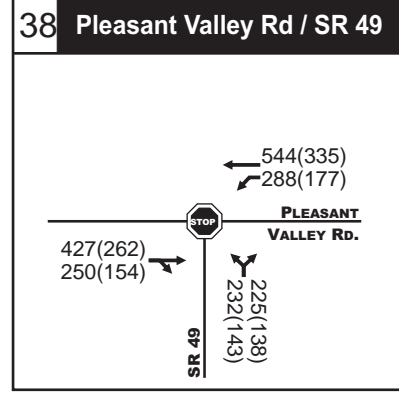
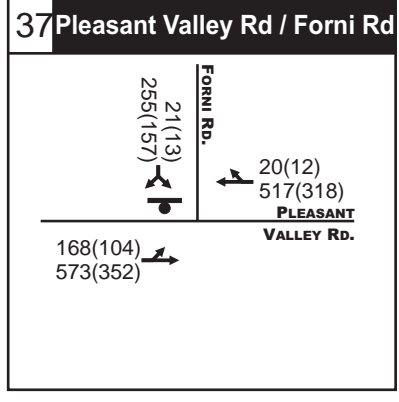
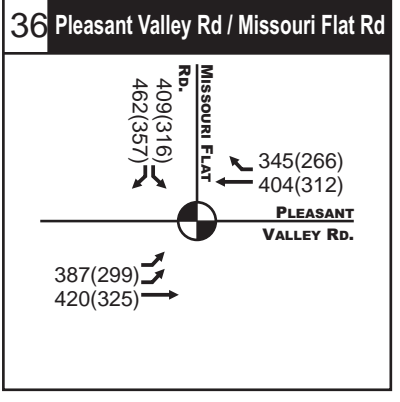
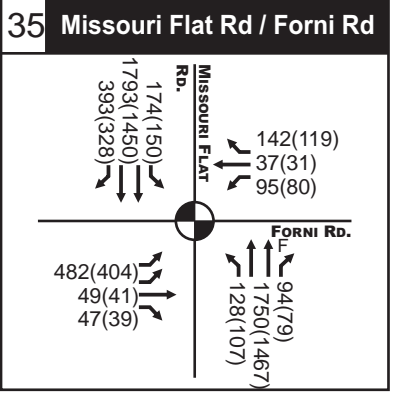
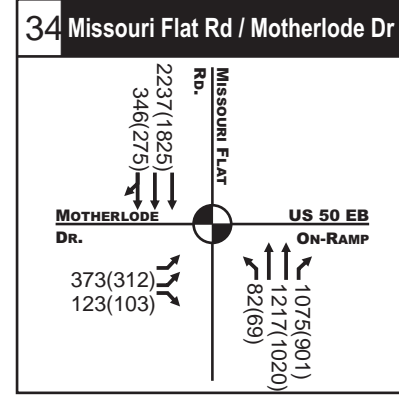
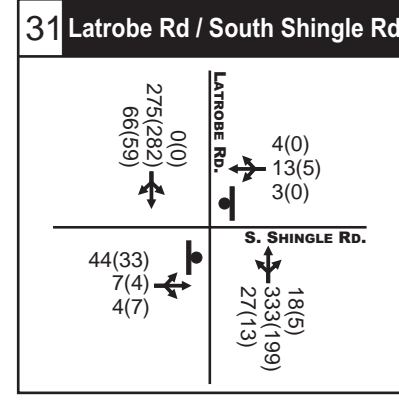
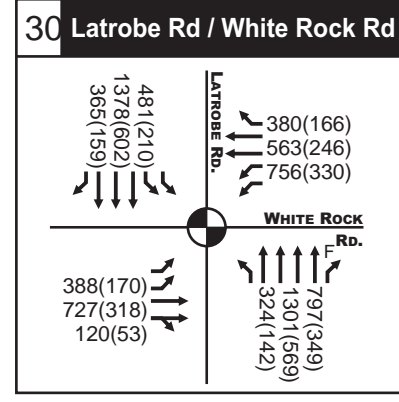
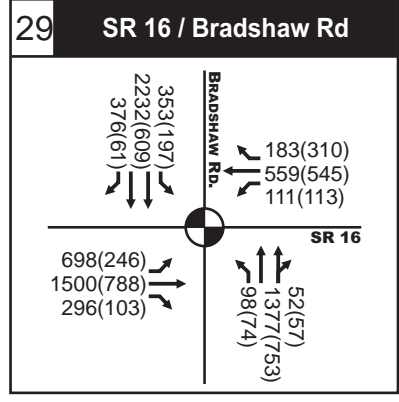
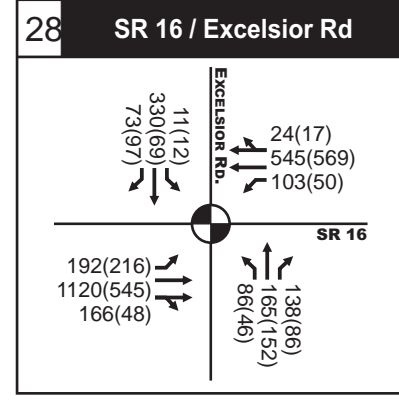
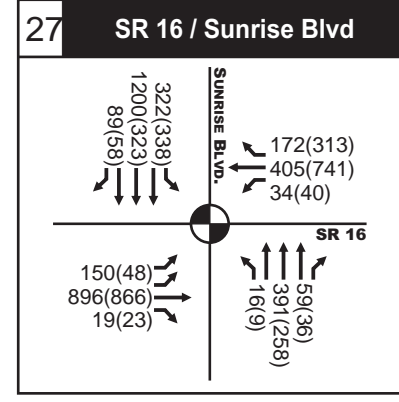
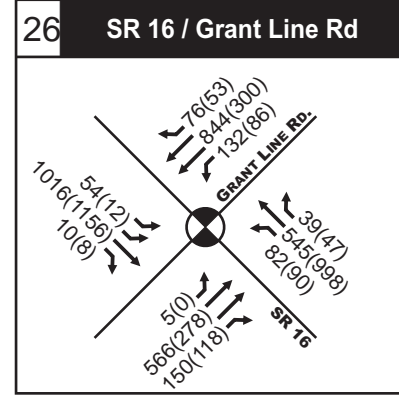
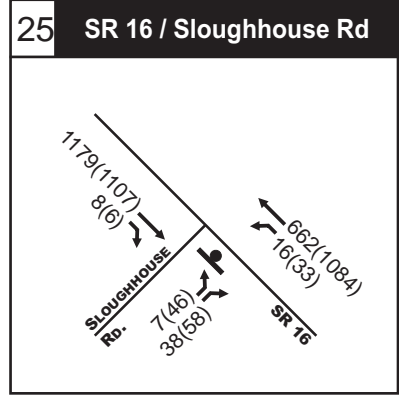
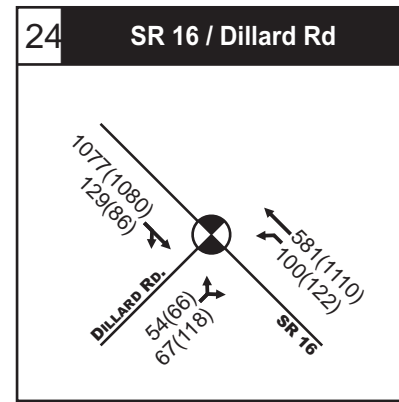
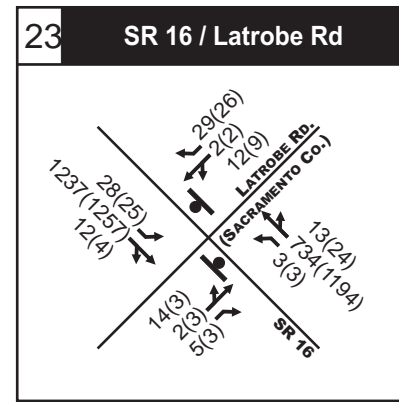
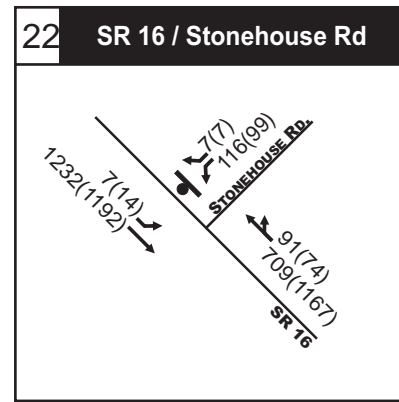
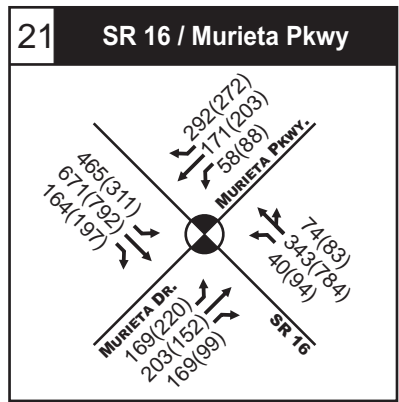


Ione Casino
Traffic Impact Analysis

Figure 25
2025 Cumulative No Project Lane Geometry
& PM Peak Hour Volumes



*Intersections 32 & 33 do not exist under this scenario



LEGEND

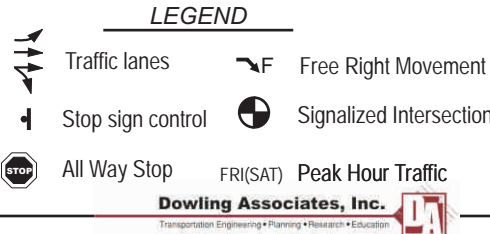
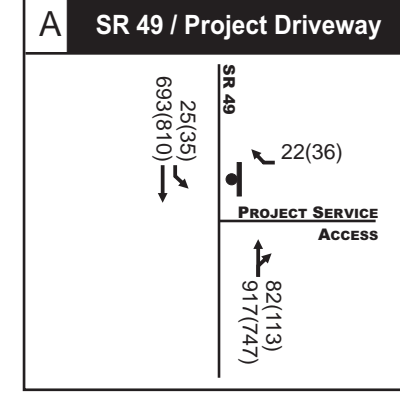
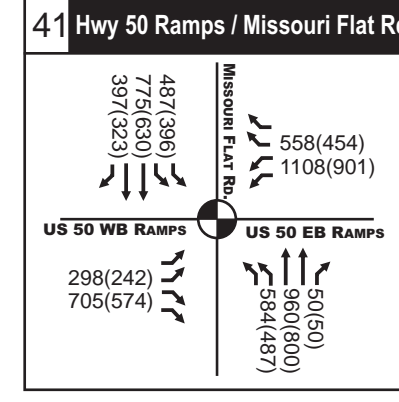
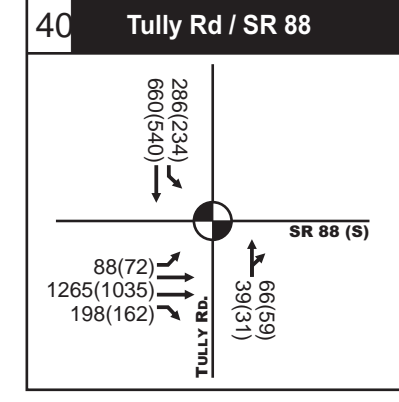
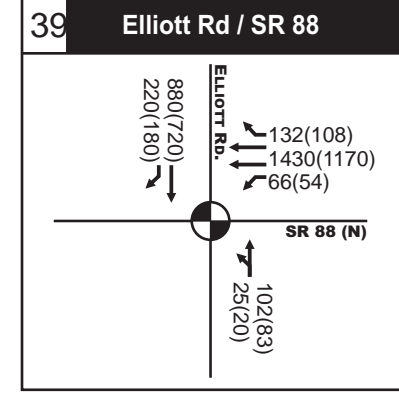
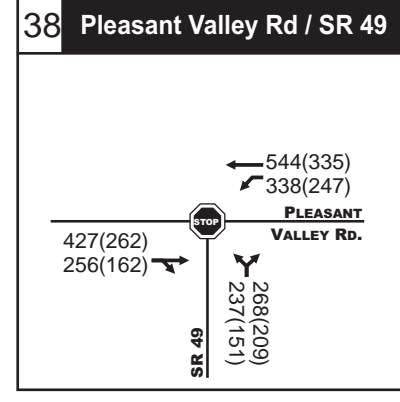
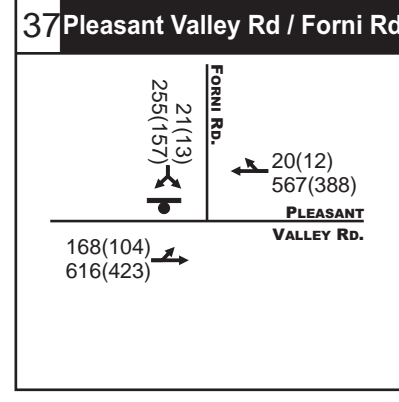
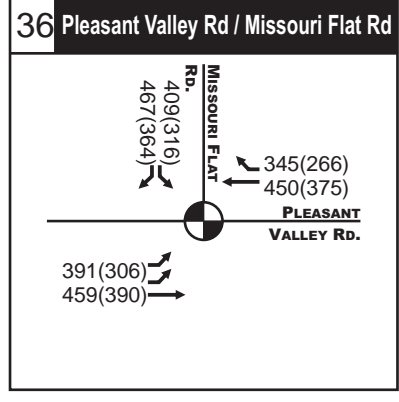
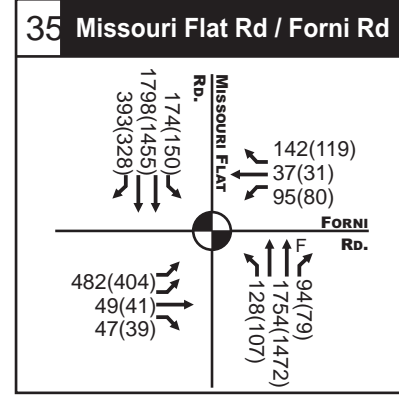
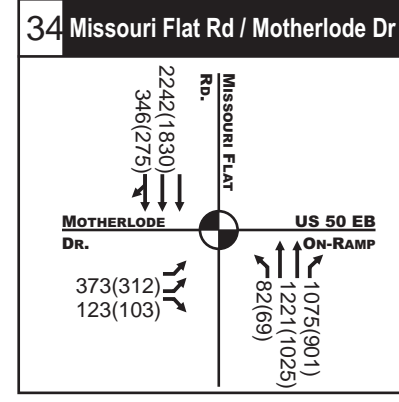
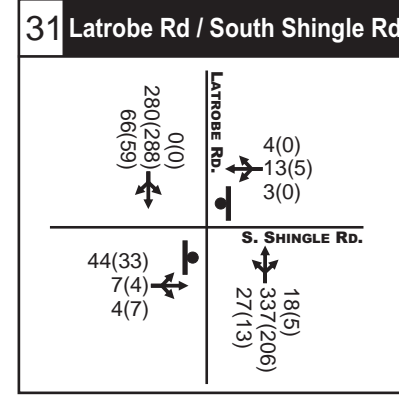
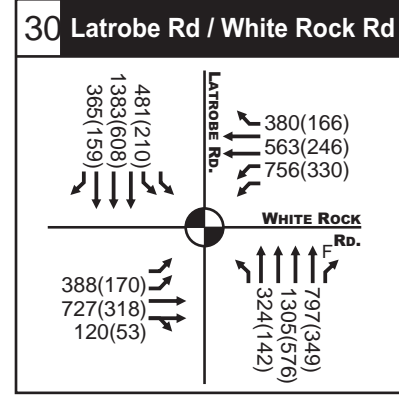
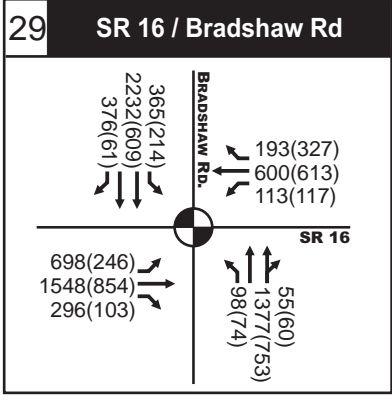
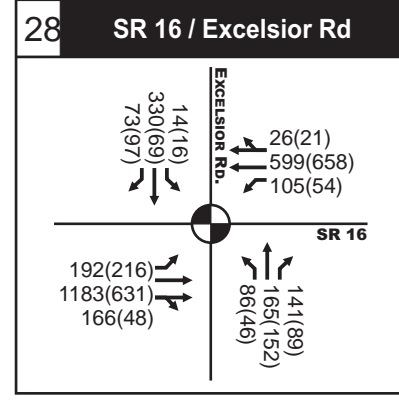
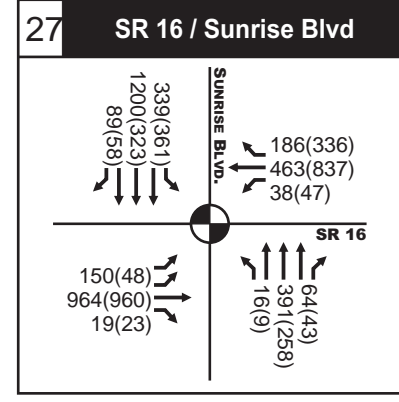
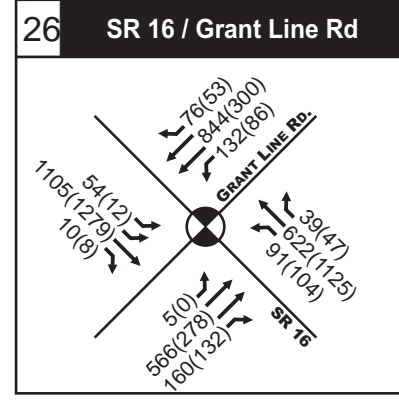
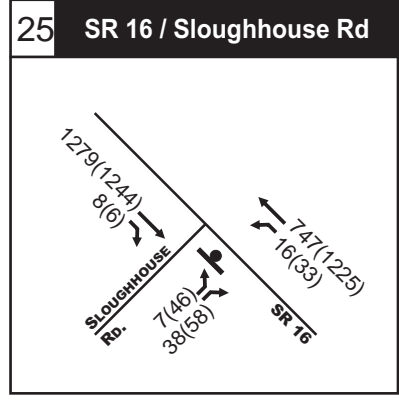
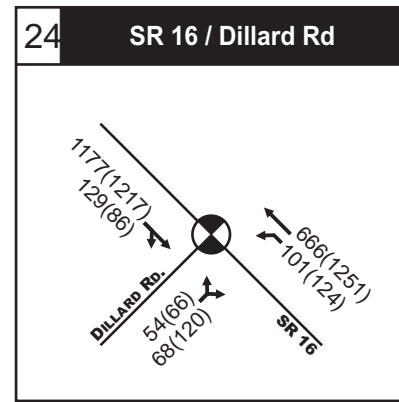
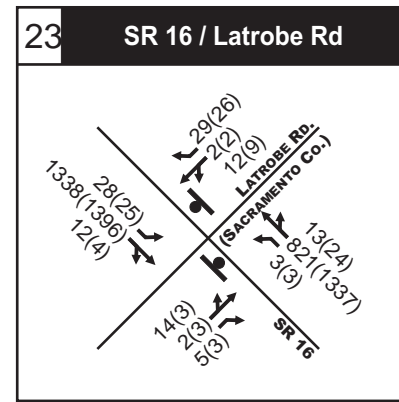
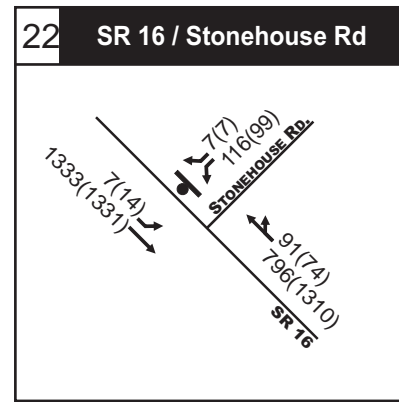
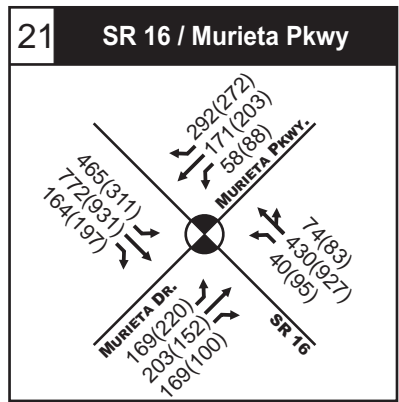
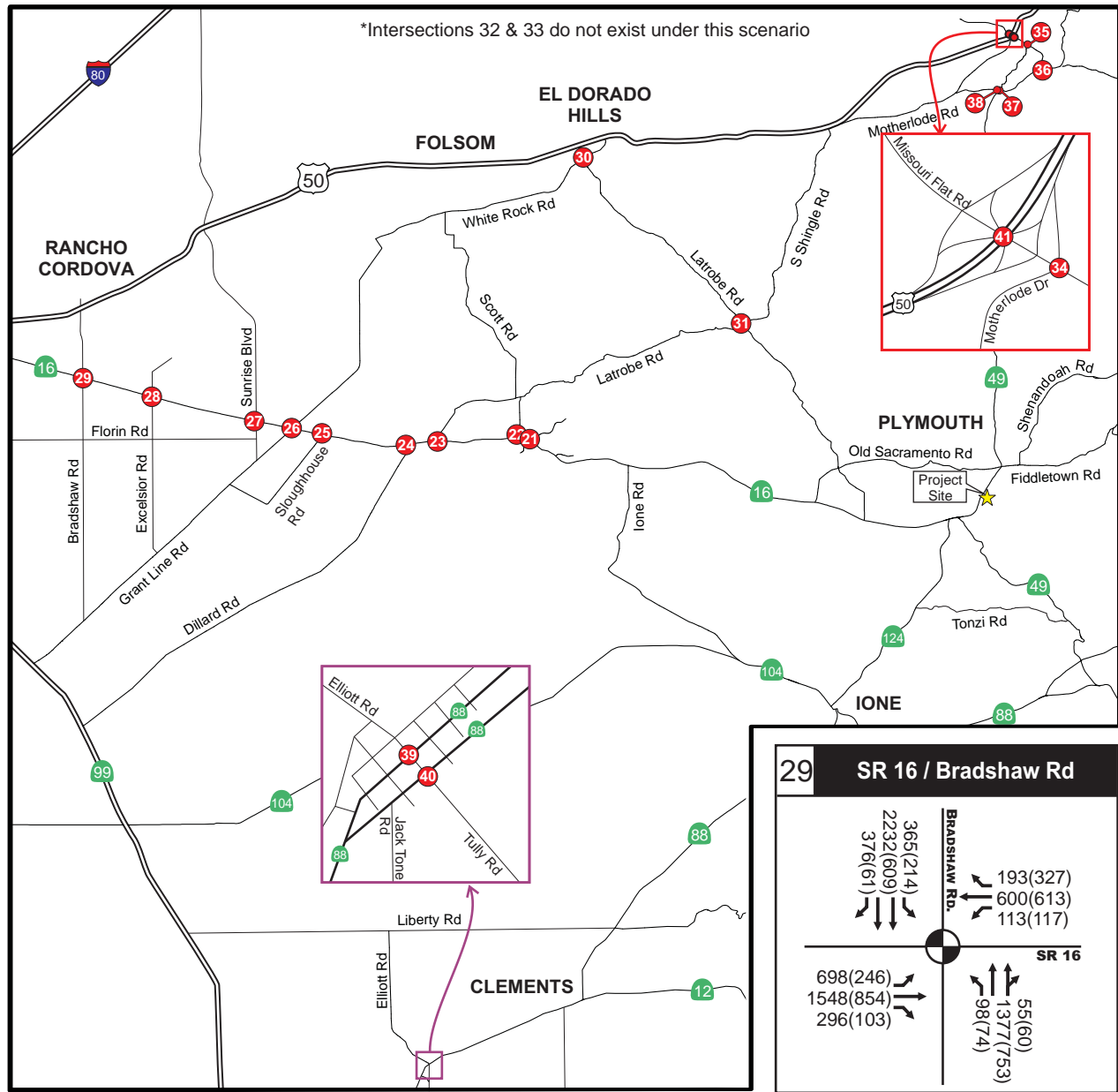
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



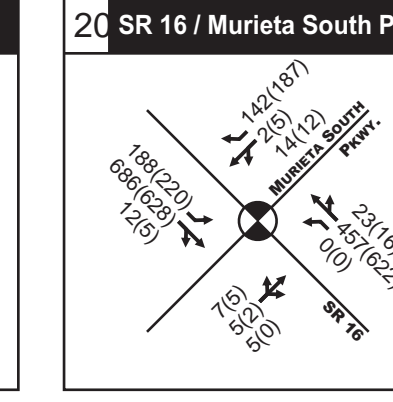
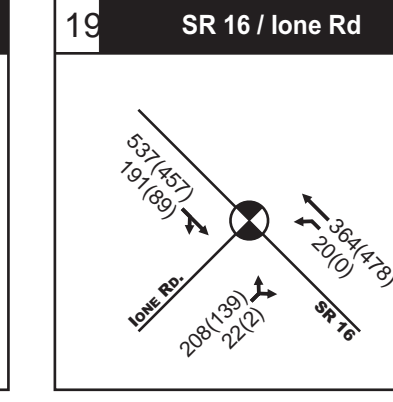
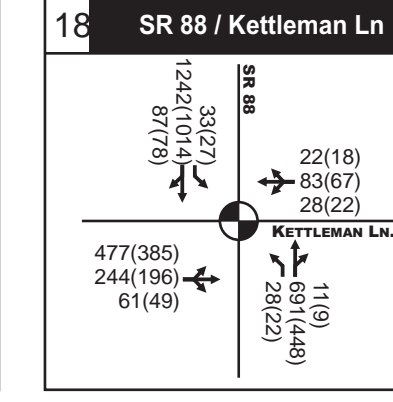
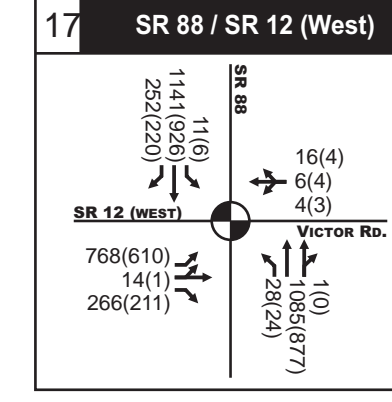
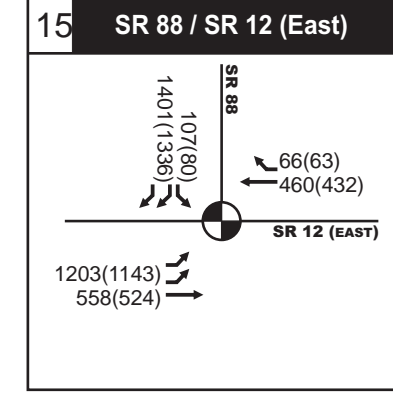
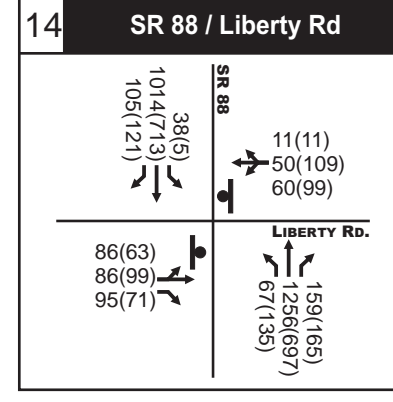
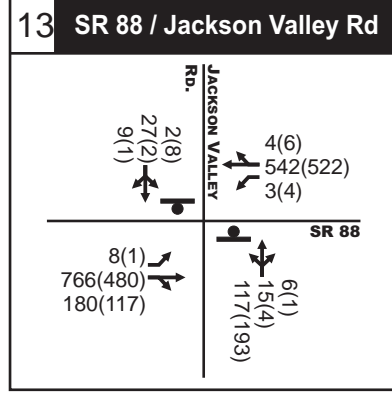
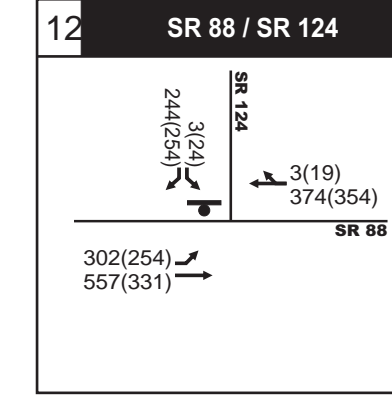
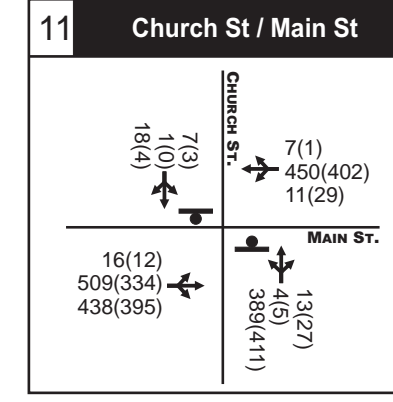
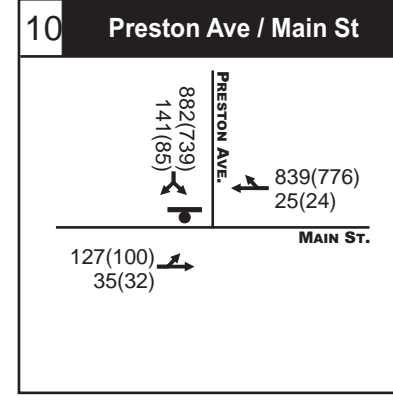
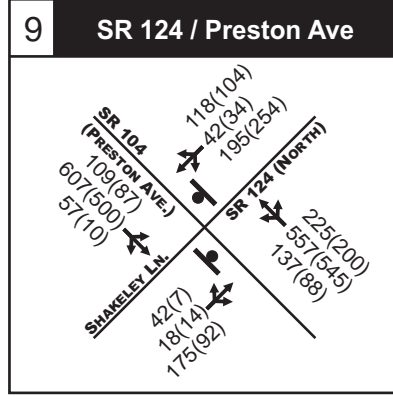
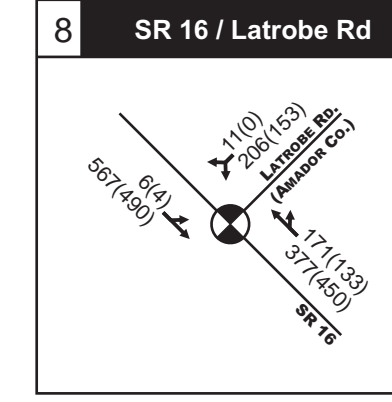
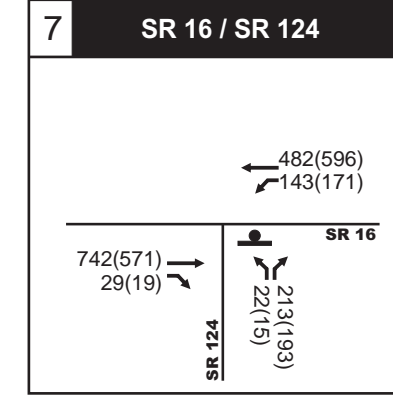
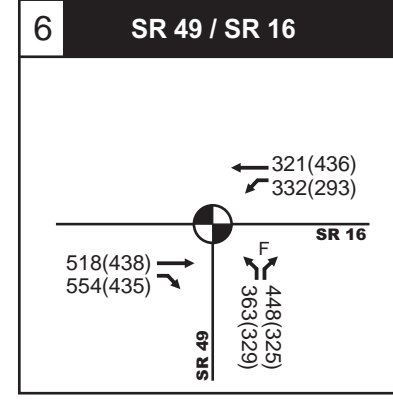
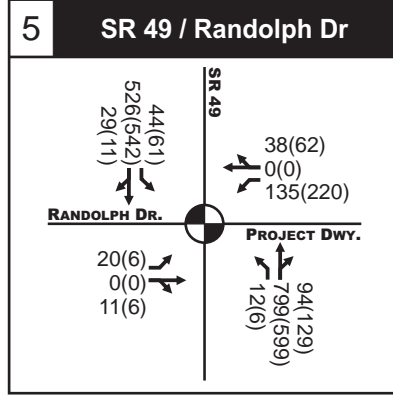
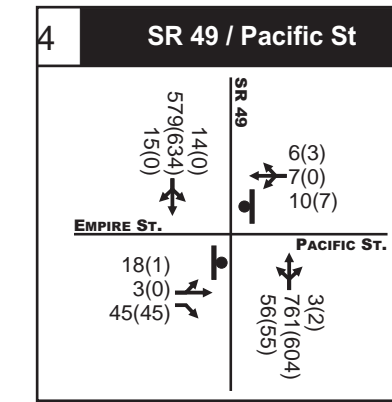
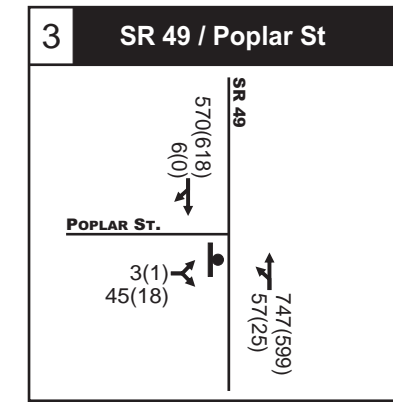
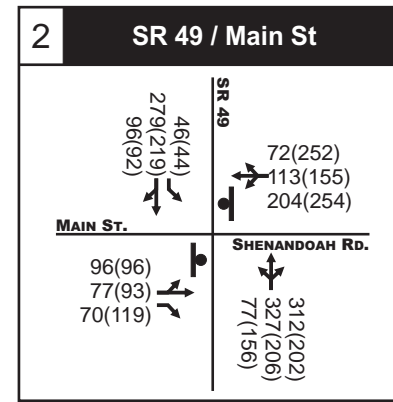
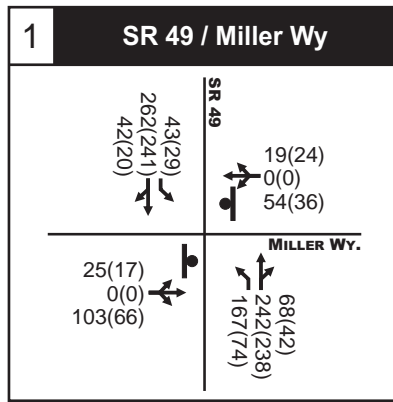
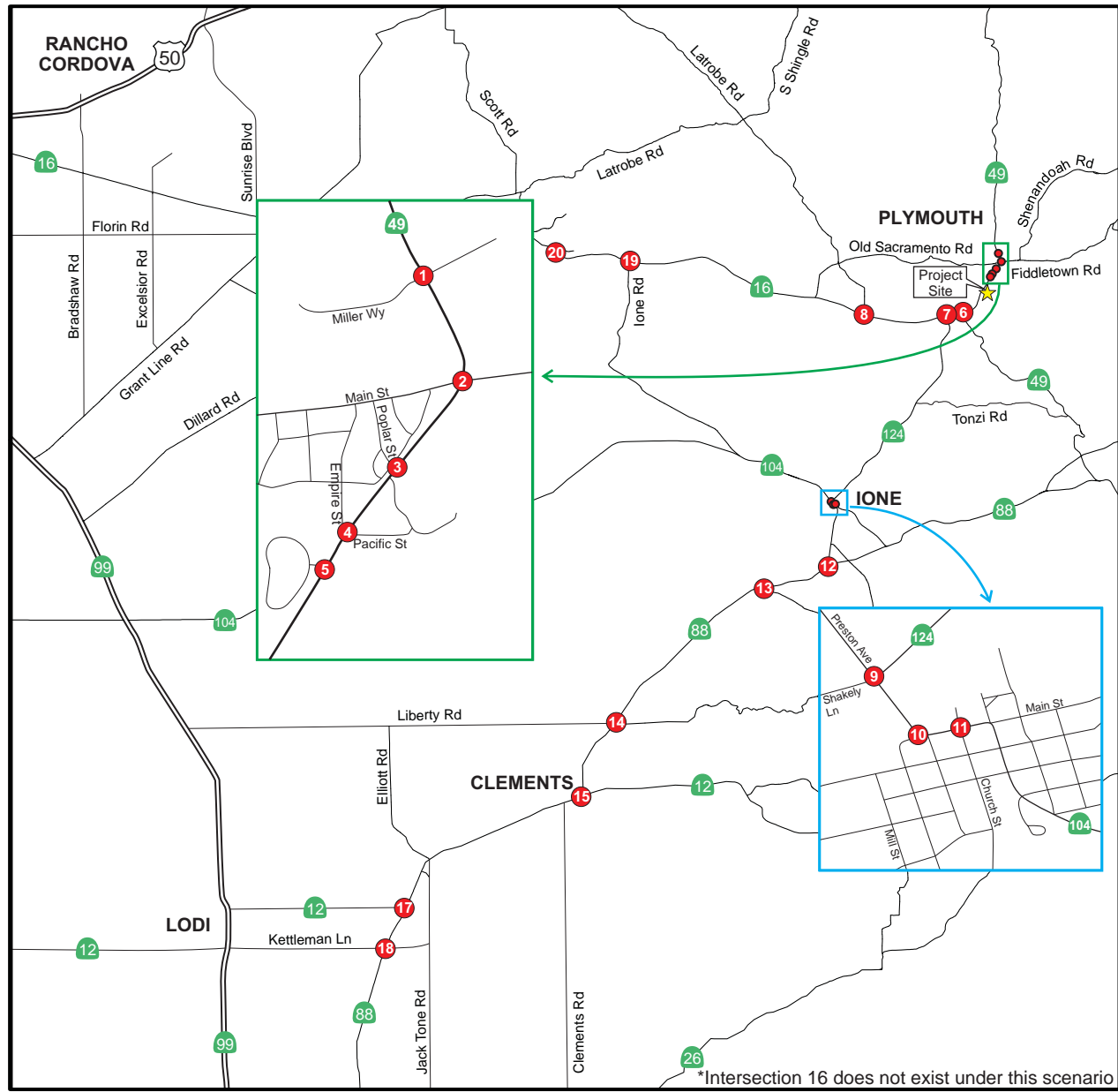
Ione Casino
 Traffic Impact Analysis

Figure 25a
 2025 Cumulative No Project Lane Geometry
 & PM Peak Hour Volumes(Cont.)



Ione Casino
Traffic Impact Analysis

Figure 26a
2025 Cumulative Plus Project Alternative A
Lane Geometry & PM Peak Hour Volumes(Cont.)



LEGEND

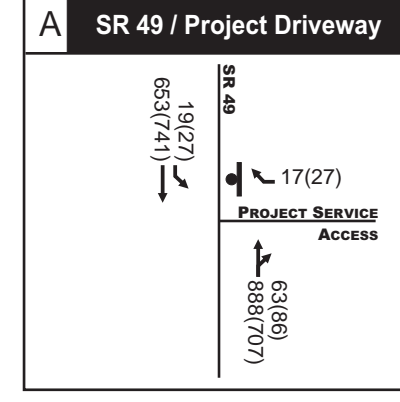
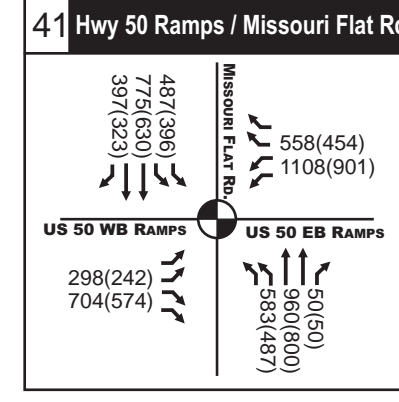
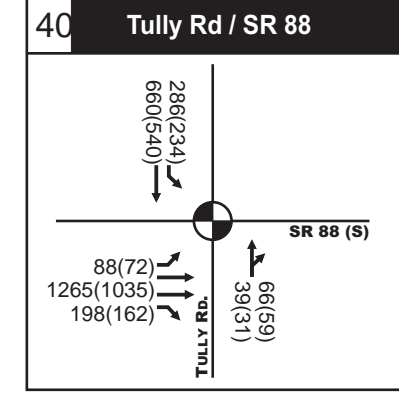
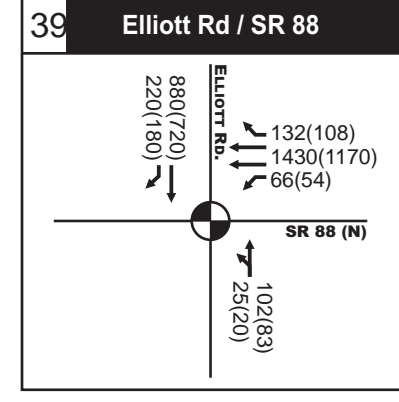
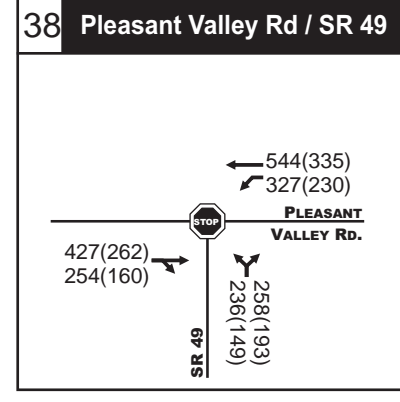
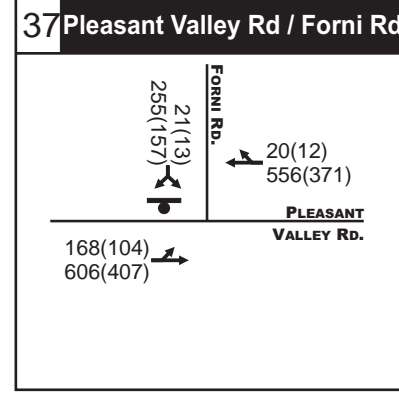
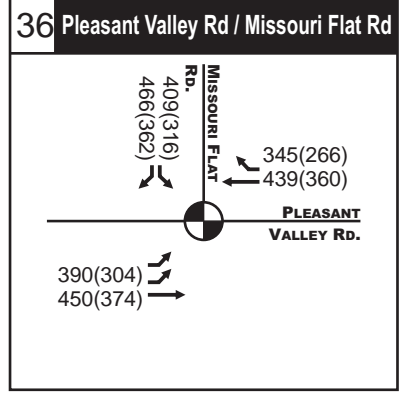
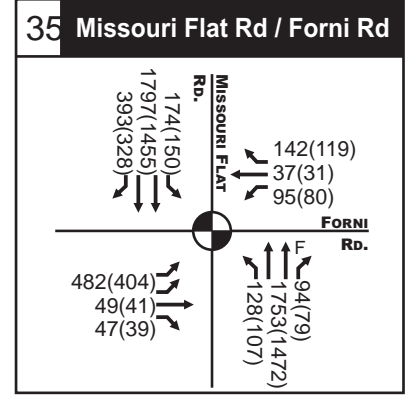
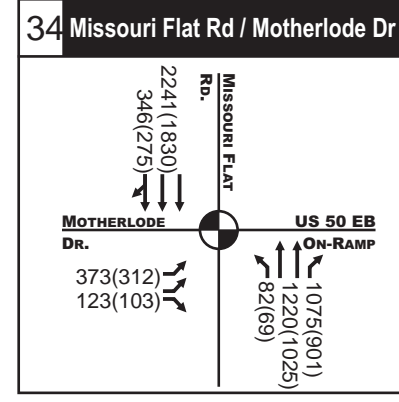
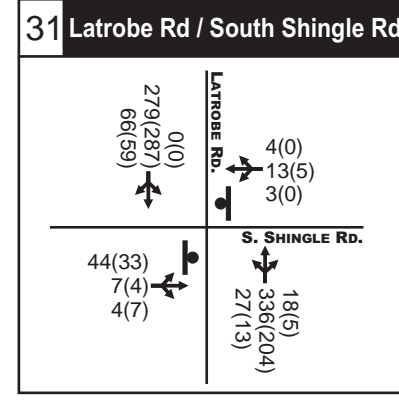
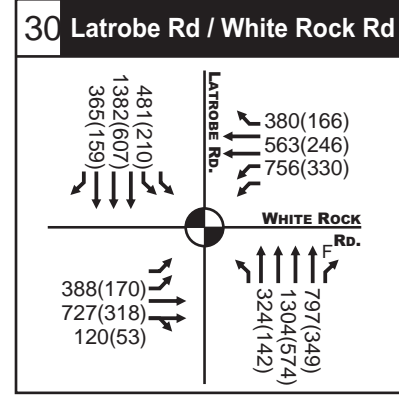
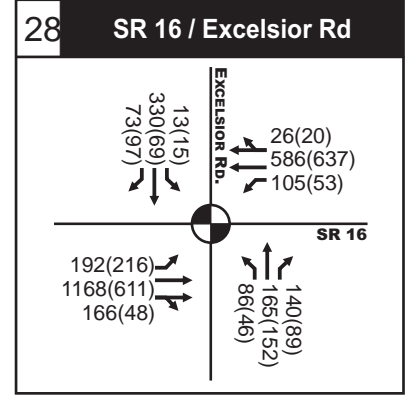
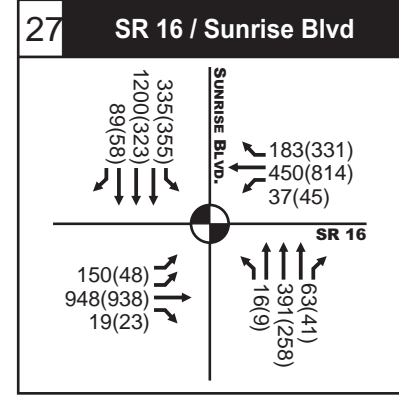
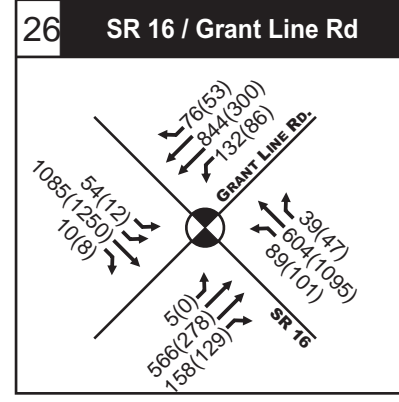
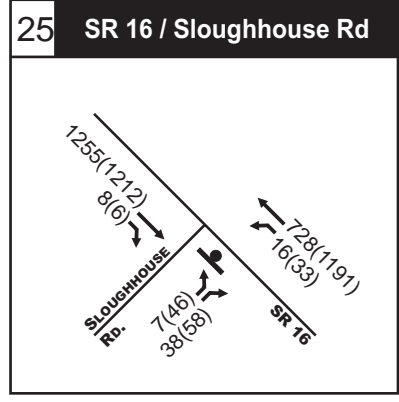
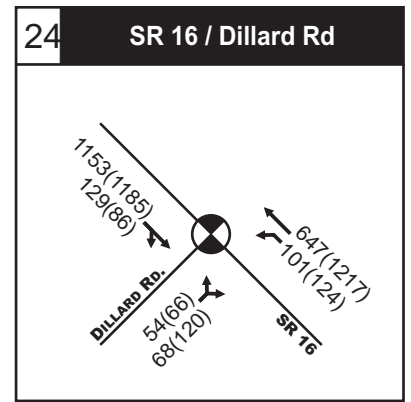
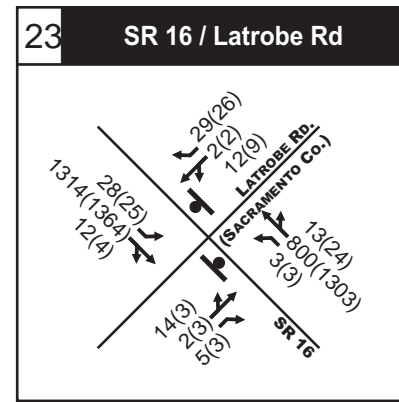
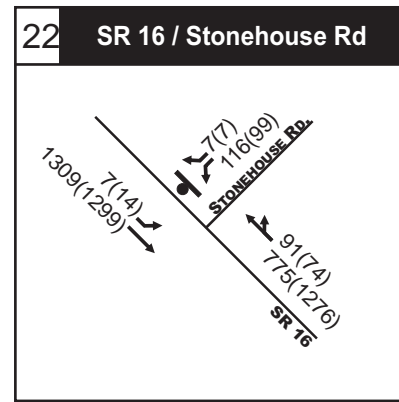
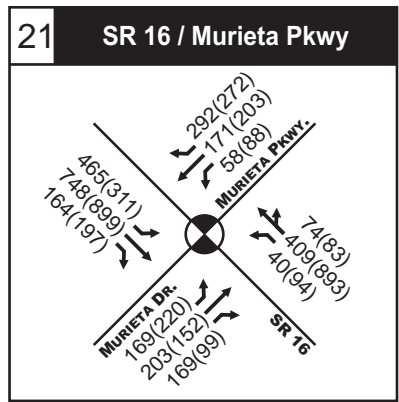
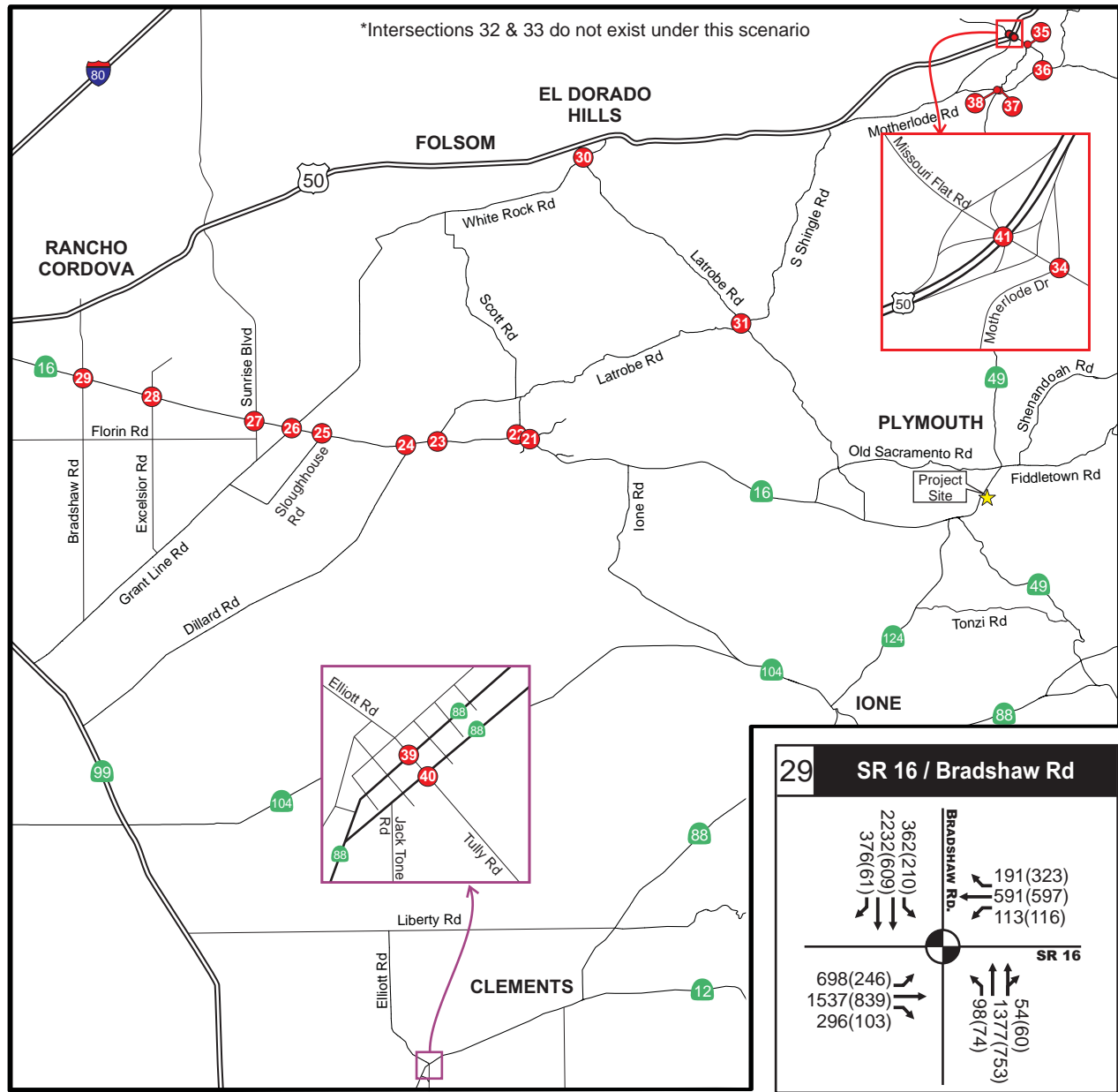
- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education



Ione Casino
 Traffic Impact Analysis

Figure 27
 2025 Cumulative Plus Project Alternative B
 Lane Geometry & PM Peak Hour Volumes



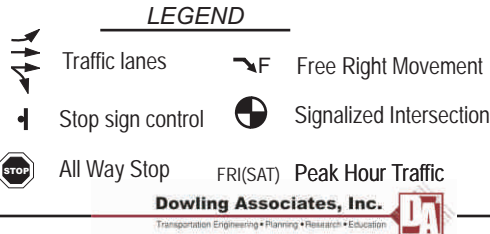
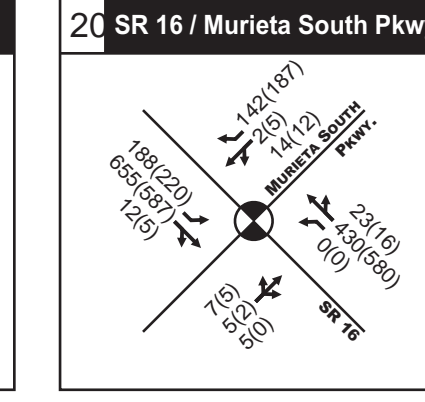
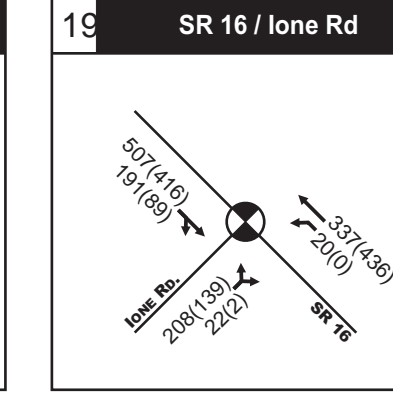
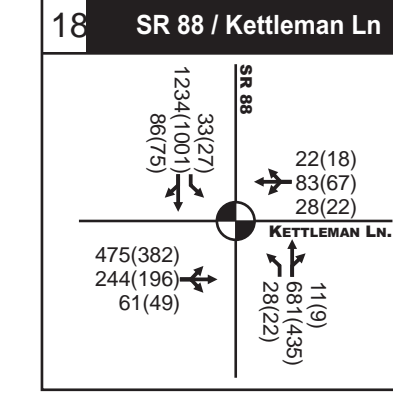
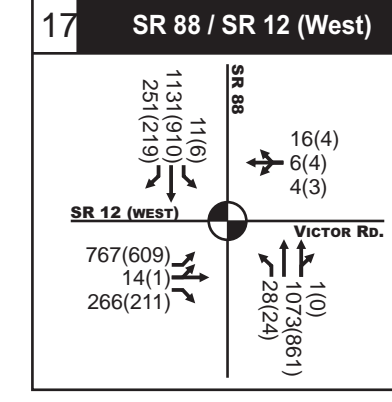
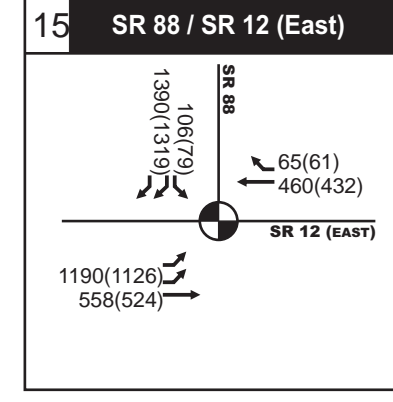
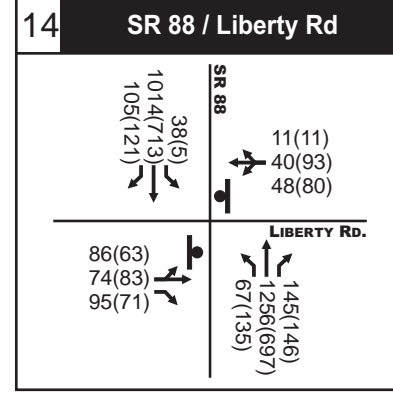
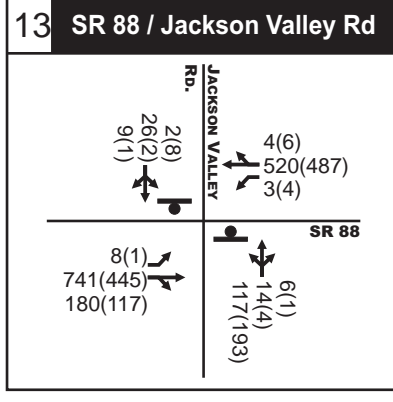
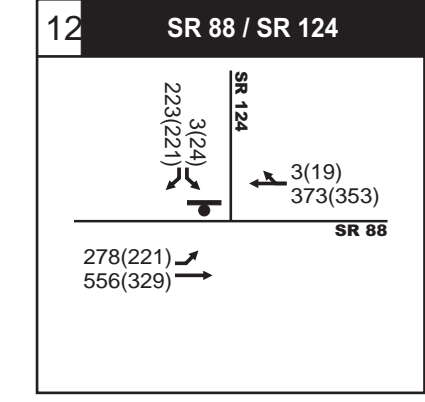
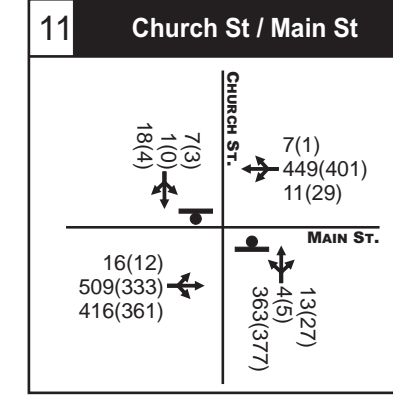
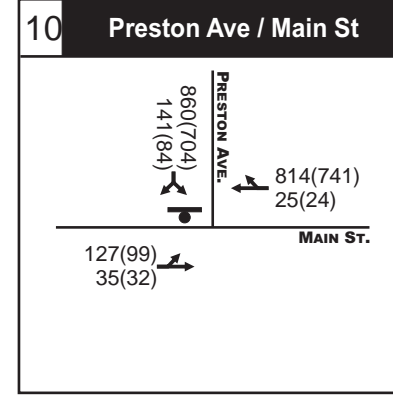
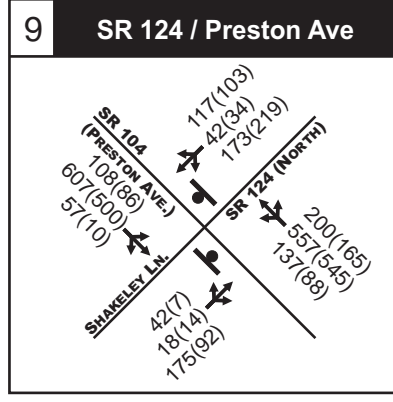
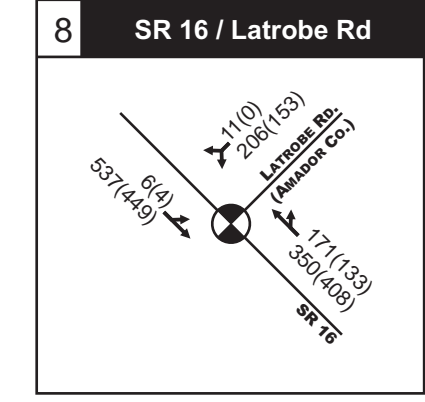
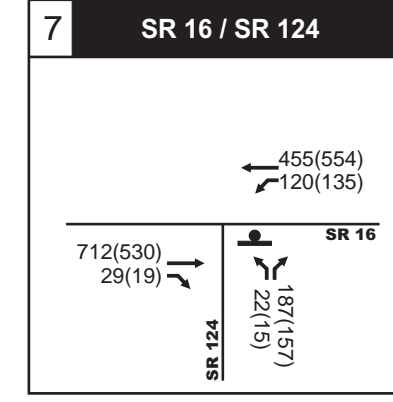
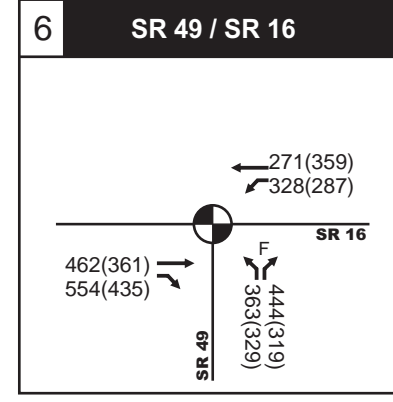
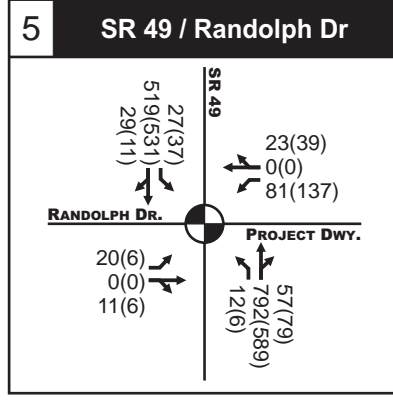
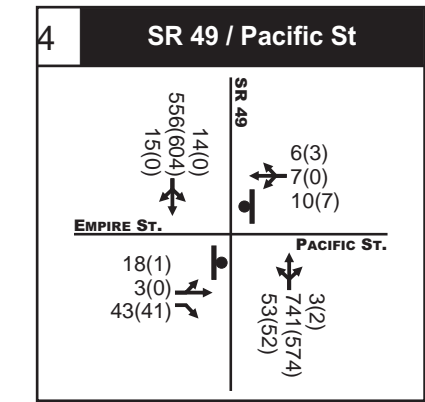
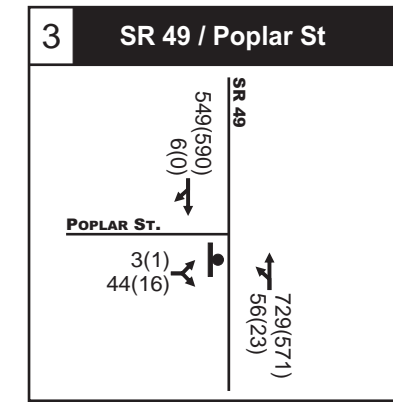
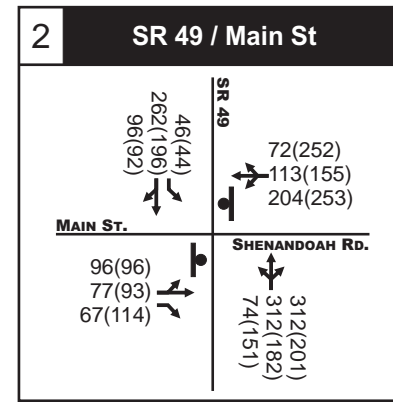
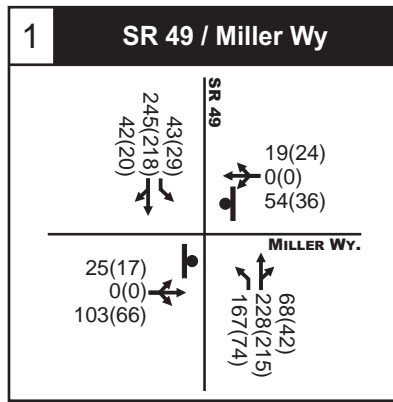
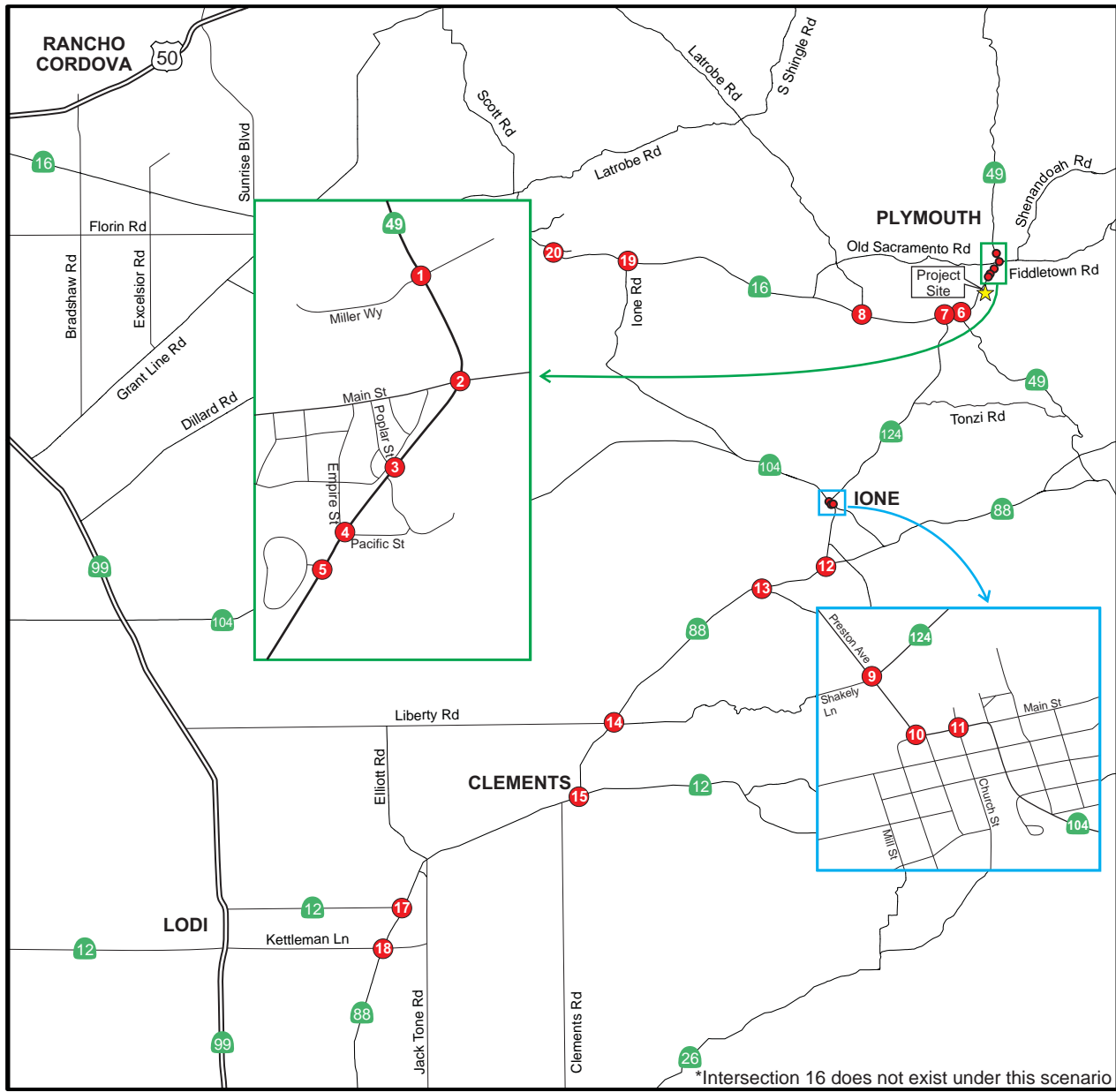
LEGEND

- Traffic lanes
- Free Right Movement
- Stop sign control
- Signalized Intersection
- All Way Stop
- FRI(SAT) Peak Hour Traffic

Dowling Associates, Inc.
 Transportation Engineering • Planning • Research • Education

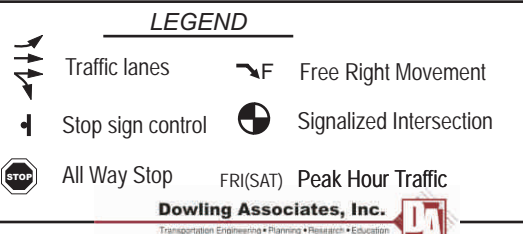
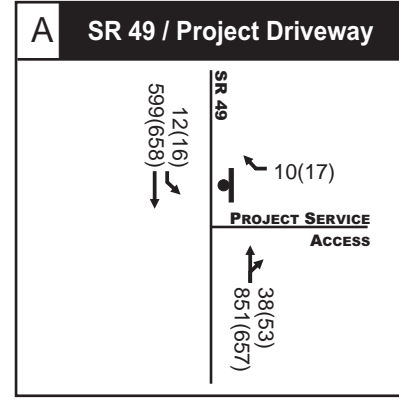
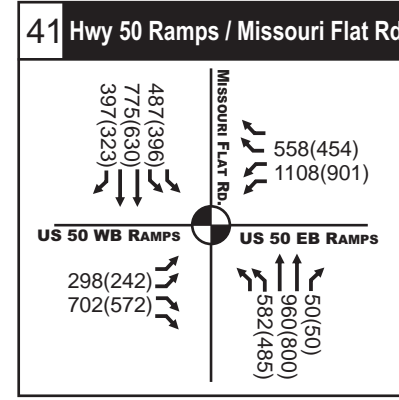
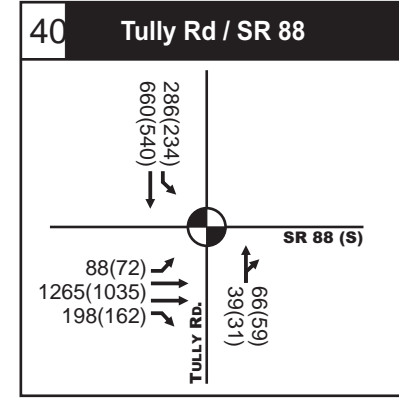
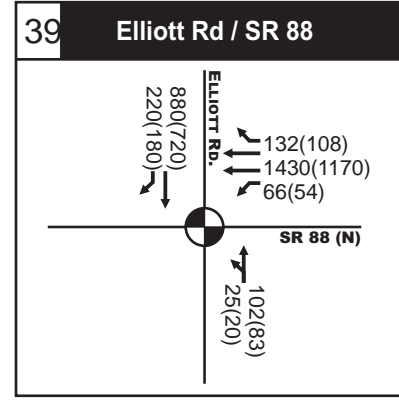
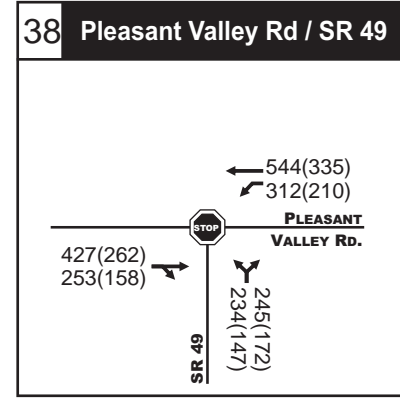
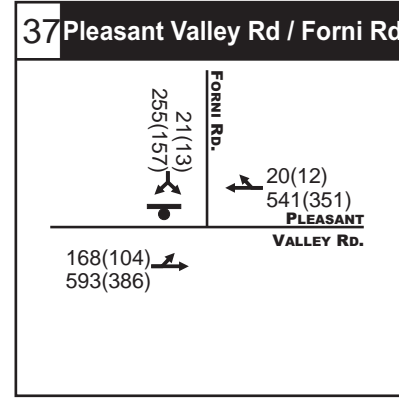
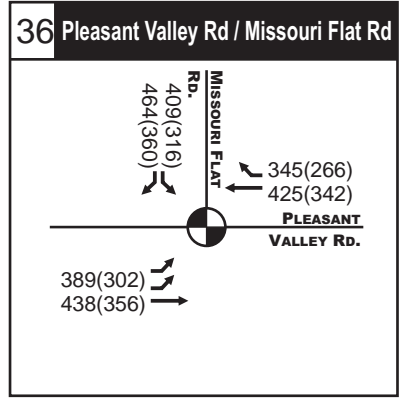
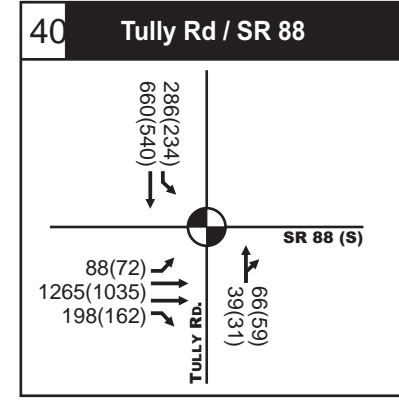
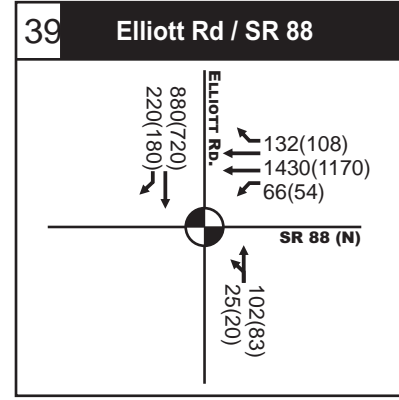
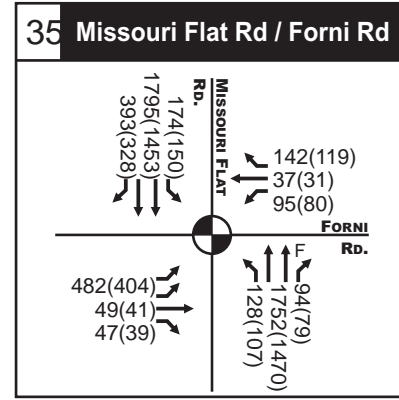
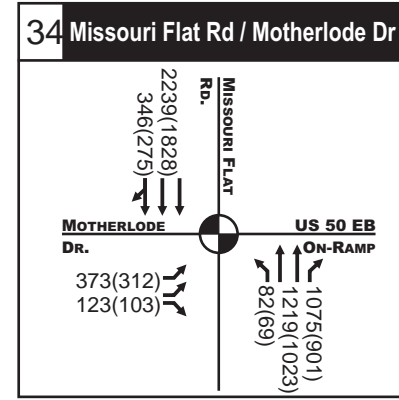
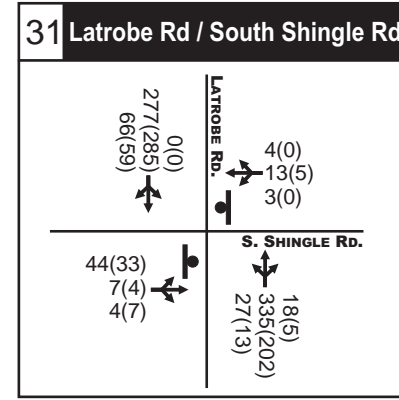
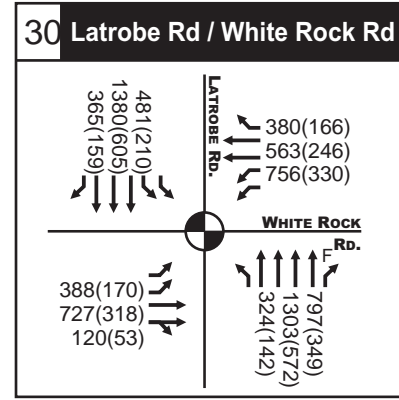
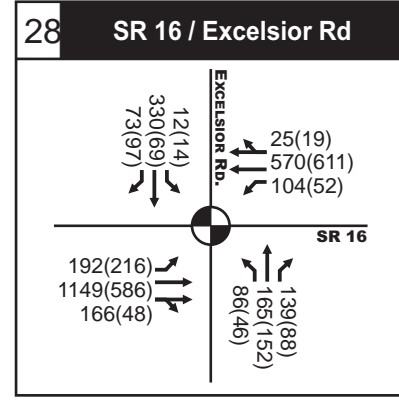
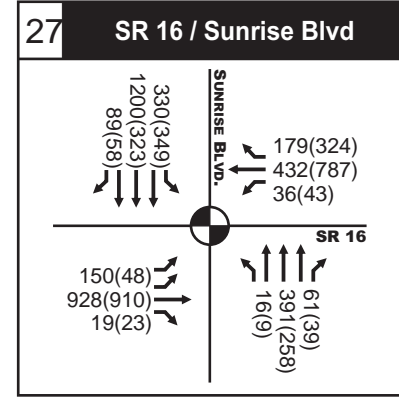
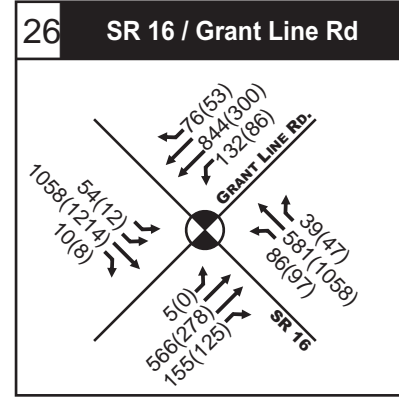
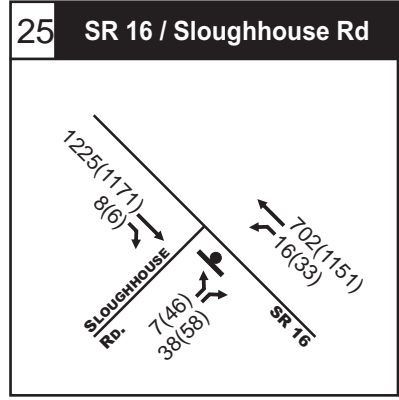
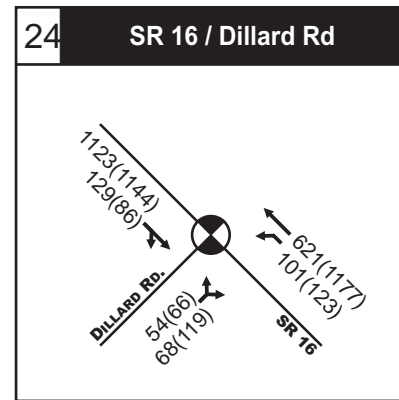
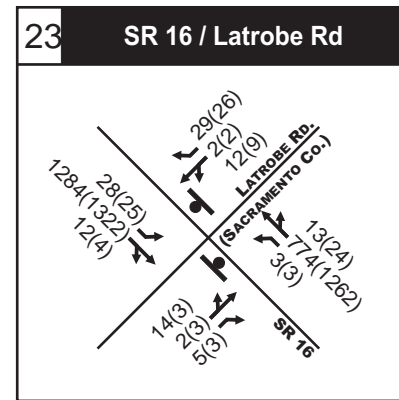
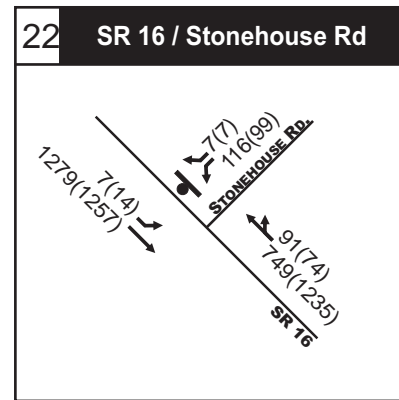
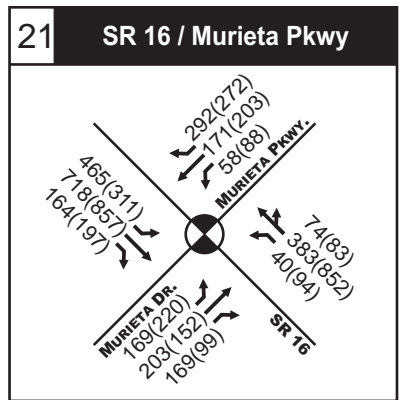
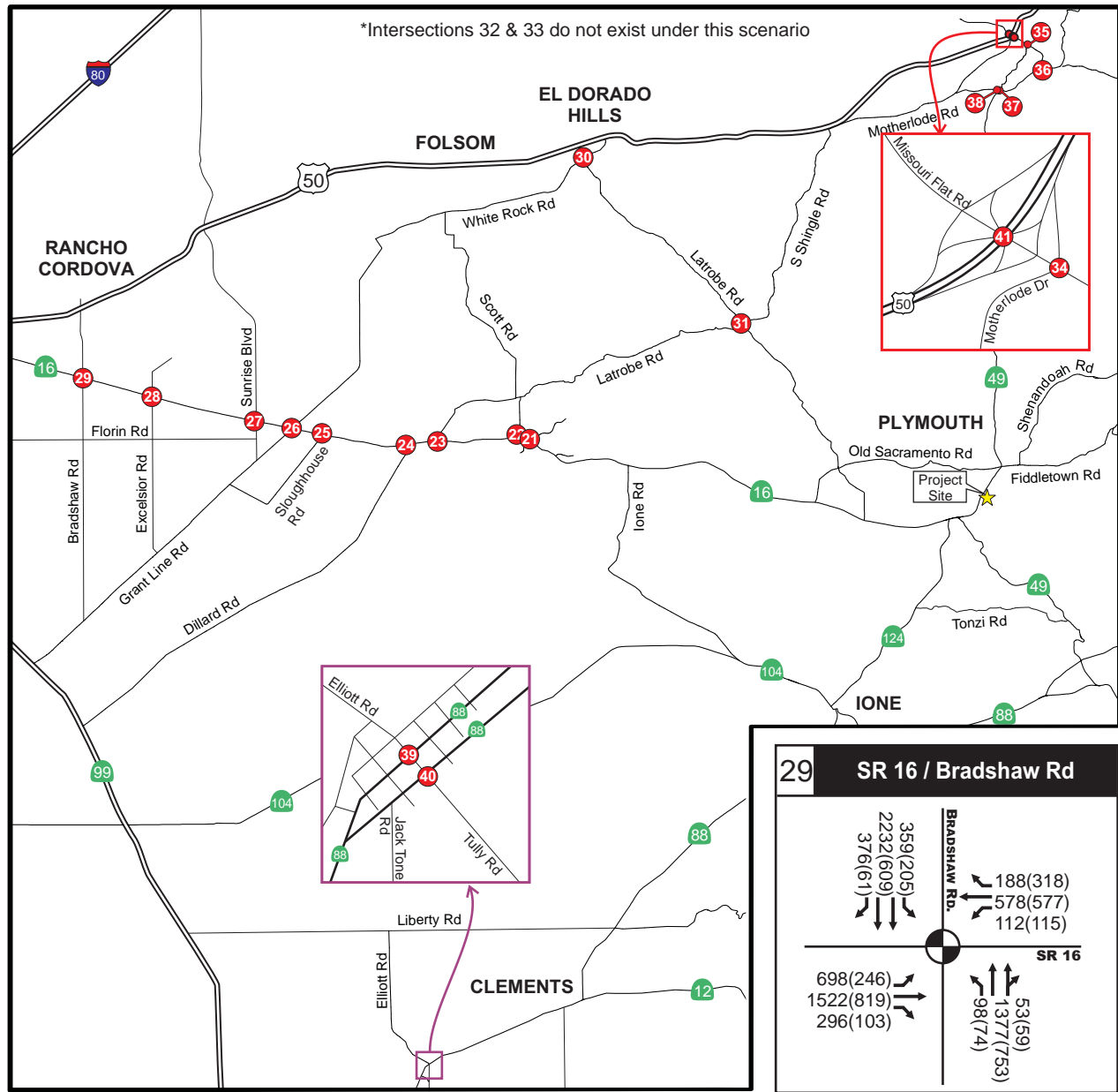


Ione Casino
 Traffic Impact Analysis
Figure 27a
 2025 Cumulative Plus Project Alternative B
 Lane Geometry & PM Peak Hour Volumes(Cont.)

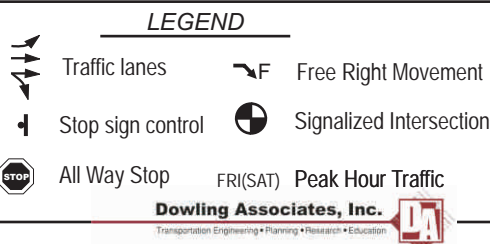
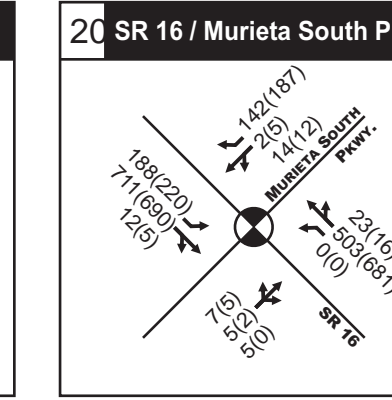
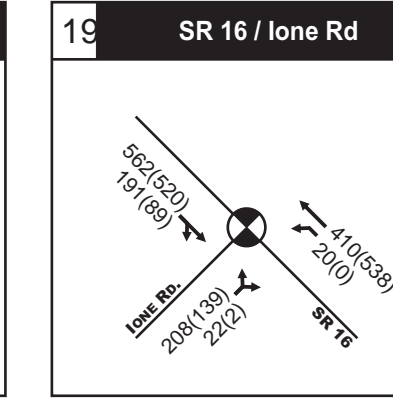
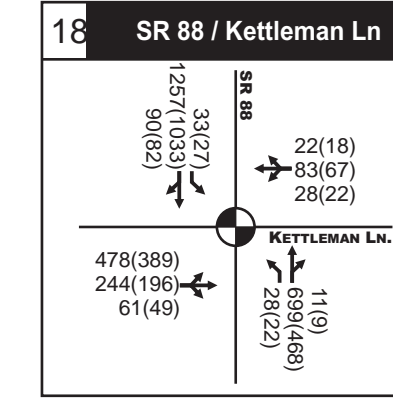
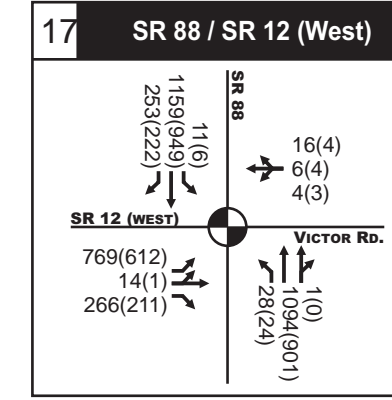
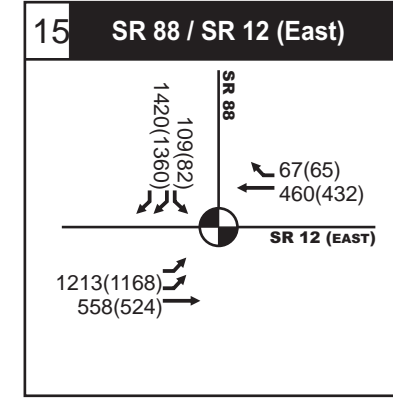
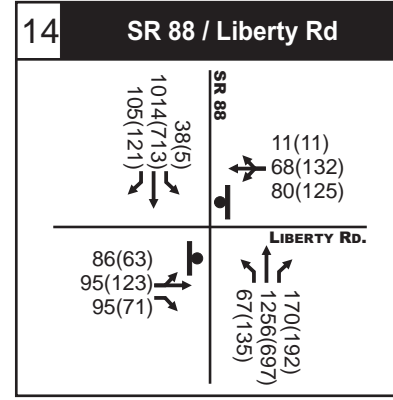
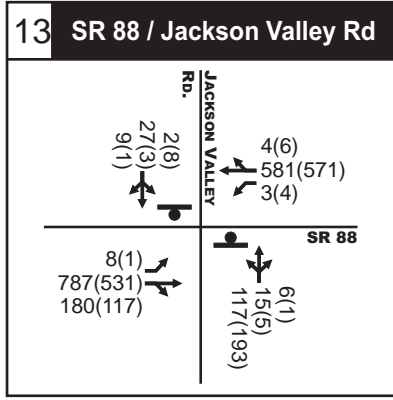
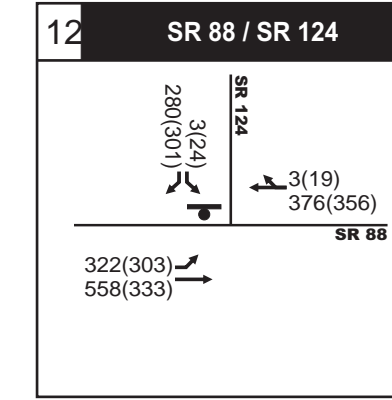
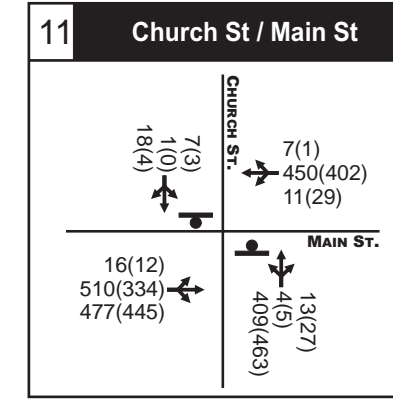
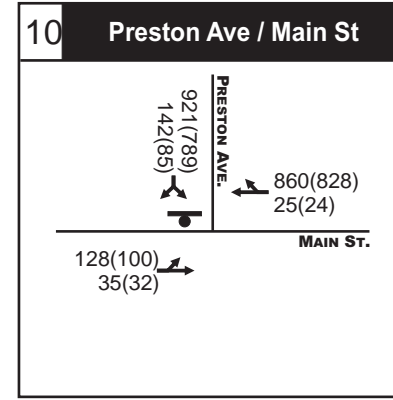
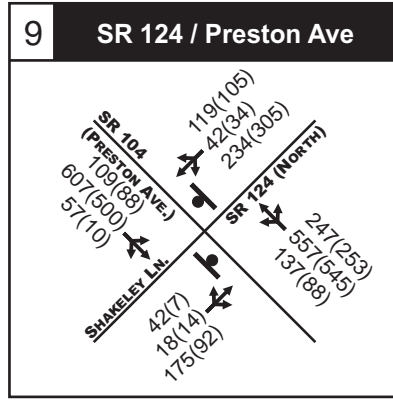
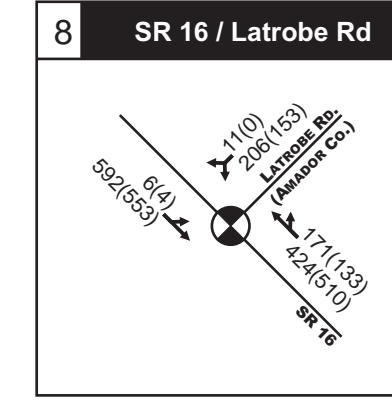
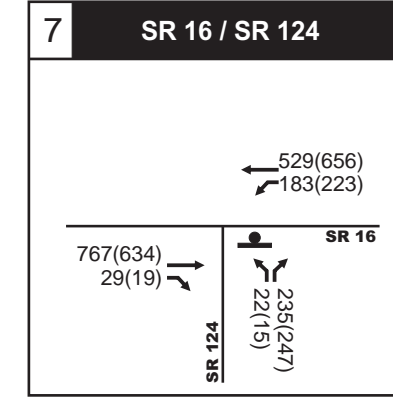
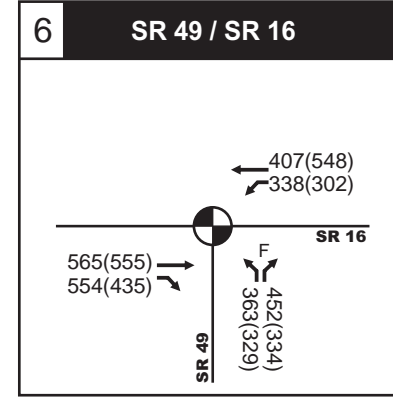
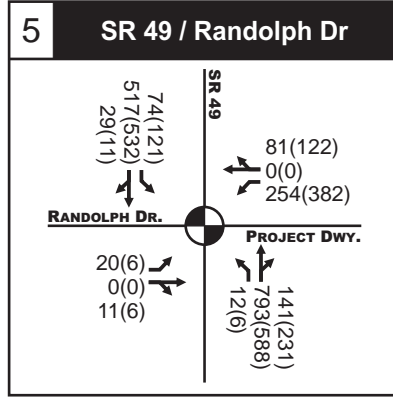
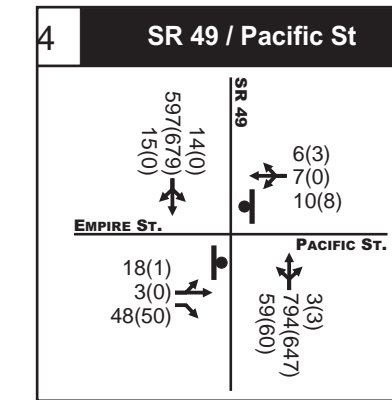
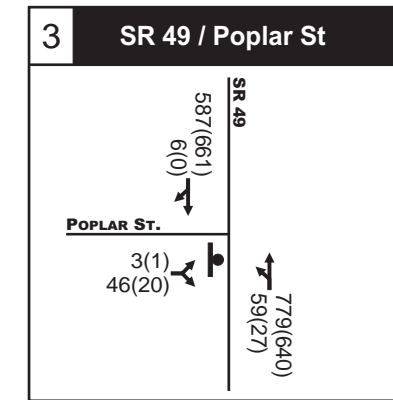
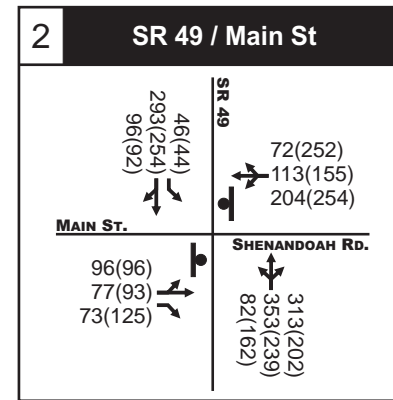
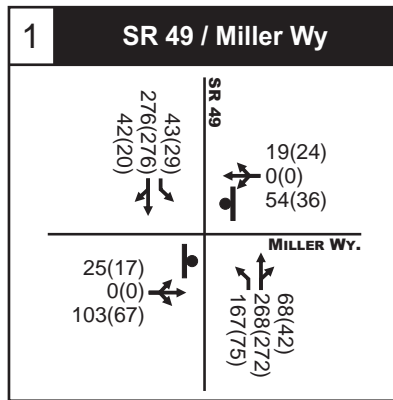
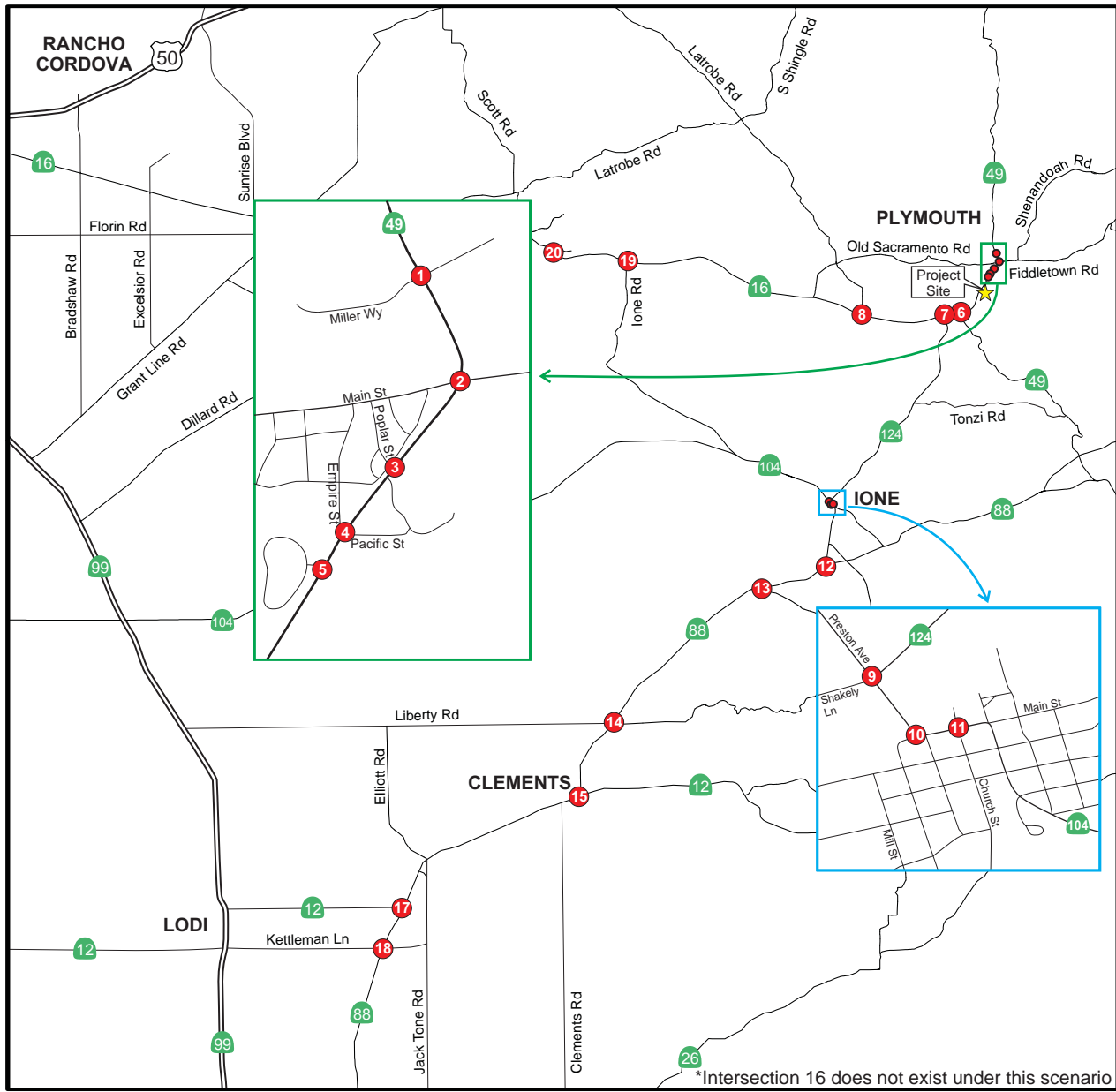


Ione Casino
Traffic Impact Analysis

Figure 28
2025 Cumulative Plus Project Alternative C
Lane Geometry & PM Peak Hour Volumes

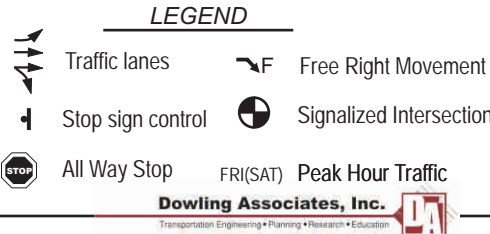
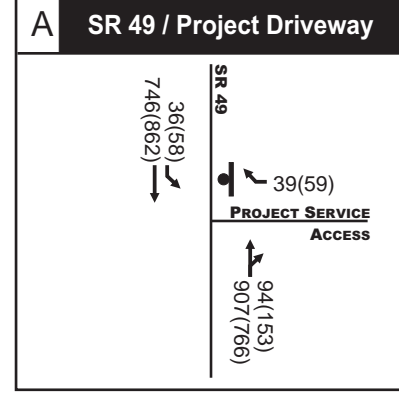
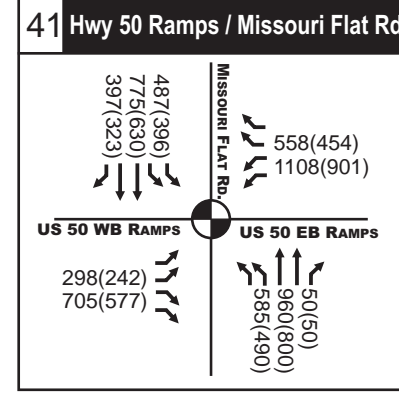
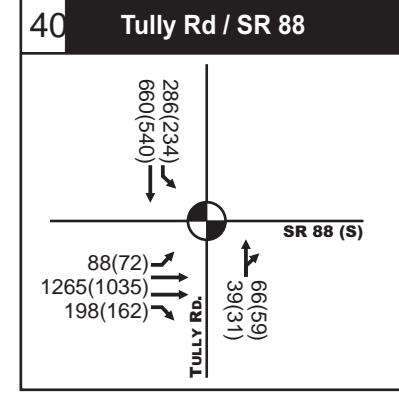
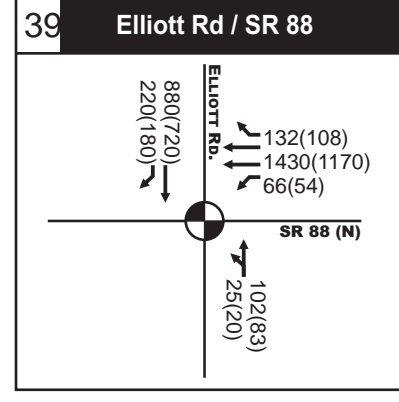
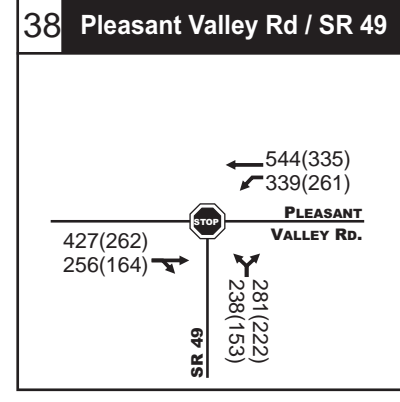
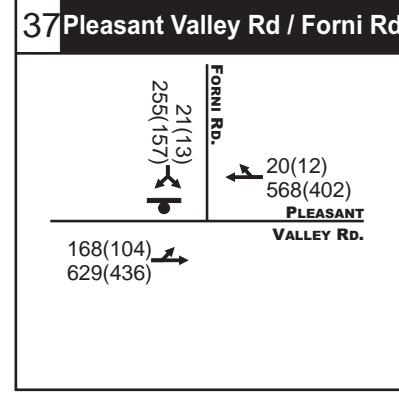
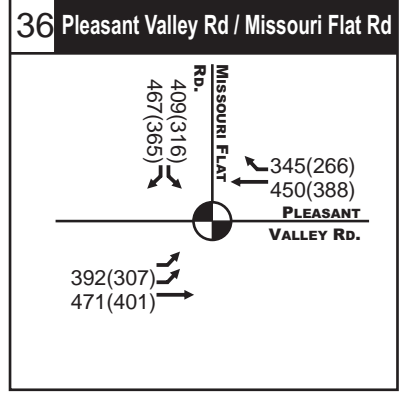
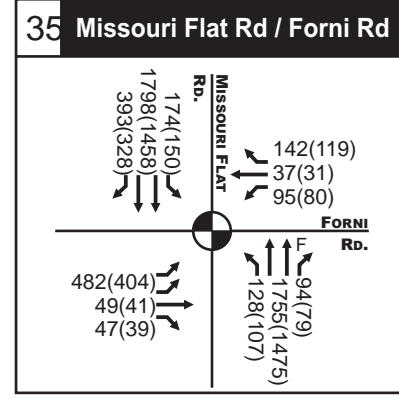
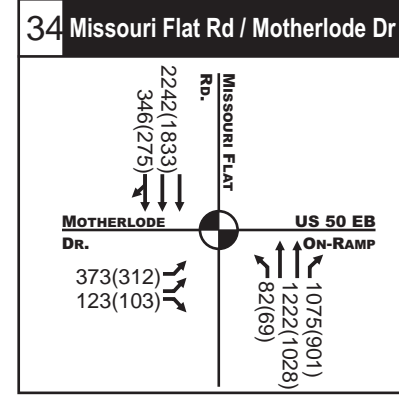
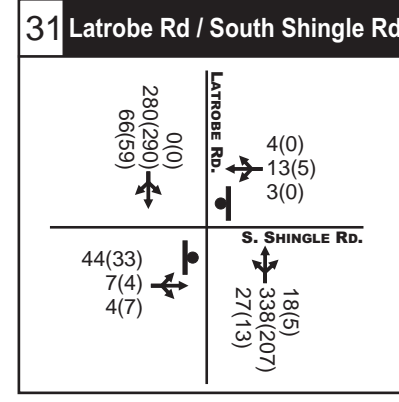
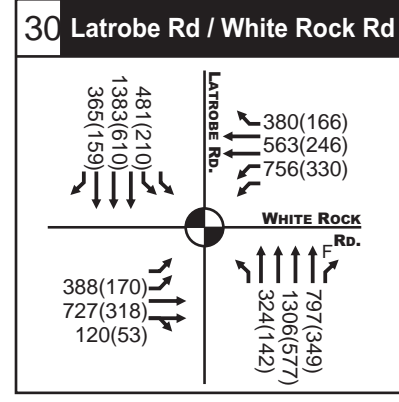
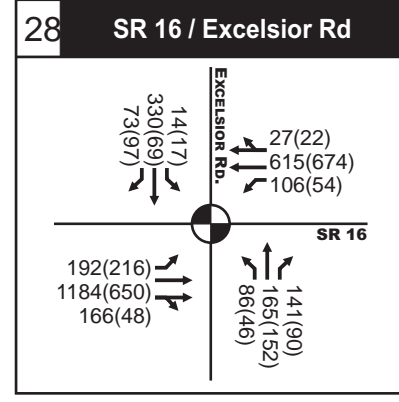
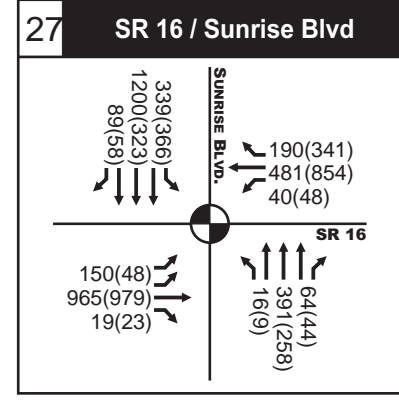
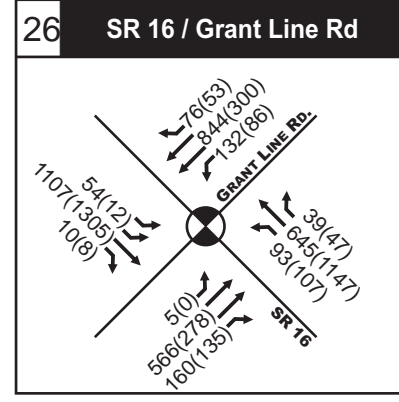
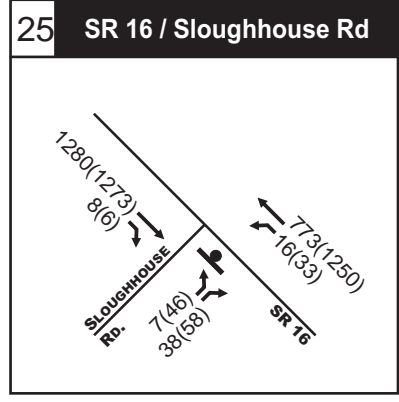
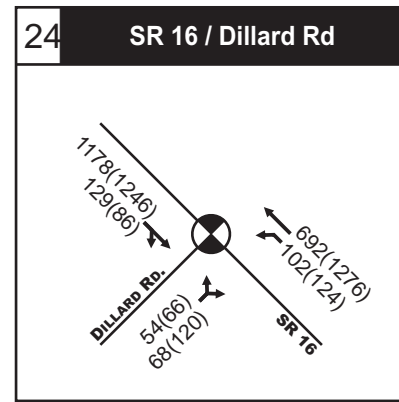
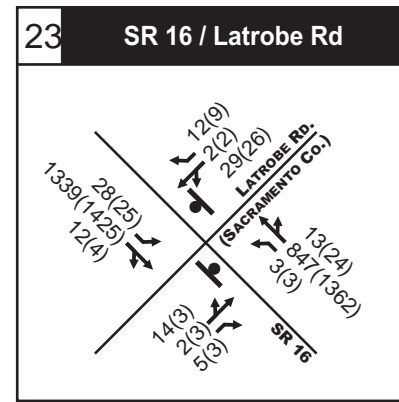
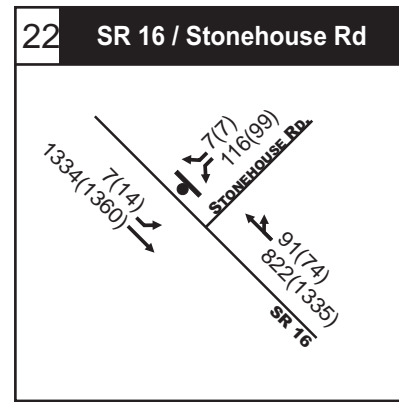
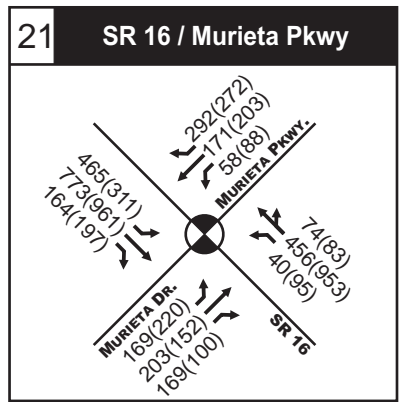
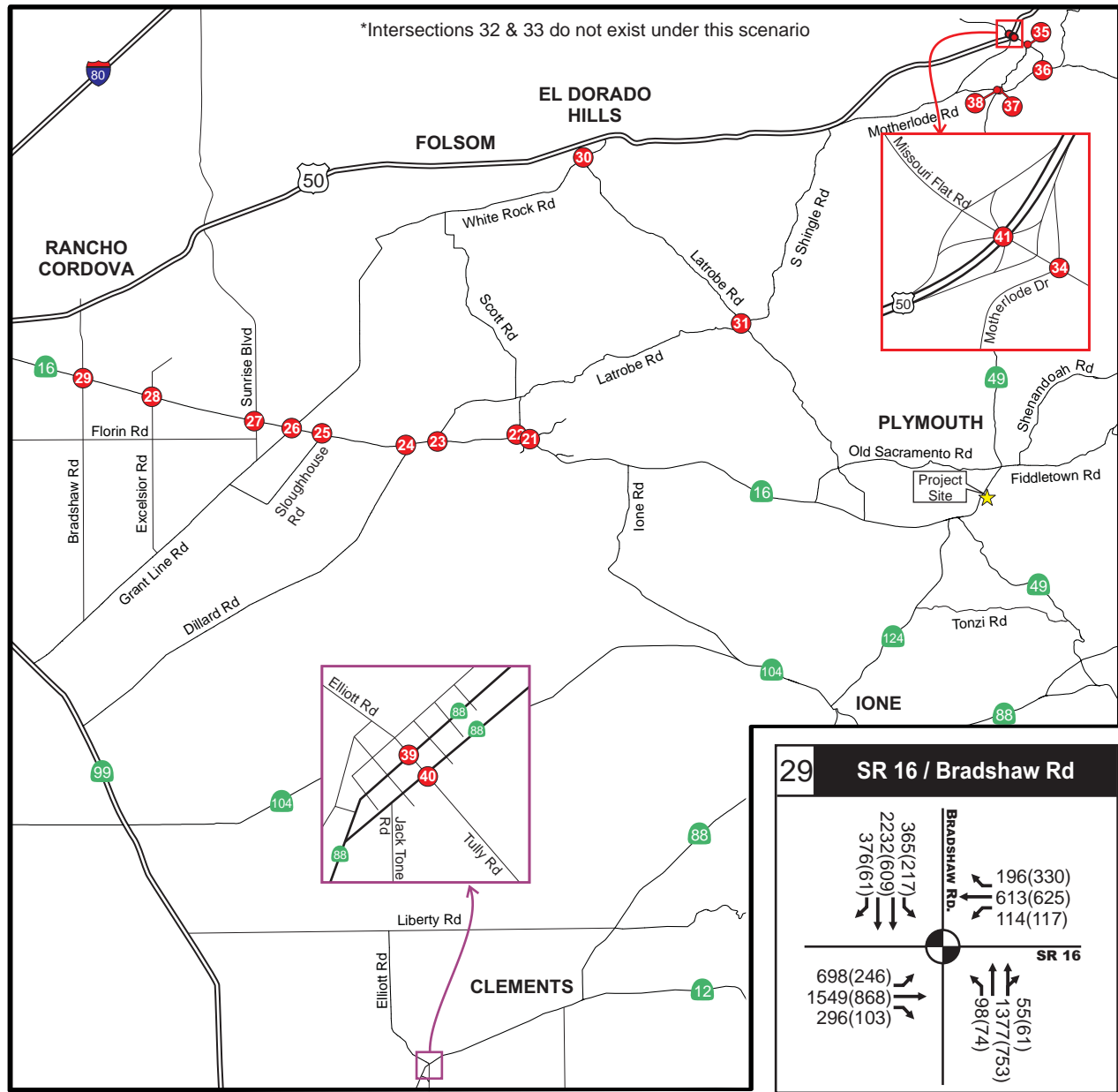


Ione Casino
Traffic Impact Analysis
Figure 28a
2025 Cumulative Plus Project Alternative C
Lane Geometry & PM Peak Hour Volumes(Cont.)



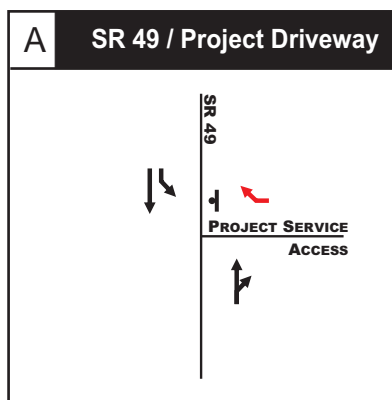
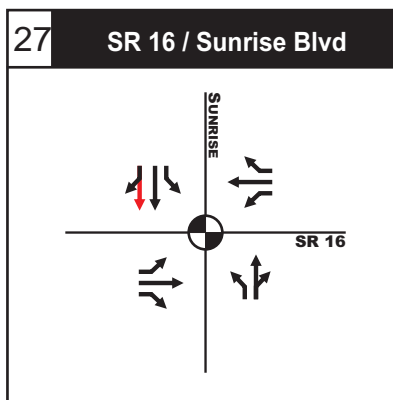
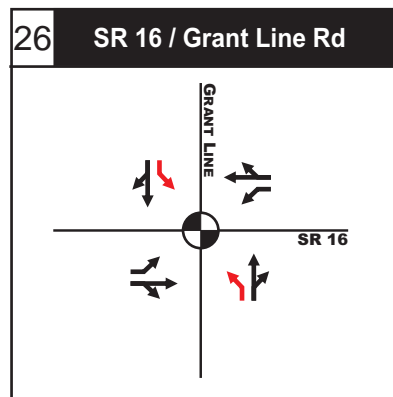
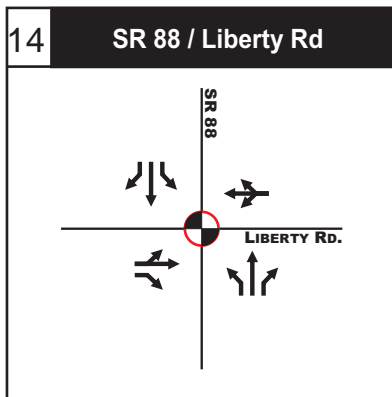
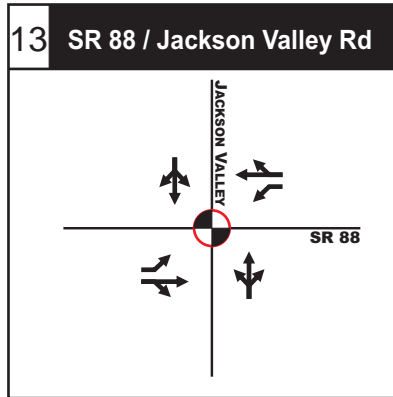
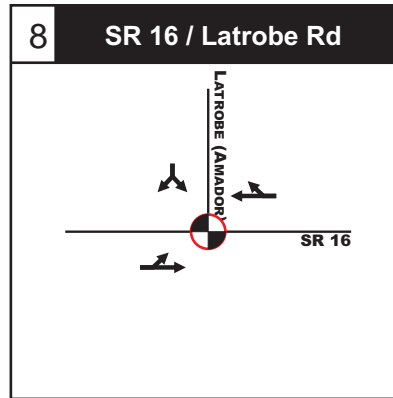
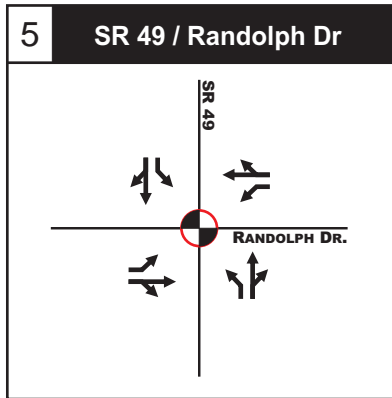
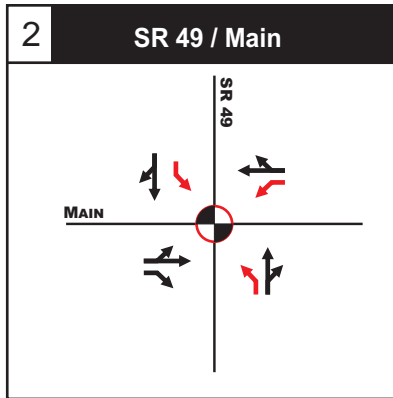
Ione Casino
Traffic Impact Analysis

Figure 29
2025 Cumulative Plus Project Alternative D
Lane Geometry & PM Peak Hour Volumes



Ione Casino
Traffic Impact Analysis

Figure 29a
2025 Cumulative Plus Project Alternative D
Lane Geometry & PM Peak Hour Volumes(Cont.)



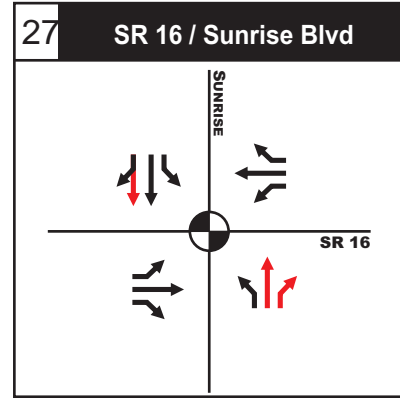
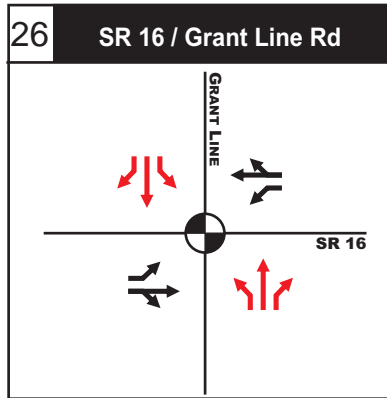
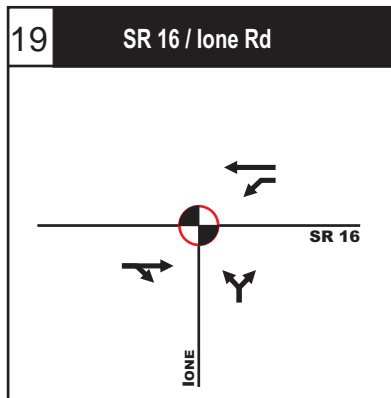
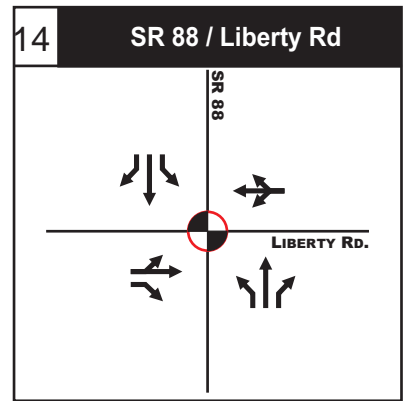
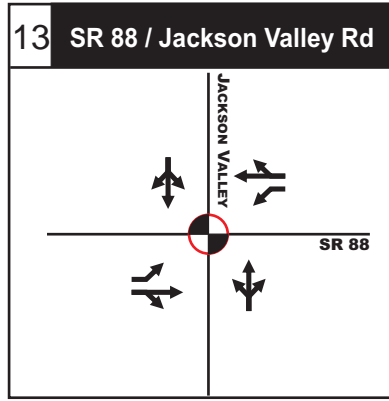
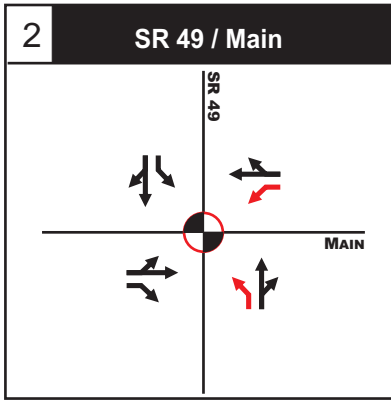
- LEGEND**
- Existing Traffic lanes
 - Signalized Intersection
 - Stop sign control
 - Mitigation Measure



*Ione Casino
Traffic Impact Analysis*

**Figure 30
Mitigation Measures Existing Plus
Approved Plus Alternative A Phase 1**





LEGEND

- Existing Traffic lanes
- Stop sign control
- Signalized Intersection
- Mitigation Measure

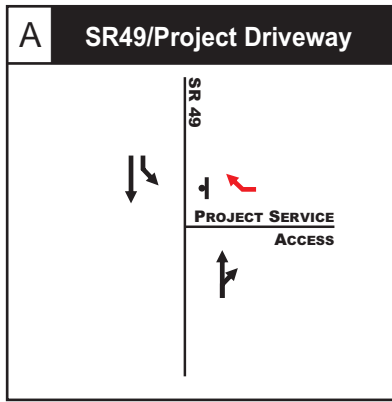
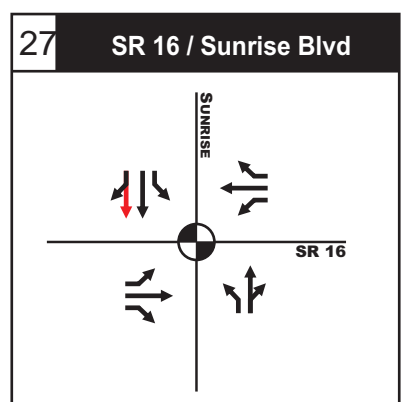
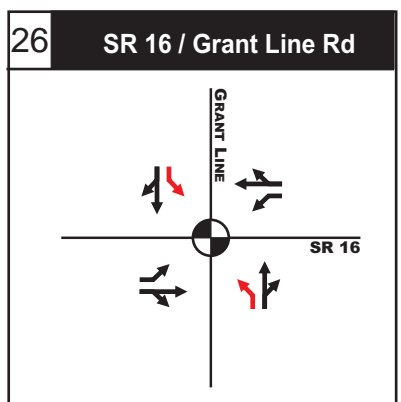
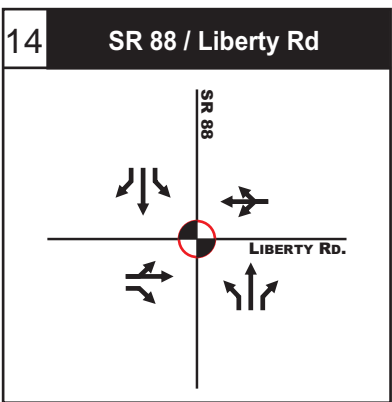
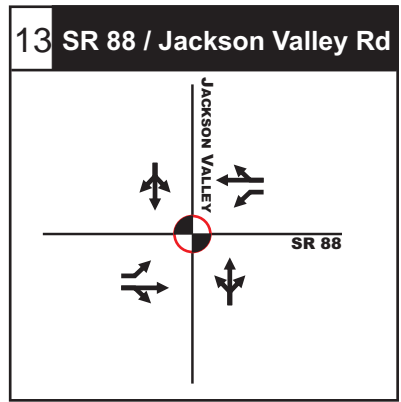
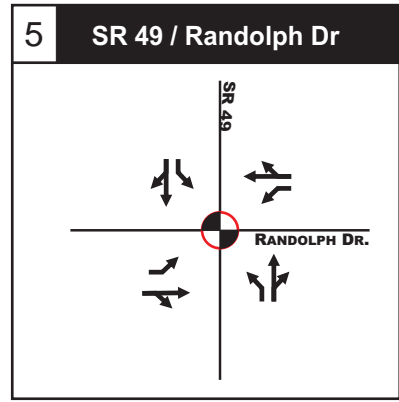
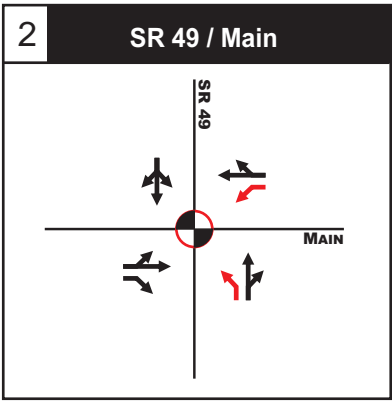


Not to Scale

*Ione Casino
Traffic Impact Analysis*

**Figure 32
Mitigation Measures
Existing Plus Approved Project
Plus Alternative A Phase 1 & 2**





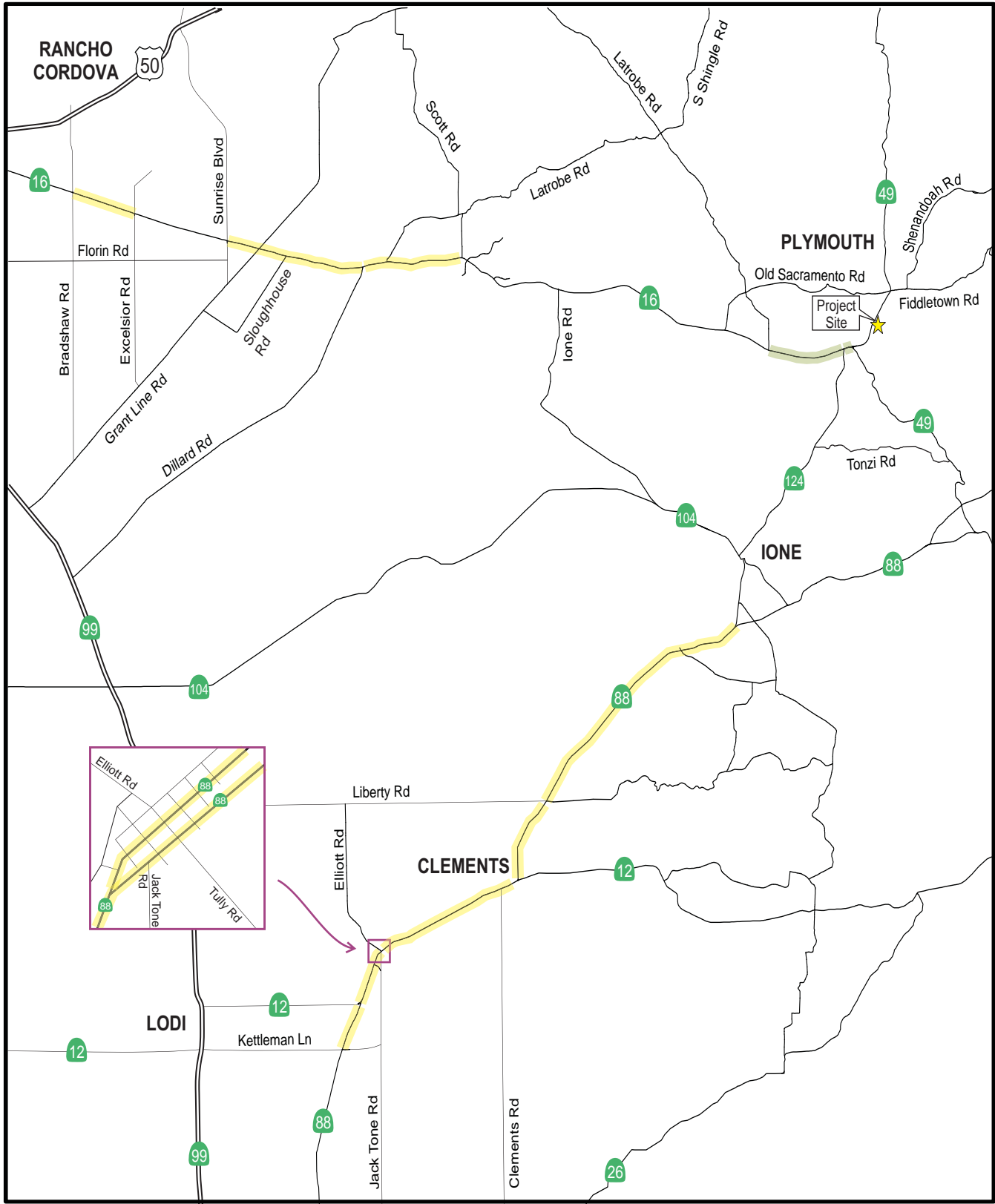
LEGEND

- Existing Traffic lanes
- Signalized Intersection
- Stop sign control
- Mitigation Measure



*Ione Casino
Traffic Impact Analysis*

Figure 34
Mitigation Measures
Existing Plus Approved Project Plus
Alternative B Phase 1



LEGEND

- Widen 2 to 4 Lanes
- Widen 2 to 3 Lanes (Climbing Lane)
- Upgrade from Class III to Class I Arterial

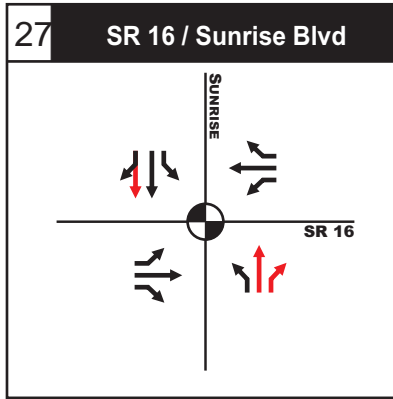
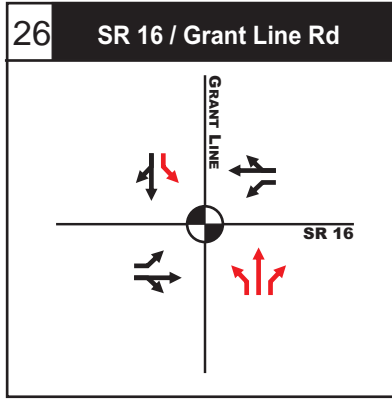
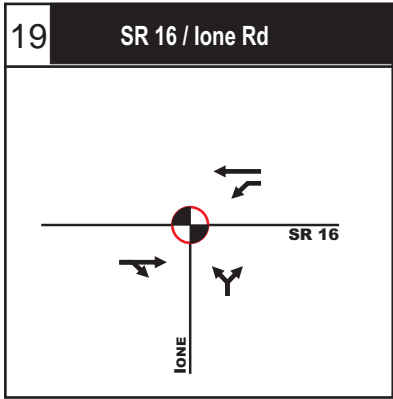
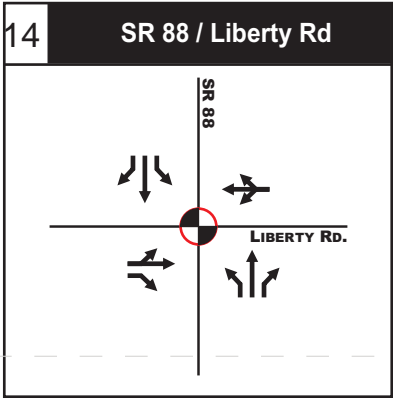
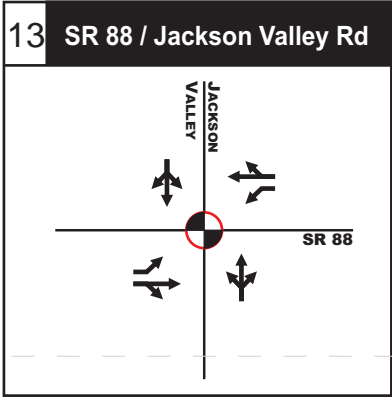
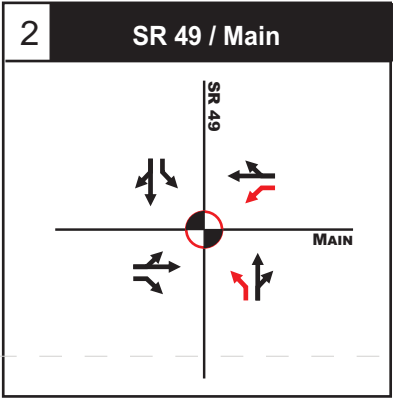


Not to Scale

*Ione Casino
Traffic Impact Analysis*

Figure 35
Mitigation Measures
Existing Plus Approved Plus Alternative B
Phase 1 Roadway Segments





LEGEND

- Existing Traffic lanes
- Stop sign control
- Signalized Intersection
- Mitigation Measures

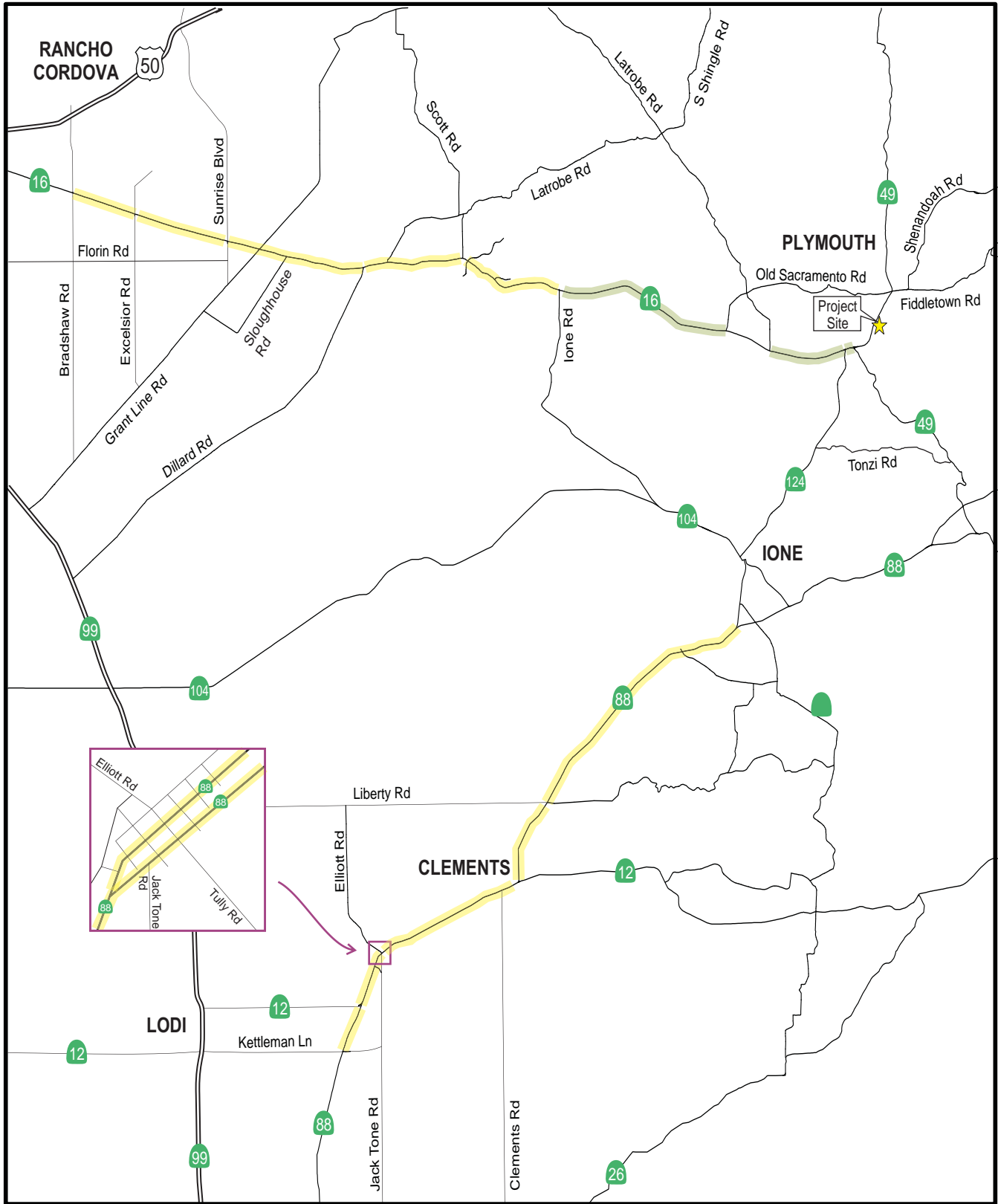


Not to Scale




*Lone Casino
Traffic Impact Analysis*

Figure 36
Mitigation Measures
Existing Plus Approved Project
Plus Alternative B Phase 1 & 2





LEGEND

-  Widen 2 to 4 Lanes
-  Widen 2 to 3 Lanes (Climbing Lane)
-  Upgrade from Class III to Class I Arterial

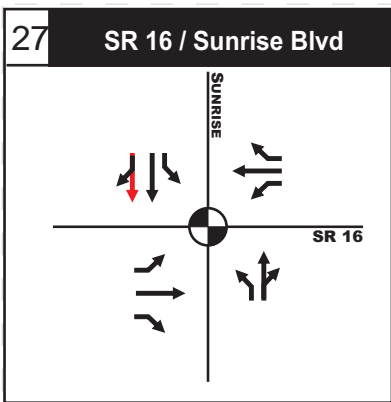
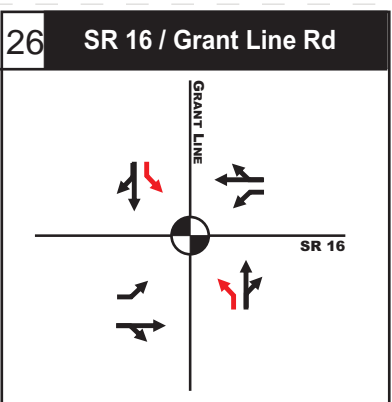
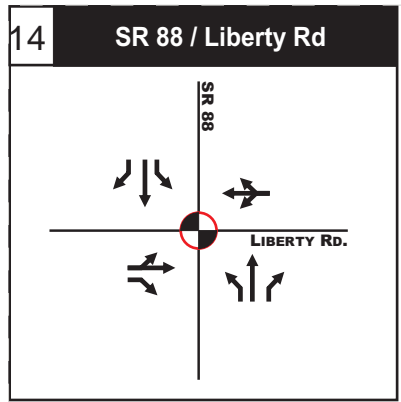
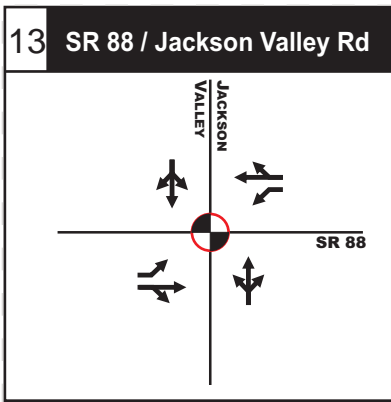
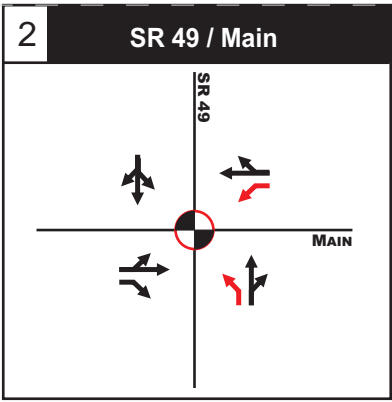


Not to Scale

*Ione Casino
Traffic Impact Analysis*

Figure 37
Mitigation Measures
Existing Plus Approved Plus Alternative B
Phase 1 & 2 Roadway Segments



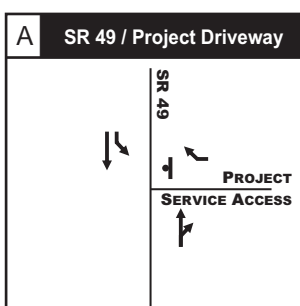
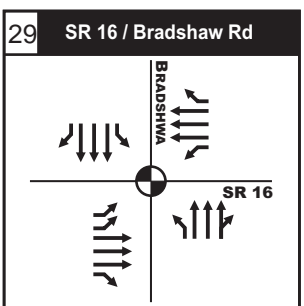
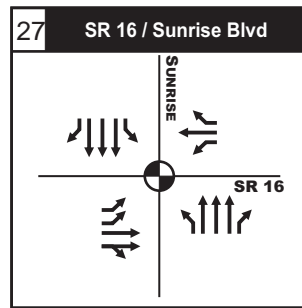
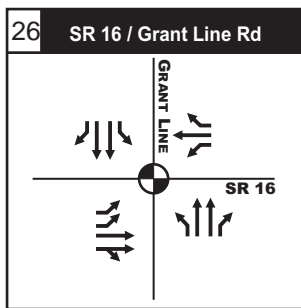
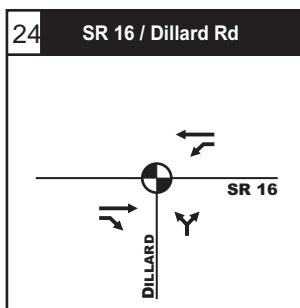
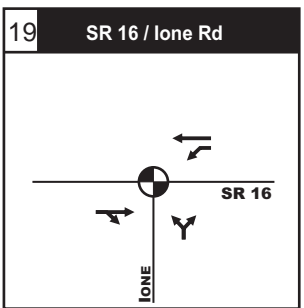
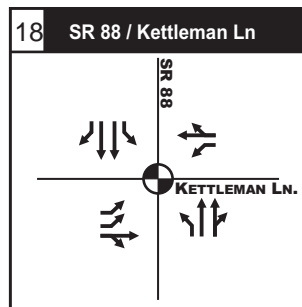
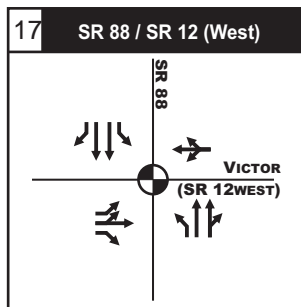
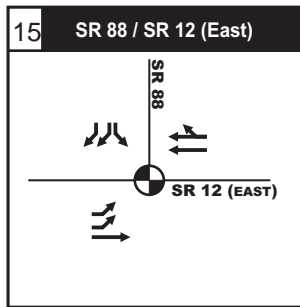
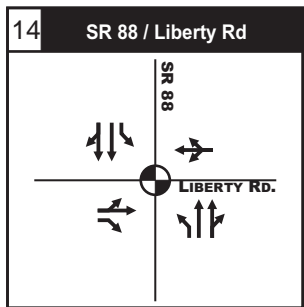
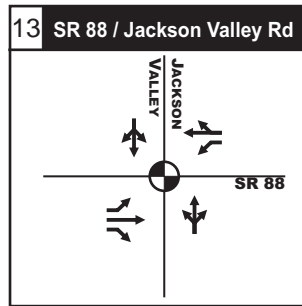
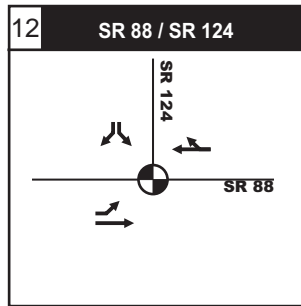
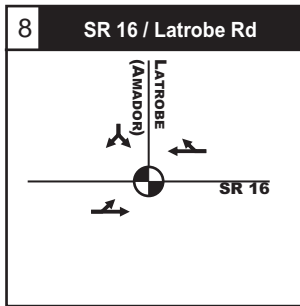
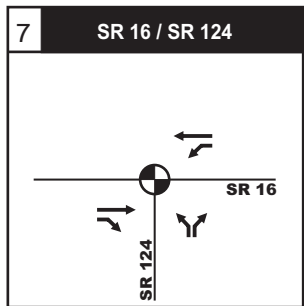
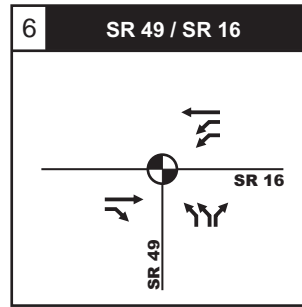
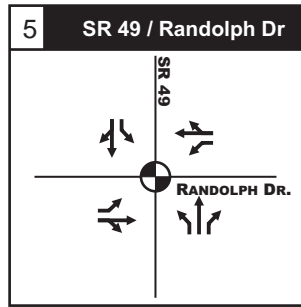
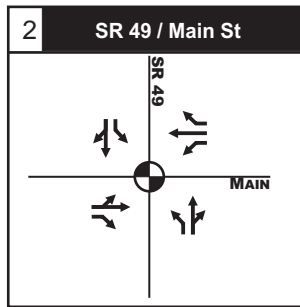
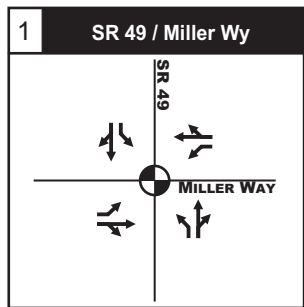


- LEGEND**
- Existing Traffic lanes
 - Stop sign control
 - Signalized Intersection
 - Mitigation Measures



*Lone Casino
Traffic Impact Analysis*

Figure 38
Mitigation Measures
Existing Plus Approved Project
Alternative C



LEGEND

Traffic lanes
 Signalized Intersection
 Stop sign control

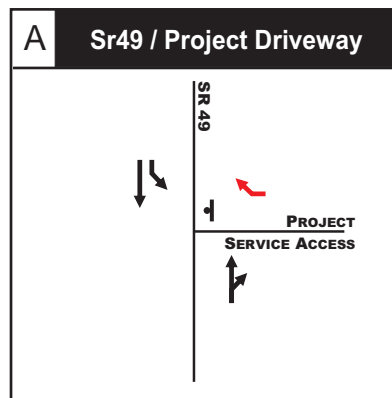
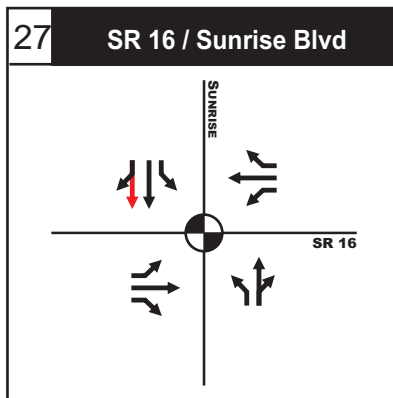
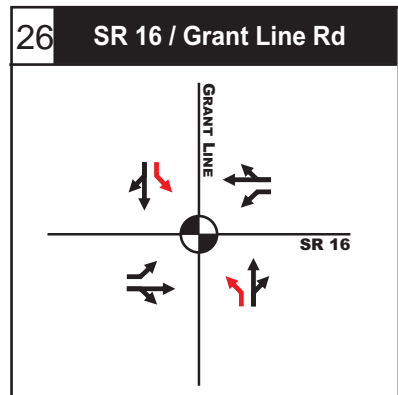
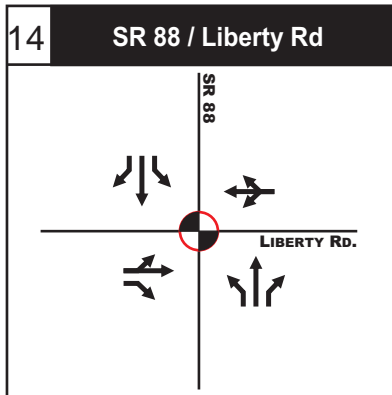
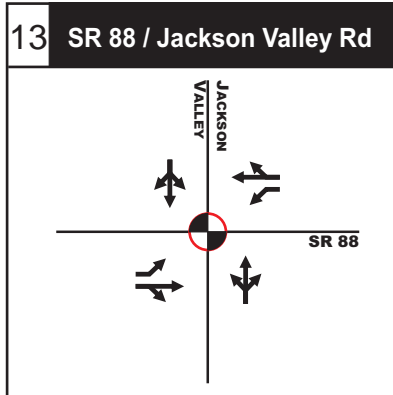
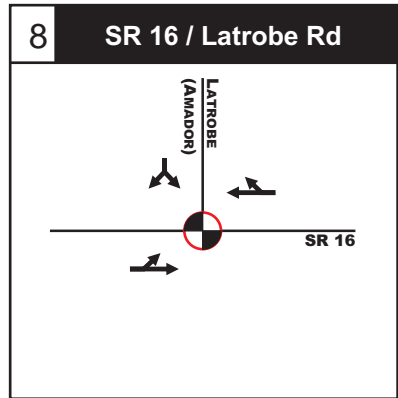
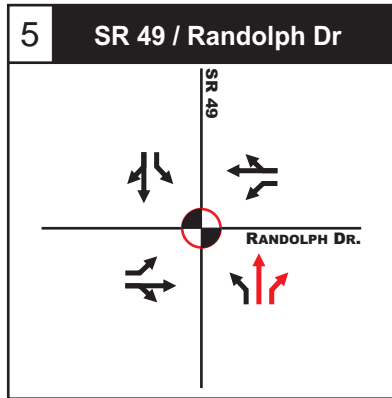
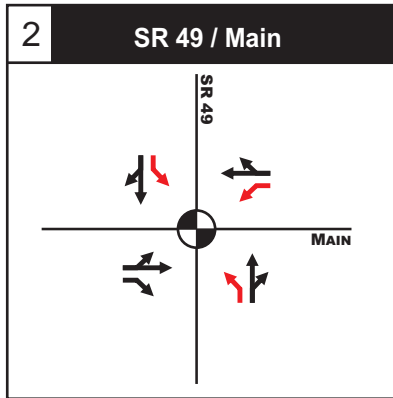


Not to Scale

Ione Casino
Traffic Impact Analysis

Figure 39
Mitigation Measures
Cumulative Plus Alternative D





LEGEND

- Existing Traffic lanes
- Stop sign control
- Signalized Intersection
- Mitigation Measures

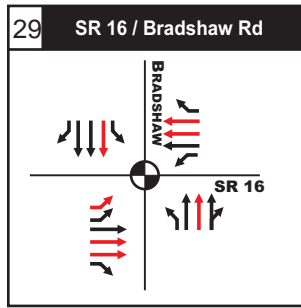
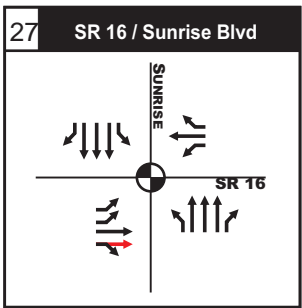
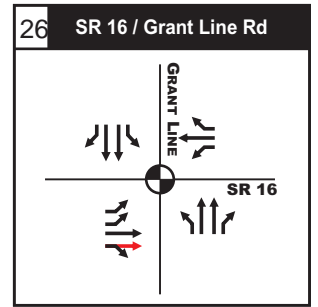
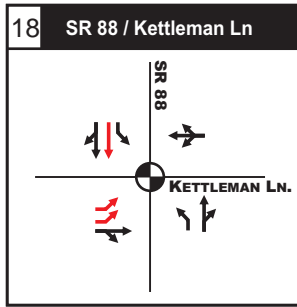
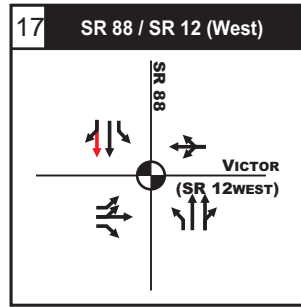
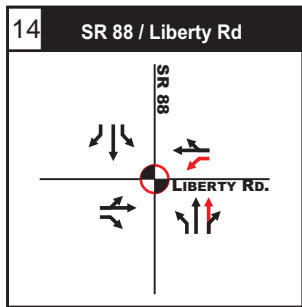
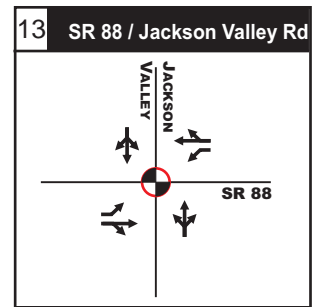
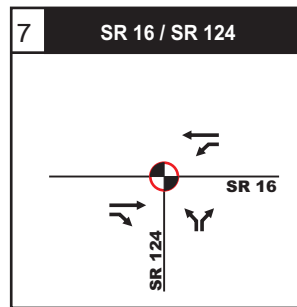
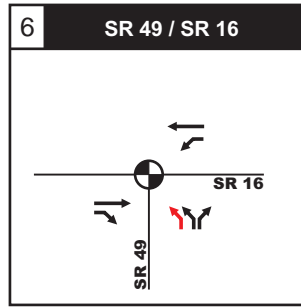
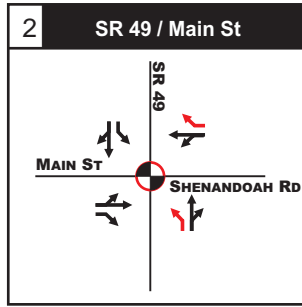


Not to Scale

*Ione Casino
Traffic Impact Analysis*

**Figure 40
Mitigation Measures
Existing Plus Approved Project
Alternative D**



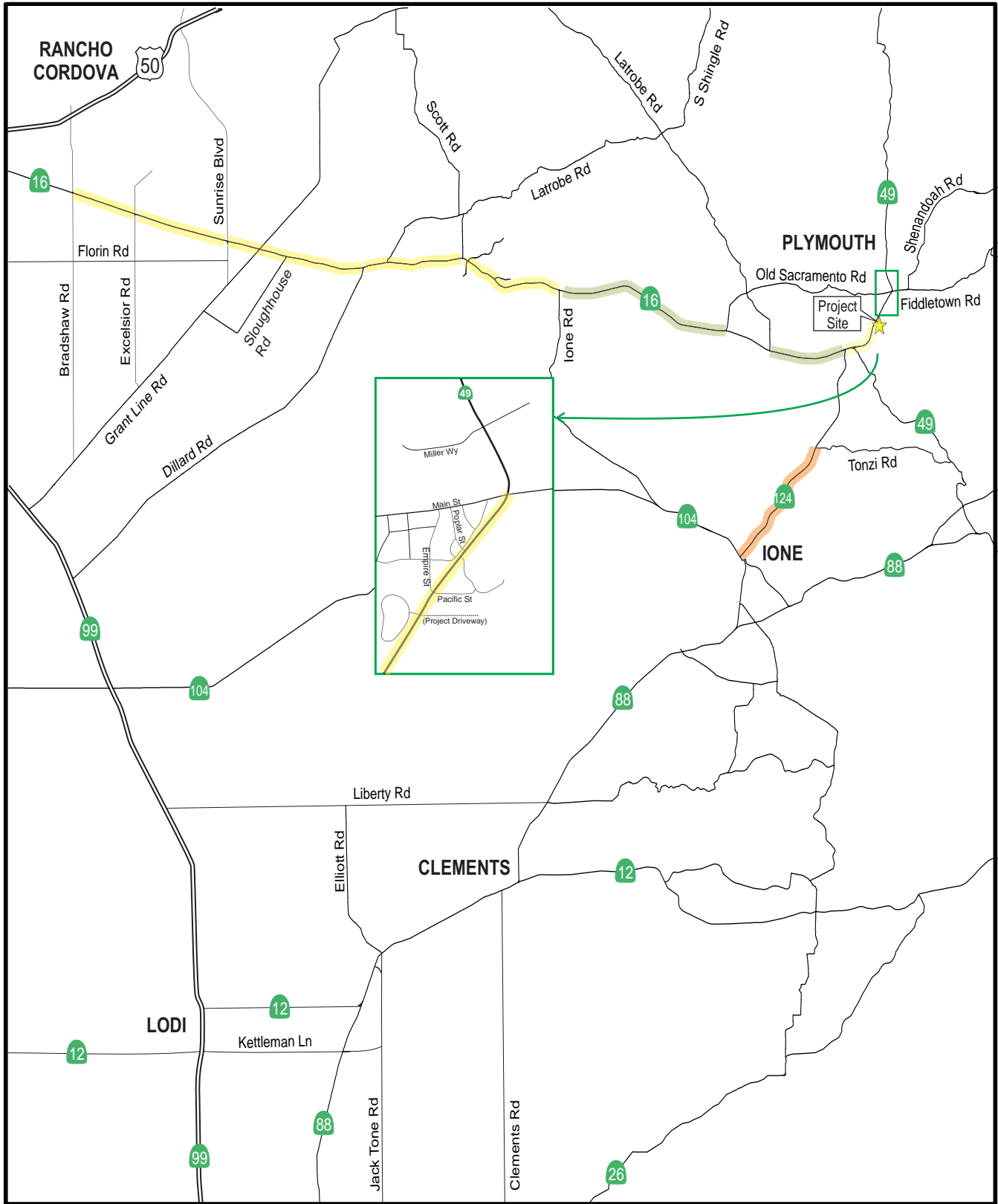


- LEGEND**
- Existing Traffic lanes
 - Signalized Intersection
 - Stop sign control
 - Mitigation Measures






Ione Casino
Traffic Impact Analysis

Figure 42
Mitigation Measures
Cumulative Plus Alternative A



LEGEND

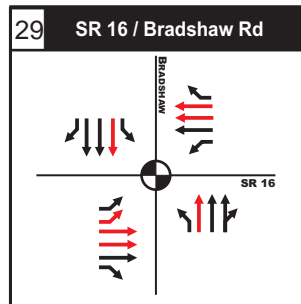
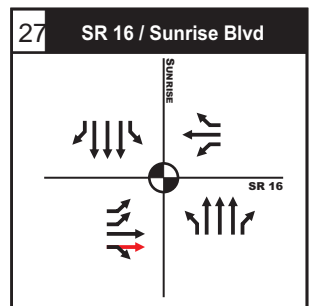
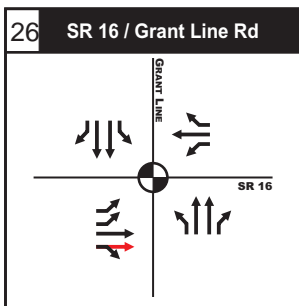
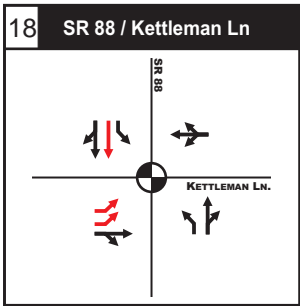
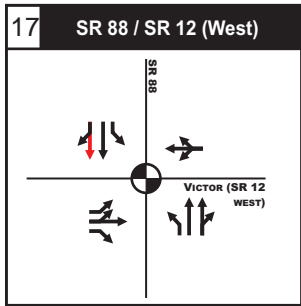
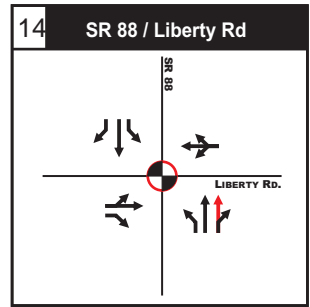
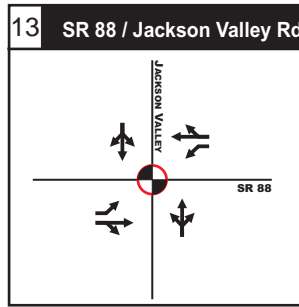
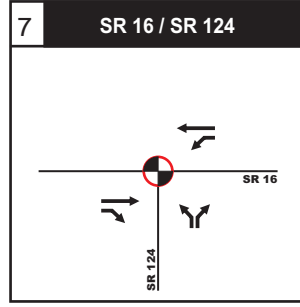
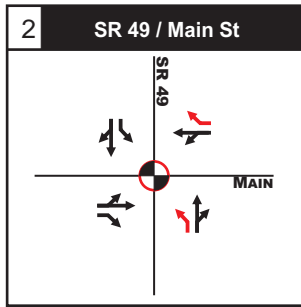
-  Widen 2 to 4 Lanes
-  Widen 2 to 3 Lanes (Climbing Lane)
-  Upgrade from Class III to Class I Arterial



Not to Scale

*Ione Casino
Traffic Impact Analysis*
Figure 43
Mitigation Measures
Cumulative
Plus Alternative A





LEGEND

- Existing Traffic lanes
- Mitigation Measures
- Signalized Intersection
- Stop sign control

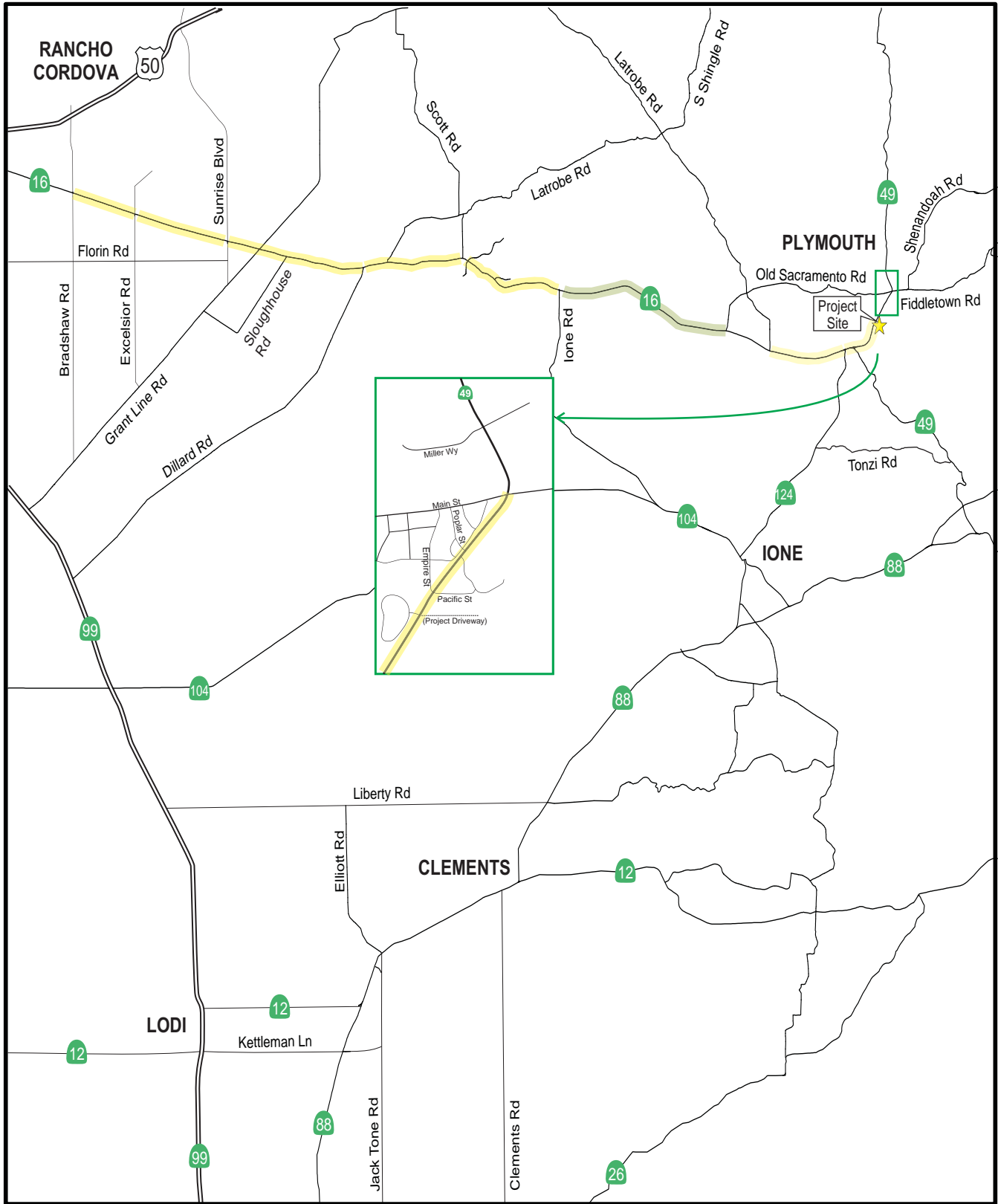


Not to Scale




*Ione Casino
Traffic Impact Analysis*

**Figure 44
Mitigation Measures
Cumulative Plus Alternative B**





LEGEND

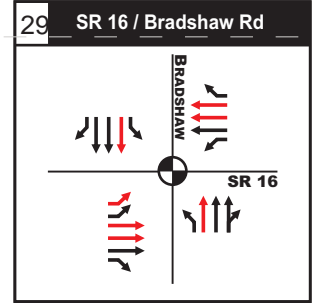
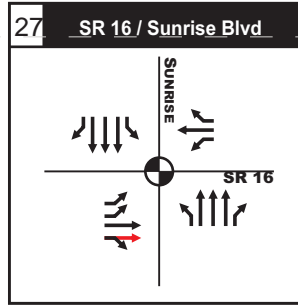
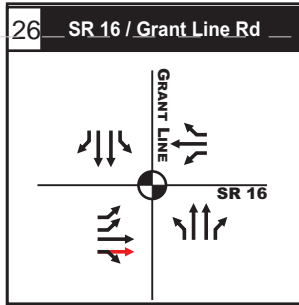
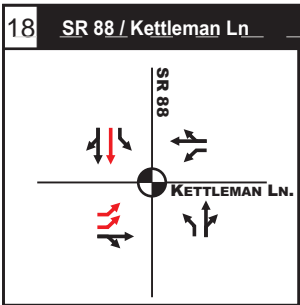
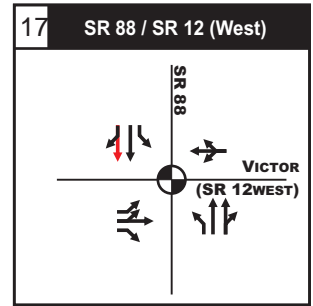
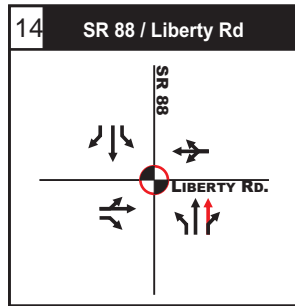
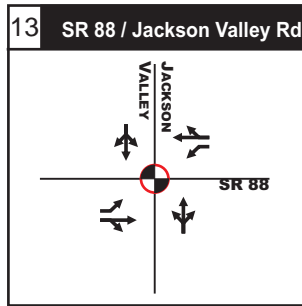
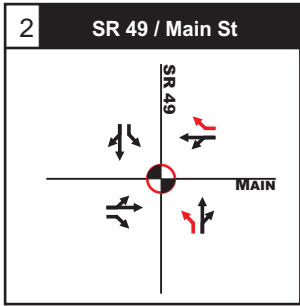
-  Widen 2 to 4 Lanes
-  Widen 2 to 3 Lanes (Climbing Lane)
-  Upgrade from Class III to Class I Arterial



Not to Scale

*Ione Casino
Traffic Impact Analysis*
Figure 45
Mitigation Measures
Cumulative
Plus Alternative B





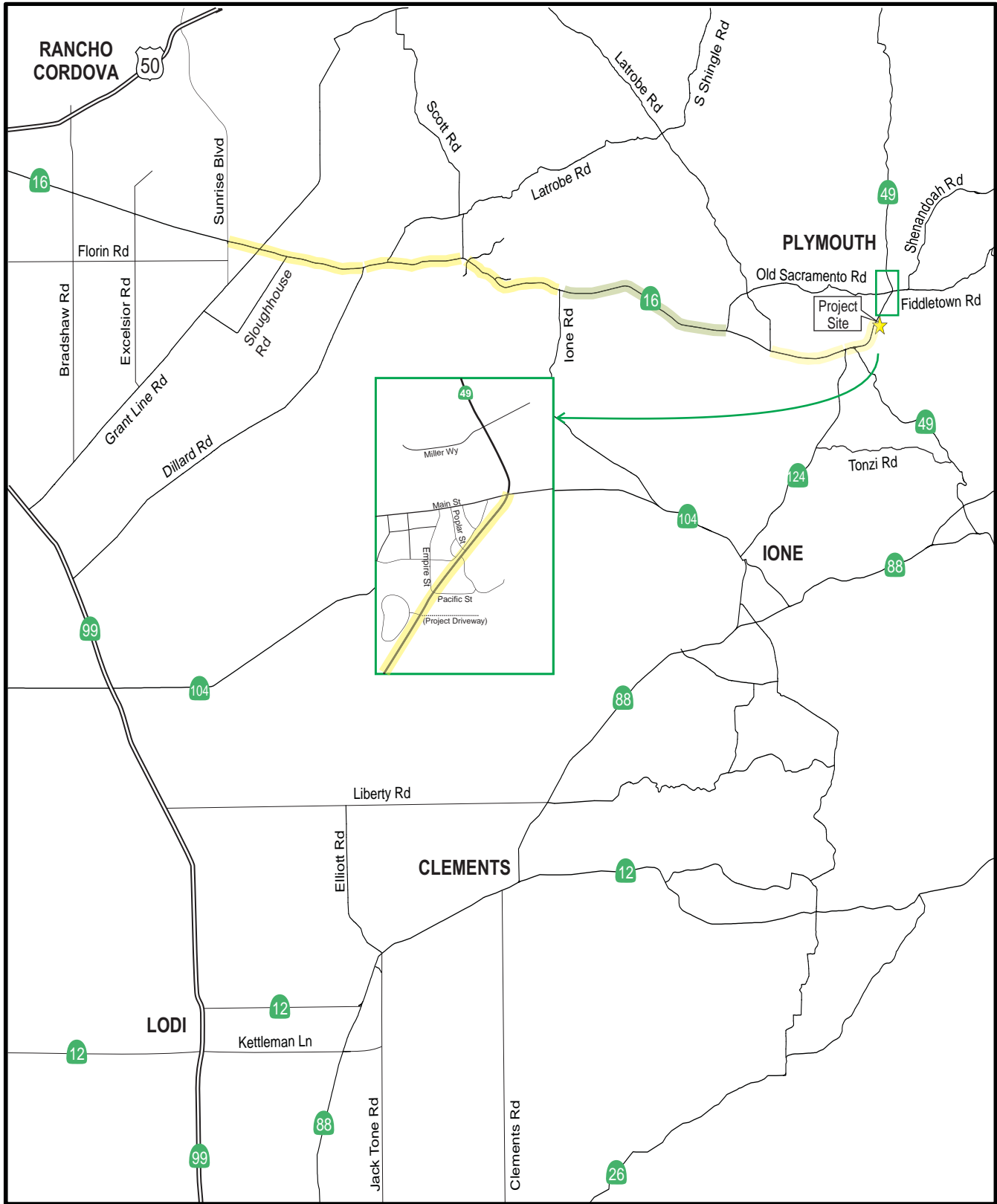
- LEGEND**
- Existing Traffic lanes
 - Stop sign control
 - Signalized Intersection
 - Mitigation Measures






*Lone Casino
Traffic Impact Analysis*

Figure 46
Mitigation Measures
Cumulative Plus Alternative C





LEGEND

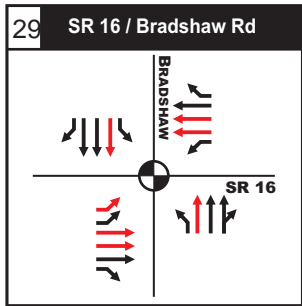
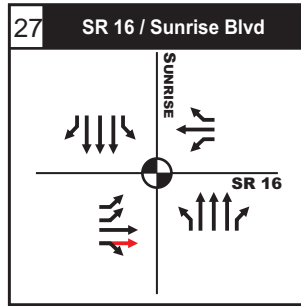
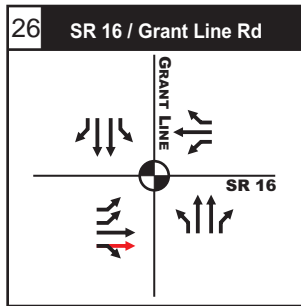
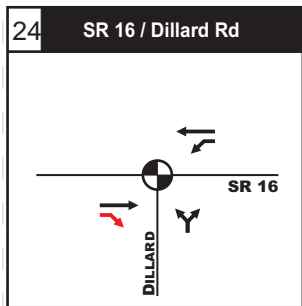
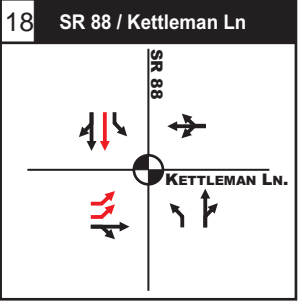
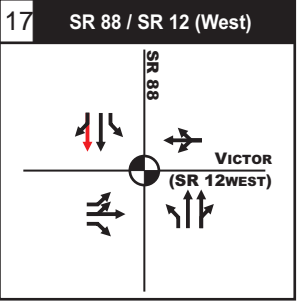
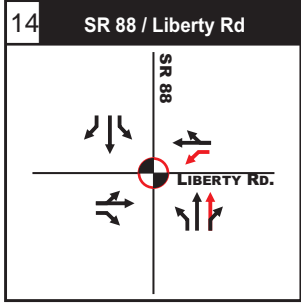
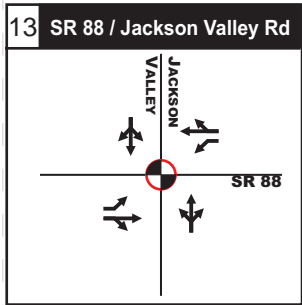
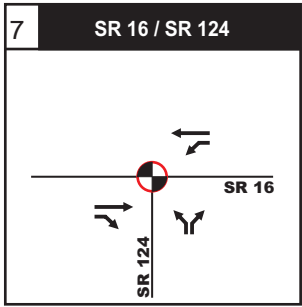
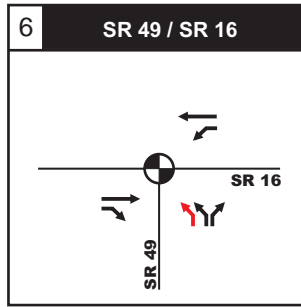
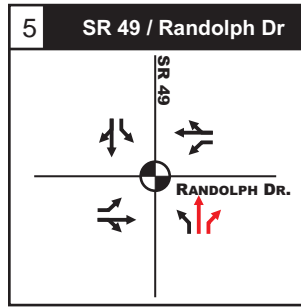
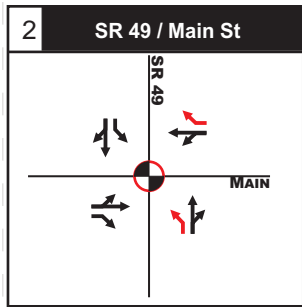
-  Widen 2 to 4 Lanes
-  Widen 2 to 3 Lanes (Climbing Lane)
-  Upgrade from Class III to Class I Arterial



Not to Scale

*Ione Casino
Traffic Impact Analysis*
Figure 47
**Mitigation Measures
Cumulative
Plus Alternative C**





- LEGEND**
- Existing Traffic lanes
 - Signalized Intersection
 - Stop sign control
 - Mitigation Measure



*Lone Casino
Traffic Impact Analysis*

**Figure 48
Mitigation Measures
Cumulative Plus Alternative D**

