

**APPENDIX 4.6**

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**Traffic Study**

**Music Festivals Plan**  
**EIR Transportation Study**

December 17, 2012

Prepared by

**The Mobility Group**

# Music Festivals Plan

## EIR Transportation Study

December 17, 2012

Prepared by

**The Mobility Group**

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A handwritten signature in cursive script, appearing to read "Matthew L. Simons", written over a horizontal line.

**Table of Contents**

**I. Introduction ..... I-1**

I.1 Purpose of Study..... I-1

I.2 Summary Project Description..... I-1

I.3 Study Approach ..... I-3

**II. Existing Conditions ..... II-1**

II.1 Study Area ..... II-1

II.2 Roadway System ..... II-1

II.3 Study Intersections ..... II-5

II.4 Existing Conditions Analysis – Overview ..... II-10

II.5 Existing Conditions – Intersections..... II-16

II.6 Existing Conditions – Public Transit..... II-33

II.7 Existing Conditions – Freeways..... II-35

**III. Existing Conditions – 2012 With Festival ..... III-1**

III.1 Introduction ..... III-1

III.2 The Project Site ..... III-1

III.3 Existing Site Uses..... III-1

III.4 Festival Characteristics..... III-3

III.5 Existing Conditions – With 2012 Coachella Festival..... III-24

**IV. Future Without Project Conditions ..... IV-1**

IV.1 Traffic Forecasts..... IV-1

IV.2 Future Roadway Improvements ..... IV-3

IV.3 Future Without Project Traffic Conditions..... IV-3

**V. Future With Project Conditions..... V-1**

V.1 Project Description ..... V-1

V.2 Project Transportation Characteristics ..... V-5

V.3 Future With Project Traffic Conditions..... V-20

V.4 Evaluation of 75,000 Person Capacity Stagecoach Events ..... V-52

V.5 Events in the Fall ..... V-96

<b>VI.</b>	<b>Mitigation Measures.....</b>	<b>VI-1</b>
VI.1	Introduction and Approach.....	VI-1
VI.2	Overall Transportation Strategy .....	VI-2
VI.3	Develop and Implement a Transportation Management Plan (TMP) .....	VI-3
VI.4	Description of Specific Mitigation Measures.....	VI-6

**Appendices**

A.II	Supporting Information – Chapter II – Existing Conditions
A.IV	Supporting Information – Chapter IV – Future Without Project Conditions
A.V	Supporting Information – Chapter V – Future With Project Conditions
A.VI	Supporting Information – Chapter VI – Mitigation Measures

## List of Figures

### Chapter I

Figure I-1	Project Site Location and Study Area .....	I-2
------------	--	-----

### Chapter II

Figure II-1	Roadways – Type Classifications – City General Plan .....	II-2
Figure II-2	Roadways – Existing Number of Lanes .....	II-3
Figure II-3	Study Intersections and Traffic Controls.....	II-6
Figure II-4	Intersection Configurations .....	II-8
Figure II-5a	Hourly Traffic Volumes by Festival – All Count Locations Thursday .....	II-11
Figure II-5b	Hourly Traffic Volumes by Festival – All Count Locations Friday.....	II-12
Figure II-5c	Hourly Traffic Volumes by Festival – All Count Locations Saturday .....	II-13
Figure II-5d	Hourly Traffic Volumes by Festival – All Count Locations Sunday .....	II-14
Figure II-5e	Hourly Traffic Volumes by Festival – All Count Locations Monday .....	II-15
Figure II-6a	Existing Conditions – No Event – Traffic Volumes Friday 3-4 PM.....	II-20
Figure II-6b	Existing Conditions – No Event – Traffic Volumes Saturday 2-3 PM.....	II-22
Figure II-6c	Existing Conditions – No Event – Traffic Volumes Monday 8-9 AM .....	II-24
Figure II-7a	Existing Conditions – No Event – Intersection Level of Service Friday 3-4 PM.....	II-30
Figure II-7b	Existing Conditions – No Event – Intersection Level of Service Saturday 2-3 PM.....	II-31
Figure II-7c	Existing Conditions – No Event – Intersection Level of Service Monday 8-9 PM.....	II-32

Figure II-8 Public Transit Service..... II-34  
 Figure II-9 Freeway Analysis Locations..... II-36

**Chapter III**

Figure III-1 Project Site and Vicinity Map ..... III-2  
 Figure III-2 Festival Site and Use by Area ..... III-4  
 Figure III-3 Principal Festival Access Routes..... III-8  
 Figure III-4 Principal Festival Egress Routes ..... III-9  
 Figure III-5 Key Traffic Control Measures..... III-13  
 Figure III-6 Festival Shuttle Lines ..... III-17  
 Figure III-7a Existing Conditions – 2012 With Festival – Traffic Volumes  
 Friday 3-4 PM..... III-28  
 Figure III-7b Existing Conditions – 2012 With Festival – Traffic Volumes  
 Saturday 2-3 PM..... III-30  
 Figure III-7c Existing Conditions – 2012 With Festival – Traffic Volumes  
 Monday 8-9 AM..... III-32  
 Figure III-8a Existing Conditions – 2012 With Coachella Festival  
 Intersection Level of Service – Friday 3-4 PM ..... III-37  
 Figure III-8b Existing Conditions – 2012 With Coachella Festival  
 Intersection Level of Service – Saturday 2-3 PM ..... III-38  
 Figure III-8c Existing Conditions – 2012 With Coachella Festival  
 Intersection Level of Service – Monday 8-9 AM..... III-39  
 Figure III-9a Observed Traffic Queues – Existing 2012 Festival – Coachella 1  
 Camping Load-In Inbound – Thursday ..... III-46  
 Figure III-9b Observed Traffic Queues – Existing 2012 Festival – Coachella 1  
 Day Parking Inbound – Friday ..... III-47  
 Figure III-9c Observed Traffic Queues – Existing 2012 Festival – Coachella 1  
 Day Parking Inbound – Saturday ..... III-48  
 Figure III-9d Observed Traffic Queues – Existing 2012 Festival – Coachella 1  
 Day Parking Inbound – Sunday..... III-49  
 Figure III-9e Observed Traffic Queues – Existing 2012 – Coachella Festival  
 Day Parking Outbound..... III-50

Figure III-9f Observed Traffic Queues – Existing 2012 – Coachella Festival  
Camping Load-Out – Monday..... III-51

**Chapter IV**

Figure IV-1a Future Without Project – No Event – Traffic Volumes  
Friday 3-4 PM..... IV-4

Figure IV-1b Future Without Project – No Event – Traffic Volumes  
Saturday 2-3 PM..... IV-6

Figure IV-1c Future Without Project – No Event – Traffic Volumes  
Monday 8-9 AM ..... IV-8

Figure IV-2 Future Roadway Improvements to be Completed by 2014 ..... IV-11

Figure IV-3a Future Without Project Conditions – No Event  
Intersection Level of Service – Friday 3-4 PM ..... IV-15

Figure IV-3b Future Without Project Conditions – No Event  
Intersection Level of Service – Saturday 2-3 PM ..... IV-16

Figure IV-3c Future Without Project Conditions – No Event  
Intersection Level of Service – Monday 8-9 AM ..... IV-17

**Chapter V**

Figure V-1 Future Festival Site and Use by Area ..... V-3

Figure V-2 Trip Distribution – Additional Vehicles – Car Camping ..... V-11

Figure V-3 Trip Distribution – Additional Vehicles – Day Parking..... V-12

Figure V-4a Future With Project – Traffic Volumes – Friday 3-4 PM ..... V-14

Figure V-4b Future With Project – Traffic Volumes – Saturday 2-3 PM ..... V-16

Figure V-4c Future With Project – Traffic Volumes – Monday 8-9 AM..... V-18

Figure V-5a Future With Project – Intersection Level of Service  
Friday 3-4 PM..... V-28

Figure V-5b Future With Project – Intersection Level of Service  
Saturday 2-3 PM..... V-29

Figure V-5c Future With Project – Intersection Level of Service  
Monday 8-9 AM ..... V-30

Figure V-6 Adjacent Residential Areas and Access Locations ..... V-35



Figure V-7a Future With Project – 75,000 Capacity Festival  
Intersection Level of Service – Friday 3-4 PM ..... V-83

Figure V-7b Future With Project – 75,000 Capacity Festival  
Intersection Level of Service – Saturday 2-3 PM ..... V-84

Figure V-7c Future With Project – 75,000 Capacity Festival  
Intersection Level of Service – Monday 8-9 AM..... V-85

**Chapter VI**

Figure VI-1 Intersection Configuration Changes for Temporary Traffic Control  
Mitigations..... VI-11

Figure VI-2 Intersection Configuration Changes for Temporary Traffic Control  
Mitigations for 75,000 Capacity Stagecoach Festival..... VI-19

**Appendix A.11**

Figure A.11-1 Roadway Segment Count Locations

**Appendix A.IV**

Figure A.IV-1 Intersection Configuration Changes from 2012 to 2014

**List of Tables**

**Chapter II**

Table II-1	No. of Intersections by Assigned Lead Jurisdiction.....	II-7
Table II-2a	Intersection Delay and Level of Service Ranges Signalized Intersections.....	II-17
Table II-2b	Intersection Delay and Level of Service Ranges Unsignalized Intersections.....	II-18
Table II-3	Existing Conditions – Intersection Level of Service 2012 No Festival.....	II-28
Table II-4	Level of Service Definitions for Freeway Segments.....	II-37
Table II-5	Existing Conditions – Freeway Segment Level of Service 2012 No Festival.....	II-39
Table II-6	Existing Conditions – Freeway Off-Ramp Analysis 2012 No Festival.....	II-40
Table II-7	Existing Conditions – Freeway On-Ramp Analysis 2012 No Festival.....	II-42

**Chapter III**

Table III-1	Festival Attendances – Total Persons.....	III-6
Table III-2	On-Site Parking Supply – Coachella Festivals.....	III-7
Table III-3	On-Site Parking Supply – Stagecoach Festival.....	III-10
Table III-4	Temporary Road Closures During Festival Weekends .....	III-12
Table III-5	Key Traffic Control Measures – Intersection Control Measure .....	III-14
Table III-6	Shuttle Lines .....	III-16
Table III-7	2012 Festival Shuttle Riders – By Festival and By Day .....	III-19
Table III-8	Shuttle Ridership by Line – Coachella 1 – Saturday.....	III-20
Table III-9	Festival Attendees – Estimates By Type & Mode of Arrival.....	III-22
Table III-10	Existing Conditions – Intersection Level of Service 2012 With Festival .....	III-35

Table III-11	Existing Conditions – Freeway Segment Level of Service 2012 With Festival .....	III-53
Table III-12	Existing Conditions – Freeway Off-Ramp Analysis 2012 With Festival .....	III-54
Table III-13	Existing Conditions – Freeway On-Ramp Analysis 2012 With Festival .....	III-55

**Chapter IV**

Table IV-1	Future Roadway Improvement Projects to be Completed by 2014 .....	IV-10
Table IV-2	Future Without Project Conditions – Intersection Level of Service No Festival.....	IV-13
Table IV-3a	Future Without Project – Freeway Segment Level of Service Friday 3-4 PM.....	IV-20
Table IV-3b	Future Without Project – Freeway Segment Level of Service Saturday 2-3 PM.....	IV-21
Table IV-3c	Future Without Project – Freeway Segment Level of Service Monday 8-9 AM .....	IV-22
Table IV-4	Future Without Project Conditions – Freeway Off-Ramp Analysis No Festival.....	IV-23
Table IV-5	Future Without Project Conditions – Freeway On- Ramp Analysis No Festival.....	IV-25

**Chapter V**

Table V-1	Proposed Project Parking Supply 99,000 Person Capacity Festival & Comparison to 2012 Festival.....	V-2
Table V-2	Festival Attendees – Estimates by Type & Mode of Arrival Coachella – 99,000 Capacity Festival & Comparison to 2012 99,000 Attendance Festival .....	V-6
Table V-3	Estimate Vehicle Trips by Key Hour – 2012 Festival.....	V-8
Table V-4	Estimated Vehicle Trips by Key Hour 99,000 Capacity Coachella Festival .....	V-8
Table V-5	Estimated Vehicle Trips by Key Hour Increase from 2012 Coachella Festival to 99,000 Capacity Festival ....	V-9
Table V-6	Future With Project Conditions – Intersection Level of Service .....	V-24

Table V-7a	Future With Project – Freeway Segment Level of Service Friday 3-4 PM.....	V-42
Table V-7b	Future With Project – Freeway Segment Level of Service Saturday 2-3 PM.....	V-43
Table V-7c	Future With Project – Freeway Segment Level of Service Monday 8-9 AM.....	V-44
Table V-8	Future With Project Conditions – Freeway Off-Ramp Analysis.....	V-48
Table V-9	Future With Project Conditions – Freeway On-Ramps.....	V-50
Table V-10	Comparison of Coachella and Stagecoach 2012 Festivals.....	V-53
Table V-11a	Existing Conditions – Level of Service Comparison 2012 Stagecoach Festival vs 2012 Coachella Festival Friday 3-4 PM.....	V-57
Table V-11b	Existing Conditions – Level of Service Comparison 2012 Stagecoach Festival vs 2012 Coachella Festival Saturday 2-3 PM.....	V-59
Table V-11c	Existing Conditions – Level of Service Comparison 2012 Stagecoach Festival vs 2012 Coachella Festival Monday 8-9 AM.....	V-61
Table V-12	Existing Conditions – Freeway Segment Level of Service 2012 Stagecoach Festival.....	V-65
Table V-13	Existing Conditions – Freeway Off-Ramp Analysis 2012 Stagecoach Festival.....	V-66
Table V-14	Existing Conditions – Freeway On-Ramp Analysis 2012 Stagecoach Festival.....	V-67
Table V-15	Proposed Project Parking Supply – 75,000 Person Capacity Festival & Comparison to 2012 Festival.....	V-68
Table V-16	Festival Attendees – Estimates by Type & Mode of Arrival Stagecoach – 75,000 Capacity Festival & Comparison to 2012 57,500 Attendance Festival.....	V-70
Table V-17	Stagecoach Type 75,000 Capacity Festival and Comparison to Coachella Type 99,000 Capacity Festival.....	V-72
Table V-18	Vehicle Trips by Key Hour – 2012 Stagecoach Festival.....	V-73
Table V-19	Estimated Vehicle Trips by Key Hour – 75,000 Capacity Stagecoach Festival.....	V-73

Table V-20	Estimated Vehicle Trips by Key Hour – Increase from 2012 Stagecoach Festival to 75,000 Capacity Festival .....	V-74
Table V-21	Future With Project Conditions – Intersection Level of Service 75,000 Capacity Festival .....	V-79
Table V-22a	Future With Project Conditions – Freeway Segment Level of Service 75,000 Capacity Festival – Friday 3-4 PM.....	V-87
Table V-22b	Future With Project Conditions – Freeway Segment Level of Service 75,000 Capacity Festival – Saturday 2-3 PM.....	V-88
Table V-22c	Future With Project Conditions – Freeway Segment Level of Service 75,000 Capacity Festival – Monday 8-9 AM .....	V-89
Table V-23	Future With Project Conditions – 75,000 Capacity Freeway Off-Ramp Analysis.....	V-92
Table V-24	Future With Project Conditions – 75,000 Capacity Freeway On-Ramps .....	V-94

**Chapter VI**

Table VI-1	Description of Transportation Mitigation Measures 99,000 Capacity Coachella Festival .....	VI-9
Table VI-2a	Future With Project Conditions With Mitigation Intersection Level of Service – Friday 3-4 PM .....	VI-12
Table VI-2b	Future With Project Conditions With Mitigation Intersection Level of Service – Saturday 2-3 PM .....	VI-13
Table VI-2c	Future With Project Conditions With Mitigation Intersection Level of Service – Monday 8-9 AM.....	VI-14
Table VI-3	Description of Transportation Mitigation Measures 75,000 Capacity Stagecoach Festival .....	VI-18
Table VI-4a	Future With Project Conditions With Mitigation Intersection Level of Service – 75,000 Capacity Festival Friday 3-4 PM.....	VI-20
Table VI-4b	Future With Project Conditions With Mitigation Intersection Level of Service – 75,000 Capacity Festival Saturday 2-3 PM.....	VI-21
Table VI-4c	Future With Project Conditions With Mitigation Intersection Level of Service – 75,000 Capacity Festival Monday 8-9 AM .....	VI-22

**Appendix A.II**

Table A.II-1 Intersection Jurisdiction and Traffic Control

**Appendix A.IV**

Table A.IV-1 Future Without Project – Intersection Approach Annual Growth Estimates

**Appendix A.V**

Table A.V.4-1 Jefferson Street Traffic Volumes  
Comparison of Coachella & Stagecoach  
Monday 8:00 – 9:00 am Hour  
PCE Adjusted Volumes

**Appendix A.VI**

Table A.VI-1 Future With Project With Mitigation Conditions  
Intersection Level of Service  
Secondary Impact Analysis for Mitigation at Madison & Ave 50 and  
Madison & Ave 52 (Monday 8-9 AM)

Table A.VI-2 Future With Project With Mitigation Conditions  
Intersection Level of Service – 75,000 Capacity Festival  
Secondary Impact Analysis for Mitigation at Madison & Ave 50  
(Monday 8-9 AM)

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# I. Introduction

## I.1 Purpose of Study

This report provides documentation of a traffic study completed to support an Environmental Impact Report (EIR) for the Music Festivals Plan proposed by the Applicant, Coachella Music Festival, LLC and Goldenvoice, LLC. The proposed Music Festival Plan would authorize through 2030 the continuation of the Coachella and Stagecoach Festivals on the Project Site each spring and two additional festival events to be held on the Project Site each fall.

## I.2 Summary Project Description

### Existing Festivals

The Coachella Valley Music and Arts Festival (Coachella Festival) and the Stagecoach: California's Country Music Festival (Stagecoach Festival) have been held annually since 1999<sup>1</sup> and 2007, respectively, in the City of Indio on the grounds of the Empire and Eldorado Polo Clubs and adjacent properties located between Avenue 49, Monroe Street, Avenue 52 and Madison Street in the southwestern corner of the City of Indio. Figure I-1 shows the approximately 535 acre existing festival site, and the area studied in this report.

The existing festival Site is bordered to the north and east in the City of Indio by vacant property, the Mountain Vista Elementary School, and residential uses to the north; and a golf course, vacant property, and some single-family homes to the east; and by existing residential neighborhoods in the City of La Quinta to the south and west. A mobile home park is located in Indio west of Monroe Street and north of Avenue 52 adjacent to the Project Site.

The festivals have operated under various special event agreements issued by the City of Indio. The Coachella Festival currently operates on a two-year permit (2012 and 2013) and occurs for two weekends in April, with a total allowed attendance capacity of 95,000 persons. Both weekends are identical festivals. In 2012, the approximate maximum actual attendance at the Coachella Festival was 90,000. The first weekend is referred to in this study as Coachella 1 and the second weekend as Coachella 2. Unless otherwise noted, references to the Coachella 2012 Festival refer to the Coachella 1 weekend.

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<sup>1</sup>The Coachella Festival has been held on the site from 1999 through 2012, except for 2000.



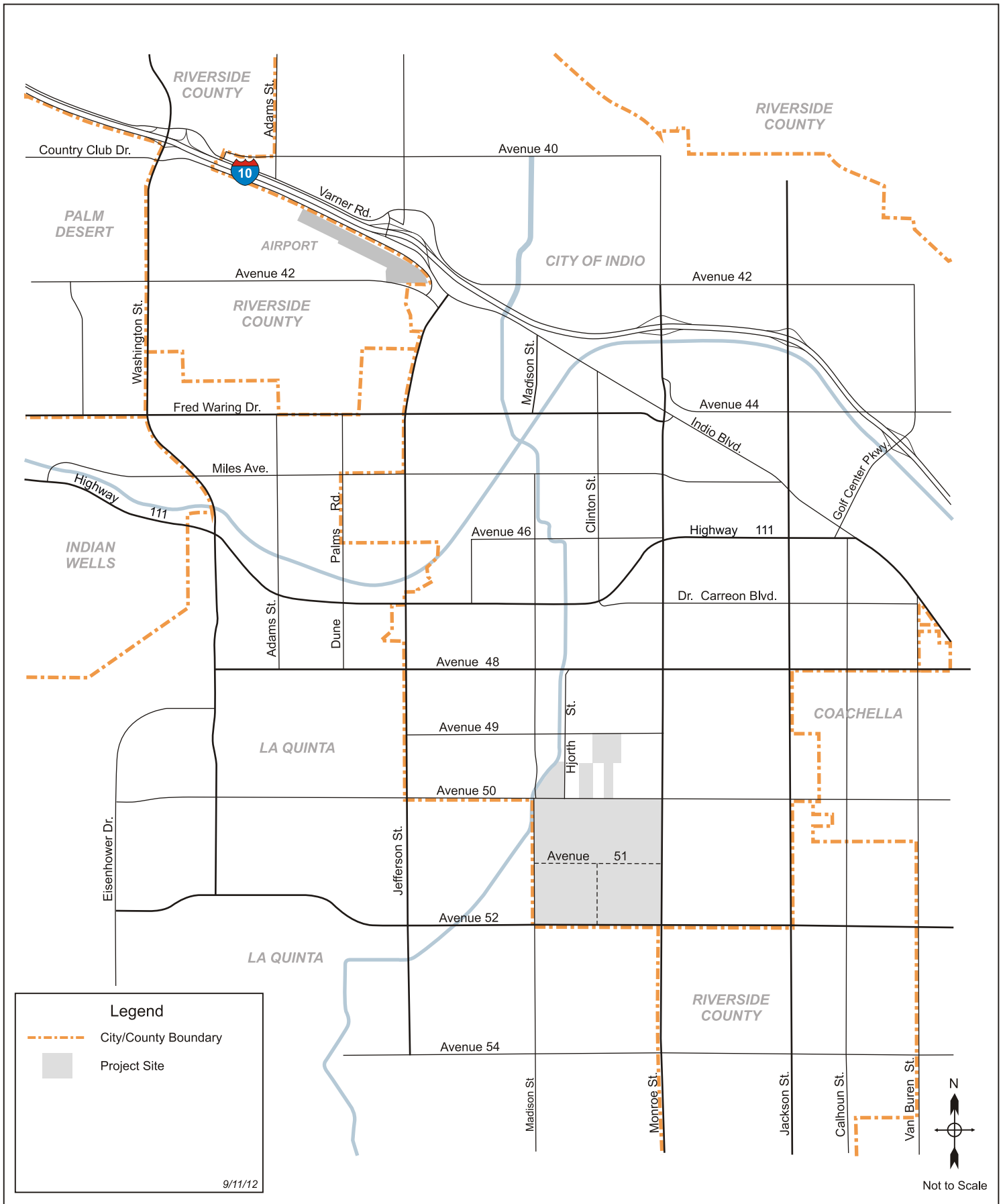


Figure I-1  
Project Site Location and Study Area

The Stagecoach Festival also currently operates on a two-year permit (2012 and 2013) and occurs for one weekend in April, immediately following the Coachella 2 Festival, with a total allowed attendance capacity of 65,000 persons. In 2012, the approximate maximum actual attendance at the Stagecoach Festival was 55,500.

The music festivals both occur Friday through Sunday. On-site camping is allowed at both festivals starting the day before the festival (Thursday) and ending the day after the festival (Monday).

### Proposed Festivals

The proposed Music Festival Plan would authorize through 2030 the continuation of the Coachella and Stagecoach Festivals on the Project Site each spring and two additional festival events to be held each fall. The maximum allowed attendance, including all staff, would be 75,000 persons for two of these events and 99,000 persons for three of the events.

This would increase the person capacity of the Coachella Festival or other similar festival from 95,000 to 99,000 persons, and would increase the person capacity of the Stagecoach festival or other similar festival from 65,000 to 75,000 persons. Further Project Description details are provided in Chapter V.

### Project Site

While the Project Site generally would remain bounded by the same streets, the amount of area within these boundaries used for parking, camping, and other support functions would increase slightly both to provide enhanced circulation and support for the Music Festival Events and accommodate the increased attendance level proposed at these events. The proposed Project Site includes approximately 601 acres of property. Further details are provided in Chapter V.

## **I.3 Study Approach**

The analysis in this report addresses the study area shown in Figure I-1. The report addresses the potential traffic impacts of the Music Festivals Plan compared against existing conditions in the vicinity of the Project Site in 2012 when no festival events are occurring. These existing conditions are referred to in this report as the “no event baseline” or “no event condition”. This existing conditions baseline provides a conservative approach, as music festivals have in fact been operating at the site for 13 years. It is also conservative because the Project Site hosts a variety of other (although smaller) events during the year, which are not included in the existing conditions baseline. (These are discussed further in Chapter 2). For informational and comparative purposes, the report also provides an analysis of existing conditions in 2012 with the festivals (based on the Coachella 1 weekend as that was the

highest attendance weekend). This is referred to as the “Existing Conditions – with 2012 Festival” condition throughout the report.

The analysis addresses a future analysis year of 2014. This is also a conservative approach as it is the first year that the new festival capacity could be achieved. The analysis includes planned and programmed public infrastructure improvements to be completed in the study area by 2014.

The analysis addresses three key time periods:

Friday:	3:00 to 4:00 pm
Saturday:	2:00 to 3:00 pm
Monday:	8:00 to 9:00 am

These were determined to be the times of highest festival traffic combined with background roadway traffic, based on an evaluation of existing conditions and festival data (see Chapter 2 for further details). These hours also address a weekday afternoon peak hour, a weekday morning peak hour, and the highest weekend hour.

The analysis focuses on intersection level of service as the main analytical parameter, but also addresses traffic queues, parking, transit shuttle operations, and other transportation characteristics.

The analysis is based on an extensive data collection program conducted for a no-event weekend, and for all three 2012 festivals.

The methodology utilized in this study follows the City of Indio methodology for traffic studies, as the City of Indio is the lead agency for the project. For analysis locations located in other jurisdictions the analysis is also conducted according to the methodology guidelines for the relevant jurisdiction.

## II. Existing Conditions

### II.1 Study Area

The study area is shown in Figure I-1. The Project Site is located in the City of Indio. The majority of the study area is located in the City of Indio and the City of La Quinta. Some analysis locations are located in other jurisdictions including the City of Palm Desert and the County of Riverside.

### II.2 Roadway System

Regional access to the Project Site is provided by the I-10 Freeway which is located in the northern part of the Study Area, and runs approximately north-west to south-east. I-10 connects westward through the northern Coachella Valley to Palm Springs, San Bernardino and Los Angeles, and eastwards to Blythe, Phoenix and through the southern United States. In the study area, it is a six-lane freeway and there are interchanges with surface arterial streets at Washington Street, Jefferson Street, Monroe Street, Jackson Street, and Golf Center Parkway (see Figure II-1).

The roadway system is shown in Figure II-1, which identifies the classifications of each roadway according to the General Plans of each jurisdiction. Figure II-2 shows the existing number of lanes for each principle segment of the roadway.

#### North-South Streets

Key northbound streets are Monroe Street and Jackson Street to the east of the Project site, Madison Street, Jefferson Street, and Washington Street to the west of the Project site. All these streets except Madison Street have interchanges with the I-10 freeway on the northern edge of the study area. Monroe Street and Madison Street serve the Project Site directly. These key roadways on the study area are described below.

Monroe Street: In Indio, Monroe Street is classified as a Secondary Highway. It consists of one lane in each direction adjacent to the Project Site. North of the Project Site (Avenue 50), it consists of two northbound lanes and one southbound lane between Avenue 50 and Avenue 49, and generally two lanes in each direction north of Avenue 49. South of the Project Site (Avenue 52), it is classified as a Primary Arterial in the City of La Quinta and consists of one northbound lane and two southbound lanes between Avenue 52 and Avenue 54, and one lane in each direction south of Avenue 54.

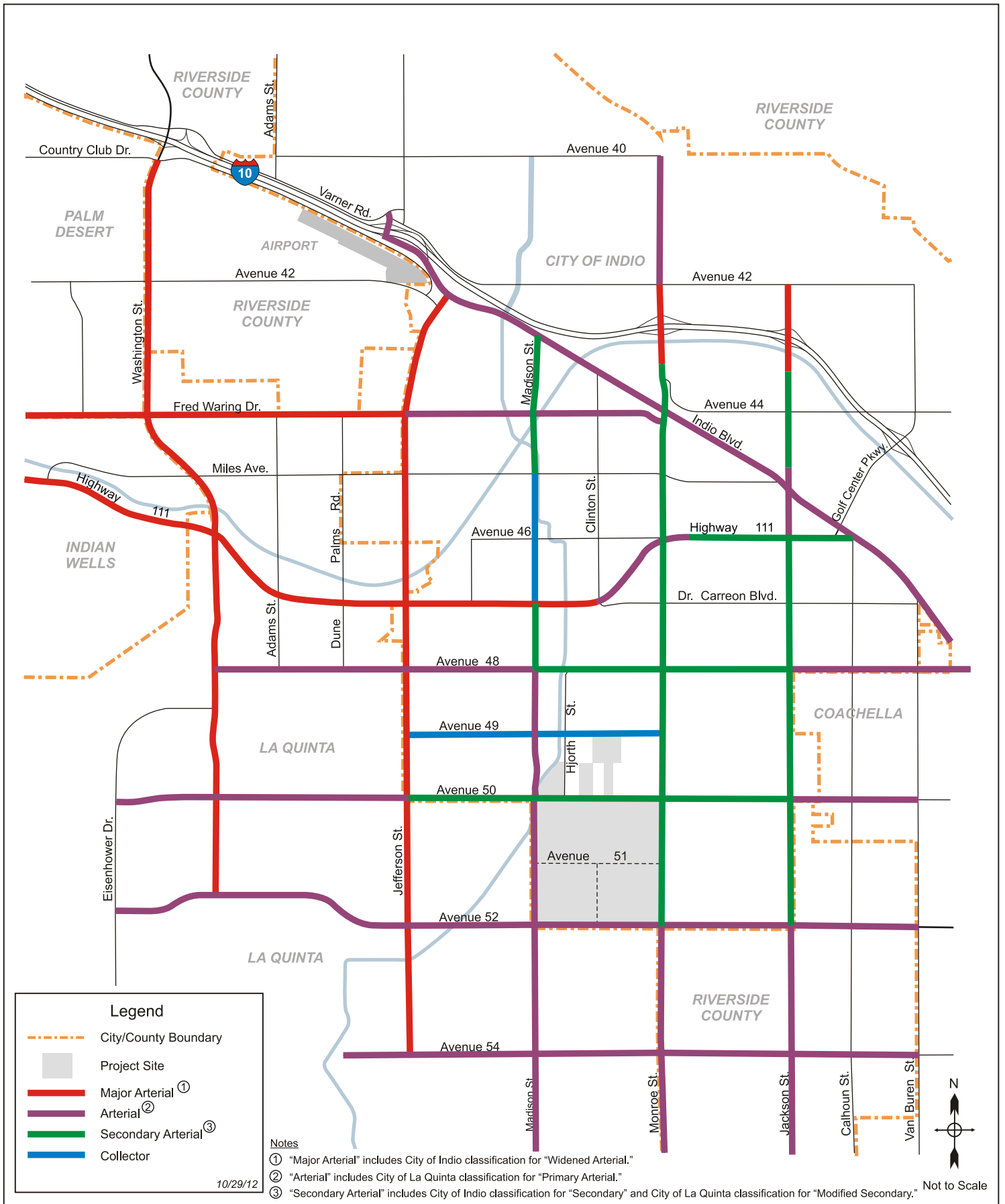


Figure II-1  
Roadways - Type Classifications - City General Plan

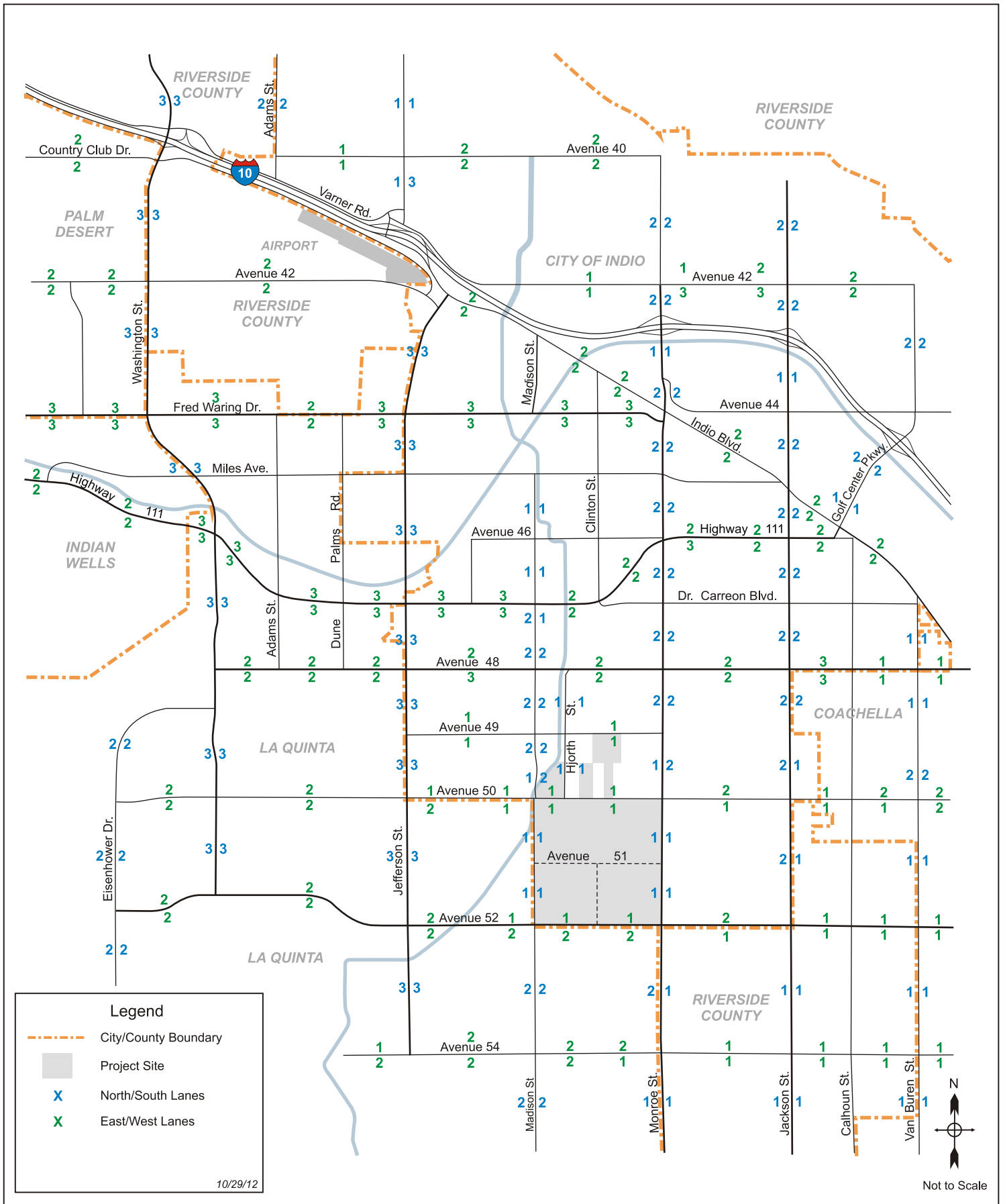


Figure II-2  
Roadways - Existing Number of Lanes

Madison Street: In Indio, Madison Street is classified as an Arterial and consists of one lane in each direction adjacent to the Project Site. Immediately north of the Project Site (Avenue 50), it consists of two northbound lanes and one southbound lane, but north of the Coachella Canal it consists of two lanes in each direction until Highway 111, then one lane in each direction northwards where it is classified as a Collector Street. South of the Project Site (Avenue 52) in La Quinta, it is classified as a Primary Arterial and consists of two lanes in each direction.

Jackson Street: In Indio, Jackson Street is classified as a Secondary Arterial and consists of one northbound lane and two southbound lanes between Avenue 49 and Avenue 52. North of Avenue 49 it consists of two lanes in each direction. South of Avenue 52, in unincorporated Riverside County, it is classified as an Arterial and consists of one lane in each direction.

Jefferson Street: In Indio, Jefferson Street is classified as a Widened Arterial. In La Quinta it is classified as a Major Arterial. It consists of three lanes in each direction both cities and through the study area.

Washington Street: In La Quinta, Washington Street is classified as a Major Arterial and in unincorporated Riverside County north of Mountain View it is classified as an Urban Arterial. It consists of three lanes in each direction in both jurisdictions and through the study area.

### East/West Streets

Key east-west streets are Avenue 50, Avenue 49, Avenue 48, Highway 111, Fred Waring Drive, and Indio Boulevard to the north of the Project site, and Avenue 52 and Avenue 54 to the south of the Project site. Avenue 49, Avenue 50, and Avenue 52 provide direct access to the Project site.

Avenue 50: In Indio, Avenue 50 is classified as a Secondary Arterial and consists of one lane in each direction adjacent to the Project Site. East of the Project Site (Monroe Street), it consists of one eastbound lane and two westbound lanes. West of the Project Site (Madison Street), it consists of one lane westbound and mostly two lanes eastbound (except a single lane approaching Madison Street). In La Quinta, it is classified as a Primary Arterial and consists of two lanes in each direction.

Avenue 52: In Indio, Avenue 52 is classified as an Arterial and consists of two eastbound lanes and one westbound lane adjacent to the Project Site. East of the Project Site (Monroe Street), it consists of one eastbound lane and two westbound lanes. West of the Project Site (Madison Street), it consists of two eastbound lanes and one westbound lane. In La Quinta, it is classified as a Primary Arterial and consists of two lanes in each direction.

Avenue 54: In La Quinta, Avenue 54 is classified as a Primary Arterial and generally consists of two lanes in each direction west of Monroe Street. In unincorporated Riverside County, east of Monroe Street, it is classified as an Arterial and consists of one lane in each direction.

Avenue 49: In Indio, Avenue 49 is classified as a Collector and consists of one lane in each direction between Monroe Street and Jefferson Street.

Avenue 48: In Indio, Avenue 48 is classified as an Arterial between Jefferson Street and Madison Street and between Jackson Street and Indio Boulevard, and as Secondary Arterial between Madison Street and Jackson Street. It generally consists of two eastbound and two westbound lanes. In La Quinta, it is classified as a Primary Arterial and consists of two lanes in each direction.

Highway 111: In Indio, Highway 111 is classified as a Widened Arterial between Jefferson and Clinton Street, an Arterial between Clinton Street and Arabia Street, a Secondary Arterial between Arabia Street and Indio Boulevard. East of Madison it consists of two lanes in each direction and west of Madison Street it consists of three lanes in each direction. In La Quinta, it is classified as a Major Arterial and consists of three lanes in each direction.

Fred Waring Drive: In Indio, Fred Waring Drive is classified as an Arterial consisting of three lanes in each direction. In La Quinta, it is classified as a Major Arterial and also consists of three lanes in each direction. In the unincorporated County area it is two lanes in each direction.

Indio Boulevard: In Indio, Indio Boulevard is classified as an Arterial and consists of two lanes in each direction.

### **II.3 Study Intersections**

The study intersections are shown in Figure II-3. These were identified in conjunction with the Cities of Indio and La Quinta, and were identified as the principle intersections in the study area and on the principle routes used by festival traffic. Figure II-3 also shows the type of traffic control at each intersection. Of the 41 study intersections, a total of 26 are signalized, 14 are unsignalized (stop signs), and one intersection is a roundabout. The existing configurations of the study intersections are shown in Figure II-4.

The study intersections are located in multiple jurisdictions, with almost one-third having quadrants located in more than one jurisdiction. For the purposes of analysis, intersections were categorized by a lead jurisdiction according to the jurisdiction with traffic control over the intersection. All freeway ramp intersections were assigned to Caltrans as the lead jurisdiction. The number of intersections in each jurisdiction is shown in Table II-1.



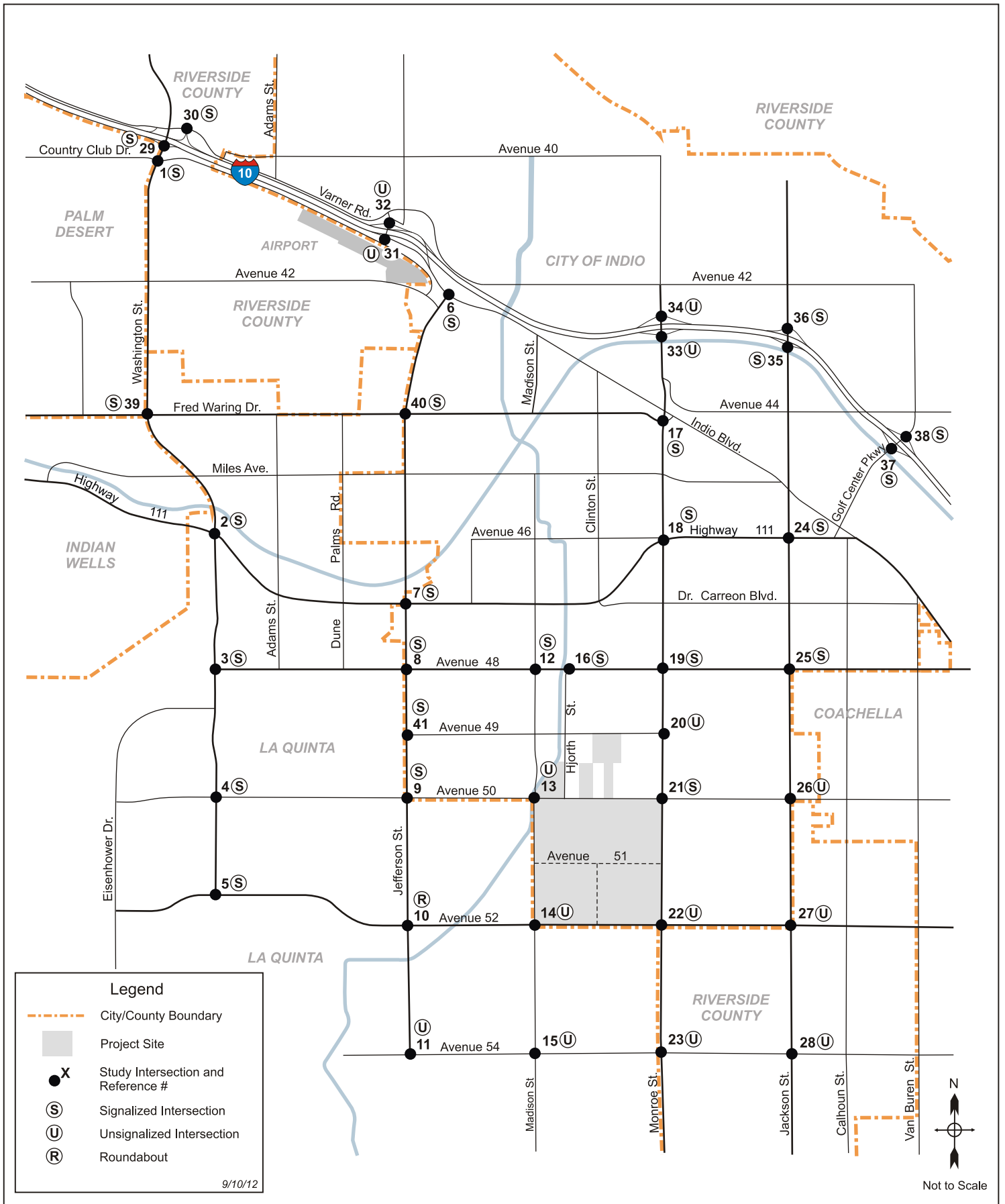


Figure II-3  
Study Intersections and Traffic Controls

**Table II-1 No. of Intersections by Assigned Lead Jurisdiction**

	Allocated Entirely in Jurisdiction	Row Shared but Allocated to Jurisdiction	Total Allocated to Jurisdiction
Indio	9	5 <sup>1</sup>	14
La Quinta	7	7 <sup>2</sup>	14
Coachella	0	0	0
Indian Wells	0	0	0
Palm Desert	0	1 <sup>3</sup>	1
County of Riverside	1	1 <sup>4</sup>	2
Caltrans	10	0 <sup>5</sup>	10
	27	14	41

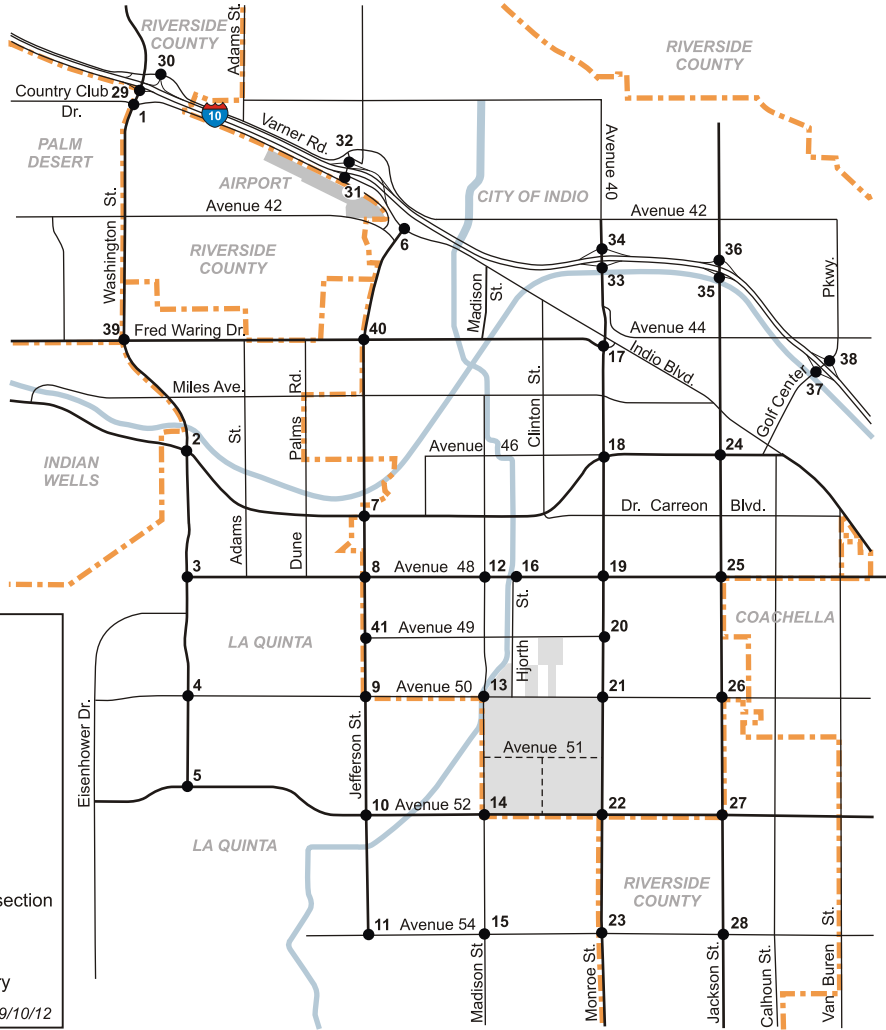
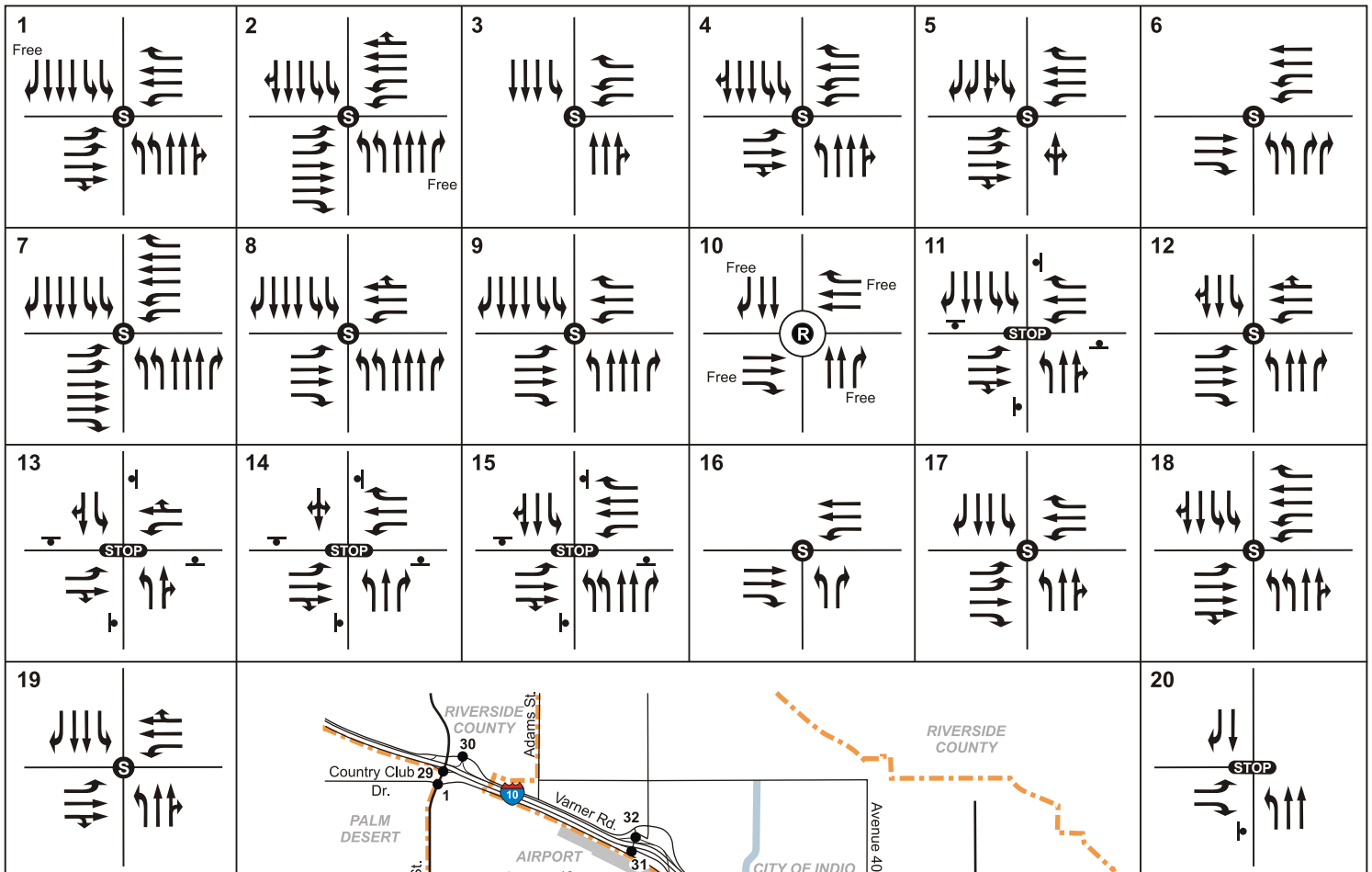
<sup>1</sup> 2 shared with La Quinta.  
 1 shared with La Quinta & County.  
 1 shared with Coachella.  
 1 shared with County

<sup>2</sup> 5 shared with Indio.  
 1 shared with Indian Wells & Palm Desert.  
 1 shared with County.

<sup>3</sup> 1 shared with County.

<sup>4</sup> 1 shared with Indio.

<sup>5</sup> Freeway ramp intersection assigned to Caltrans jurisdiction.



**Legend**

- City/County Boundary
- Project Site
- Study Intersection and Reference #
- Signalized Intersection
- Roundabout
- Stop Sign Controlled Intersection
- Stop Sign
- Intersection Lane Geometry

9/10/12



Figure II-4  
Intersection Configurations

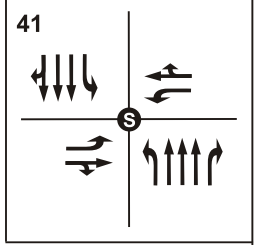
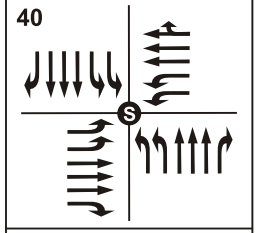
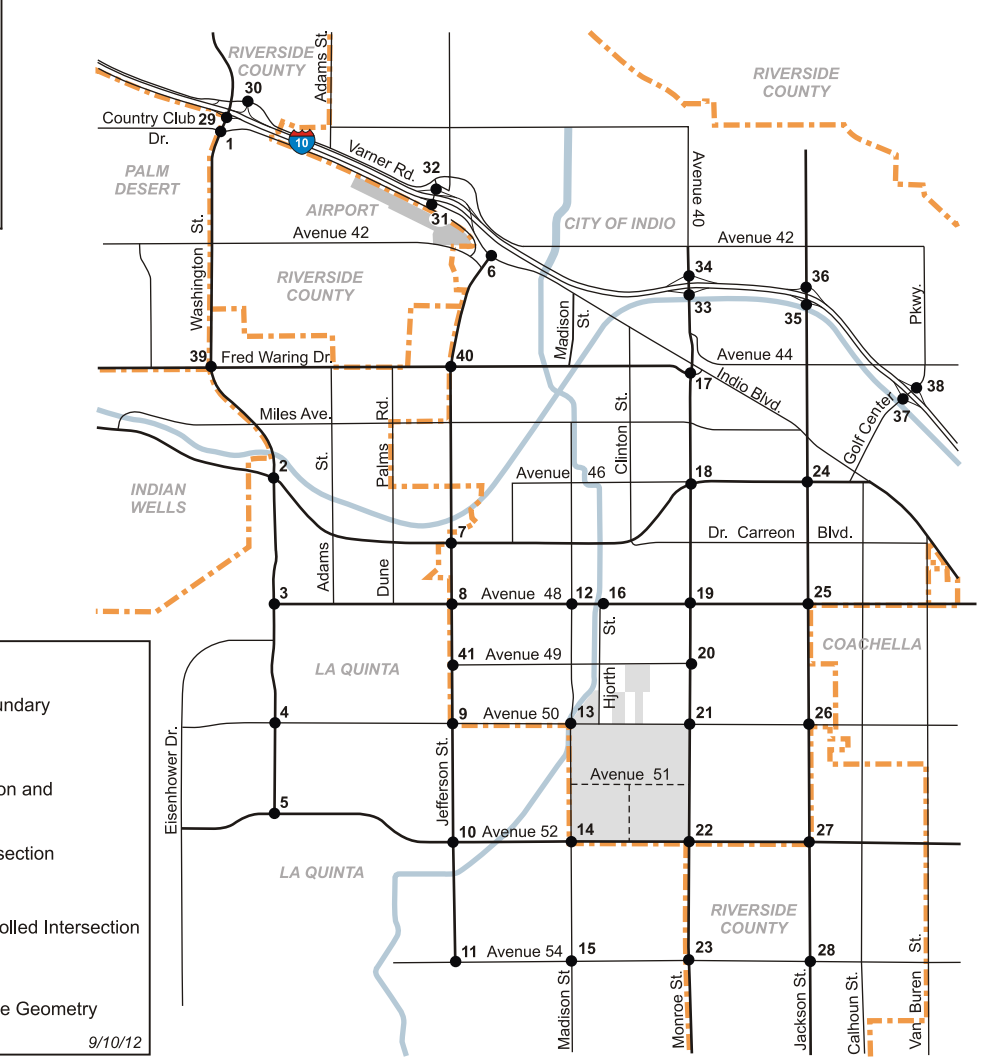
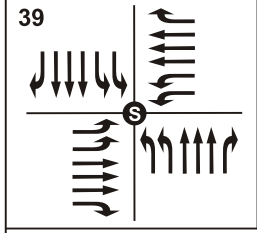
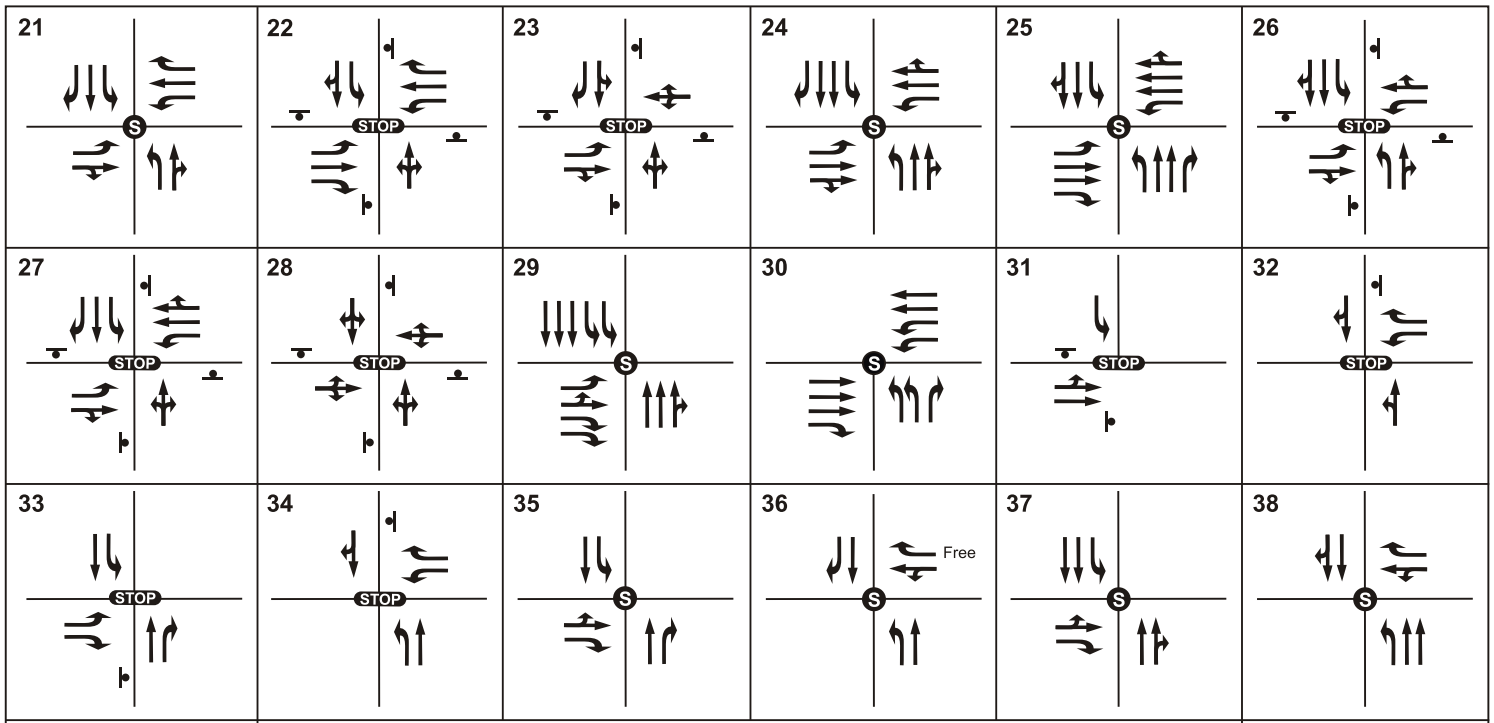


Figure II-4 cont.  
Intersection Configurations

A total of 14 intersections were assigned to the City of Indio (9 located entirely in the City, and 5 sharing right-of-way with other jurisdictions); 14 intersections were assigned to La Quinta (7 located entirely in the City and 7 sharing right-of-way with other jurisdictions); 1 intersection was assigned to the City of Palm Desert (sharing right-of-way with another jurisdiction) and two intersections were assigned to the County of Riverside (1 located entirely in the County and 1 sharing right-of-way with other jurisdictions). All freeway ramp intersections were assigned to Caltrans as the lead jurisdiction. Details of the geographic and traffic control jurisdictions are shown in Table A.1-1 in Appendix A.

## II.4 Existing Conditions Analysis - Overview

A comprehensive data collection effort was undertaken to provide data for the traffic study. This effort, which was coordinated with the Cities of Indio and La Quinta, included observations for a non-event weekend and for all three festivals in 2012. The data collection included automatic traffic counts of hourly volumes by day at 38 street segment locations throughout the study area, and intersection turn counts at all 41 study intersections.

### Hours of Analysis

While the existing condition analysis is for a no-event condition, the impact analysis addresses the festivals. The hours of analysis were therefore focused on the hours of highest total traffic on the roadway system including festival traffic. These were determined by analyzing the automatic traffic counts that were conducted on an hourly basis for five days (Thursday through Monday) for each festival weekend and a non-event weekend at 38 locations in the study area, and determining the key hours of highest traffic volumes. These data are summarized in Figure II-5. The figures show the traffic totaled for all 38 count locations. (The count locations are shown in Figure A.2-1 in Appendix A). Based on this analysis, the following three separate hours were selected for analysis.

Friday:	3:00 to 4:00 pm
Saturday:	2:00 to 3:00 pm
Monday:	8:00 to 9:00 am

These are representative of the main peak hours of traffic that occurred during the festivals, as well as being representative of key different time periods. As can be seen from Figure II-5b, the Friday 3:00 to 4:00 pm hour represents the highest weekday hour of total traffic for traffic inbound to the festivals, and also coincides with the weekday p.m. commute peak period.

The Saturday 2:00 to 3:00 pm hour represents the highest weekend hour of total traffic for traffic inbound to the festivals. As can be seen from Figure II-5c, traffic peaks were higher on Saturdays than on Sundays during the festivals.

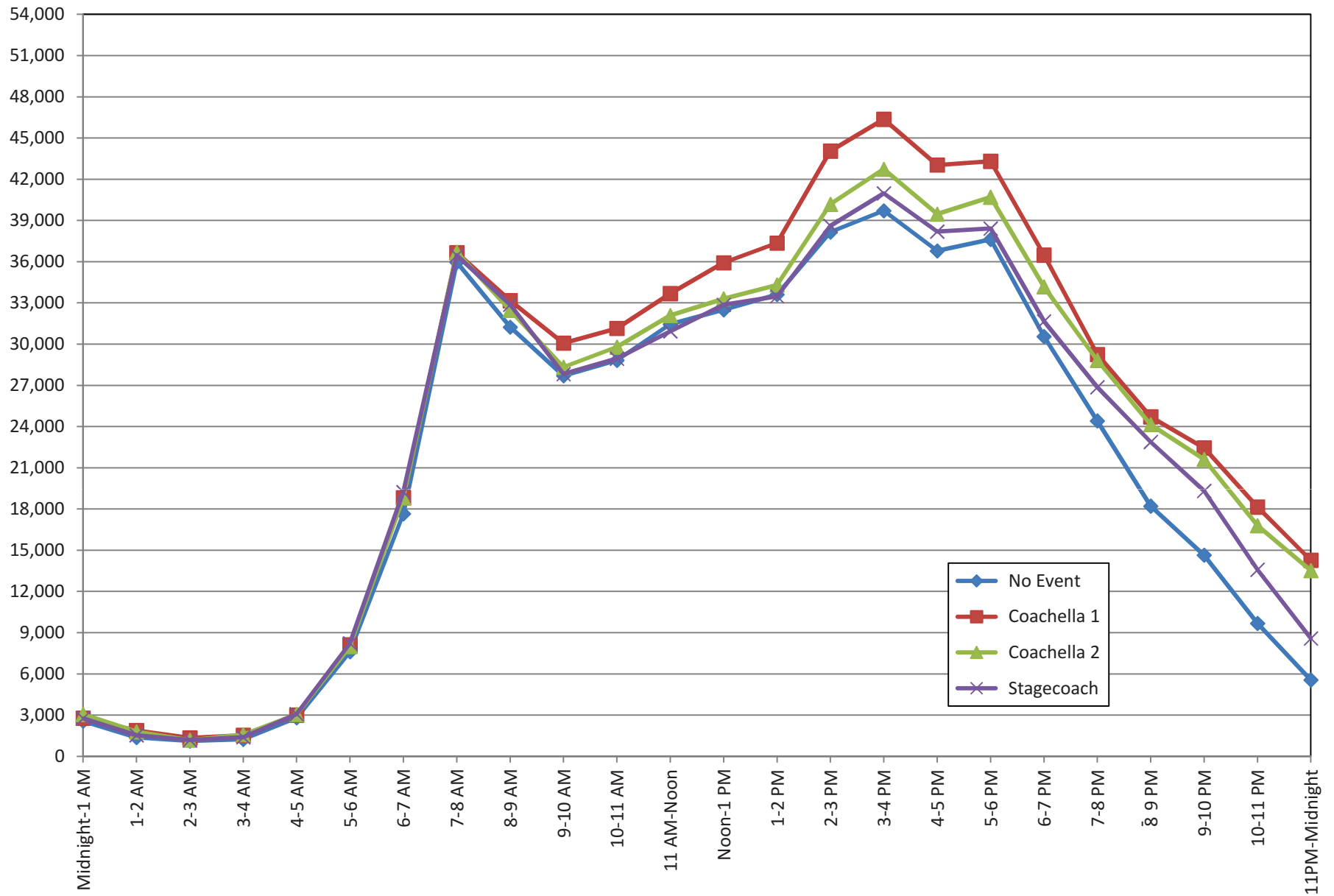


Figure II-5a  
Hourly Traffic Volumes by Festival - All Count Locations - Thursday

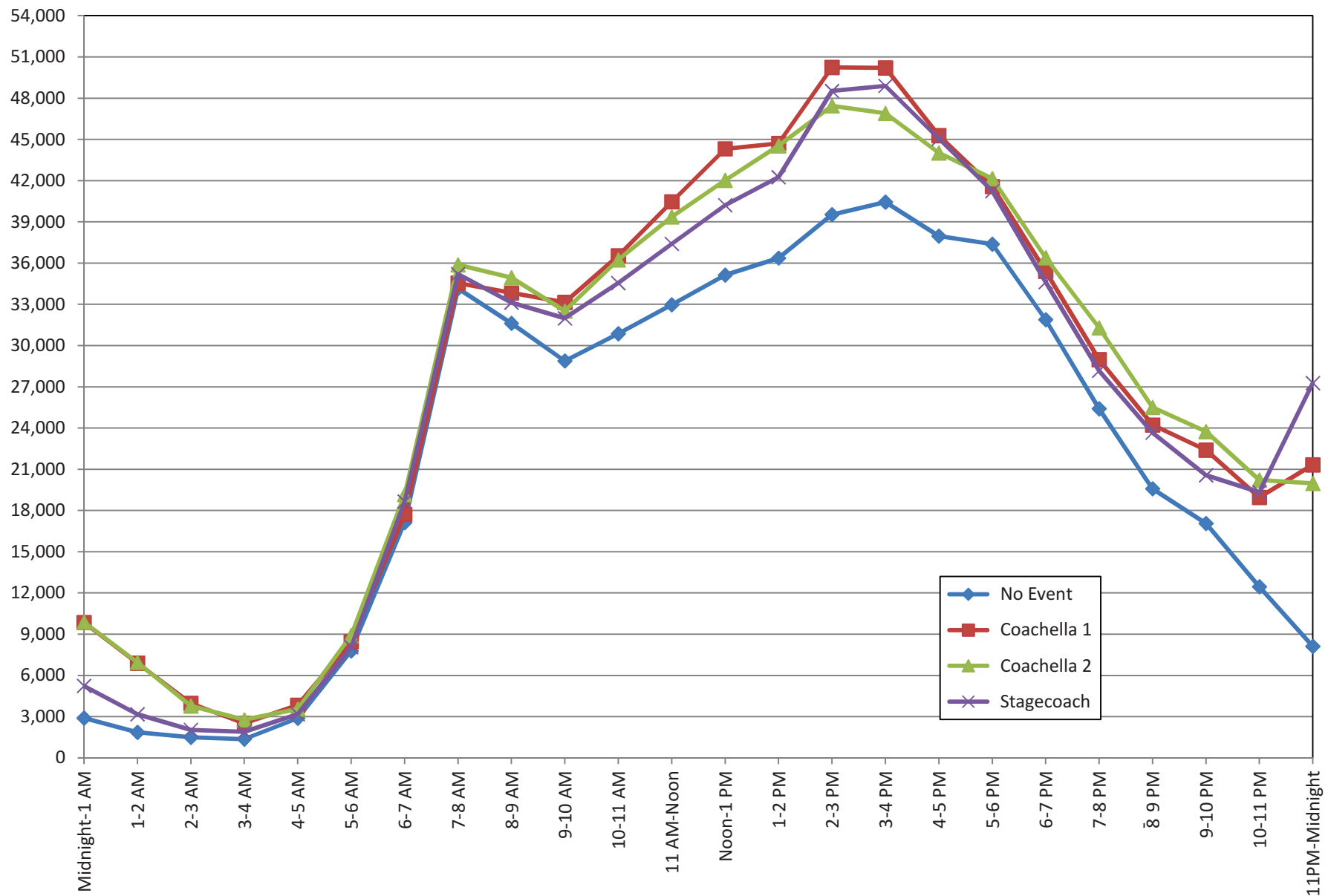


Figure II-5b  
 Hourly Traffic Volumes by Festival - All Count Locations - Friday

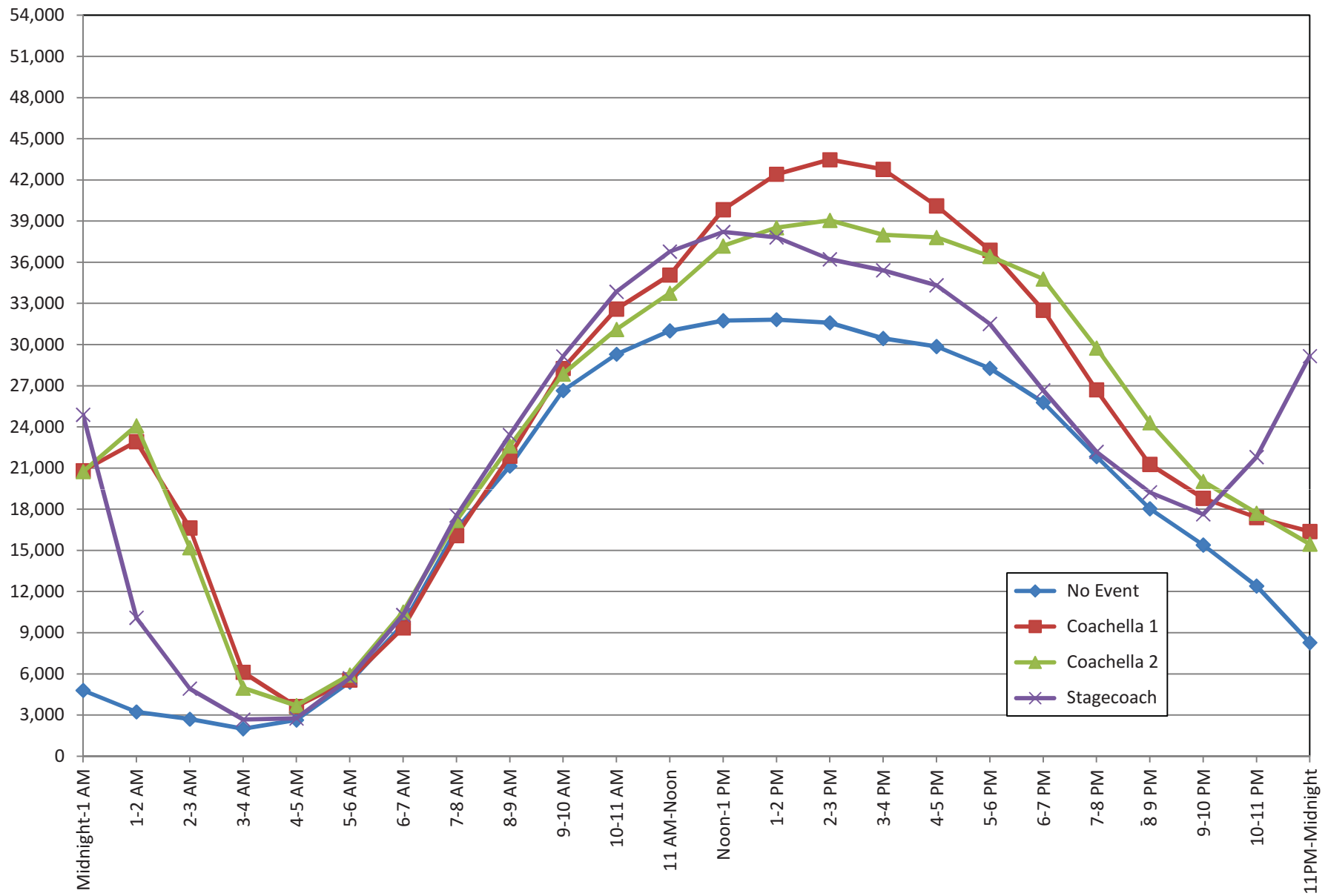


Figure II-5c  
 Hourly Traffic Volumes by Festival - All Count Locations - Saturday



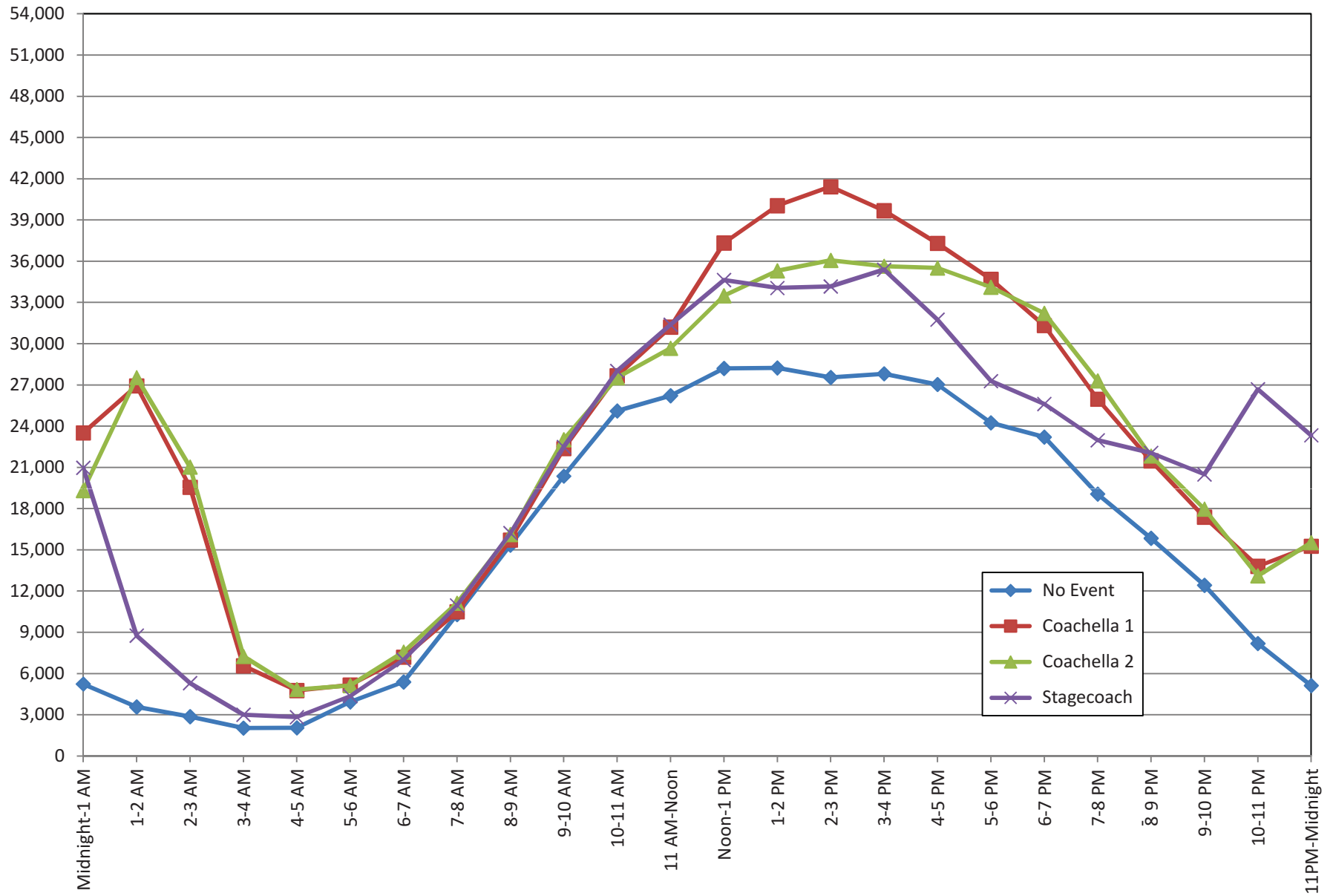


Figure II-5d  
Hourly Traffic Volumes by Festival - All Count Locations - Sunday

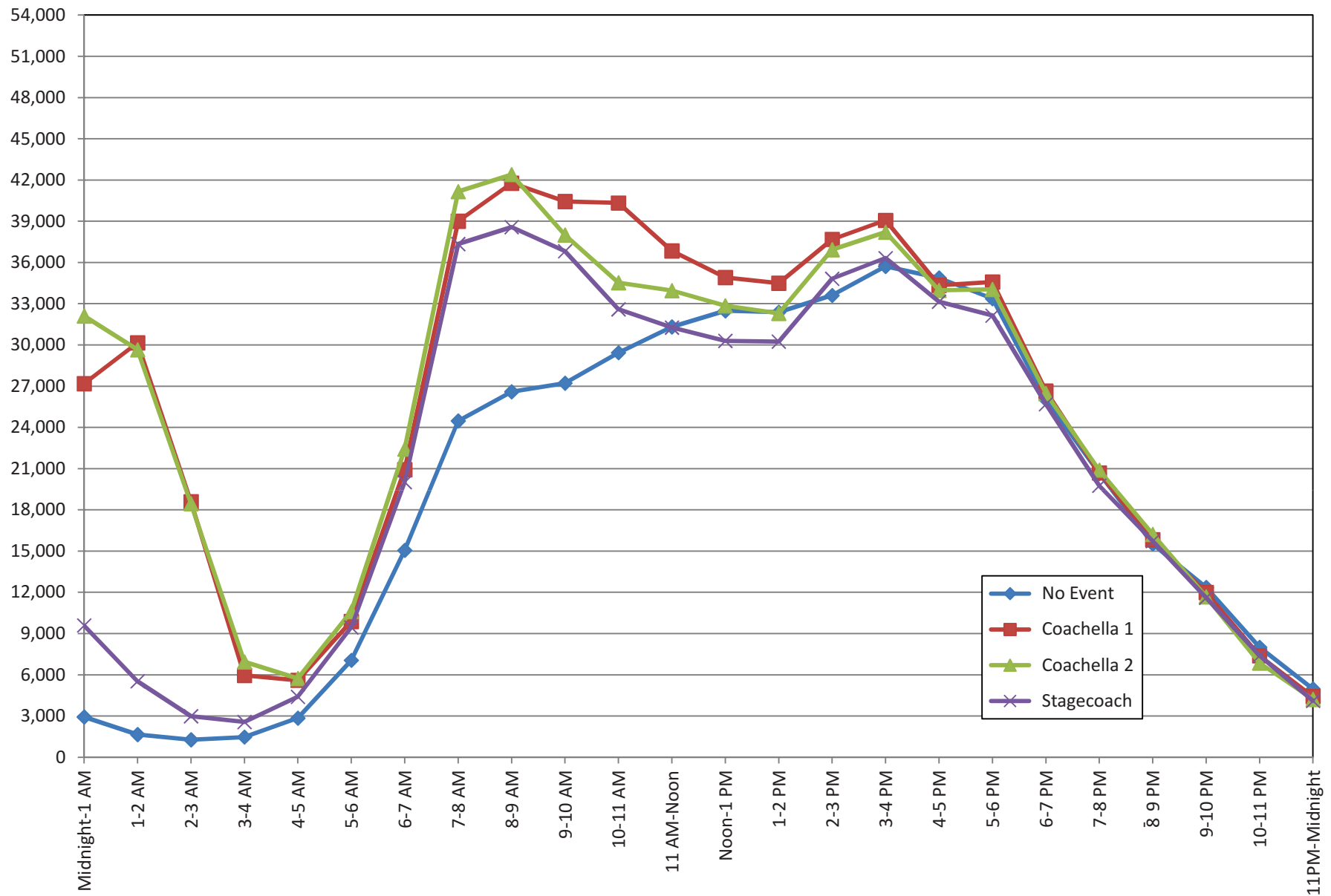


Figure II-5e  
 Hourly Traffic Volumes by Festival - All Count Locations - Monday

The Monday 8:00 to 9:00 am hour represents the highest weekday hour of total traffic, including outbound traffic from the festivals (camping load out), and also coincides with the weekday a.m. commute peak period.

Other hours or days, although observed and monitored during data collection, were not analyzed as traffic levels were lower than for the hours selected. For example, it was concluded it was not necessary to analyze the hours relating to outbound traffic at the end of each day's festival as total traffic volumes on the roadway system during the 1:00 to 3:00am period were considerably lower than at other times (due to the low level of nighttime background traffic on the roadway system), as also shown in Figure II-5.

## II.5 Existing Conditions - Intersections

### Intersection Conditions – Analysis Methodology

Level of Service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from LOS A (free-flow conditions) to LOS F (severely congested, stop and go conditions). The level of service is determined by the amount of vehicle delay at an intersection. Intersection conditions were analyzed using the Highway Capacity Manual (HCM) Signalized Intersection Operations Method and Unsignalized Intersection Method, as required by the City of Indio and City of La Quinta, and as allowed by the County of Riverside. The TRAFFIX Version 8.0 software was used to determine the level of service.

#### *Signalized Intersections*

The level of service (LOS) is based on the average control delay per vehicle at a signalized intersection. Control delay is the portion of the total delay occurring at a specific intersection that is attributed to traffic signal operation. The key intersection characteristics that are considered in the calculation of delay are traffic volumes, lane geometry and signal phasing. Signalized intersection LOS definitions and associated vehicle delay ranges are shown in Table II-2a.

#### *Unsignalized Intersections*

Unsignalized intersections may be either two-way stop controlled – where only the minor street approaches are controlled by a stop sign, or four-way stop controlled – where all four approaches are stopped. Level of service (LOS) for an unsignalized intersection is defined by the average delay for the worst stop controlled approach for a two-way stop intersection, and by the average delay on all approaches for an all-way or four-way stop intersection. Unsignalized intersection LOS and associated vehicle delay ranges are shown in Table II-2b.

**Table II-2a Intersection Delay and Level of Service Ranges – Signalized Intersections**

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

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

**Table II-2b Intersection Delay and Level of Service Ranges – Unsignalized Intersections**

Level of Service	Unsignalized Intersection Delay (seconds per vehicle)
A	$\leq 10$
B	$>10$ and $\leq 15$
C	$>15$ and $\leq 25$
D	$>25$ and $\leq 35$
E	$>35$ and $\leq 50$
F	$>50$

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

## Traffic Volumes

Existing condition traffic volumes at study intersections for each of the three analysis hours are shown in Figure II-6. These volumes represent a no-event weekend, and were collected the weekend of Thursday March 29 to Monday April 2, 2012.

## Level of Service Standards

The following level of service standards are in use by the different jurisdictions in the study area. These are discussed in more detail in Chapter V and so are only summarized here.  
Table II-2a Intersection Delay and Level of Service Ranges – Signalized Intersections

For purposes of analyzing Existing Conditions and Future Without Project Conditions (both without an event) the following general standards were used. Criteria for identifying significant impact thresholds with the Project are described further in Chapter 5 under project impact analysis.

The City of Indio<sup>1</sup> has adopted a standard of intersection performance (acceptable intersection condition) of Level of Service “D” (LOS D) during peak hours, except under certain conditions where a peak hour LOS D is not reasonable and feasible<sup>2</sup>, in which case the standard is Level of Service “E” (LOS E).

The City of La Quinta has adopted<sup>3</sup> a standard for intersection performance of Level of Service LOS “D”.

The County of Riverside has established a target Level of Service of LOS “C” for all County maintained roads and conventional state highways<sup>4</sup>. As an exception, LOS “D” may be allowed in Community Development areas<sup>5</sup>, only at intersections of certain street types. These exceptions do not apply to the two intersections identified under County jurisdiction in this study.

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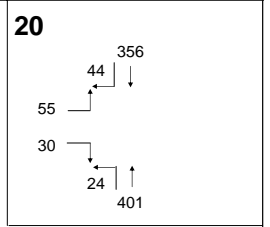
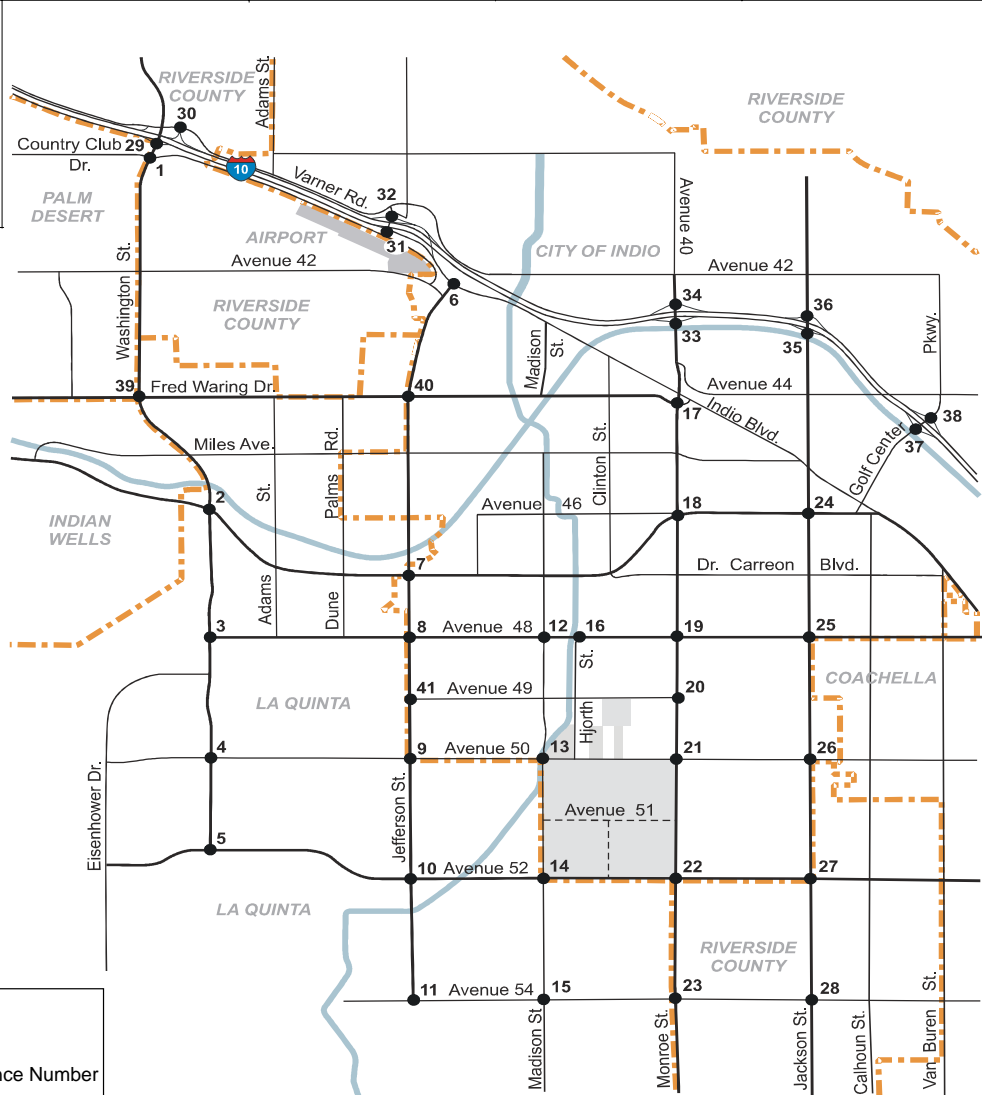
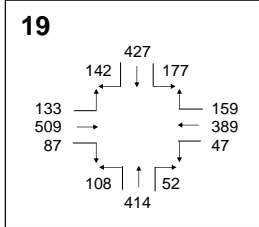
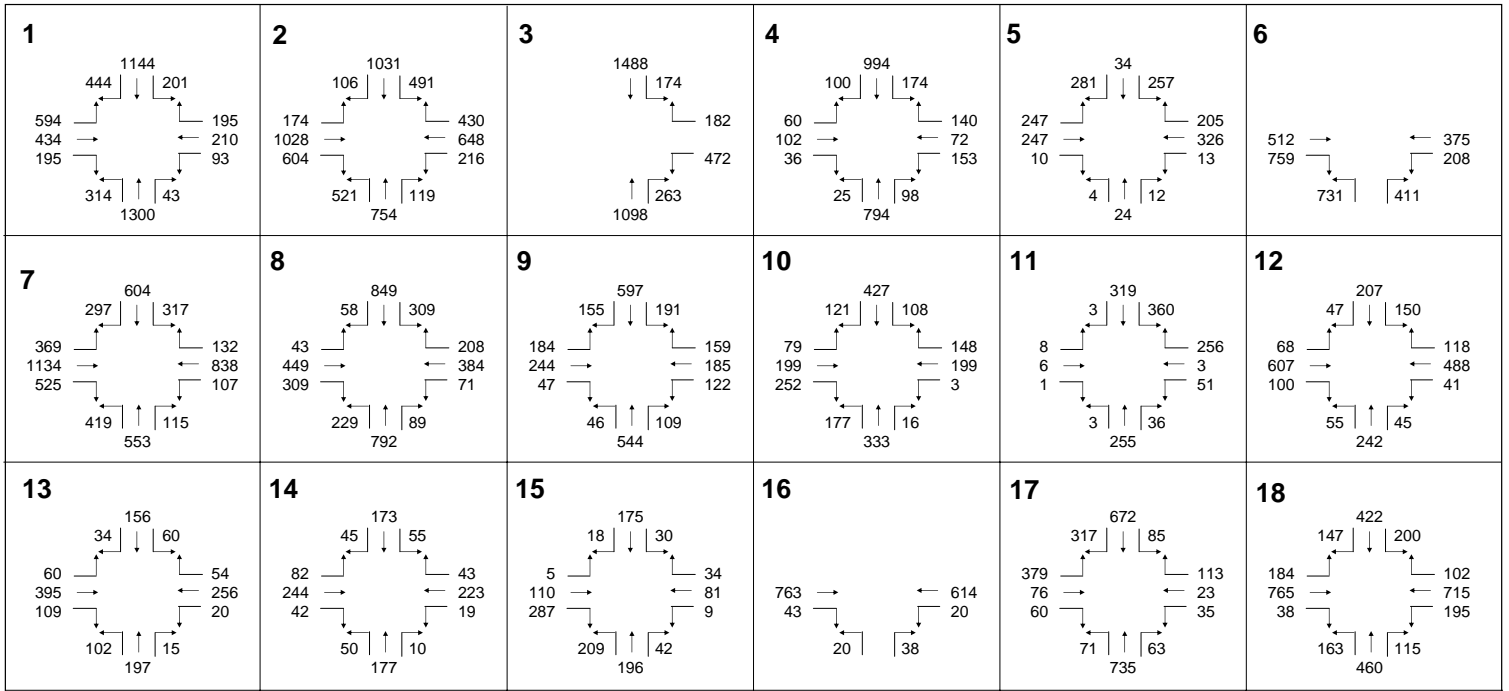
<sup>1</sup> Policy CIR-1.1 of the City of Indio 2008 Circulation Plan Update.

<sup>2</sup> The following factors are to be considered when determining whether operation at LOS D is reasonable and feasible: (1) Excessive right of way acquisition to attain LOS D; (2) Unreasonable costs to attain LOS D; (3) Impacts to other environmental resources to achieve LOS D, such as biological resources or cultural resources (e.g., historic properties); and (4) Conflicts with other *City of Indio 2008 General Plan Update* policies, such as provisions for alternative transportation (e.g., public transit, pedestrian facilities and/or bicycle routes) or provisions for neighborhood preservation.

<sup>3</sup> City of La Quinta Engineering Bulletin #06-13 – Traffic Study Guidelines.

<sup>4</sup> Policy C.2.1 of the County of Riverside General Plan Circulation Element.

<sup>5</sup> Specific areas of the County where urban and suburban development are deemed appropriate.



**Legend**

- Study Intersection
- X Intersection Reference Number
- xx Intersection Turn Volume



Fig II-6a  
Existing Conditions – No Event – Traffic Volumes – Friday 3-4 PM

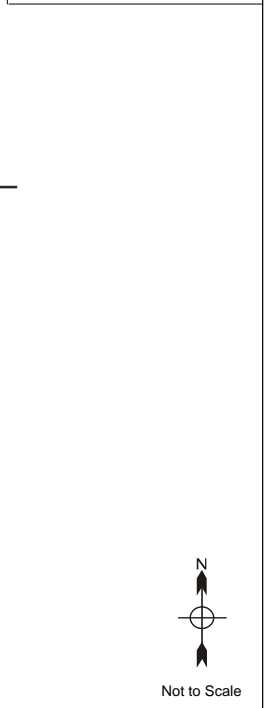
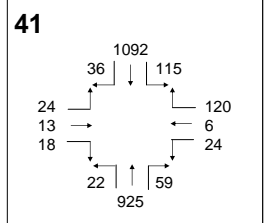
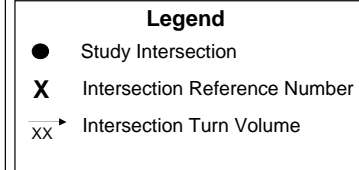
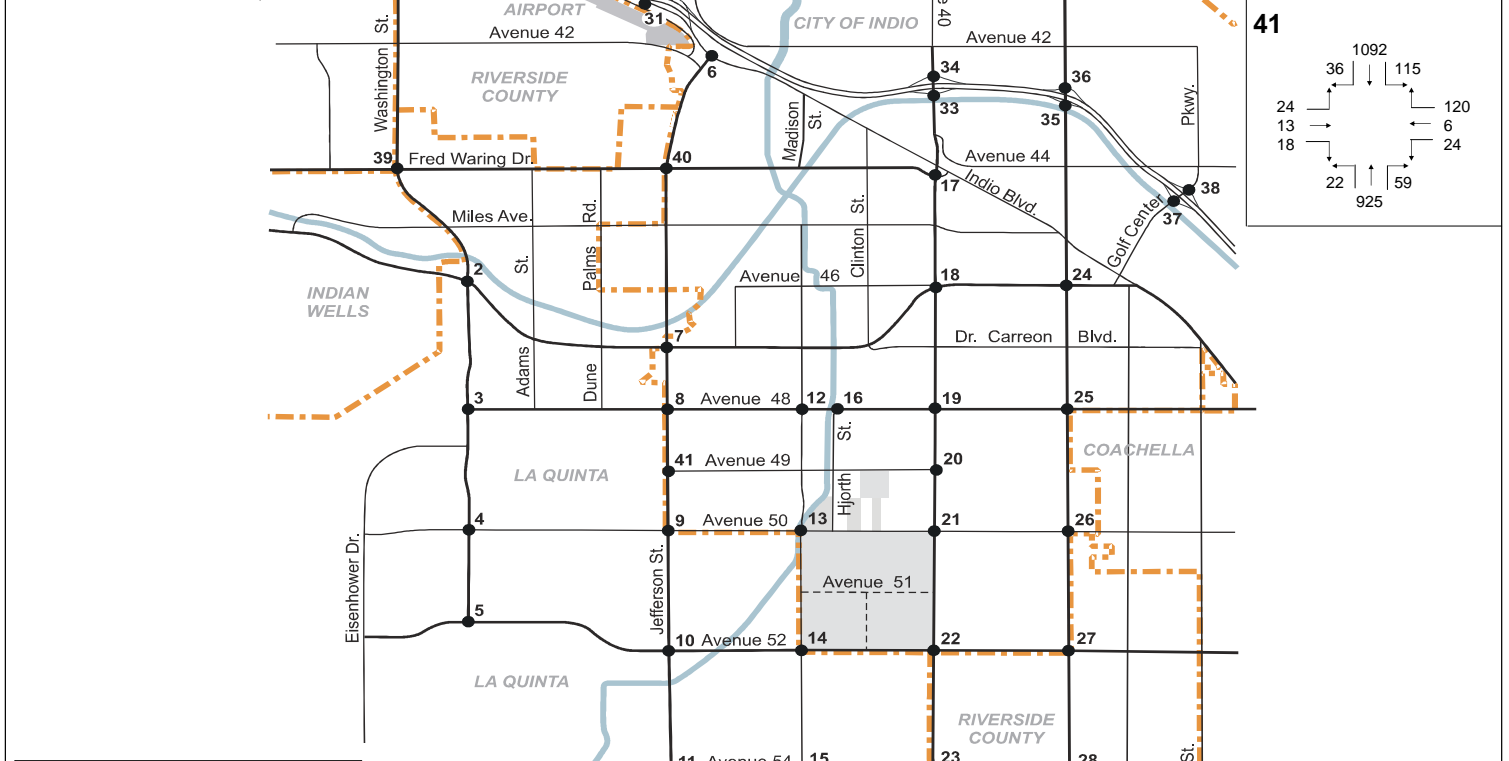
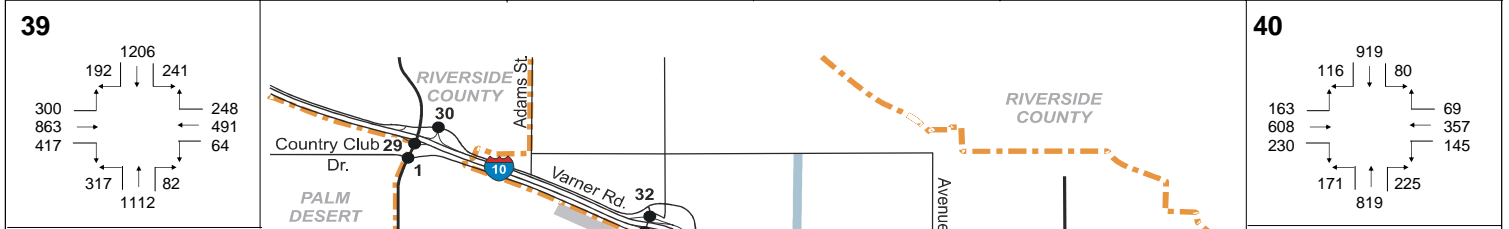
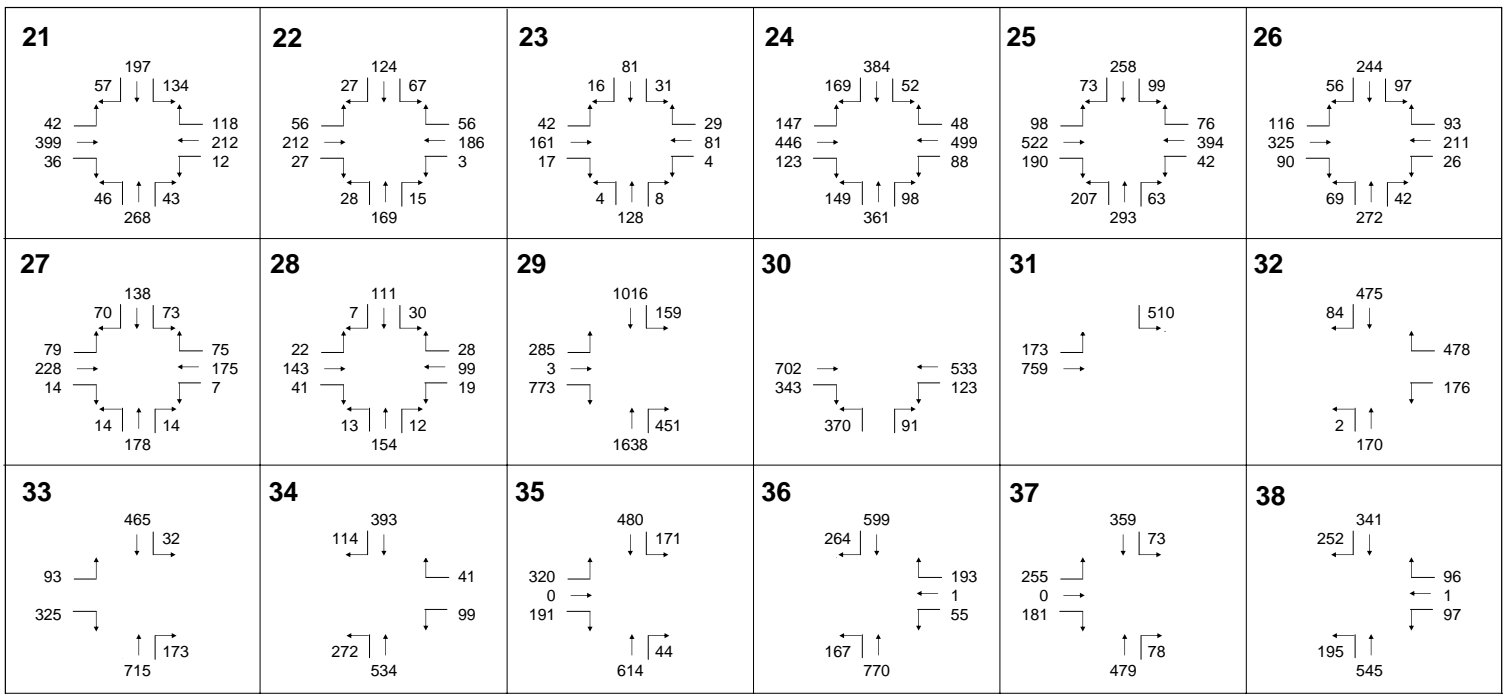


Fig II-6a cont.  
 Existing Conditions – No Event – Traffic Volumes – Friday 3-4 PM



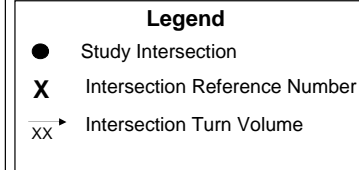
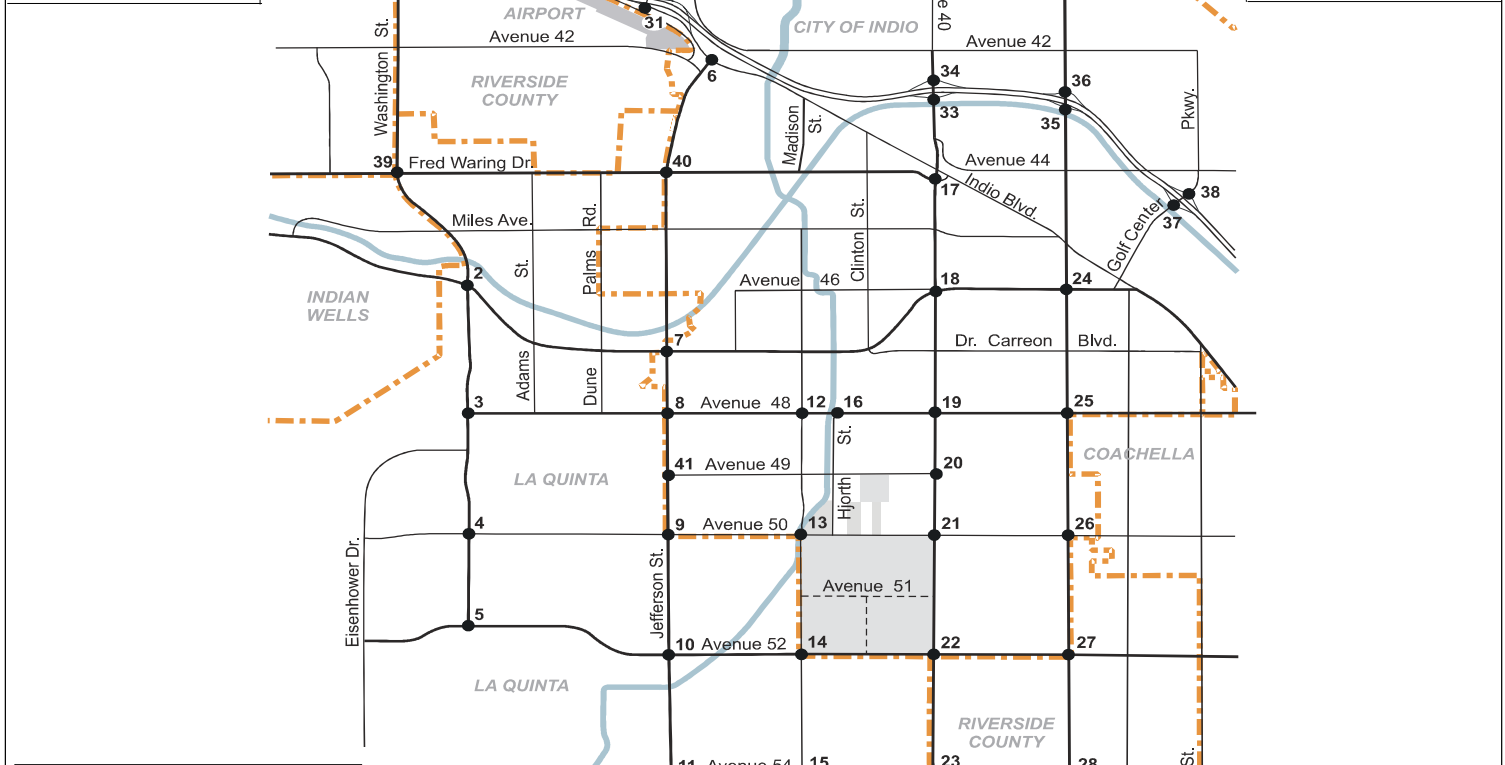
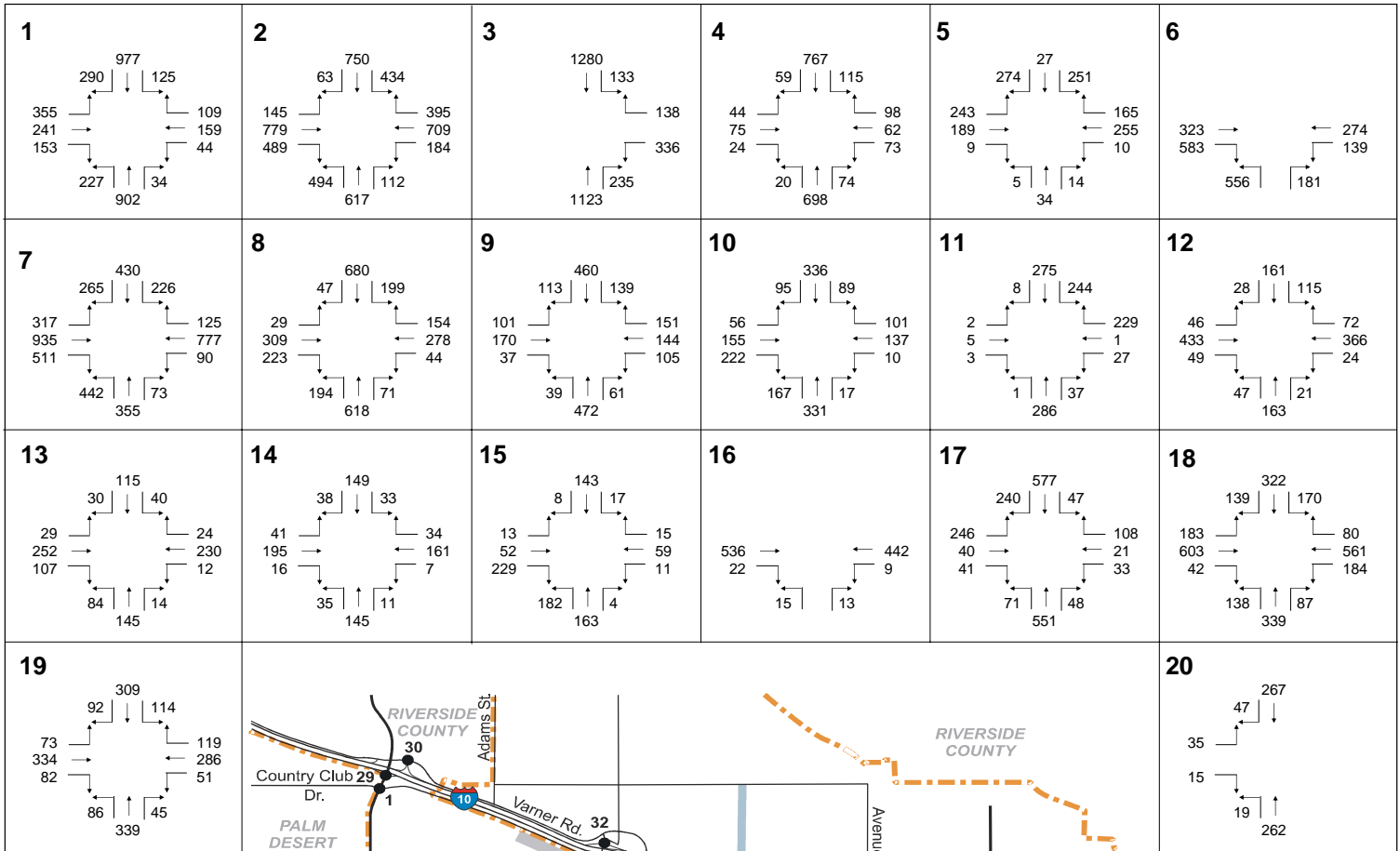


Fig II-6b  
Existing Conditions – No Event – Traffic Volumes – Saturday 2-3 PM

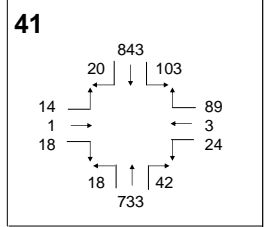
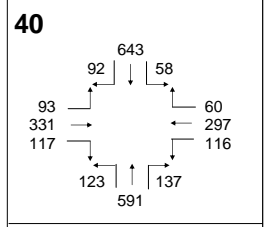
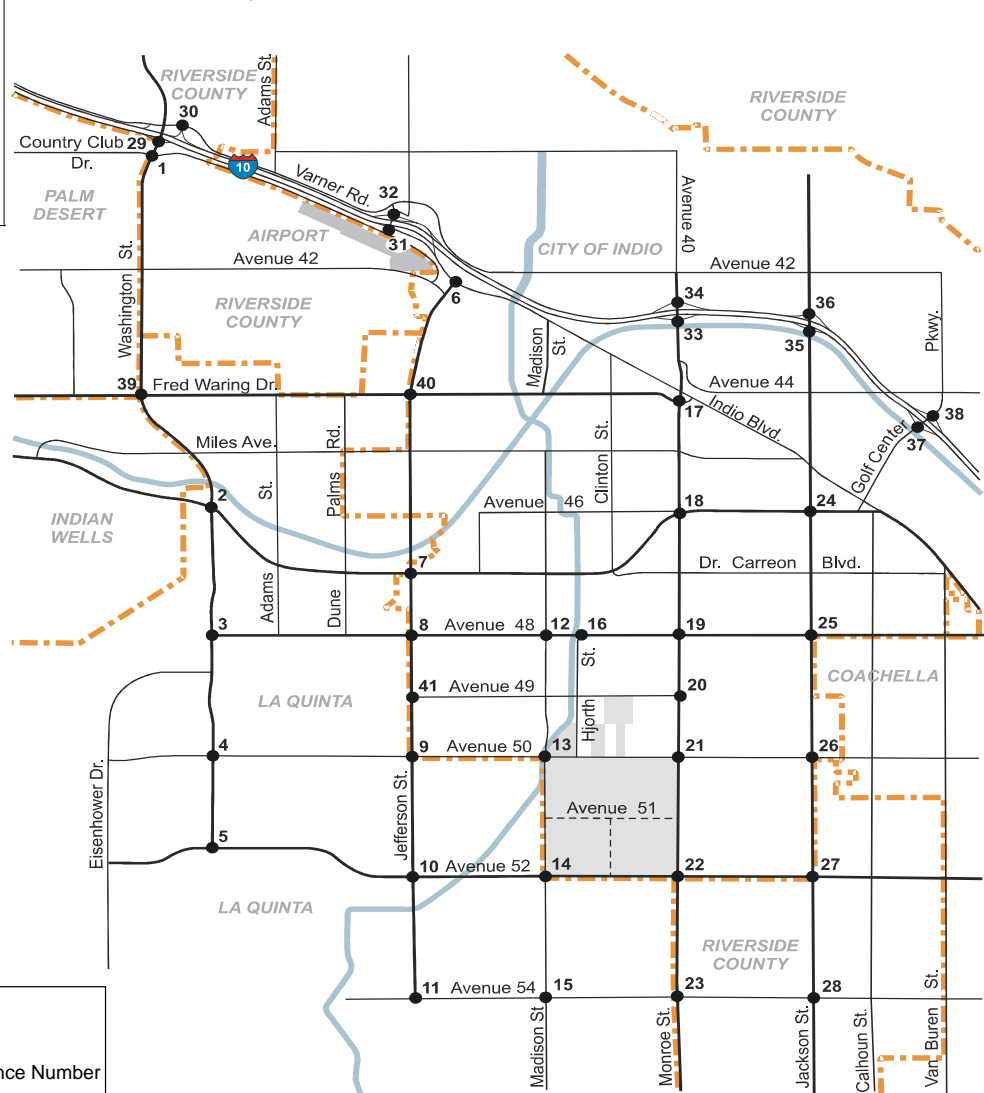
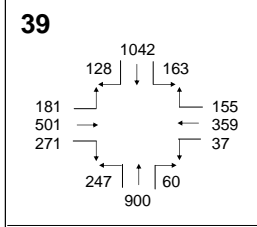
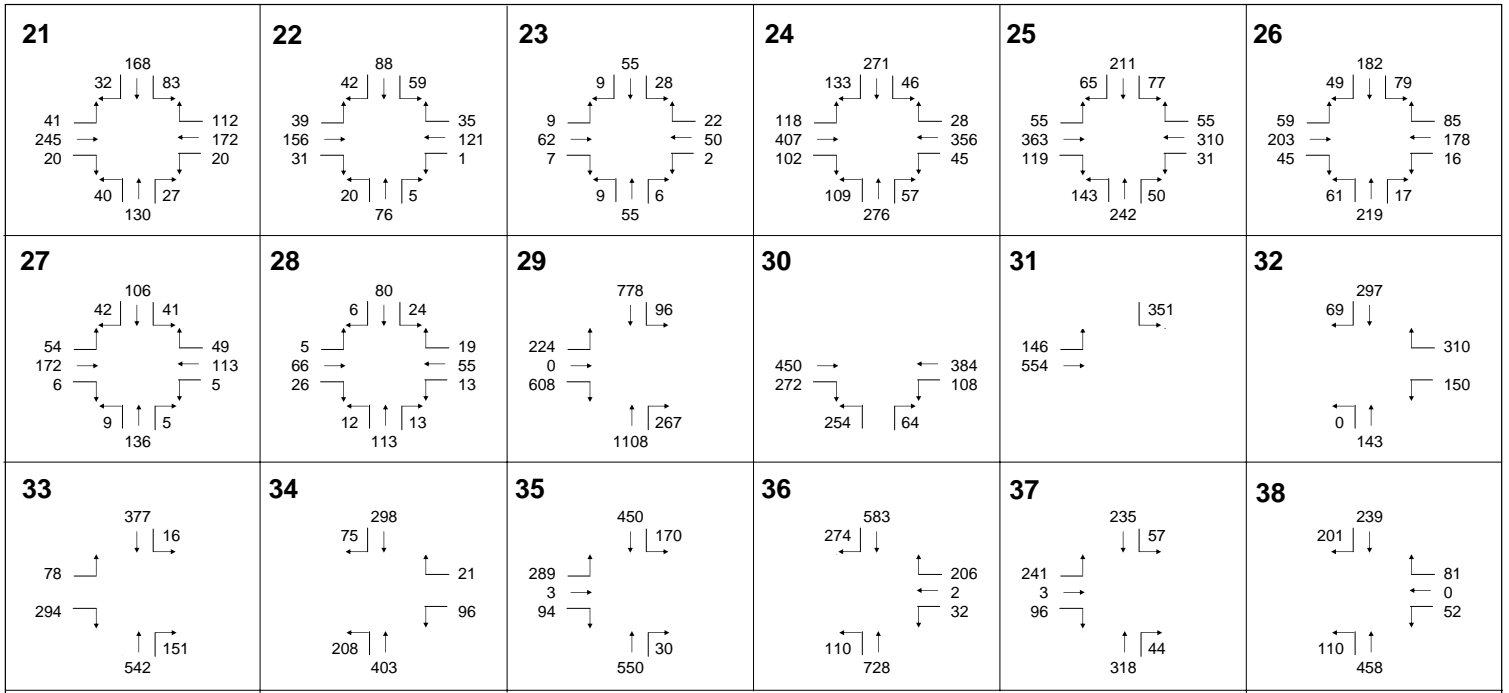
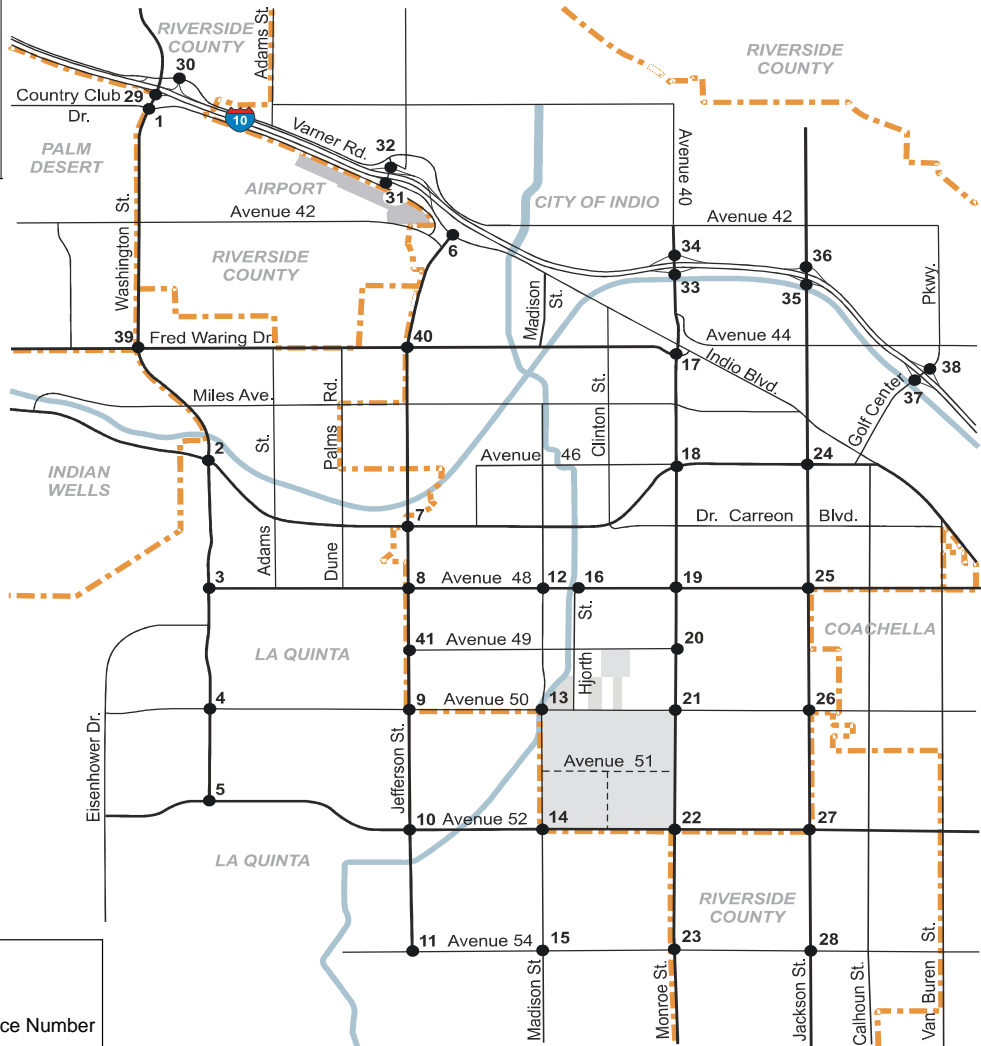
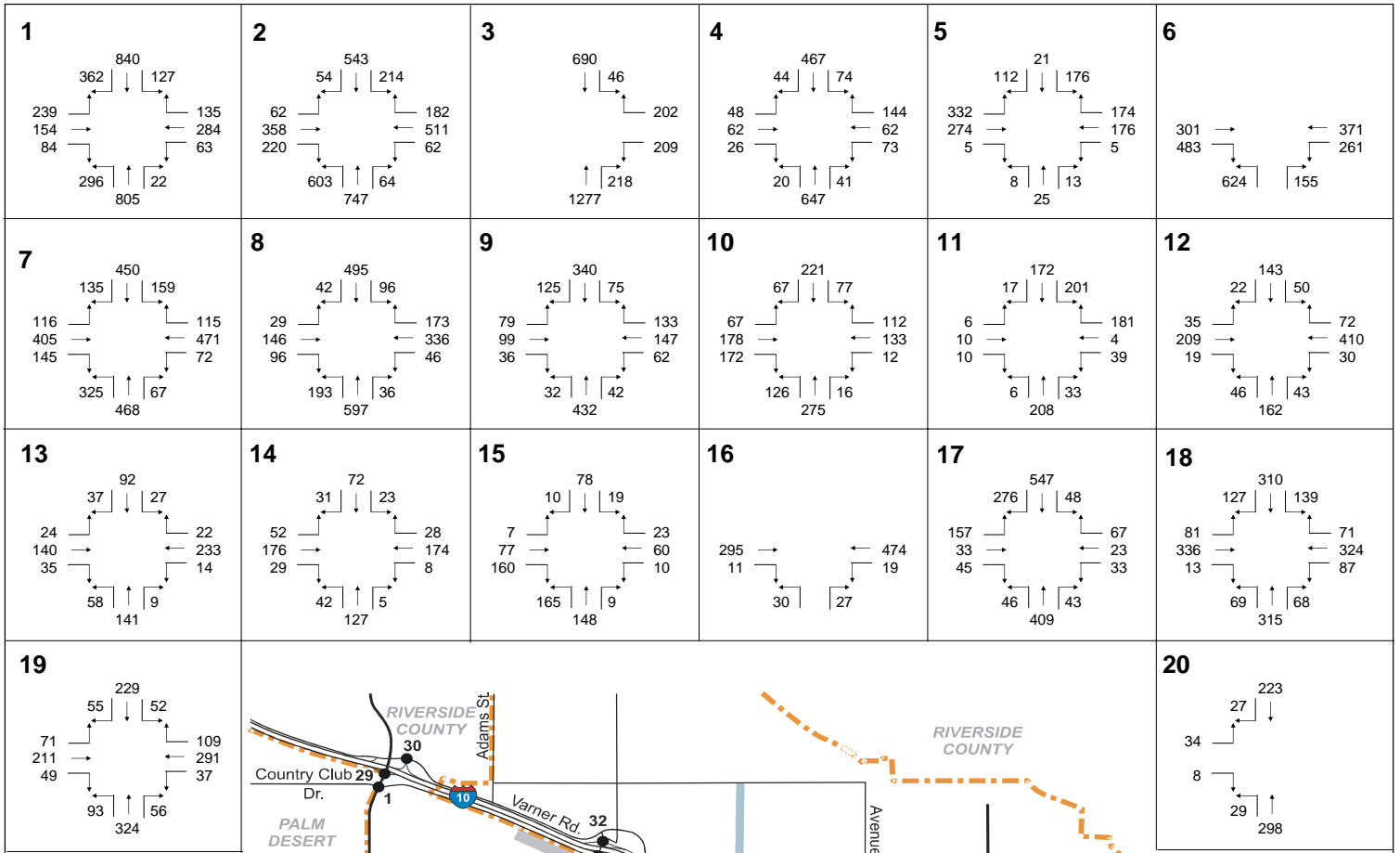


Fig II-6b cont.  
 Existing Conditions – No Event – Traffic Volumes – Saturday 2-3 PM



**Legend**

- Study Intersection
- X Intersection Reference Number
- xx ▶ Intersection Turn Volume

North Arrow

Not to Scale

Fig II-6c  
Existing Conditions – No Event – Traffic Volumes – Monday 8-9 AM

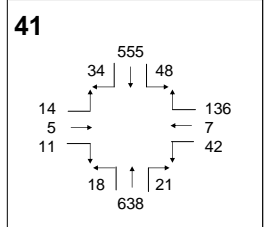
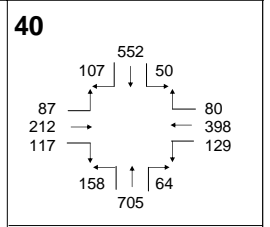
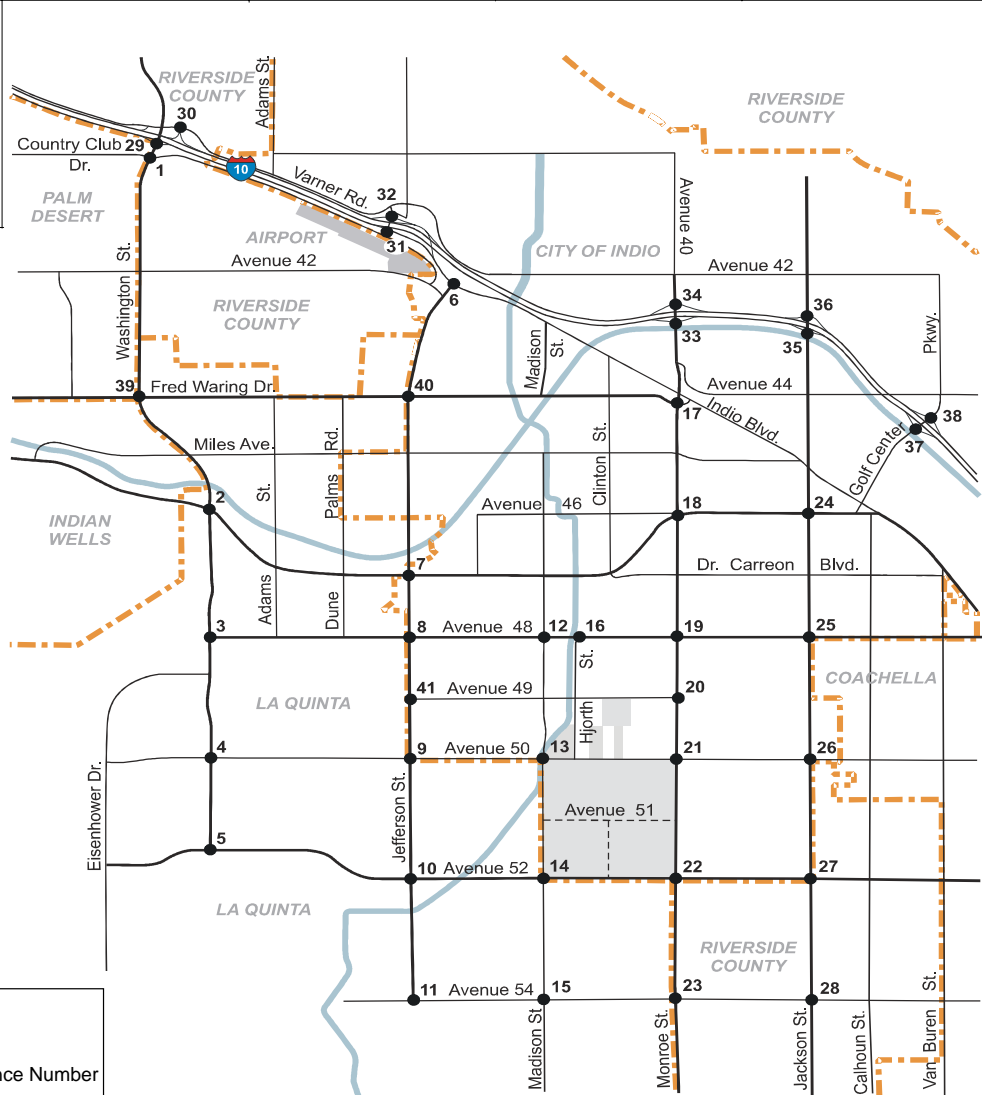
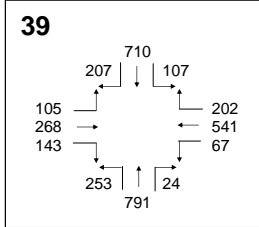
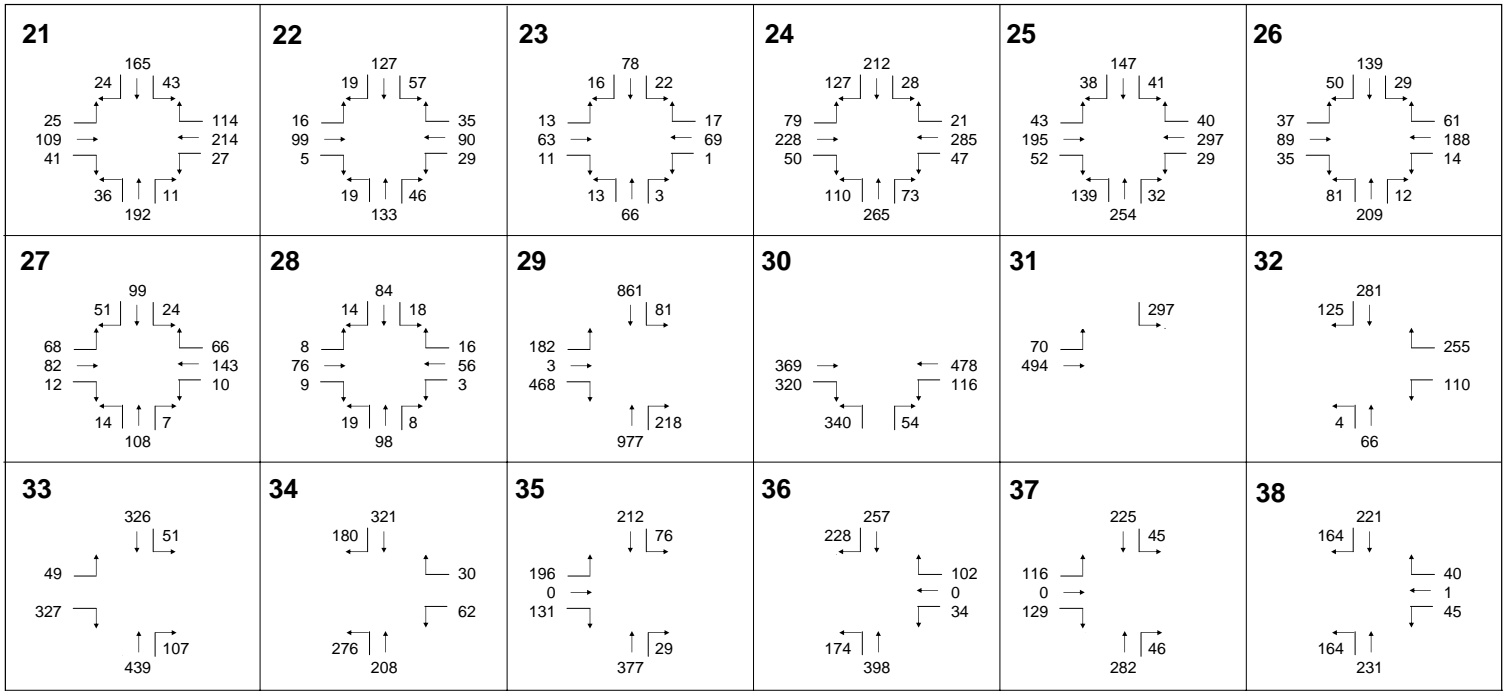


Fig II-6c cont.  
Existing Conditions – No Event – Traffic Volumes – Monday 8-9 AM

The City of Palm Desert has established<sup>1</sup> a target Level of Service of LOS “C”. For peak operating periods, LOS “D” is provisionally considered the generally acceptable service level.

The California Department of Transportation (Caltrans) has set the target Level of Service for signalized intersections and ramp terminals<sup>2</sup> as the transition between LOS “C” and LOS “D”, which effectively sets the target level of service as (not exceeding) LOS C. However Caltrans acknowledges that this may not always be feasible. If an existing State highway facility is operating at less than the appropriate target LOS, then the Caltrans guidelines state that the existing LOS should be maintained.

The most common performance standard in the study area is therefore LOS D, so this is the standard used for describing traffic conditions in this report for conditions without the project (see also Chapter V for a more detailed discussion of significance thresholds for project impacts). It should be noted that these performance standards apply to normal day-to-day roadway operating conditions. There are no performance standards for temporary events which may have temporary higher peak traffic levels and for which traffic delays and queues are typically expected for short periods of time. Application of the normal standards is therefore a conservative approach to the analysis.

Intersection Conditions – Level of Service

The intersection level of service analysis is summarized in Table II-3, which shows the calculated vehicle delay and associated level of service for each of the study intersections for each of the three analysis hours. The intersection levels of service are also shown in Figure II-7.

*Friday: 3:00 – 4:00 PM*

As shown in Table II-3 and Figure II-7a, all intersections in the study area are currently operating at LOS D or better, with two exceptions which are:

- 13. Madison Street & Avenue 50 LOS E
- 34. Monroe Street & I-10 Westbound Freeway Ramps LOS F

The number of intersections operating by each level service category are as follows:

- LOS A 4 intersections
- LOS B 11 intersections

<sup>1</sup> Program 1.A of the Goals, Policies and Programs section of the City of Palm Desert General Plan Circulation Element.

<sup>2</sup> California Department of Transportation - Guide for the Preparation of Traffic Impact Studies, 2003.

LOS C	19 intersections
LOS D	5 intersections
LOS E	1 intersections
LOS F	1 intersections

*Saturday: 2:00 – 3:00 PM*

As shown in Table II-3 and Figure II-7b, all intersections in the study area are currently operating at LOS D or better, with one exception which is:

34. Monroe Street & I-10 Westbound Freeway Ramps      LOS E

The number of intersections operating by each level service category are as follows:

LOS A	6 intersections
LOS B	14 intersections
LOS C	19 intersections
LOS D	1 intersections
LOS E	1 intersections
LOS F	0 intersections

*Monday: 8:00 – 9:00 AM*

As shown in Table II-3 and Figure II-7c, all intersections in the study area are currently operating at LOS D or better.

The number of intersections operating by each level service category are as follows:

LOS A	7 intersections
LOS B	15 intersections
LOS C	17 intersections
LOS D	2 intersections
LOS E	0 intersections
LOS F	0 intersections

*Summary*

Virtually all intersections in the study area and all intersections in La Quinta are currently operating at generally acceptable levels of service (generally LOS D) during the analysis hours. One intersection in the City of Indio exceeds current standards during the Friday 3:00 to 4:00 pm hour, which is the intersection of Madison Street & Avenue 50 which operates at LOS E. Neither of the two County intersections currently exceed the County’s LOS

**Table II-3 Existing Conditions - Intersection Level of Service - 2012 No Festival**

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	41.7	D	34.8	C	37.2	D
2	Washington St & Hwy-111	LQ	Signalized	48.5	D	37.1	D	33.4	C
3	Washington St & Ave 48	LQ	Signalized	23.4	C	18.5	B	16.0	B
4	Washington St & Ave 50	LQ	Signalized	21.9	C	20.2	C	23.7	C
5	Washington St & Ave 52	LQ	Signalized	25.7	C	26.3	C	26.7	C
6	Jefferson St & Indio Blvd	I	Signalized	23.2	C	18.0	B	19.7	B
7	Jefferson St & Hwy-111	LQ	Signalized	31.4	C	29.8	C	30.5	C
8	Jefferson St & Ave 48	LQ	Signalized	32.1	C	30.4	C	30.4	C
9	Jefferson St & Ave 50	LQ	Signalized	33.0	C	32.1	C	31.0	C
10	Jefferson St & Ave 52	LQ	Roundabout	2.2	A	2.0	A	2.0	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	13.0	B	12.9	B	10.3	B
12	Madison St & Ave 48	I	Signalized	25.2	C	24.7	C	22.9	C
13	Madison St & Ave 50	I	4-Way Stop	38.9	E	16.6	C	11.3	B
14	Madison St & Ave 52	LQ	4-Way Stop	15.5	C	11.8	B	11.0	B
15	Madison St & Ave 54	LQ	4-Way Stop	12.6	B	10.5	B	9.9	A
16	Hjorth St & Ave 48	I	Signalized	5.9	A	5.1	A	7.5	A
17	Monroe St & Fred Waring Dr.	I	Signalized	25.0	C	23.9	C	20.2	C
18	Monroe St & Hwy-111	I	Signalized	33.6	C	32.3	C	30.4	C
19	Monroe St & Ave 48	I	Signalized	27.9	C	27.2	C	25.6	C
20	Monroe St & Ave 49	I	2-Way Stop	13.1	B	11.5	B	11.5	B
21	Monroe St & Ave 50	I	Signalized	19.9	B	16.9	B	17.8	B
22	Monroe St & Ave 52	I	4-Way Stop	12.3	B	10.0	A	10.3	B
23	Monroe St & Ave 54	LQ	4-Way Stop	9.9	A	8.4	A	8.6	A
24	Jackson St & Hwy-111	I	Signalized	32.3	C	29.7	C	30.9	C
25	Jackson St & Ave 48	I	Signalized	27.1	C	26.5	C	26.6	C
26	Jackson St & Ave 50	I	4-Way Stop	34.1	D	15.1	C	11.6	B
27	Jackson St & Ave 52	CR	4-Way Stop	12.6	B	10.1	B	9.6	A
28	Jackson St & Ave 54	CR	4-Way Stop	10.3	B	8.3	A	8.2	A
29	I-10 EB Ramps & Washington St	C	Signalized	31.9	C	26.0	C	23.2	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	12.9	B	12.3	B	12.7	B

**Table II-3 Existing Conditions - Intersection Level of Service - 2012 No Festival**

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	33.8	D	16.7	C	13.0	B
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	17.5	C	12.1	B	10.9	B
33	I-10 EB Ramps & Monroe St	C	2-Way Stop	32.4	D	18.8	C	16.8	C
34	I-10 WB Ramps & Monroe St	C	2-Way Stop	125.6	F	37.9	E	34.4	D
35	I-10 EB Ramps & Jackson St	C	Signalized	21.2	C	15.7	B	14.2	B
36	I-10 WB Ramps & Jackson St	C	Signalized	8.4	A	7.4	A	8.7	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	15.5	B	15.0	B	13.4	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.1	B	10.9	B	12.3	B
39	Washington St & Fred Waring Dr	LQ	Signalized	34.7	C	30.6	C	29.6	C
40	Jefferson St & Fred Waring Dr	I	Signalized	27.6	C	27.0	C	26.4	C
41	Jefferson St & Ave 49	LQ	Signalized	16.3	B	16.1	B	21.7	C

Note:

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans



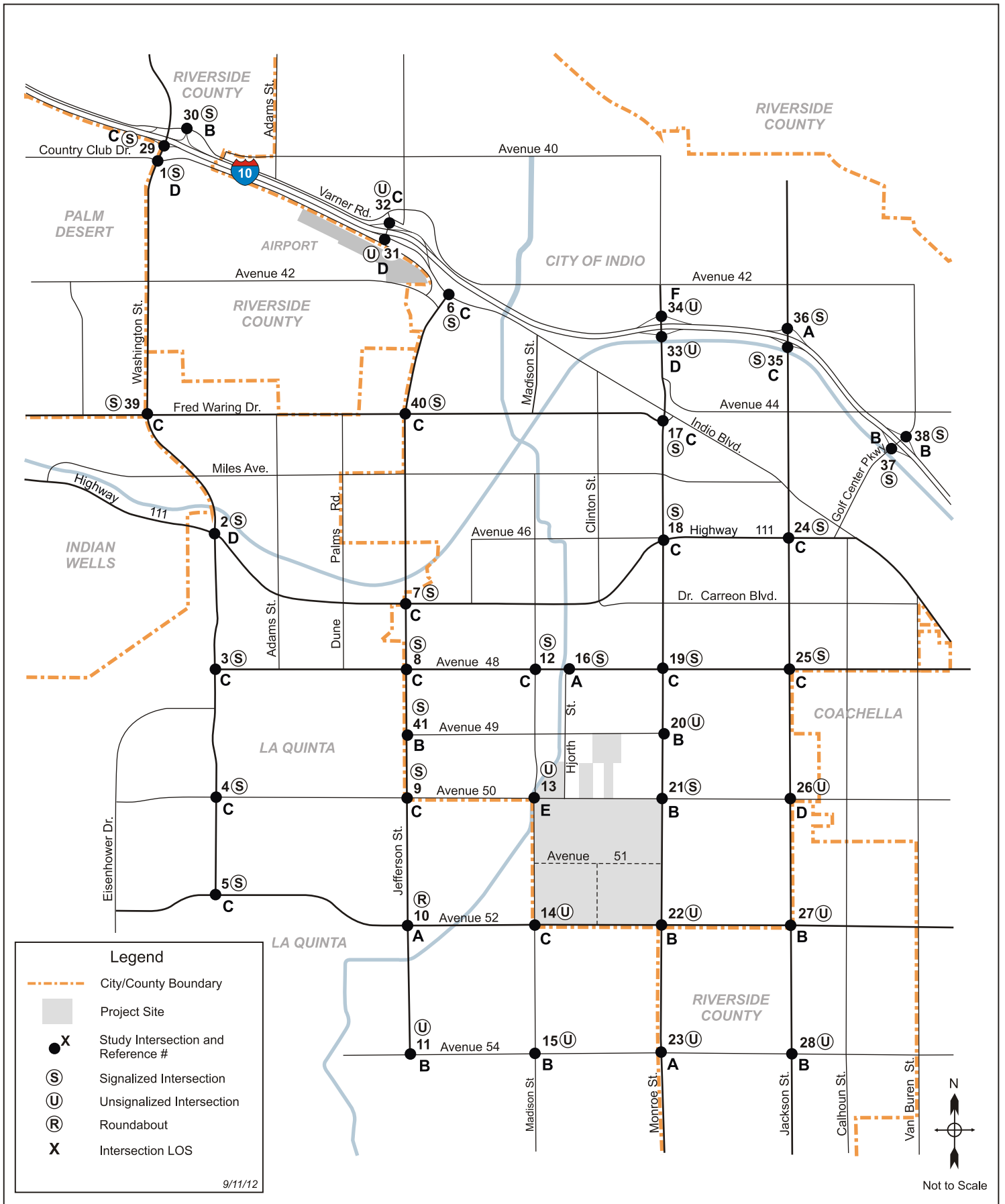


Figure II-7a  
 Existing Conditions - No Event - Intersection Level of Service - Friday 3:00-4:00 PM

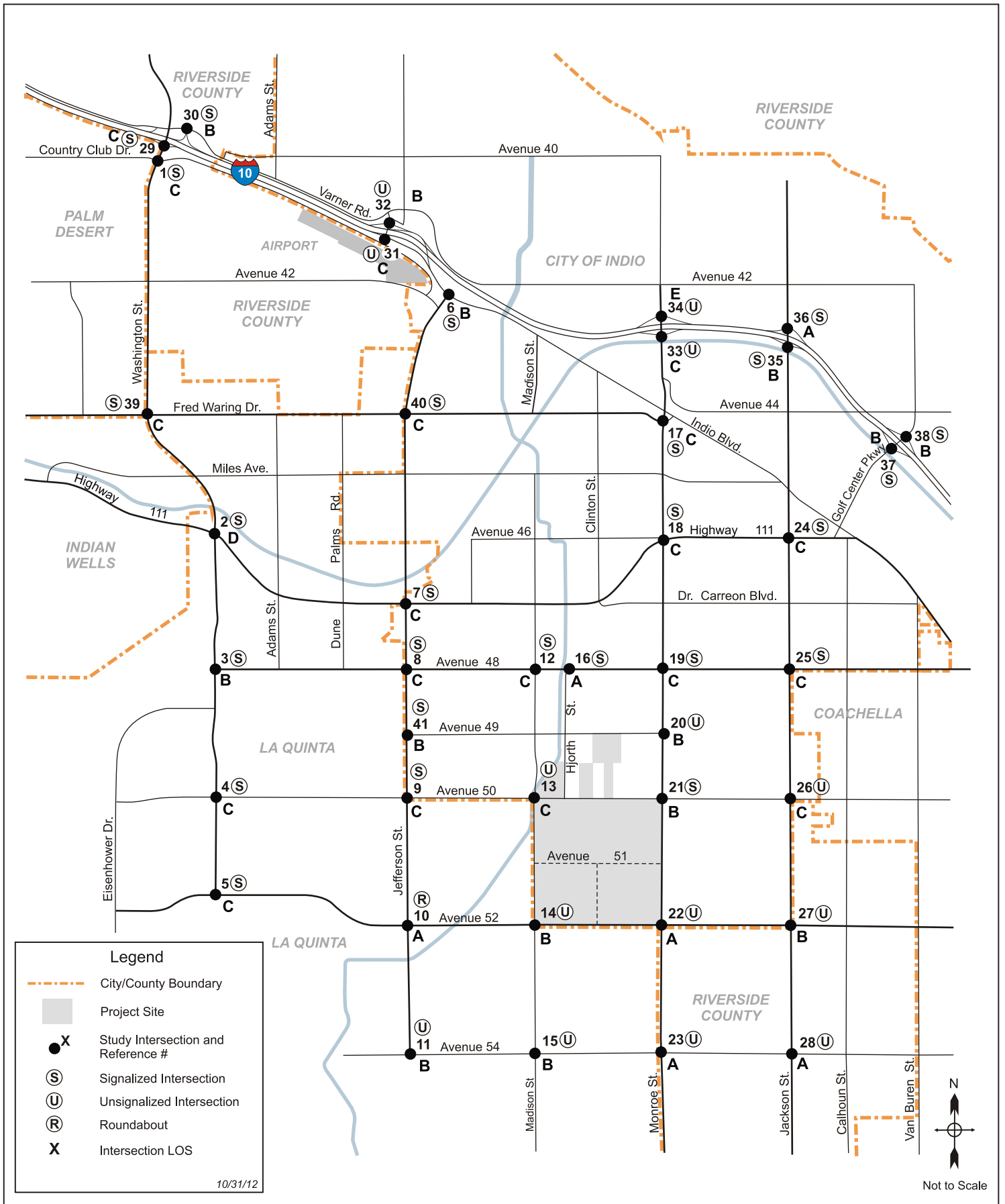


Figure II-7b  
 Existing Conditions - No Event - Intersection Level of Service - Saturday 2:00-3:00 PM

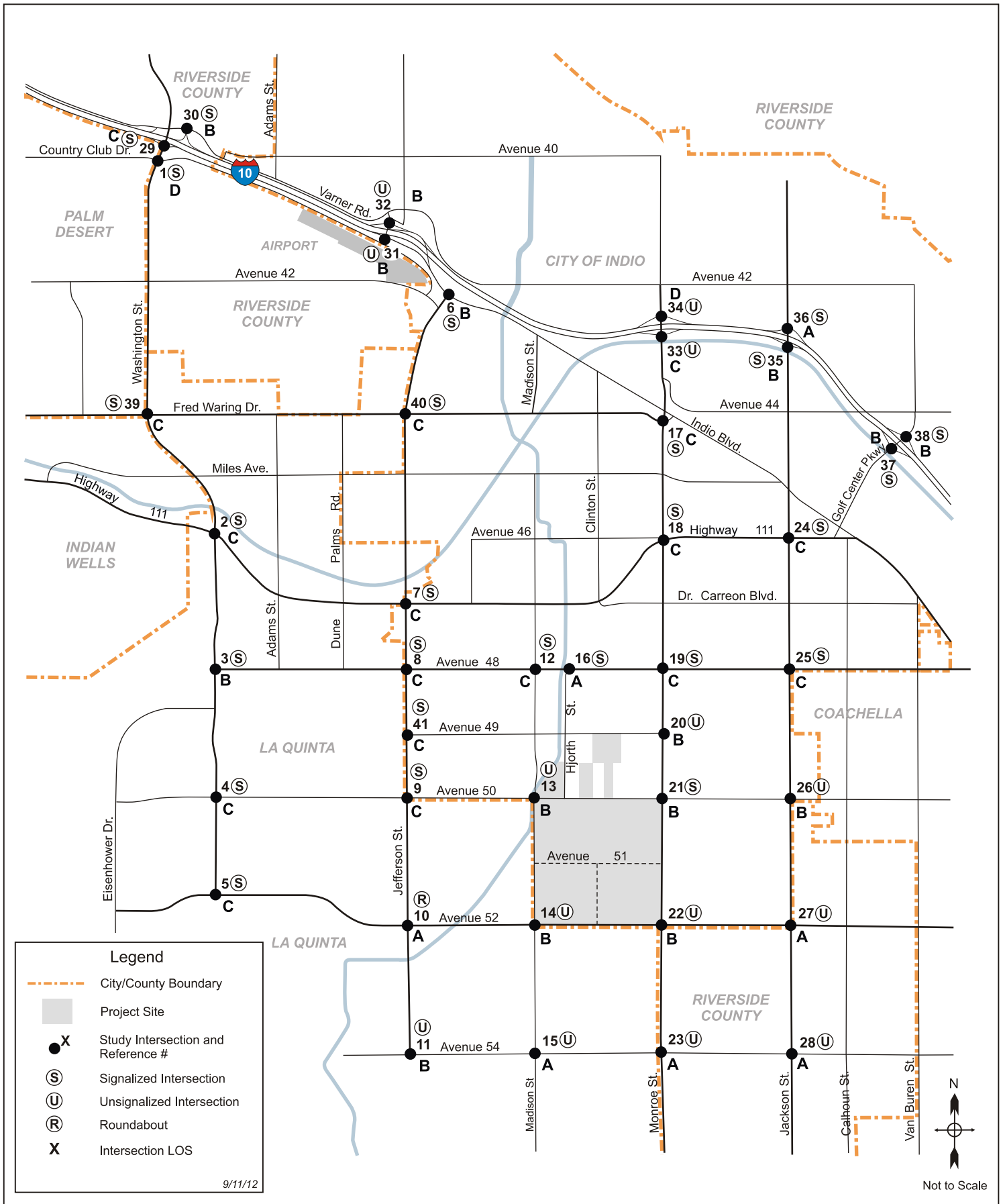


Figure II-7c  
 Existing Conditions - No Event - Intersection Level of Service - Monday 8:00-9:00 AM

standards. Three ramp intersections currently exceed Caltrans standards – two, the I-10 eastbound ramps at Indio Boulevard and the I-10 eastbound ramps at Monroe Street just exceed the standard and operate at LOS D during the Friday 3:00 to 4:00 pm hour, and one, the I-10 westbound ramps at Monroe Street, which operates at LOS F during the Friday 3:00 to 4:00 pm hour, at LOS E during the Saturday 2:00 to 3:00 pm hour, and at LOS D during the Monday 8:00 to 9:00 am hour.

## II.6 Existing Conditions – Public Transit

Transit service in the study area is provided by Sunline Transit Agency. No bus lines directly serve the project site but six bus lines do traverse the general study area. These are shown in Figure II-8.

Line 70 runs north/south between Bermuda Dunes in unincorporated Riverside County and La Quinta Cove in La Quinta mainly via Washington Street. It operates with 45 minute headways on weekdays and 90 minute headways on Saturdays and Sundays. The headways do not differ between peak and base periods.

Line 111 runs east/west between Palm Springs and Indio via Highway 111. It operates with 20 minute headways on weekdays and 40 minute headways on Saturdays and Sundays. The headways do not differ between peak and base periods.

Line 80 runs in a southbound loop through central Indio via stretches of Avenue 44, Monroe Street, Clinton Street, Dr. Carreon Boulevard, Indio Boulevard, and Jackson Street. It operates with 60 minute headways every day. The headways do not differ between peak and base periods.

Line 81 runs in a northbound loop through central Indio via stretches of Avenue 44, Monroe Street, Dr. Carreon Boulevard., Jackson Street, and Indio Boulevard. It operates with 60 minute headways every day. The headways do not differ between peak and base periods.

Line 90 runs east/west between Indio and Coachella via stretches of Calhoun Street, Van Buren Street, Avenue 50 and others. It operates with 35 minute headways every day. The headways do not differ between peak and base periods.

Line 91 runs east/west between Indio and Oasis in unincorporated Riverside County via stretches of Indio Boulevard, Harrison Street, Airport Boulevard, Avenue 66, and others. It operates with 60 minute headways on weekdays and approximately 80 minute headways on Saturdays and Sundays. The headways do not differ between peak and base periods.

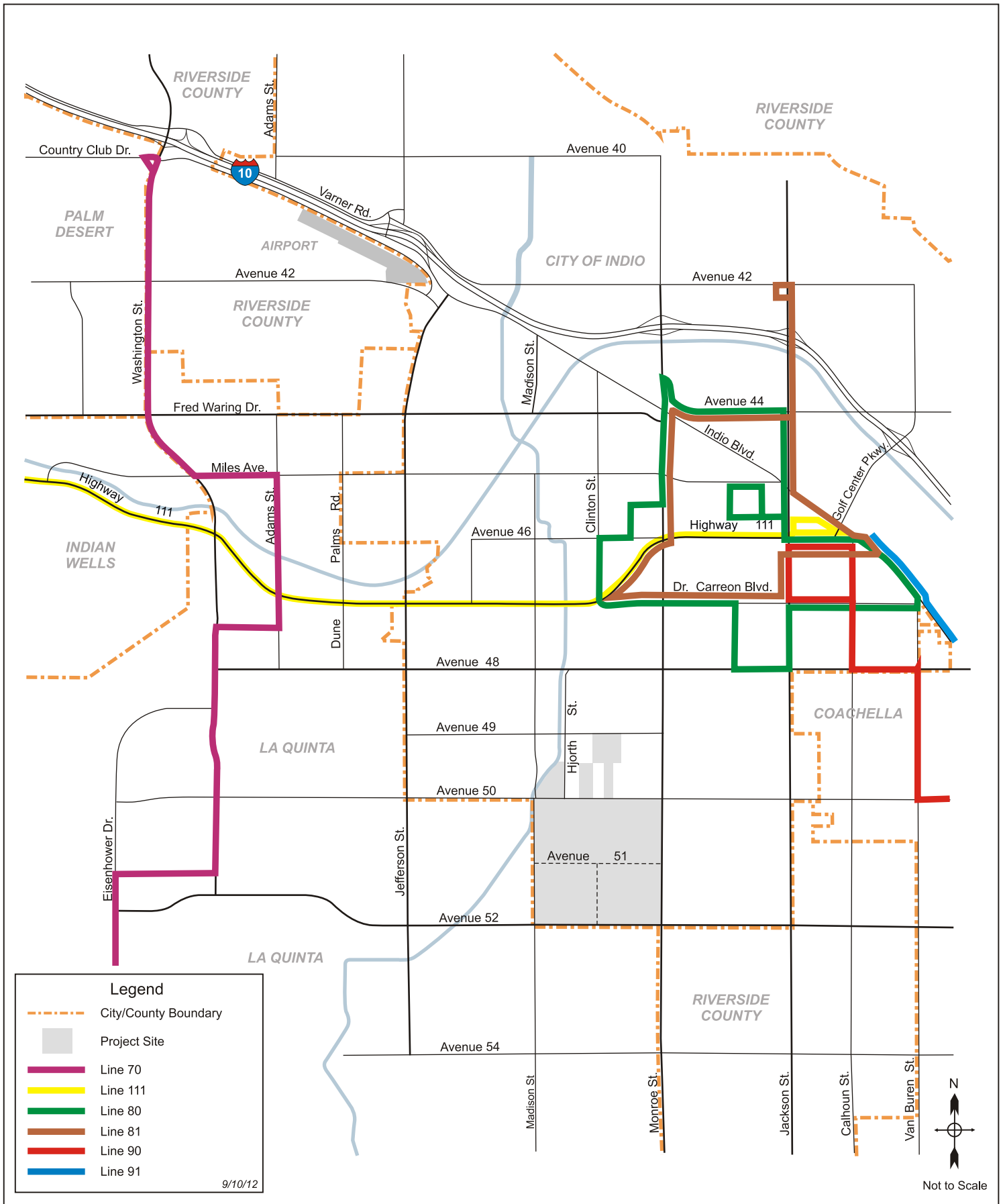


Figure II-8  
Public Transit Service

## II.7 Existing Conditions – Freeways

Regional access to the Project Site is provided by the I-10 Freeway which is located in the northern part of the Study Area, and runs approximately north-west to south-east. I-10 connects westward through the northern Coachella Valley to Palm Springs, San Bernardino and Los Angeles, and eastwards to Blythe, Phoenix and eastward through the southern United States. In the study area, it is a six-lane freeway and there are interchanges with surface arterial streets at Washington Street, Jefferson Street, Monroe Street, Jackson Street, and Golf Center Parkway (see Figure II-1).

The analysis of freeways addresses freeway mainline locations (segments), and freeway off-ramps and on-ramps that would be used by Proposed Project traffic.

### Freeway Segments

Six freeway mainline locations on I-10 were analyzed, from west of Washington Street to east of Golf Center Parkway, as shown in Figure II-9, and listed below:

1. West of Washington Street
2. Between Washington Street & Jefferson Street/Indio Boulevard
3. Between Jefferson Street/Indio Boulevard & Monroe Street
4. Between Monroe Street & Jackson Street
5. Between Jackson Street & Golf Center Parkway
6. East of Golf Center parkway

Existing traffic volumes on the freeway segments for the three analysis time periods were obtained from *Caltrans Annual Average Daily Traffic Volume Report* and the *Caltrans Peak Hour Volume Data Report*. The daily traffic volumes were factored by Caltrans peak hour and directional factors for a weekday afternoon, weekend afternoon and weekday morning to obtain existing directional volumes for the Friday 3:00 to 4:00 pm, Saturday 2:00 to 3:00 pm and Monday 8:00 to 9:00 am hours respectively.

The level of service for freeway segments is based on the total volume of traffic, or demand, traveling along a freeway segment compared to the capacity of that specific location. A lane capacity of 2,000 vehicles per hour per lane (vphpl) was used to calculate the total capacity of the freeway segments that were analyzed. The overall capacity of a specific freeway segment was calculated by multiplying the individual capacities by the total number of lanes in that segment. Freeway level of service (LOS) is then determined by comparing the total number of vehicles traveling along a specific freeway segment to the capacity of that segment as calculated above. These demand/capacity (D/C) ratios are then rated for levels of service using the definitions shown in Table II-4.

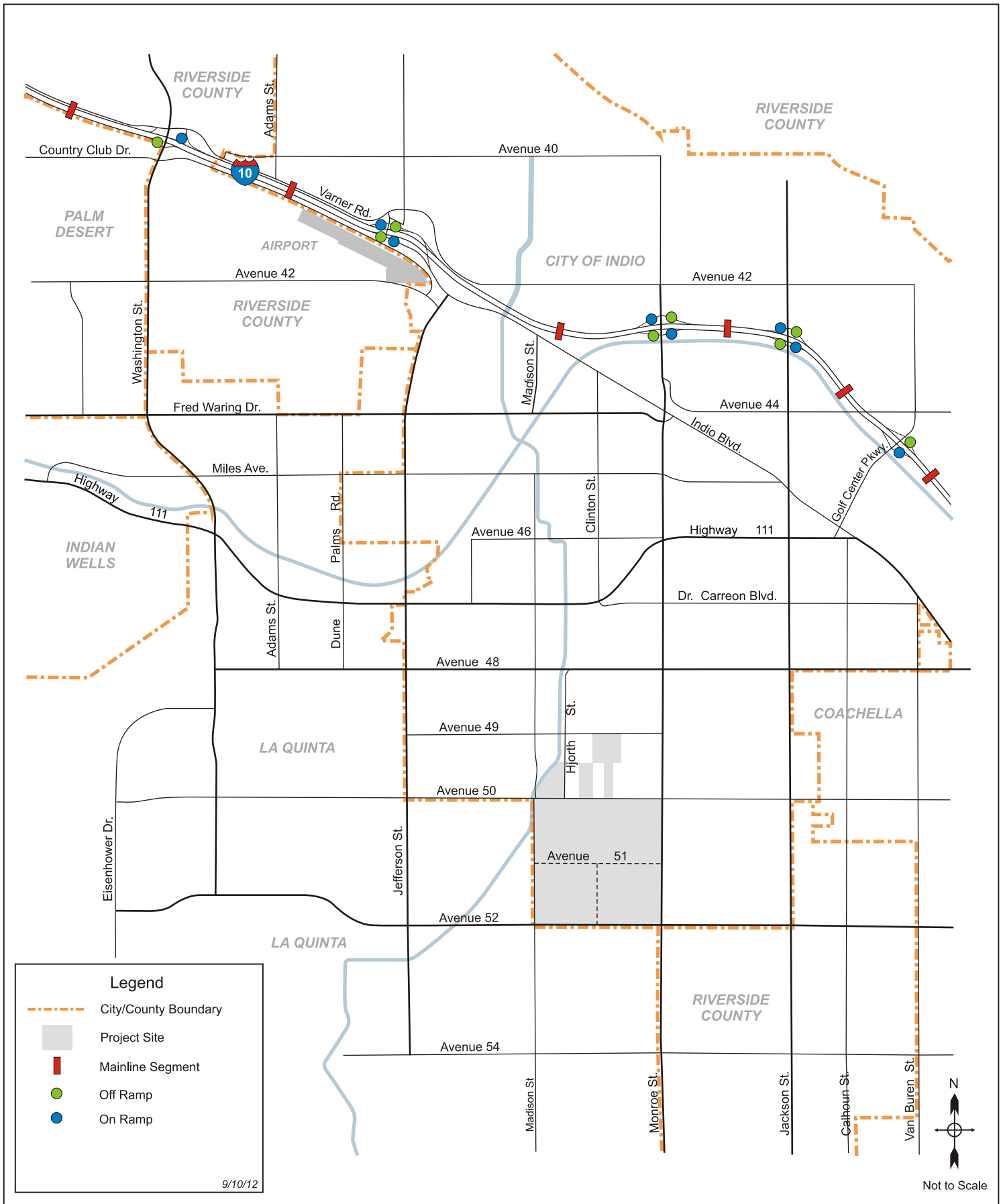


Figure II-9  
Freeway Analysis Locations

**Table II-4 Level of Service Definitions for Freeway Segments**

Level of Service	Volume/Capacity Ratio	Flow Conditions
A	0.000 – 0.300	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed.
B	0.301 – 0.500	Stable traffic flow, speed becoming slightly restricted. Low restriction on maneuverability.
C	0.501 – 0.710	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Density increasing.
D	0.711 – 0.890	Approaching unstable flow. Speeds tolerable but subject to sudden and considerable variation. Less maneuverability and driver comfort.
E	0.891 – 1.000	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort.
F	> 1.000	Forced traffic flow. Speed and flow may be greatly reduced with high densities.

Source: *Guide for the Preparation of Traffic Impact Studies*, Caltrans, December 2002.



Existing traffic volumes on these freeway segments, and corresponding D/C ratios, are shown in Table II-5 for each of the analysis hours. Most all existing freeway segment level of service conditions range from LOS A to LOS C in the study area for the three analysis hours, with the majority of freeway segments operating at LOS B or LOS C. The two exceptions are eastbound I-10 west of Washington Street which operates at LOS D in the Friday 3:00pm to 4:00pm hour and in the Saturday 2:00pm to 3:00pm hour.

### Freeway Off-Ramps

A total of 8 freeway off-ramps were identified for analysis as locations that could be used by Proposed Project traffic. These locations are shown in Figure II-9, and listed below:

#### From the West on I-10

- 1 Washington Street Eastbound Off-Ramp
2. Jefferson Street/Indio Boulevard Eastbound Off-Ramp
3. Monroe Street Eastbound Off-Ramp
4. Jackson Street Eastbound Off-Ramp

#### From the East in I-10

5. Golf Center Parkway Westbound Off-Ramp
6. Jackson Street Westbound Off-Ramp
7. Monroe Street Westbound Off-Ramp
8. Jefferson Street/Indio Boulevard Westbound Off-Ramp

Existing traffic volumes on these freeway off-ramps were obtained from traffic counts conducted as part of the overall traffic count program for the study described earlier. Analysis of ramp traffic conditions was based on a queue analysis at the end of the ramp intersection, using the Highway Capacity Manual (HCM) 2000 Operations methodology, and determining the 95<sup>th</sup> percentile queue length (the vehicle queue length that would be exceeded only 5% of the time, which is a common measure used to evaluate queues<sup>1,2</sup>). The storage capacity of each off-ramp (between the end-of-ramp intersections and the mainline freeway) was determined, and the queue length compared to this storage capacity to determine if there is sufficient storage capacity on the ramp or if the queue would back into the mainline freeway.

The off-ramp analysis is summarized in Table II-6, which shows that vehicle queues do not currently exceed the ramp storage lengths at any of the off-ramp locations.

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<sup>1</sup> For four-way stop intersections, the average queue length is shown.

<sup>2</sup> Using 22 feet/car for queue length calculations.

**Table II-5 Existing Conditions - Freeway Segment Level of Service - 2012 No Festival**

No.	Location	Notes	DIR	No of Lanes	Capacity (veh/hr)	Existing - Friday 3-4 PM <sup>2</sup>		Existing - Saturday 2-3 PM <sup>2</sup>		Existing - Monday 8-9 AM <sup>2</sup>				
						Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	1	EB	3 G	6,000	4,453	0.742	D	4,415	0.736	D	3,884	0.647	C
			WB	3 G	6,000	3,764	0.627	C	3,020	0.503	C	2,978	0.496	B
2	I - 10 b/w Washington Street and Jefferson Street	1	EB	3 G	6,000	3,964	0.661	C	3,930	0.655	C	3,457	0.576	C
			WB	3 G	6,000	3,351	0.558	C	2,688	0.448	B	2,651	0.442	B
3	I - 10 b/w Jefferson Street and Monoe Street	1	EB	3 G	6,000	3,230	0.538	C	3,202	0.534	C	2,817	0.469	B
			WB	3 G	6,000	2,730	0.455	B	2,190	0.365	B	2,160	0.360	B
4	I - 10 b/w Monoe Street and Jackson Street	1	EB	3 G	6,000	2,936	0.489	B	2,911	0.485	B	2,561	0.427	B
			WB	3 G	6,000	2,482	0.414	B	1,991	0.332	B	1,963	0.327	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	1	EB	3 G	6,000	2,691	0.449	B	2,668	0.445	B	2,347	0.391	B
			WB	3 G	6,000	2,275	0.379	B	1,825	0.304	B	1,800	0.300	A
6	I - 10 east of Golf Center Pkwy	1	EB	3 G + 1 A	7,000	2,496	0.357	B	2,474	0.353	B	2,176	0.311	B
			WB	4 G	8,000	2,110	0.264	A	1,693	0.212	A	1,669	0.209	A

Notes:

- G - General Purpose Lane
- A - Auxilliary Lane

1. Freeway AADT from Caltrans 2011 AADT Traffic Volumes.

2. Peak hour and directional volumes obtained by using appropriate K & D factors from Caltrans' 2010 Peak Hour Volume Data Report .

**Table II-6 Existing Conditions - Freeway Off-Ramp Analysis - 2012 No Festival**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Existing Conditions											
					Friday 3-4 PM			Saturday 2-3 PM			Monday 8-9 PM					
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length			
<u>From West on I-10</u>																
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	288	176	No	224	132	No	185	110	No			
		EB RT	2	1,025	773	726	No	608	462	No	468	352	No			
		RAMP TOTAL	4	2,090	1,061	902	No	832	594	No	653	462	No			
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	173	88	No	146	44	No	70	22	No			
		EB TH	1	705	759	88	No	554	22	No	494	22	No			
		RAMP TOTAL	2	1,410	932	176	No	700	66	No	564	44	No			
3 Monroe Street EB Off ramp	2-Way Stop	EB LT/TH	1	695	93	88	No	78	44	No	49	22	No			
		EB RT	1	695	325	88	No	294	66	No	327	66	No			
		RAMP TOTAL	2	1,390	418	176	No	372	110	No	376	88	No			
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	320	374	No	292	286	No	196	176	No			
		EB RT	1	775	191	154	No	94	66	No	131	110	No			
		RAMP TOTAL	2	1,550	511	528	No	386	352	No	327	286	No			
<u>From East on I-10</u>																
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	98	110	No	52	44	No	46	44	No			
		WB RT	1	355	96	110	No	81	88	No	40	44	No			
		RAMP TOTAL	2	710	194	220	No	133	132	No	86	88	No			
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	56	66	No	34	44	No	34	44	No			
		WB RT	1	740	193	0	No	206	0	No	102	0	No			
		RAMP TOTAL	2	1,480	249	66	No	240	44	No	136	44	No			
7 Monroe Street WB Off ramp	2-Way Stop	WB LT/TH	1	685	99	132	No	96	66	No	62	44	No			
		WB RT	1	685	41	22	No	21	22	No	30	22	No			
		RAMP TOTAL	2	1,370	140	154	No	117	88	No	92	66	No			
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	176	66	No	150	22	No	110	22	No			
		WB RT	1	503	478	88	No	310	44	No	255	22	No			
		RAMP TOTAL	2	1,006	654	154	No	460	66	No	365	44	No			

### Freeway On-Ramps

A total of 8 freeway on-ramp locations were identified for analysis as locations that could be used by Proposed Project traffic. These locations are shown in Figure II-9 and listed below:

#### To I-10 West

1. Washington Street Westbound On-Ramp from Varner Road
2. Jefferson Street/Indio Boulevard Westbound On-Ramp
3. Monroe Street Westbound On-Ramp
4. Jackson Street Westbound On-Ramp

#### To I-10 East

5. Golf Center Parkway Eastbound On-Ramp
6. Jackson Street Eastbound On-Ramp
7. Monroe Street Eastbound On-Ramp
8. Jefferson Street/Indio Boulevard Eastbound On-Ramp

Existing traffic volumes on these freeway on-ramps were obtained from traffic counts conducted as part of the overall traffic count program described earlier. The analysis compares the traffic volumes on the on-ramps to the ramp capacities (in accordance with Caltrans methodology which identifies the maximum capacity of an on-ramp at 900 vehicles per hour per lane).

The on-ramp analysis is summarized in Table II-7, which shows that vehicle volumes do not currently exceed the on-ramp capacities at any of the on-ramp locations.

**Table II-7 Existing Conditions - Freeway On-Ramp Analysis - 2012 No Festival**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Existing Conditions					
			Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
			Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity
<u>To I-10 West</u>								
1 Washington Street WB On ramp	1	900	466	No	380	No	436	No
2 Jefferson Street WB On ramp	1	900	86	No	69	No	129	No
3 Monroe Street WB On ramp	1	900	386	No	283	No	456	No
4 Jackson Street WB On ramp	1	900	432	No	386	No	402	No
<u>To I-10 East</u>								
5 Golf Center Pkwy EB On ramp	1	900	151	No	104	No	91	No
6 Jackson Street EB On ramp	1	900	215	No	203	No	105	No
7 Monroe Street EB On ramp	1	900	205	No	167	No	158	No
8 Jefferson Street EB On ramp	1	900	145	No	107	No	96	No

Notes:

1. Number of lanes on ramp.
2. Capacity based on 900 veh/hr/ln.
3. Traffic volumes from 2012 intersection counts.

## **III. Existing Conditions –With 2012 Festival**

### **III.1 Introduction**

This chapter is provided for informational purposes. To provide the most conservative analysis, the existing conditions baseline in this traffic study is the no-festival condition. However, the Coachella Music and Arts Festival (Coachella Festival) and the Stagecoach California's Country Music Festival (Stagecoach Festival) have been held annually since 1999 and 2007, respectively, in the City of Indio on the grounds of the Empire and Eldorado Polo Clubs and adjacent properties. The festivals have operated under various special event agreements issued by the City of Indio. In addition, activities occur at the Empire Polo Club and Eldorado Polo Club throughout the year.

This chapter describes the existing use activity on the Project Site, including the festivals held in 2012, to provide background information to inform the impact analysis in Chapter IV.

### **III.2 The Project Site**

The location of the Project Site is shown in Figure III-1. The main site is bounded by Madison Street to the west, Avenue 50 to the north, Monroe Street to the east and Avenue 52 to the south. The site also includes additional areas north of Avenue 50 and south of Avenue 49, and east of Madison Street and west of Monroe Street as also shown in Figure III-1. Primary access to the Empire Polo Club is from Avenue 51 at Monroe Street. Primary access to the Eldorado Polo Club is from Avenue 51 at Madison Street. The Empire Polo Club contains a variety of existing facilities, including stables located south and north of Avenue 51, a restaurant, a 48,000 square foot exhibition hall, 24,000 square feet of additional covered event space, and related support facilities. The Eldorado Polo Club contains a main clubhouse, restaurant, stables and related support facilities.

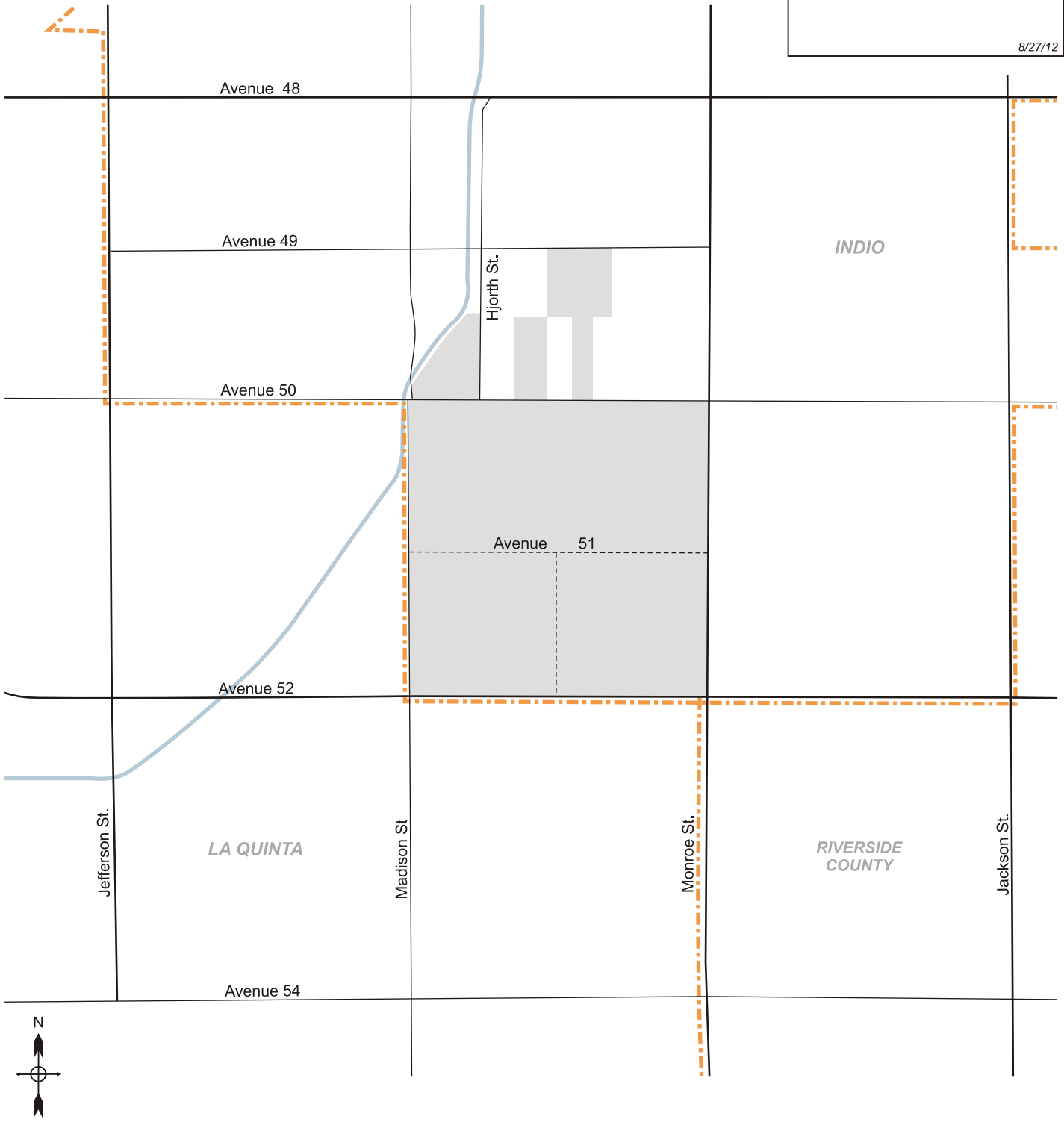
### **III.3 Existing Site Uses**

The Empire Polo Club is a multi-use facility that hosts a variety of special events in addition to hosting polo events. The 2012 regular polo season extended from January 6 to April 1, 2012 with games held every Friday night and on Sundays. Preseason games were also held between November 25 and December 18, 2011. As discussed above, the Empire Polo Club contains a 48,000 square foot event pavilion and 24,000 square feet of additional covered event space and hosts a number of special events. In January, a series of special events were

**Legend**

- City/County Boundary
- Project Site

8/27/12



Not to Scale

Figure III-1  
Project Site and Vicinity Map

hosted at the Empire Polo Club including the Palm Springs Dog Show, a lacrosse tournament, and arts and wine festivals. The Empire Polo Club also hosted the American Cancer Society Relay for Life in March and will host the Coachella Valley Cyclefest in late October. The Empire Polo Club also hosts weddings at three different venues within the Club grounds. The Empire Polo Club also includes the Tack Room Tavern, a restaurant that is also available for special events.

The Eldorado Polo Club also contains facilities used for weddings and other special events. The Eldorado Polo Club season extended from November 19, 2011 to April 8, 2012 this year, with matches held between January and April from Friday through Sunday.

During the weekend of Thursday March 29 to Monday April 2, 2012 when the no-festival existing condition traffic counts were collected for this study, polo games were played at both the Empire Polo Club and the Eldorado Polo Club, but no special events were scheduled.

### **III.4 Festival Characteristics**

The Coachella Festival currently operates on a two-year permit (2012 and 2013) and occurs for two weekends in April, with a total allowed attendance of 95,000 persons per day, and with both weekends being identical festivals. The first weekend is referred to in this study as Coachella 1 and the second weekend as Coachella 2. Unless otherwise noted, references to the Coachella 2012 Festival refer to the Coachella 1 weekend.

The Stagecoach Festival also currently operates on a two-year permit (2012 and 2013) and occurs for one weekend in April, immediately following the Coachella 2 Festival, with a total allowed attendance capacity of 65,000 persons per day.

The music festivals both occur Friday through Sunday. On-site camping is allowed at both festivals starting the day before the festival (Thursday) and ending the day after the festival (Monday).

#### Festival Site

The Project Site is shown in Figure III-2, which shows the approximate locations of the main performance venue, camping areas, day parking areas (general admission parking), and support/production areas.

Access to all camping lot areas is through Lot 13A in the southwest corner of the site, from driveways on Madison Street. The principal access to day parking is from Clinton Street on Avenue 52, with some access from Avenue 50 just east of Madison Avenue and from Avenue



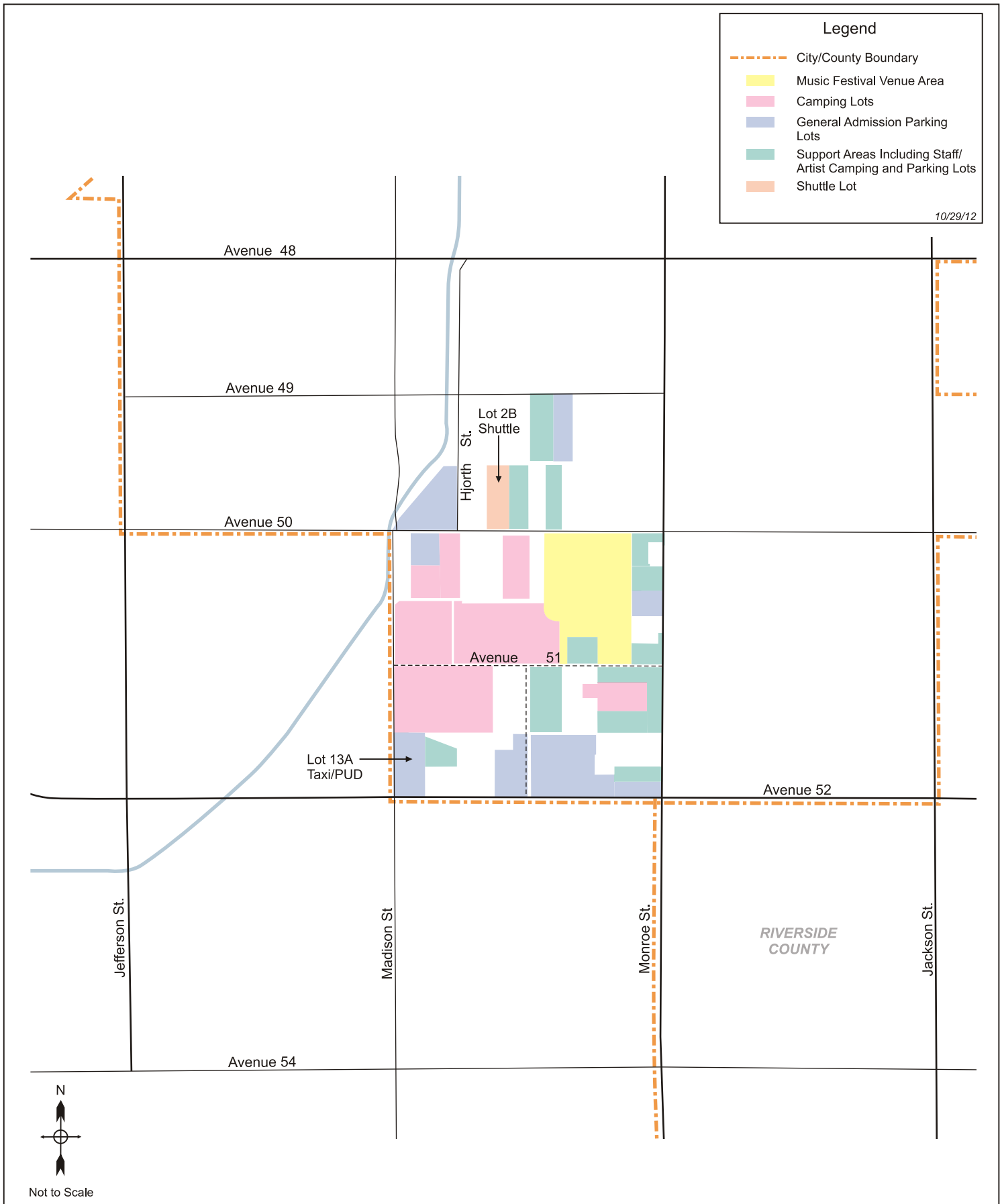


Figure III-2  
Festival Site and Use by Area

49 mid-way between Monroe Street and Hjorth Street. Production vehicle access is from Monroe Street between Avenue 50 and Polo Road, and from Avenue 50 between Monroe Street and Braley Court. Shuttle bus access is provided via Hjorth Street and Avenue 50 to the Shuttle Terminal in Lot 2B.

### Festival Attendance

The capacity limit for the Coachella Festival in 2012 was 95,000 persons in the venue at any given time, and for the Stagecoach Festival the limit was 65,000 persons. The number of persons in attendance is shown in Table III-1 for all three festivals. These are estimates based on wristband scans of persons entering the site, and the person totals represent all people at the venue site including patrons and all staff.

For Coachella 1 the average daily attendance was 88,280 persons, ranging from 85,985 on the Friday to 90,255 on the Saturday. For Coachella 2 the average daily attendance was 83,430 persons, ranging from 81,405 on the Friday to 85,265 on the Saturday. For Stagecoach the average daily attendance was 53,625 persons, ranging from 48,315 on the Sunday to 57,350 on the Saturday.

For each festival the highest attendance occurred on the Saturday of each weekend. The highest overall attendance occurred for Coachella 1. The analysis of the festivals in this study was thus based on festival characteristics for the Saturday of the Coachella 1 Festival, as the highest overall attendance. Because of the lower attendance totals the Stagecoach Festival was not analyzed to the same degree, although comparative evaluations were conducted where applicable to confirm that no traffic characteristics of the Stagecoach Festival exceeded the Coachella 1 Festival (these also used the Saturday of the Stagecoach weekend as the highest attendance day). As the above numbers were estimates, for purposes of analysis in this traffic study, the peak Coachella 1 attendance was rounded to 90,000, and the peak Stagecoach attendance was rounded to 57,500.

### Parking and Access

#### *Coachella Festival*

A total of 29,610 parking spaces were provided for the Coachella Festivals. The parking supply was comprised as shown in Table III-2 below.

Entry to all parking lots required a pre-paid festival entry wristband. People using Car and Tent Camping parking arrive and depart at the site only once – with the vast majority arriving on Thursday or on Friday morning, and leaving on Monday morning. Once parked there are

**Table III-1 Festival Attendances – Total Persons**

Festival	Condition Limit	Day	Total Persons
Coachella 1	95,000	Friday	85,985
	95,000	Saturday	90,225
	95,000	Sunday	88,635
	95,000	Average	88,280
Coachella 2	95,000	Friday	81,405
	95,000	Saturday	85,265
	95,000	Sunday	83,610
	95,000	Average	83,430
Stagecoach	65,000	Friday	55,200
	65,000	Saturday	57,350
	65,000	Sunday	48,315
	65,000	Average	53,625

Source: RFID Scans, Intellitix (Includes 2.5% margin of error, and unscanned security employees.

Numbers rounded to nearest five.

no in/out moves allowed, so these cars do not leave the site during the festival. Companion Parking is for people joining friends/family in car/tent camping but who arrive separately. Again, once parked there are no in/out moves allowed, so these cars also do not leave the site during the festival. An on-site camping center included a general store where campers could purchase provisions. A shuttle service was operated from the camping area to the Ralph’s grocery store at Jefferson Street & Avenue 50, for persons wishing to purchase provision off-site.

**Table III-2 On-Site Parking Supply – Coachella Festivals**

<i>Parking Type</i>	<i>No. of Spaces</i>	<i>Notes</i>
Car Camping	10,200	
Tent Camping	1,010	
Companion Parking	3,000	(supports car / tent camping)
Day Parking	10,340	(includes overflow areas)
Staff Parking	5,060	
<i>Total</i>	<i>29,610</i>	

Access to all car camping lots was through check-in facilities in Lot 13A in the south west corner of the project site, via driveways on Madison Street just north of Avenue 52. Access to tent-camping and companion parking was from Avenue 50 just east of Madison Street. The principal access routes to the festival site for car camping were via Jefferson Street to Avenue 50 to Madison Street, and via Monroe Street to Avenue 52, as shown in Figure III-3. After the festival, egress from car camping lots was primarily to Madison Street (with some egress allowed via Avenue 51 to Monroe Street), and egress from tent camping and companion lots to Avenue 50 and non-event to Jefferson Street. The principal egress route from the festival site for car camping was via Madison Street to either Avenue 50 or Avenue 52 and then to Jefferson Street, as shown in Figure III-4, with some vehicles also using Avenue 51 to Monroe Street (also shown in Figure III-4).

Day Parking was provided for general admission attendees<sup>1</sup>. These patrons arrive and depart each day. No overnight parking is allowed so these lots fill and empty each day. The principal access to Day Parking was via Clinton Street on Avenue 52. Access to additional Day Parking areas was provided from Avenue 50 just east of Madison Street, from Avenue 49 midway between Monroe Street & Hjorth Street, and from Madison Street just north of Avenue 52. The principal access routes to Day Parking were via Monroe Street to Avenue 52,

<sup>1</sup> To obtain entry into any festival parking lot, every person(s) in the vehicle had to be wearing a pre-paid festival wristband. There were therefore no “pay-on-the-day” entries of any kind at the festivals

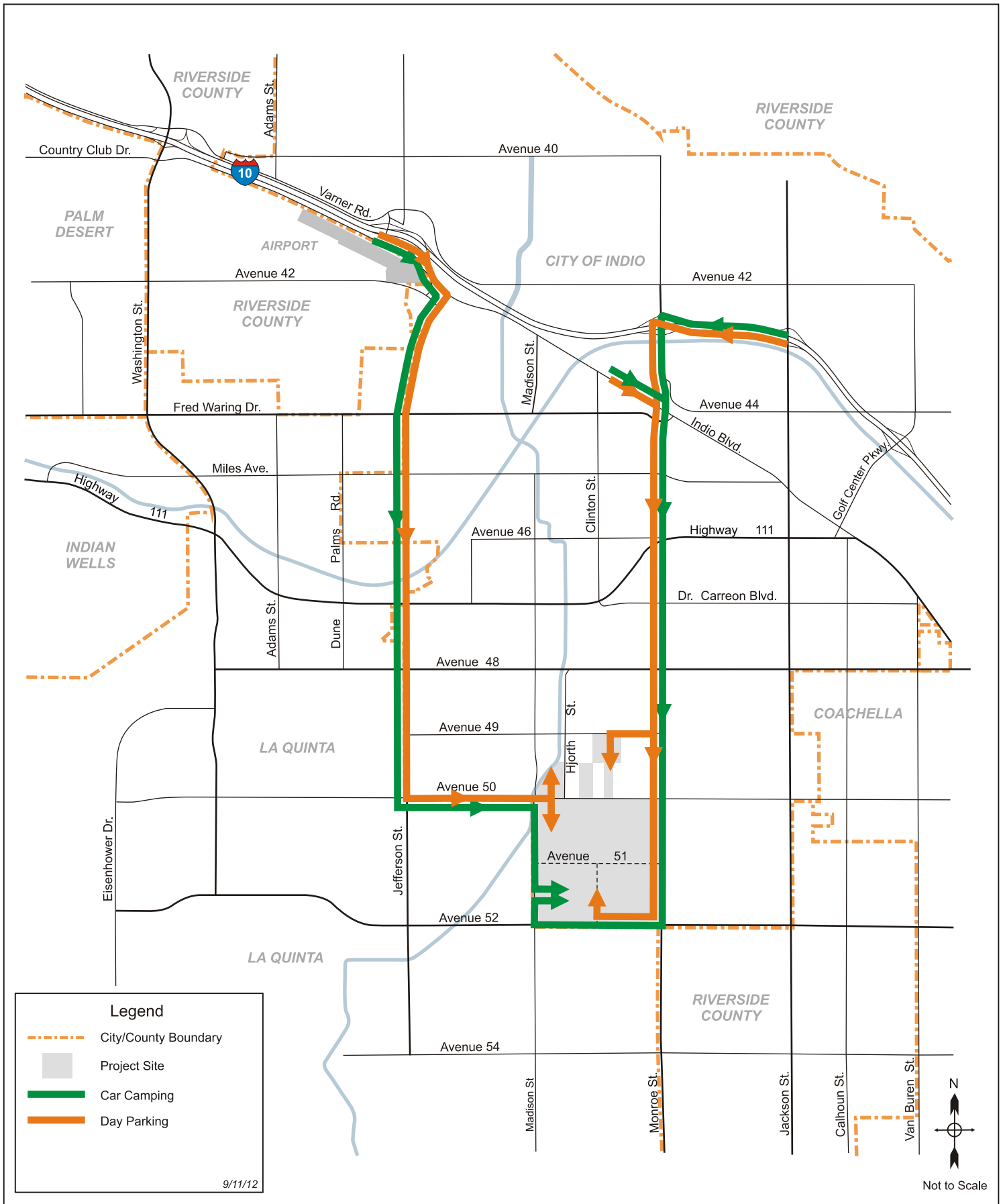


Figure III-3  
Principal Festival Access Routes

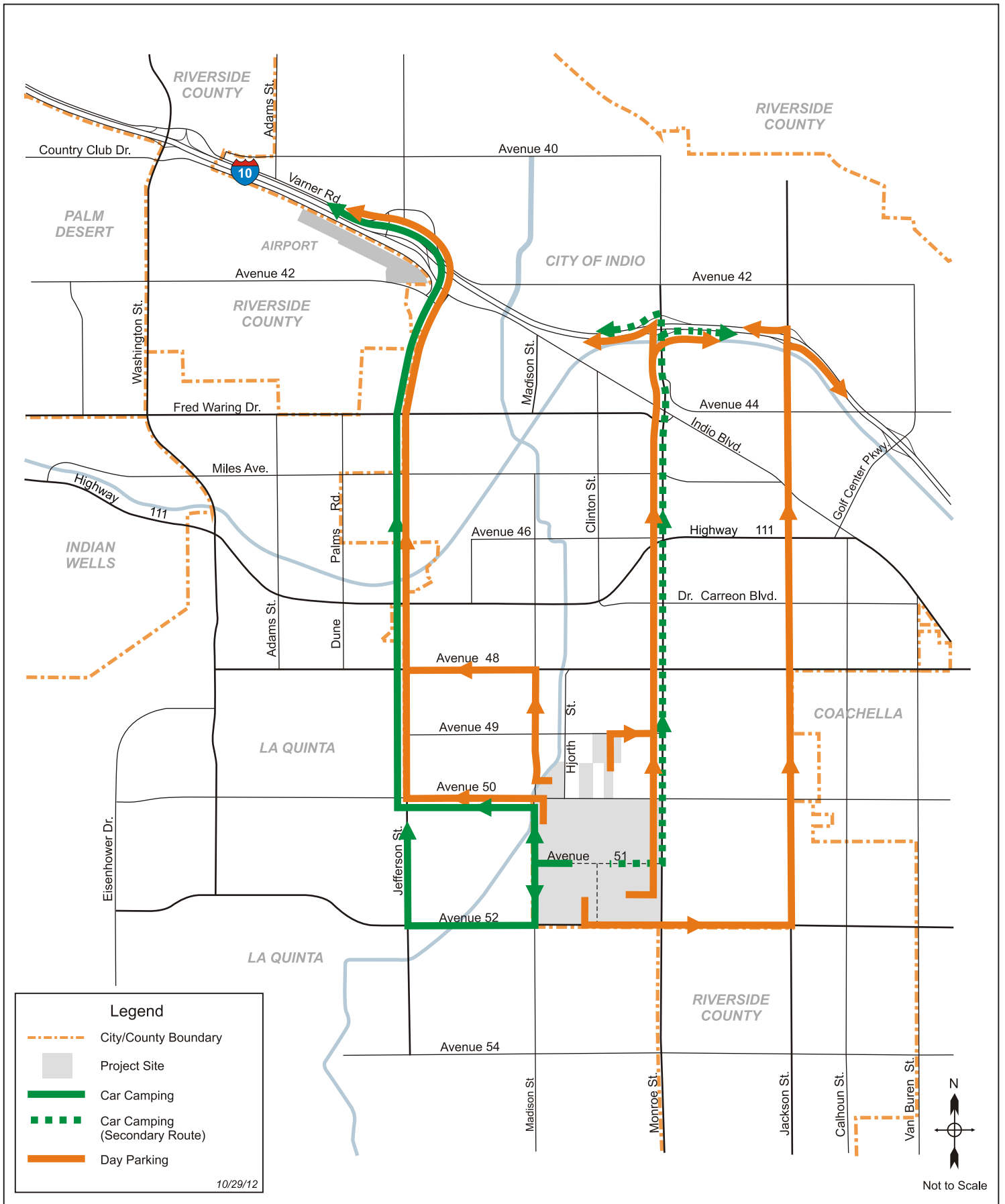


Figure III-4  
Principal Festival Egress Routes

Monroe Street to Avenue 49, and Jefferson Street to Avenue 50, as shown in Figure III-3. Egress from Day Parking was from the same locations used for access. The principal egress routes from Day Parking were via Avenue 52 to Jackson Street, via Monroe Street, and via Avenue 50 and Madison Street to Jefferson Street, as shown in Figure III-4.

Staff parking is provided for the many categories of staff support personnel, including vendors, suppliers, and security staff, who typically arrive and depart each day of the festival. Access to staff parking was primarily from Monroe Street between Avenue 50 & Avenue 52, with access to additional staff parking from 49<sup>th</sup> Avenue midway between Monroe Street & Hjorth Street.

For the Saturday of Coachella I, the peak parking demand was approximately 25,265 spaces.<sup>2</sup> While this was about 85% of the total parking capacity at the site, it was quite close to the operational capacity of the parking supply. The operational capacity (typically in the range of 90% to 95% of total capacity) is less than the total capacity because the parking lots operate most effectively when not completely full - which allows for the most efficient access/egress and circulation and flexibility in operating the lots.

*Stagecoach Festival*

A total of 22,660 parking spaces were provided for the Stagecoach Festival. The parking supply was comprised as shown in Table III-3 below.

Less parking spaces are provided for Stagecoach because the majority of camping is for recreational vehicle (RV) camping. The larger vehicles take up more room so less total spaces can be accommodated. Other parking totals also vary slightly because of these differences.

**Table III-3 On-Site Parking Supply – Stagecoach Festival**

<i>Parking Type</i>	<i>No. of Spaces</i>	<i>Notes</i>
Recreational Vehicles	2,500	
Car Camping	750	
Tent Camping	380	
Companion Parking	3,000	(supports car / RV / tent camping)
Day Parking	10,970	(includes overflow areas)
Staff Parking	5,060	
<i>Total</i>	<i>22,660</i>	

<sup>2</sup> Estimate based on scans, counts, and observations.

Arrivals and departures to/from the Festival Site are similar in characteristics to those of the Coachella Festivals described above, with RV camping operating very similarly to Car Camping for Coachella.

For the Saturday of Stagecoach, the peak parking demand was approximately 18,775 spaces<sup>3</sup>. This was about 83% of the total parking capacity at the site.

### Key Traffic Management Measures During Festivals

A Traffic Plan was prepared and implemented for the festivals by the City of Indio and the Festival Promoter. The Plan included provisions for access/egress routes to parking areas, directional signage along these routes (including both fixed signage on surface streets and changeable message signs on surface streets and the I-10 Freeway), parking management measures, temporary street closures in the immediate vicinity of the festival site, and additional intersection traffic control measures (including use of traffic control personnel to direct traffic and temporary reconfiguration of intersection layouts at certain locations).

#### *Temporary Roadway Closures*

The Plan provided for certain roadways to be temporarily closed to through traffic (non-festival traffic) during the festivals, in order to facilitate traffic management and avoid vehicular and pedestrian conflicts. These closures are shown in Table III-4 and Figure III-5.

Some other street segments in the immediate vicinity of the Project site were also temporarily closed to non-festival traffic at certain times to facilitate traffic circulation (for example Madison Street between Avenue 50 & Avenue 52).

#### *Temporary Intersection Traffic Control Procedures*

Also as part of the Festivals Traffic Plan, special traffic control measures were implemented at a number of key intersections. These included turning traffic signals to flashing red indications, the manual control of traffic at intersections, the manual control of traffic signals, and temporary lane reconfigurations and/or turn prohibitions at key intersections. A temporary traffic signal was also installed at Monroe Street & Avenue 49 to facilitate pedestrians crossing Monroe Street. Figure III-5 identifies the intersection locations where measures were implemented, and Table III-5 lists the types of measures.

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<sup>3</sup> Estimate based on scans, counts, and observations.



**Table III-4 Temporary Road Closures During Festival Weekends**






<i>Street</i>	<i>Segment</i>	<i>Road Closure Details</i>
Madison Street	Avenue 49 to Avenue 50	From 8:30am Friday to 4:00am Monday
Hjorth Street	Avenue 49 to Avenue 50	From 3:00pm Thursday to 4:00am Monday (except for school access traffic)
Avenue 49	Monroe Street to Braley Court	From 8:30am Friday to 4:00am Monday
Avenue 50	Madison Street to Hjorth Street	From 8:30am Friday to 4:00am Monday
	Hjorth Street to Monroe Street	Fom 9:00am Thursday to 4:00am Monday
	Monroe Street to Jackson Street	From 8:30am Friday to 4:00am Monday
Avenue 51	Madison Street to Monroe Street	From 2:00pm Wednesday to 2:00am Monday
Monroe Street	Avenue 48 to Avenue 52	(Event Egress Only). Southbound lanes closed from approximately one hour before the end of the event to approximately one hour after the end of the event. Friday, Saturday and Sunday.
Avenue 52	Madison Street to Monroe Street	(Event Egress Only) Westbound lanes closed from approximately one hour before the end of the event and ending approximately one hour after the end of the event. Friday, Saturday and Sunday.

Shuttle Operation

The Applicant, through Valley Music Travel, developed and implemented a shuttle plan that provided shuttle service transportation for the Coachella Festivals, from a number of hotels and park & ride locations in La Quinta, Indian Wells, Palm Desert, Palm Springs, Shadow Hills, and the Indian Wells Tennis Garden to and from the Project Site. The park-and-ride lots were located in Palm Springs (Fashion Plaza), in Palm Desert (Albertsons), and in Indian Wells (Tennis Center). The shuttle service had an approximate capacity of 31,100 persons per day<sup>4</sup>. The Shuttle Plan comprised eight routes as identified in Table III-6 and shown in Figure III-6. At peak times a total of 235 buses were operated. Shuttles used various routes

<sup>4</sup> Valley Music Travel. The City of Indio required under the special event agreement that the Applicant provide for the transportation of a minimum of 25,000 people per day for the Coachella Festivals.

**Legend**

-  City/County Boundary
-  Project Site
-  Complete Street Closure
-  Partial Street Closure
-  Intersection Control Measures

8/27/12

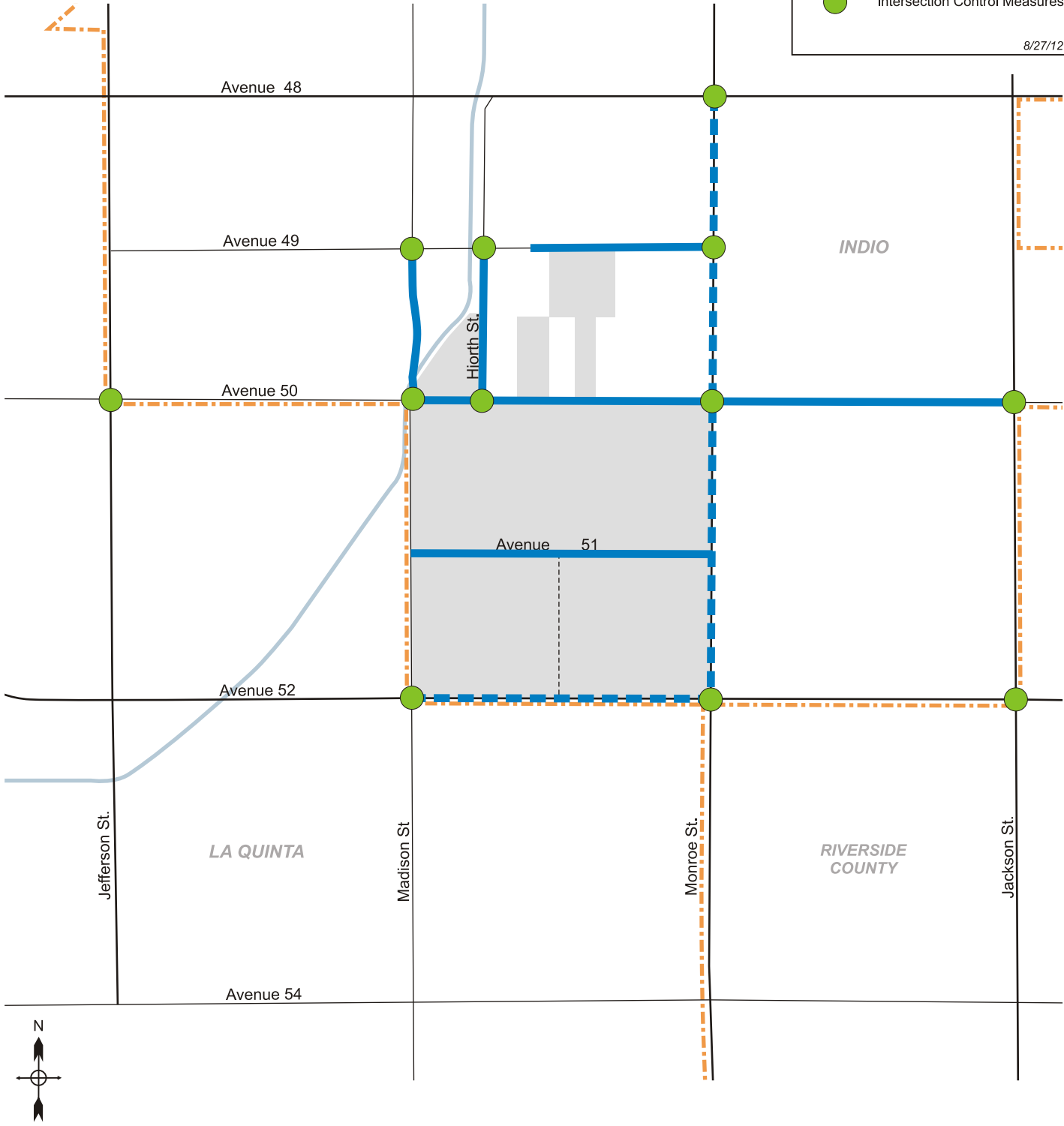


Figure III-5  
Key Traffic Control Measures

**Table III-5 Key Traffic Control Measures - Intersection Control Measures**

Intersection	Traffic Control Measures			
	Traffic Control Officer	Cones / Barriers	Flashing Red Signal	Manual Operation of Signal
Jefferson Street & Avenue 50		X		X
Madison Street & Avenue 50	X	X		
Madison Street & Avenue 52	X	X		
Monroe Street & Avenue 48 (Event Egress Only)	X	X	X	
Monroe Street & Avenue 49	X	X	X	X
Monroe Street & Avenue 50	X	X	X	
Monore Street & Avenue 52	X	X		
Jackson Street & Avenue 50	X	X		
Jackson Street & Avenue 52 (Event Egress Only)	X	X		

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**Table III-6 Shuttle Lines**

Line	Description
La Quinta Line	La Quinta Resort to Festival Site
Indian Wells Line	Renaissance Esmeralda Resort to Hyatt Grand Champions to Miramonte Resort to Festival Site
Palm Desert Line	Albertsons on Hwy 111 near Best Western, Holiday Inn, and Embassy Suites to Festival Site
JW Marriot/Palm Desert Line	JW Marriot Resort to Homewood Suites Palm Desert to Marriot Desert Spring Villas Resort to Festival Site
Palm Springs Line	Renaissance to Fashion Plaza to Festival Site
Tennis Garden Line	Indian Wells Tennis Garden to Homewood Suites Resort (La Quinta) to Festival Site
Shadow Hills RV Line	Shadow Hills RV Resort (Indio) to Festival Site
Agua Caliente Line	Agua Caliente/Shadow Ridge Resort (Palm Desert) to Marriot Shadow Ridge Villa (Palm Desert) to Festival Site

Source: Valley Music Travel, 2012

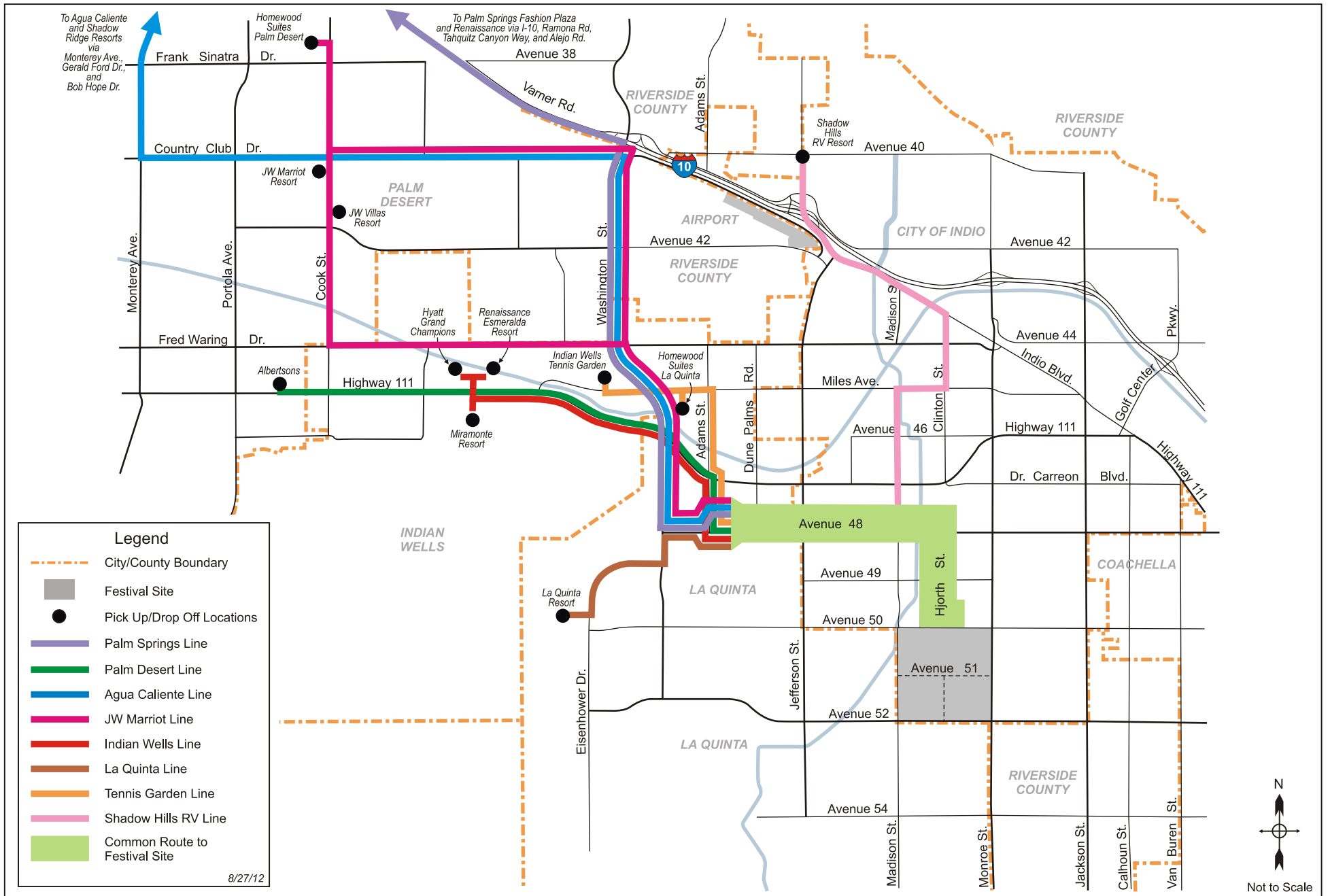


Figure III-6  
Festival Shuttle Lines

from the various origin locations, but as they converged on the festival site, the majority of routes were consolidated onto Washington Street, 48<sup>th</sup> Street, Hjorth Street Avenue 50 to the on-site shuttle terminal in Lot 2B. Shuttle transportation was provided at the Festival Promoter's expense. A similar but scaled back shuttle plan was also provided for Stagecoach.

The shuttle lines ran on the Friday, Saturday and Sunday of each festival, beginning at 11:00am and continuously until up to about two hours after the music ended. They typically ran approximately every 15-20 minutes for locations near the Project Site and 20 - 30 minutes for locations further from the site. During the peak hours (11:00am – 6:00pm and 10:00pm – 2:00am), the number of shuttles was highest to meet peak demands.

The shuttle operator and the Festival Promoter reported that over 27,000 shuttle passes were sold for Coachella 1 prior to the event. The estimated numbers of actual shuttle riders, by day and event, provided by the shuttle operator, are shown in Table III-7. An average of approximately 16,710 shuttle riders per day<sup>5</sup> were transported during Coachella 1, an average of approximately 15,170 shuttle riders per day were transported during Coachella 2, and an average of approximately 3,920 shuttle riders per day were transported during Stagecoach. The shuttle ridership for the Saturday of Coachella 1 was 17,255 persons.

Actual shuttle ridership was lower than the number of passes sold because shuttle passes were often sold as part of a hotel or ticket package, and some festival patrons ended up not using the shuttle pass – for example if they decided instead to carpool with friends staying in the same hotel, or if they drove.

The number of shuttle riders by route is summarized in Table III-8. Ridership was fairly evenly distributed between the lines, with the highest ridership occurring on the IW Tennis Garden Line (3,880 riders), the JW Marriott Line from Palm Desert (3,325 riders), the Palm Springs Line (2,850 riders) and the La Quinta Line from the La Quinta Resort (2,630 riders). During the Friday and Saturday afternoon peak hours, between 85 and 95 shuttle buses per hour operated in each direction on Avenue 48 east of Jefferson Street and on Hjorth Street.

### Festival Mode of Arrival Characteristics

#### General Travel Characteristics

Festival attendees and staff arrived at the Festival Site by numerous different modes, including by car, shuttle, taxi, pick-up/drop-off, and walk/bike.

People in car camping and tent camping arrive by car, with the majority arriving throughout the day on the Thursday (80% of arrivals occurred by 1:00am on the Friday, and 94% by 1:00

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<sup>5</sup> One-way trips.

**Table III-7 2012 Festival Shuttle Riders – By Festival and By Day**

Festival	Day	Total Persons
Coachella 1	Friday	17,145
	Saturday	17,255
	Sunday	15,735
	Average	16,710 <sup>1,2</sup>
Coachella 2	Friday	15,715
	Saturday	15,575
	Sunday	14,225
	Average	15,170
Stagecoach	Friday	3,900
	Saturday	4,175
	Sunday	3,680
	Average	3,920

Source: Jonathan Fordin, CID Entertainment

<sup>1</sup> Shuttle operation capacity was 30,100 riders.

<sup>2</sup> Approximately 27,000 shuttle passes sold for Coachella 1.



**Table III-8 Shuttle Ridership by Line  
Coachella 1 – Saturday<sup>1</sup>**

Line Name	Ridership <sup>2</sup>
La Quinta	2,630
Indian Wells	1,130
Palm Desert	1,450
JW Marriott	3,325
Palm Springs	2,850
IW Tennis Gardens	3,880
Shadow Hills RV	475
Agua Caliente / Shadow Ridge	1,515
Total	17,255

Source: Valley Music Travel / CID Entertainment

<sup>1</sup> Highest festival attendance day – used for analysis.

<sup>2</sup> One-way trips.

pm on the Friday). While some leave after the end of the festival in the early hours on the Monday, the majority leave between 8:00am and 12:00 noon on the Monday. These vehicles stay on-site during the festival and do not move from their spaces (including companion parking vehicles), so they do not generate vehicular traffic on the Friday, Saturday, or Sunday.

Many people arrive and depart each day of the festival and do not stay overnight. These people arrive by car, shuttle, taxi/drop-off, and walk/bike. They arrive throughout the day, with a general peak of arrivals between 1:00pm and 4:00pm each day, and depart towards the end of the day's event – starting around 10:00pm and peaking at the end of the event after 1:00pm.

Those arriving by car use the day parking lots, with no overnight parking allowed. On-street parking is prohibited during festival weekends on all streets within at least one mile of the festival site so all parking occurs on the Festival site with a negligible amount of parking occurring off-site.

Those arriving by shuttle use the Shuttle Terminal in Lot 2B (see Figure III-2). Those arriving by taxi and pick-up/drop, used the taxi and pick-up/drop-off area which was located in 2012 for the first time in Lot 13A at the south-west corner of the Festival site (north-east corner of Avenue 52 and Madison Street – see Figure III-2). Published access/egress routes to the Taxi/Pick-up/Drop-off Lot were Madison Street from the south and Avenue 52 from the west.

Those arriving by walk and bike were either local residents or patrons staying in local accommodations. The majority of people arriving by walk/bike did so via the north-east corner of the Festival Site – at Avenue 49 and Monroe Street (with a majority coming from the Indian Palms County Club), and via the south-west corner of the Festival Site – at Avenue 52 and Madison Street (with a majority coming from residential developments such as PGA West or The Hideaway).

#### Mode of Arrival Breakdown Estimates

An estimate of mode of arrival of festival attendees was prepared based on various available data sources (including scan data and observed counts), and is summarized in Table III-9.

#### *Coachella Festival*

For the Coachella Festival, of the 90,000 attendees, approximately 24,990 people or 28% used on-site camping during the festival; approximately 32,460 people or 36% came on a daily basis and used day parking; approximately 17,250 people or 19% used the shuttle;

**Table III-9 Festival Attendees - Estimates By Type & Mode of Arrival**

Type	2012 Coachella			2012 Stagecoach		
	Vehicles	Persons	% of Total	Vehicles	Persons	% of Total
Car Camping	8,319	22,045	24%	723	1,916	3%
RV Camping	0			2,625	10,474	18%
Tent Camping	450	1,193	1%	285	755	1%
Sub-Total Camping	8,769	23,238	26%	3,633	13,145	23%
Companion Camping	800	1,752	2%	3,315	7,989	14%
<b>Total - Camping</b>	<b>9,569</b>	<b>24,990</b>	<b>28%</b>	<b>6,948</b>	<b>21,134</b>	<b>37%</b>
Day Parking	10,892	32,458	36%	7,406	20,884	36%
Shuttle	N/A	17,256	19%	N/A	3,585	6%
Taxi/PUDO	2,218	6,300	7%	1,838	5,219	9%
Walk/Bike	N/A	1,600	2%	N/A	1,360	2%
<b>Total - Patron</b>	<b>13,110</b>	<b>82,604</b>	<b>92%</b>	<b>9,244</b>	<b>52,182</b>	<b>90%</b>
Staff/Security	4,846	7,397	8%	4,136	5,318	9%
<b>GRAND TOTAL</b>	<b>27,525</b>	<b>90,000</b>	<b>100%</b>	<b>20,328</b>	<b>57,500</b>	<b>100%</b>

Sub-Total Private Auto	64,845	72%	47,336	82%
Sub-Total Non-Private Auto	25,156	28%	10,164	18%

Note: Estimates from scan data, various counts, and on-site observations.

approximately 6,300 people or 7% used taxi and pick-up/drop-off; approximately 1,600 or 2% walked or rode a bicycle; and approximately 7,400 or 8% were staff. Approximately 72% came by private auto, and 28% came by non-private auto (shuttle, walk/bike, and taxi/pick-up/drop-off).

These numbers represent the ways in which patrons arrived at the festival. Not all of these trips occur on any given day. The majority of camping vehicle trips occur on the Thursday (inbound) and on the Monday (outbound), with very few vehicle trips on other days. On the Friday, Saturday, and Sunday, the number of vehicle trips is comprised of the day parkers, taxi and pick-up/drop-off vehicles, and staff vehicles, and is typically approximately 17,956 vehicle trips per day. The arrivals are spread out over a period of approximately eight hours as patrons tend to arrive at the festival at different times. Departures are more focused towards the end of each day's event, but do not all occur when the festival closes at 1:00 pm, as some patrons and staff start leaving around 10:00 pm.

### *Vehicle Occupancy*

Average vehicle occupancies were calculated from observations and counts undertaken during the festivals. The average total vehicle occupancy of car camping was 2.65 persons per vehicle and for day parking was 2.98 persons per vehicle. The average net occupancy for arrivals by taxi and pickup/drop-off was 2.84 person per vehicle (patrons only – excluding driver). The average total vehicle occupancy for staff arrivals was 2.03 persons per vehicle. These vehicle occupancies are considerably higher than typical general traffic average vehicle occupancies which average approximately 1.53 on weekday peak periods and up to about 2.16 on weekends<sup>6</sup>.

### *Stagecoach Festival*

For the Stagecoach Festival, of the 57,500 attendees, approximately 21,135 people or 37% used on-site camping during the festival; approximately 20,885 people or 37% came on a daily basis and used day parking; approximately 3,585 people or 6% used the shuttle; approximately 5,200 people or 9% used taxi and pick-up/drop-off; approximately 1,360 or 2% walked or rode a bicycle; and approximately 5,300 or 9% were staff. Approximately 82% came by private auto, and 18% came by non-private auto (shuttle, walk/bike, and taxi/pick-up/drop-off).

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<sup>6</sup> National Household Travel Survey – 2009, U.S. Department of Transportation, Bureau of Transportation Statistics, Washington D.C., 2010

### III.5 Existing Conditions – With 2012 Coachella Festival

A comprehensive data collection effort was undertaken to provide data for the traffic study. This effort, which was coordinated with the Cities of Indio and La Quinta, included observations for a non-event weekend and for all three festivals in 2012. The data collection included automatic traffic counts of hourly volumes by day at 38 street segment locations throughout the study area, and intersection turn counts (by video monitoring) at all 41 study intersections. Direct observations and measurements were also taken of inbound queue lengths on all days of the festival, and observations recorded on outbound queue lengths. The program also included additional video observations at a number of key on-site or site-adjacent intersections and locations, video observations at all key access/egress points to residential developments in the general vicinity of the project site that could potentially be affected by traffic queues on arterial roadways. On-site counts and observations of vehicle occupancies were conducted. General observations were conducted by The Mobility Group staff throughout the festival site and the study area, of traffic conditions at all times during the festivals and during a non-event weekend.

#### General Overview of Traffic Conditions

The following general overview of traffic conditions during the 2012 Festivals is based on observations conducted by The Mobility Group (TMG); discussions with City of Indio and City of La Quinta personnel, the Indio Police Department (IPD), and Goldenvoice staff; and on various data collected. The observations by TMG staff were part of the Traffic Monitoring process required by Condition 20 of the Special Event Agreement with the City for the 2012 Festivals.

The Mobility Group staff observed both on-site and offsite transportation conditions at all times during all three festivals including the day before (Thursday) and the day following (Monday) each festival<sup>7</sup>.

With major festivals such as Coachella and Stagecoach, heavy temporary peak traffic loads and traffic queues are to be expected, due to the high volumes and the peaking characteristics of patrons arriving and departing over short periods of time.

The Traffic Plan that was developed for the festivals was successfully implemented and, ensured that planned traffic management procedures and operations occurred as planned. Notwithstanding the traffic queues that are to be expected with major events and festivals, and temporary traffic backups at certain times and locations, traffic conditions were generally as expected. In general, staff from the Cities of Indio and La Quinta stated they were pleased

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<sup>7</sup> The Applicant provided TMG staff full access to all areas of the venue and festival site, and IPD provided TMG staff access to all streets that were closed in the vicinity of the festival site.

with the overall management of traffic, and that implementation of the Traffic Plan was effective in successfully minimizing both the general effects of traffic and parking and the traffic impacts to area residents. City staff reported they received very few specific complaints regarding traffic during the festivals. The following is a brief summary overview of traffic conditions during the festivals. Specific traffic conditions and operating parameters are discussed later in this chapter.

#### *Camping Load In and Load Out (Thursdays and Mondays)*

No major issues or problems were observed during camping load in days (Thursdays), or camping load out days (Mondays). The principal inbound routes were Jefferson Street to Avenue 50, and Monroe Street to Avenue 52. During load-in on Thursdays, vehicle arrivals were spread throughout the day and evening. On the camping load out day on Mondays, most patrons departed between 8:00 am and 11:00 am, and the festival site was clear by noon. The principal outbound routes were Avenue 50 and Avenue 52 to Jefferson Street and Avenue 51 to Monroe Street.

#### *Inbound Daily Festival Traffic (Friday to Sunday)*

During the festivals, inbound traffic used primarily Monroe Street and Jefferson Street. While queues occurred on Monroe Street, there was very little evidence of inbound traffic queues or even heavy traffic on Jefferson Street during all three festivals (Friday thru Sunday), and minimal evidence of festival traffic on Washington Street or Jackson Street. (Traffic queues are discussed in more detail later in this chapter). In general, no blockage of access streets or driveways to residential communities by traffic queues was observed during all three festivals. Traffic was managed by traffic control officers at numerous locations, as previously described and shown in Figure III-5.

#### *Outbound Daily Festival Traffic (Friday to Sunday)*

Post-event outbound traffic was generally focused on Monroe Street and Jackson Street, with some traffic on Jefferson Street. Traffic queues occurred on Monroe Street and Jackson Street and were managed by traffic control officers at numerous locations. Outbound traffic dispersed within about one and a half hours to two hours of the end of the event.

#### *Streets Where Commuter Traffic was Affected by Festivals*

Other than Monroe Street between Avenue 52 and Avenue 48 – which served as a principal route for access and egress for festival traffic, the streets primarily affected during commute hours were Avenue 50 between Jackson Street & Madison Street, which was closed during the festivals; Madison Street between Avenue 49 and Avenue 50, which was also closed during the festivals; Madison Street between Avenue 50 & Avenue 52, which was open but

affected by festival traffic particularly during the camping load out traffic on Monday mornings; Avenue 49 between Monroe Street and Hjorth Street, which was closed at various times during the festivals; and Hjorth Street between Avenue 49 and Avenue 50, which was also closed during the festivals, but access continued to be provided to/from the elementary school.

### Neighborhood Resident Plan

A Neighborhood Resident Plan was developed and implemented for neighborhoods likely to be affected by festival traffic. Local residents living along streets that were closed during the festival were allowed continued access at all times to all streets and were provided special access passes to display on windshields. This included residents in the area immediately surrounding the Empire and Eldorado Polo Clubs including along Avenue 50 and Avenue 51 between Monroe Street and Madison Street, residents of La Quinta Polo Estates west of Madison Street, as well as staff of the J.F.K. Hospital on Monroe Street. The City published traffic alerts showing streets that could be subject to delays, including Monroe Street, Jefferson Street, Madison Street between Avenue 50 and Avenue 52, Avenue 50 between Jefferson Street and Madison Street, and Washington Street, along with suggested alternate routes to avoid traffic. Residents of the La Quinta Ridge Mobile Home Estates (west of Monroe Street and north of Avenue 52) and Rancho Santa (south of Avenue 52 and west of Monroe Street) were advised of recommended access and egress routes during festival weekends. Residents were thus able to plan ahead to minimize the effect of festival traffic on their trip making. (see also further discussion in Chapter V).

### Traffic Volumes With Festival

Existing condition traffic volumes for the 2012 Coachella Festival at study intersections for each of the three analysis hours are shown in Figure III-7. These volumes were collected the weekend of Thursday April 12 to Monday April 16, 2012.

### General Discussion of Traffic Volumes and Intersection Level of Service with Festival Traffic

Traffic conditions during the festival are unique circumstances, and intersections in the vicinity of the festival site operate very differently to non-festival conditions, particularly if some streets are closed and/or if traffic is controlled/directed manually by traffic control personnel.

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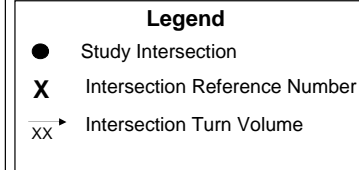
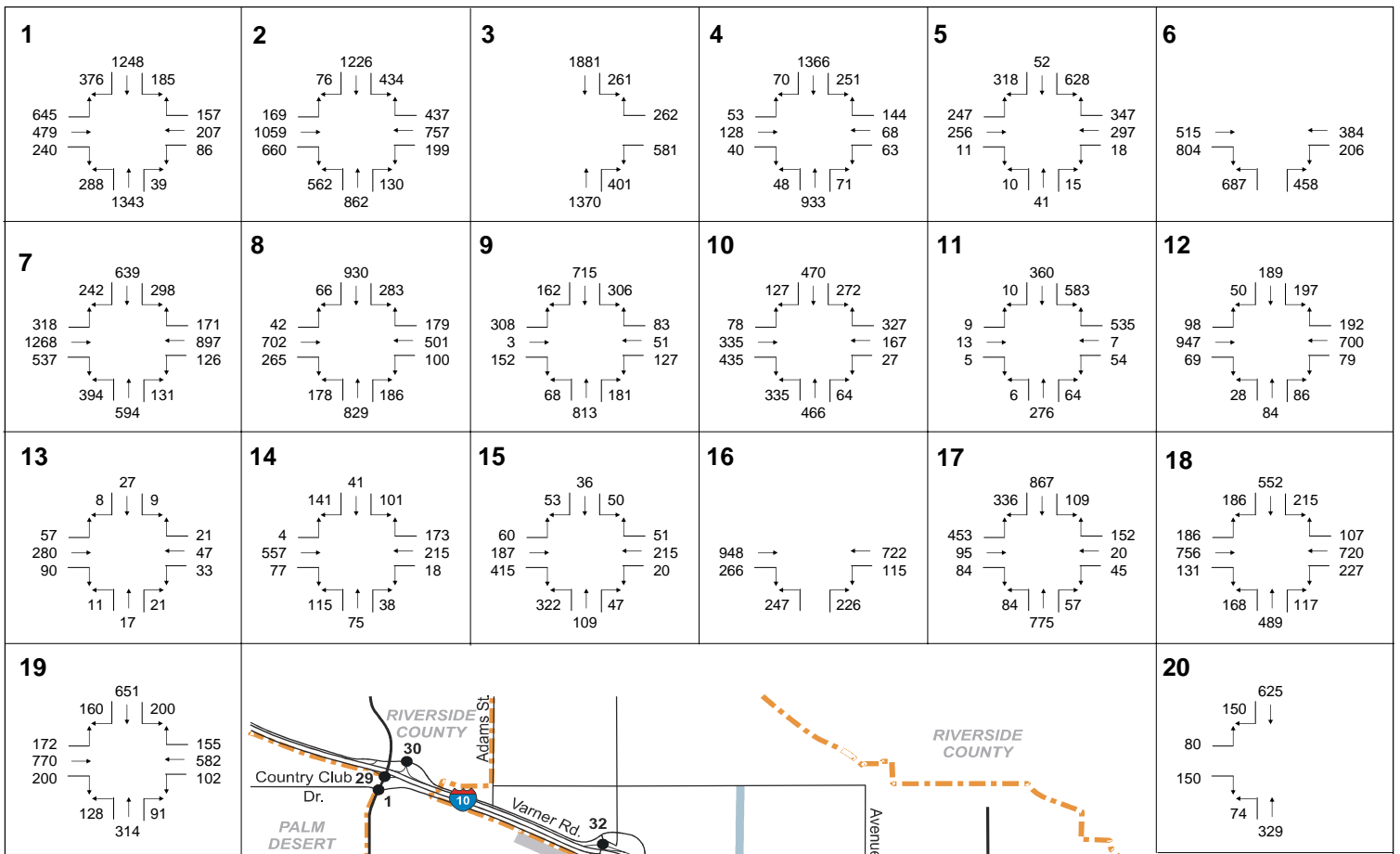


Fig III-7a  
Existing Conditions – 2012 With Festival – Traffic Volumes – Friday 3-4 PM

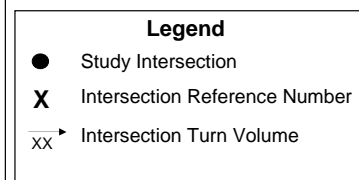
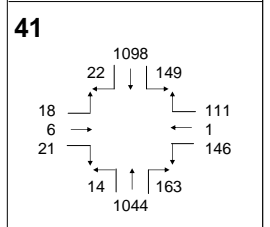
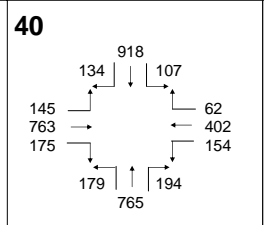
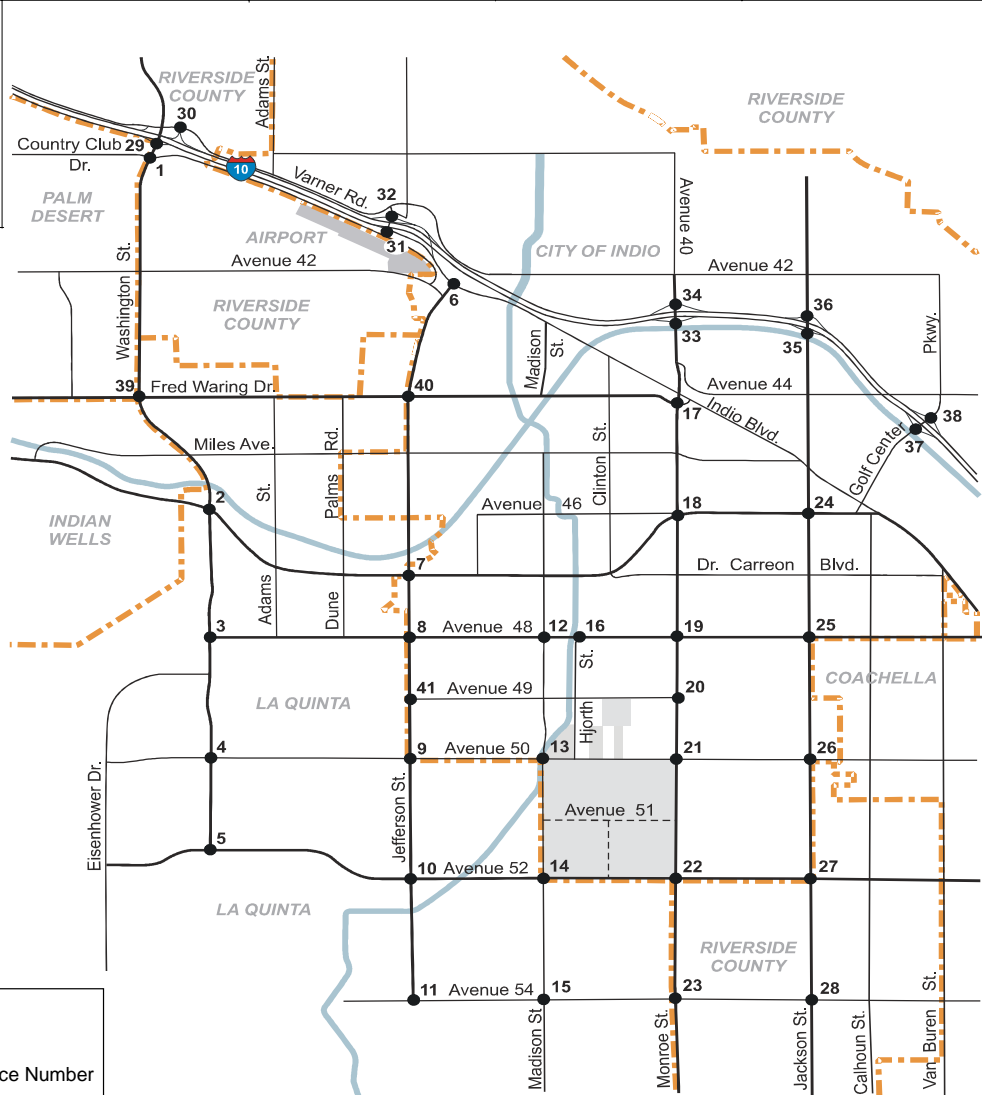
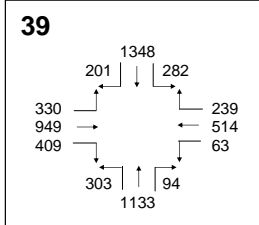
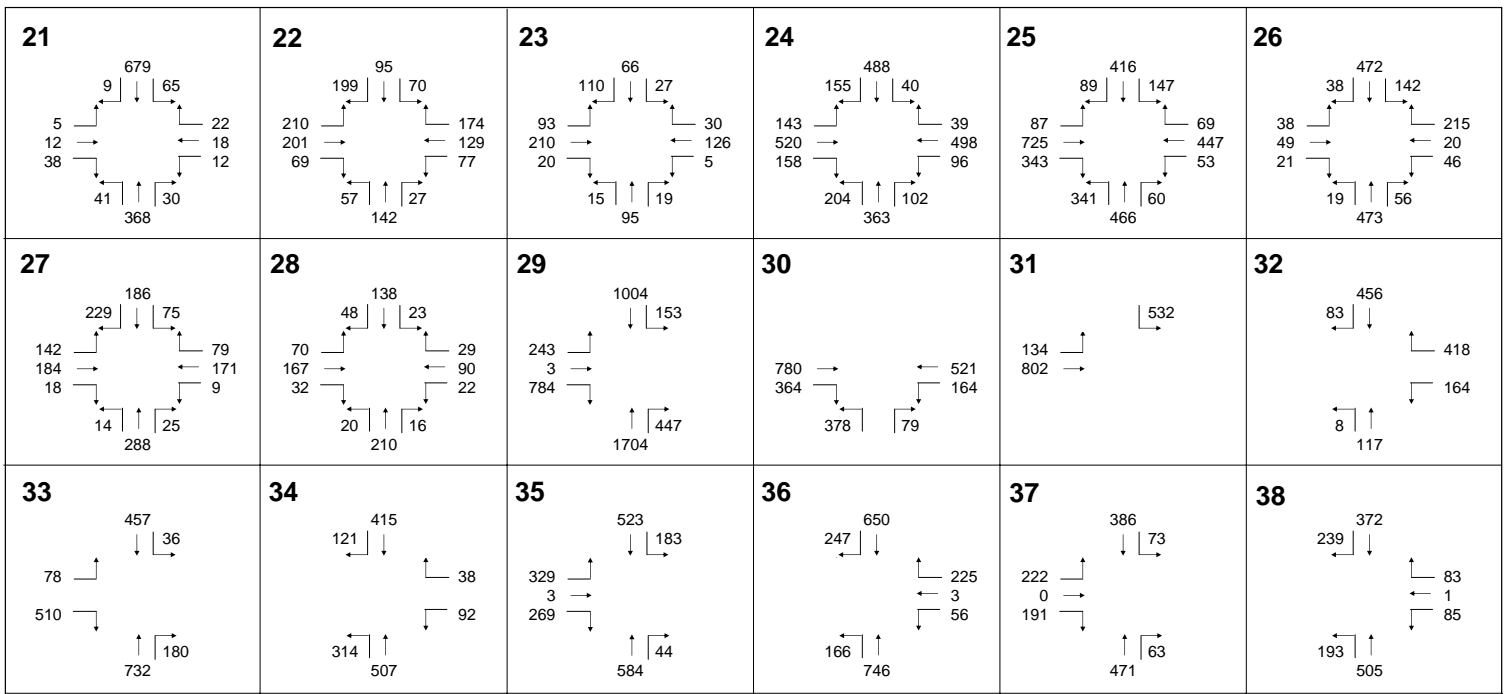


Fig III-7a cont.  
 Existing Conditions – 2012 With Festival – Traffic Volumes – Friday 3-4 PM

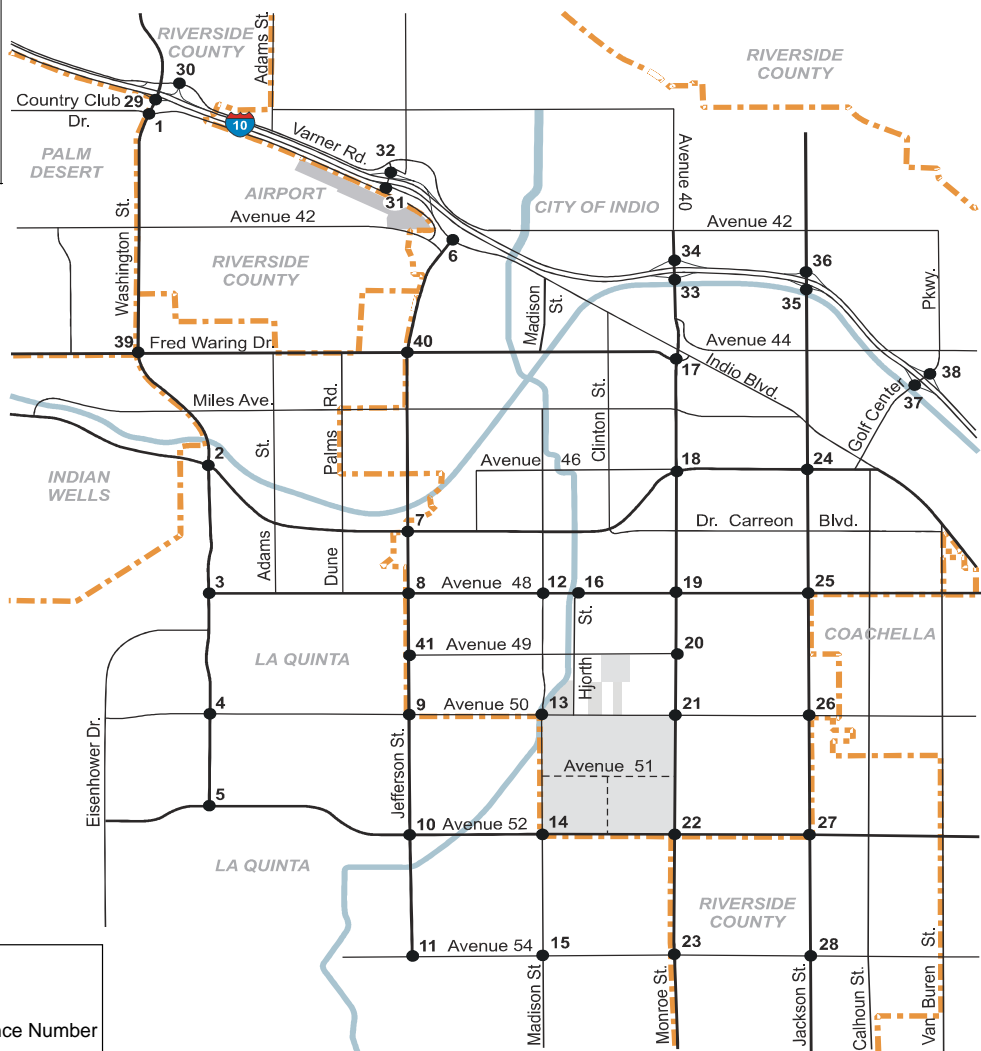
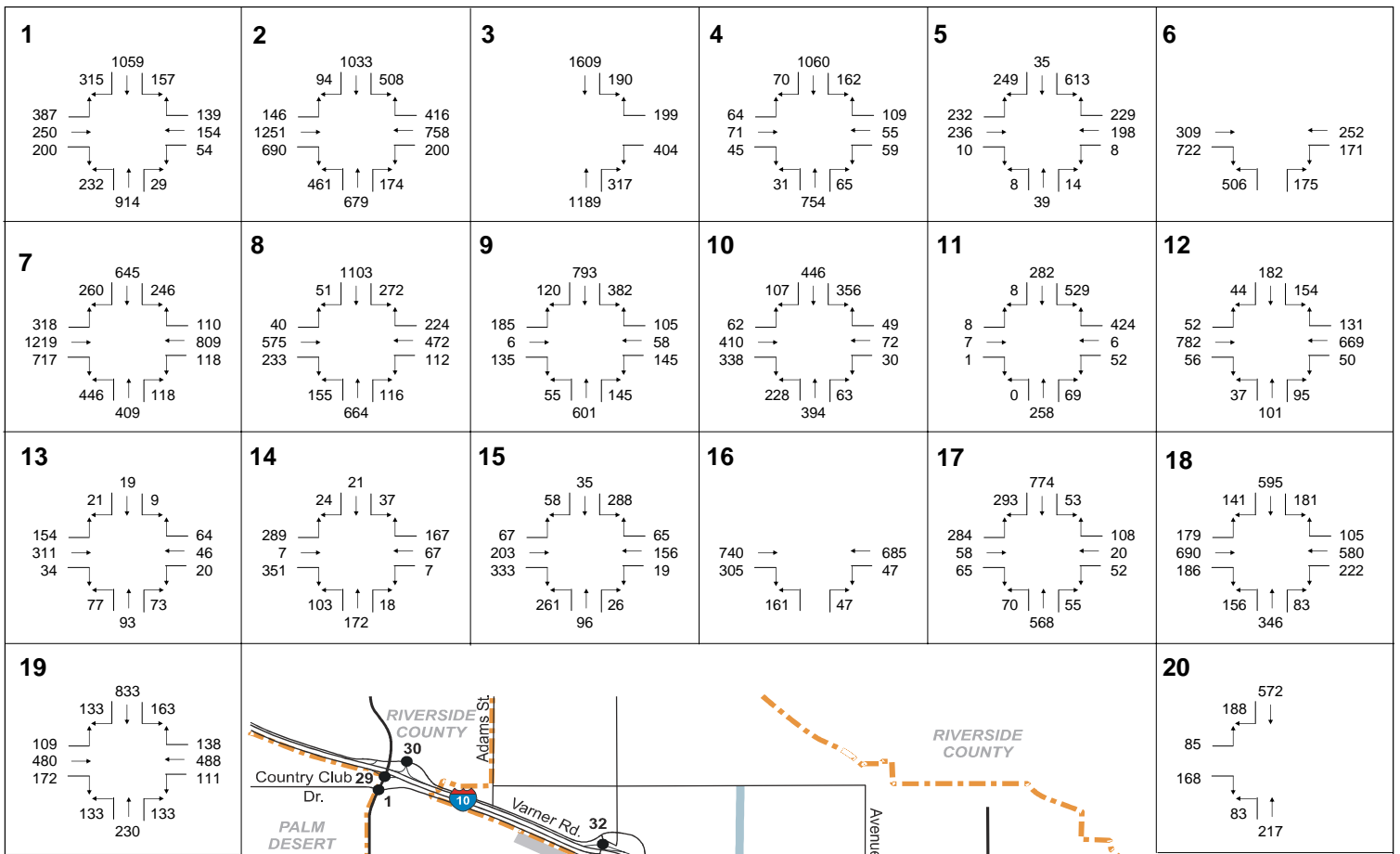


Fig III-7b  
Existing Conditions – 2012 With Festival – Traffic Volumes – Saturday 2-3 PM

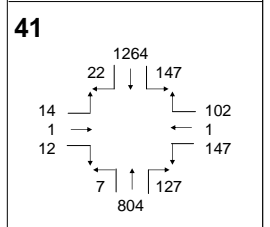
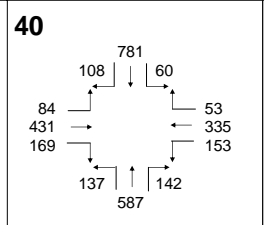
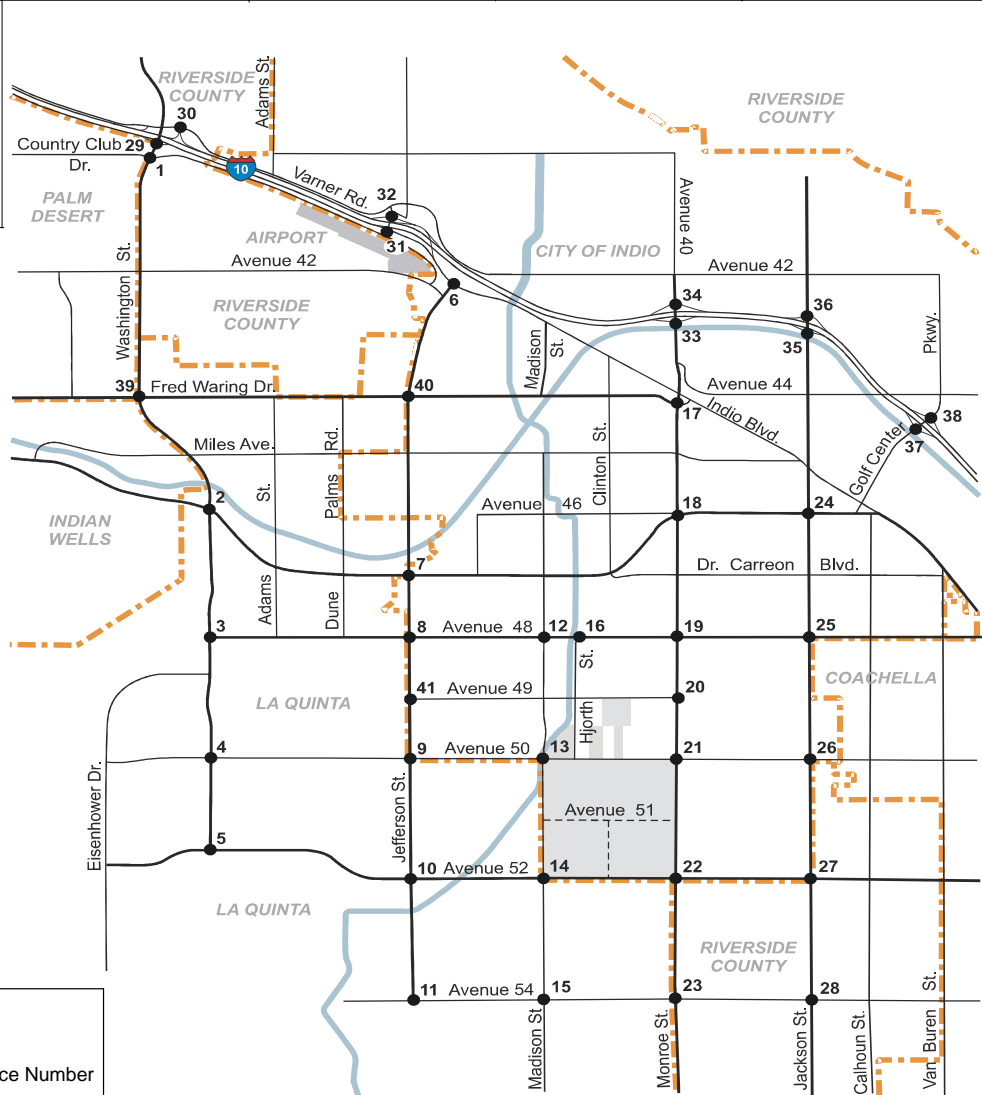
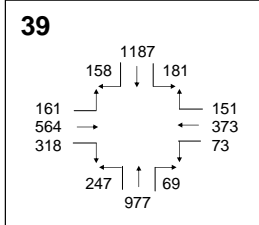
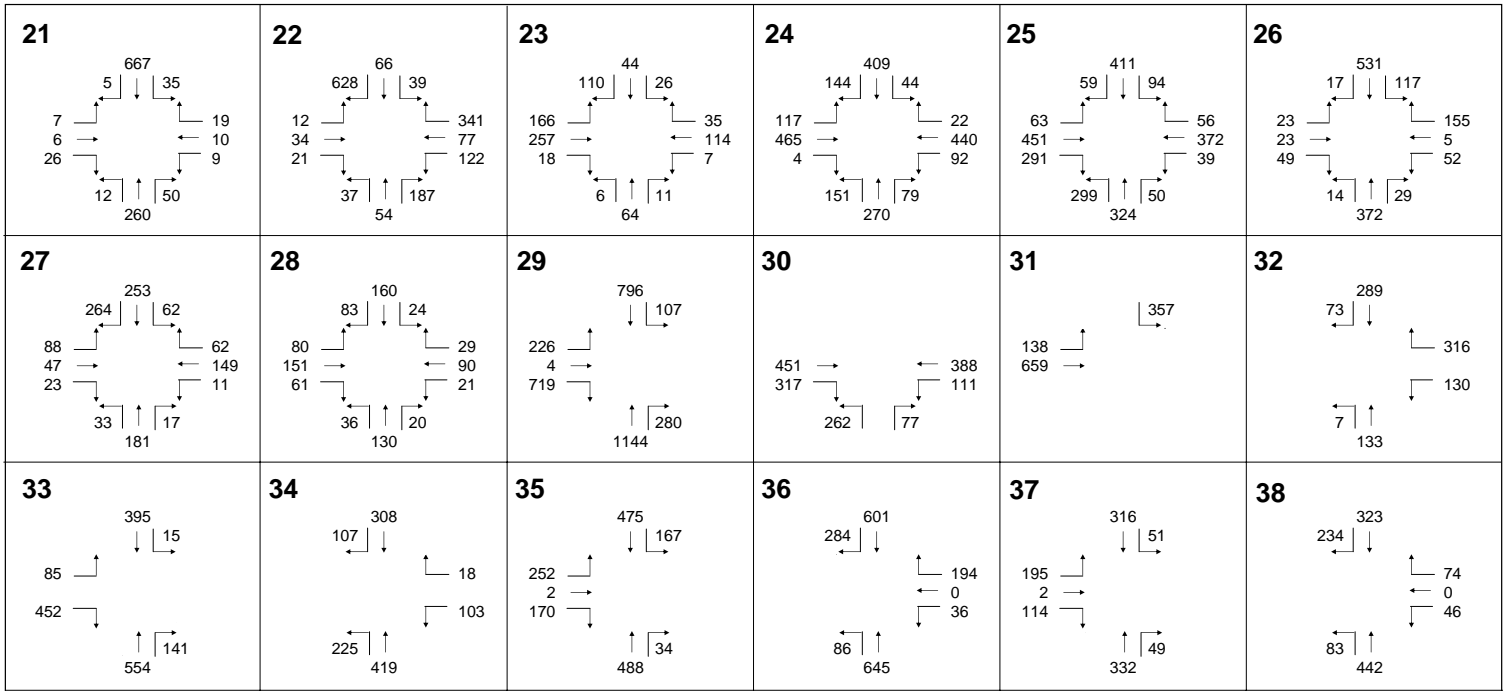
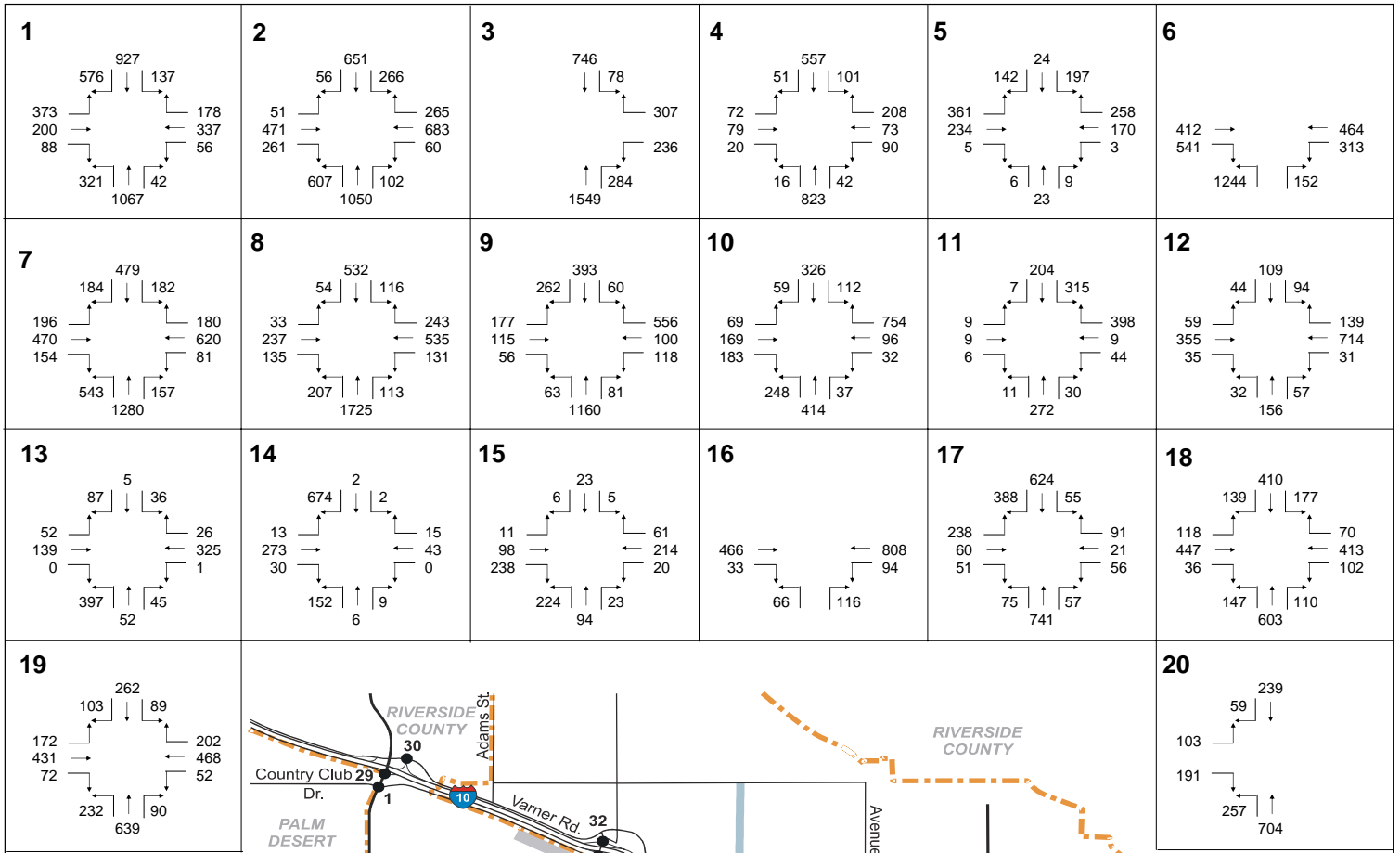


Fig III-7b cont.  
 Existing Conditions – 2012 With Festival – Traffic Volumes – Saturday 2-3 PM



**Legend**

- Study Intersection
- X Intersection Reference Number
- xx Intersection Turn Volume



Fig III-7c  
Existing Conditions – 2012 With Festival – Traffic Volumes – Monday 8-9 AM

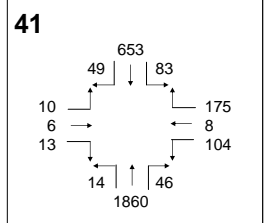
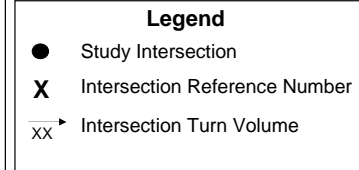
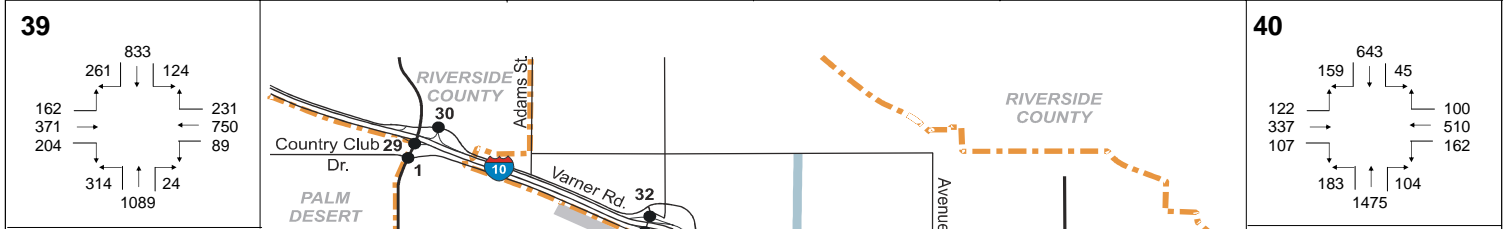
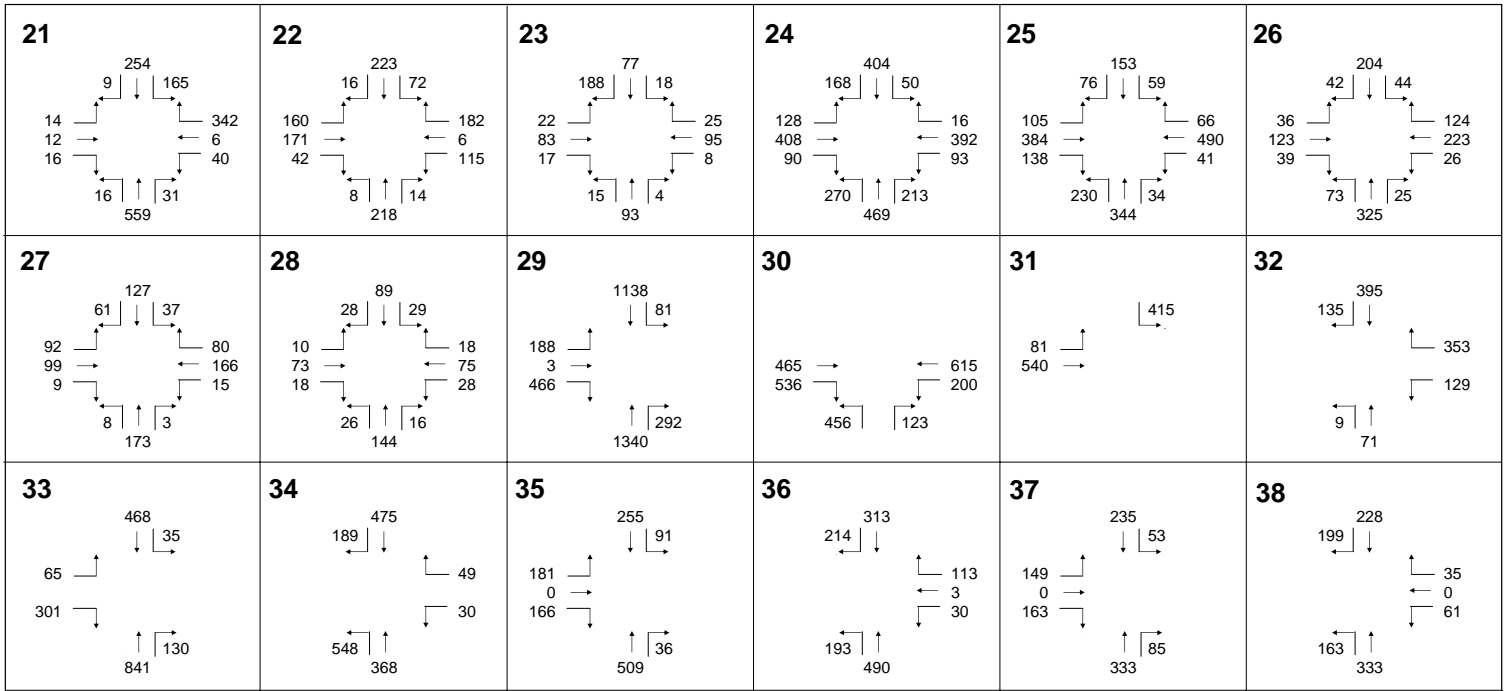


Fig III-7c cont.  
 Existing Conditions – 2012 With Festival – Traffic Volumes – Monday 8-9 AM

Traffic volumes during the festival are not necessarily the additive result of festival traffic. While the festival clearly adds traffic, the background (non-festival) traffic may in fact decrease during festival weekends – as some residents may leave town for the weekend, or other residents may not make their normal day-to-day trips on roads near the festival site. In other locations, background traffic could increase, if residents continue to make trips but use alternate routes to avoid closed streets and/or festival traffic. So traffic volumes observed during the festival are the combined result of added festival traffic and changes in the background traffic.

There may also be instances when the level of service at an intersection may not worsen or change during the festival weekend compared to a non-festival weekend – typically at locations close to the festival site. The reason for implementing traffic management measures during special events is in fact to try to achieve this and minimize the effects of special event traffic – particularly by reducing conflicting traffic movements to enable more efficient operation for the higher event volumes. During the festival, at certain intersections some streets may be closed and/or some turns may be prohibited. So while the traffic volumes in one direction (i.e. inbound to the festival) may increase, traffic in other direction may reduce or even be eliminated with street closures. In these instances there will be fewer conflicting movements at the intersections. As the level of service is based on an analysis of the intersection as a whole, including overall intersection volumes and the conflicting moves that have to be accommodated at the intersection (e.g. through moves versus left turn moves), the level of service (for the intersection as a whole) may be no worse than during non-event conditions. Intersection level of service is a valid methodology under both conditions. However, there may also be traffic queues comprised of festival traffic at some intersections, so these need to be considered as well. Traffic queues are discussed after the following analysis of intersection level of service.

Intersection Conditions – Level of Service

The intersection level of service analysis is summarized in Table III-10, which shows the calculated vehicle delay and associated level of service for each of the study intersections for each of the three analysis hours, for the 2012 Coachella Festival. The intersection levels of service are also shown in Figure III-8.

*Friday: 3:00 – 4:00 PM*

As shown in Table III-10 and Figure III-8a, all intersections in the study area operated at LOS D or better during the 2012 Coachella Festival, with five exceptions which were:

- |                                    |       |
|------------------------------------|-------|
| 2. Washington Street & Highway 111 | LOS E |
| 11. Jefferson Street & Avenue 54   | LOS F |

**Table III-10 Existing Conditions - Intersection Level of Service - 2012 With Festival**

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	41.2	D	37.2	D	39.6	D
2	Washington St & Hwy-111	LQ	Signalized	62.2	E	52.8	D	34.0	C
3	Washington St & Ave 48	LQ	Signalized	31.2	C	21.4	C	20.3	C
4	Washington St & Ave 50	LQ	Signalized	19.7	B	19.5	B	28.4	C
5	Washington St & Ave 52	LQ	Signalized	24.9	C	24.6	C	26.0	C
6	Jefferson St & Indio Blvd	I	Signalized	25.6	C	18.8	B	33.1	C
7	Jefferson St & Hwy-111	LQ	Signalized	31.4	C	31.0	C	30.1	C
8	Jefferson St & Ave 48	LQ	Signalized	31.7	C	31.6	C	33.5	C
9	Jefferson St & Ave 50	LQ	Signalized	32.7	C	31.9	C	43.1	D
10	Jefferson St & Ave 52	LQ	Roundabout	3.0	A	2.8	A	2.2	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	61.1	F	29.4	D	19.0	C
12	Madison St & Ave 48	I	Signalized	24.1	C	23.2	C	21.7	C
13	Madison St & Ave 50	I	4-Way Stop	11.5	B	13.6	B	30.6	D
14	Madison St & Ave 52	LQ	4-Way Stop	24.3	C	16.6	C	50.1	F
15	Madison St & Ave 54	LQ	4-Way Stop	21.5	C	23.7	C	11.6	B
16	Hjorth St & Ave 48	I	Signalized	17.7	B	13.2	B	15.3	B
17	Monroe St & Fred Waring Dr.	I	Signalized	27.0	C	23.1	C	21.1	C
18	Monroe St & Hwy-111	I	Signalized	34.0	C	33.2	C	31.9	C
19	Monroe St & Ave 48	I	Signalized	31.8	C	29.9	C	29.7	C
20	Monroe St & Ave 49	I	Signalized	6.7	A	7.6	A	8.3	A
21	Monroe St & Ave 50	I	Signalized	31.8	C	22.2	C	30.7	C
22	Monroe St & Ave 52	I	4-Way Stop	18.0	C	124.4	F	15.8	C
23	Monroe St & Ave 54	LQ	4-Way Stop	10.9	B	12.4	B	9.8	A
24	Jackson St & Hwy-111	I	Signalized	33.8	C	32.8	C	44.6	D
25	Jackson St & Ave 48	I	Signalized	32.2	C	29.6	C	27.9	C
26	Jackson St & Ave 50	I	4-Way Stop	41.9	E	19.9	C	25.8	D
27	Jackson St & Ave 52	CR	4-Way Stop	16.0	C	13.3	B	10.8	B
28	Jackson St & Ave 54	CR	4-Way Stop	11.4	B	13.2	B	9.0	A
29	I-10 EB Ramps & Washington St	C	Signalized	32.4	C	28.1	C	21.9	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.3	B	12.1	B	14.4	B



**Table III-10 Existing Conditions - Intersection Level of Service - 2012 With Festival**

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	16.0	C	11.2	B	13.2	B
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	15.0	B	12.2	B	14.1	B
33	I-10 EB Ramps & Monroe St	C	2-Way Stop	43.1	E	24.4	C	34.0	D
34	I-10 WB Ramps & Monroe St	C	2-Way Stop	172.1	F	57.1	F	371.8	F
35	I-10 EB Ramps & Jackson St	C	Signalized	18.8	B	14.7	B	14.4	B
36	I-10 WB Ramps & Jackson St	C	Signalized	8.9	A	7.3	A	8.3	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	15.0	B	14.0	B	14.1	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	11.8	B	9.6	A	12.0	B
39	Washington St & Fred Waring Dr	LQ	Signalized	35.4	D	31.2	C	31.3	C
40	Jefferson St & Fred Waring Dr	I	Signalized	28.1	C	27.5	C	25.8	C
41	Jefferson St & Ave 49	LQ	Signalized	20.5	C	18.4	B	17.5	B

Note:

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

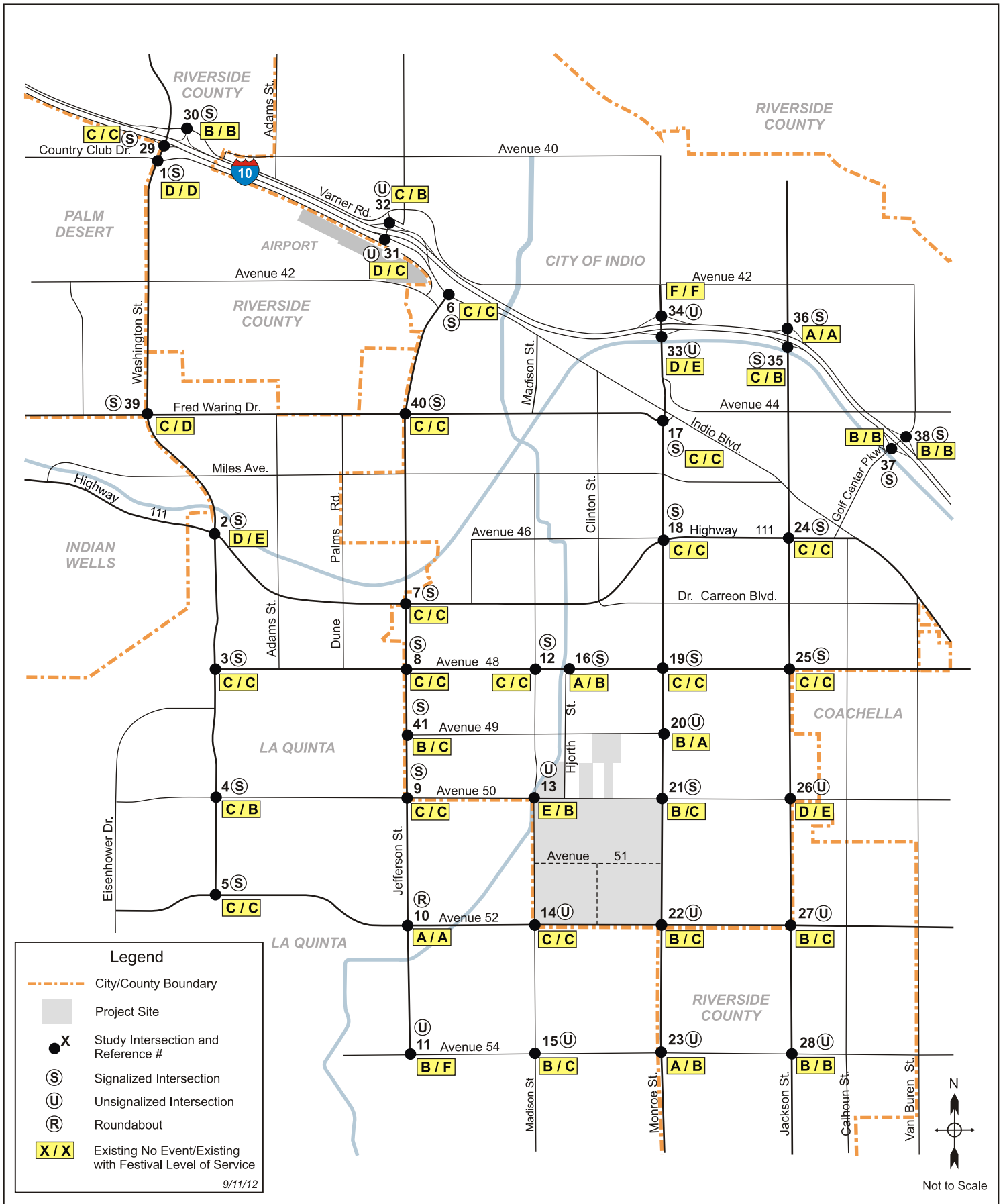


Figure III-8a  
 Existing Conditions – 2012 With Coachella Festival – Intersection Level of Service – Friday 3:00-4:00 PM

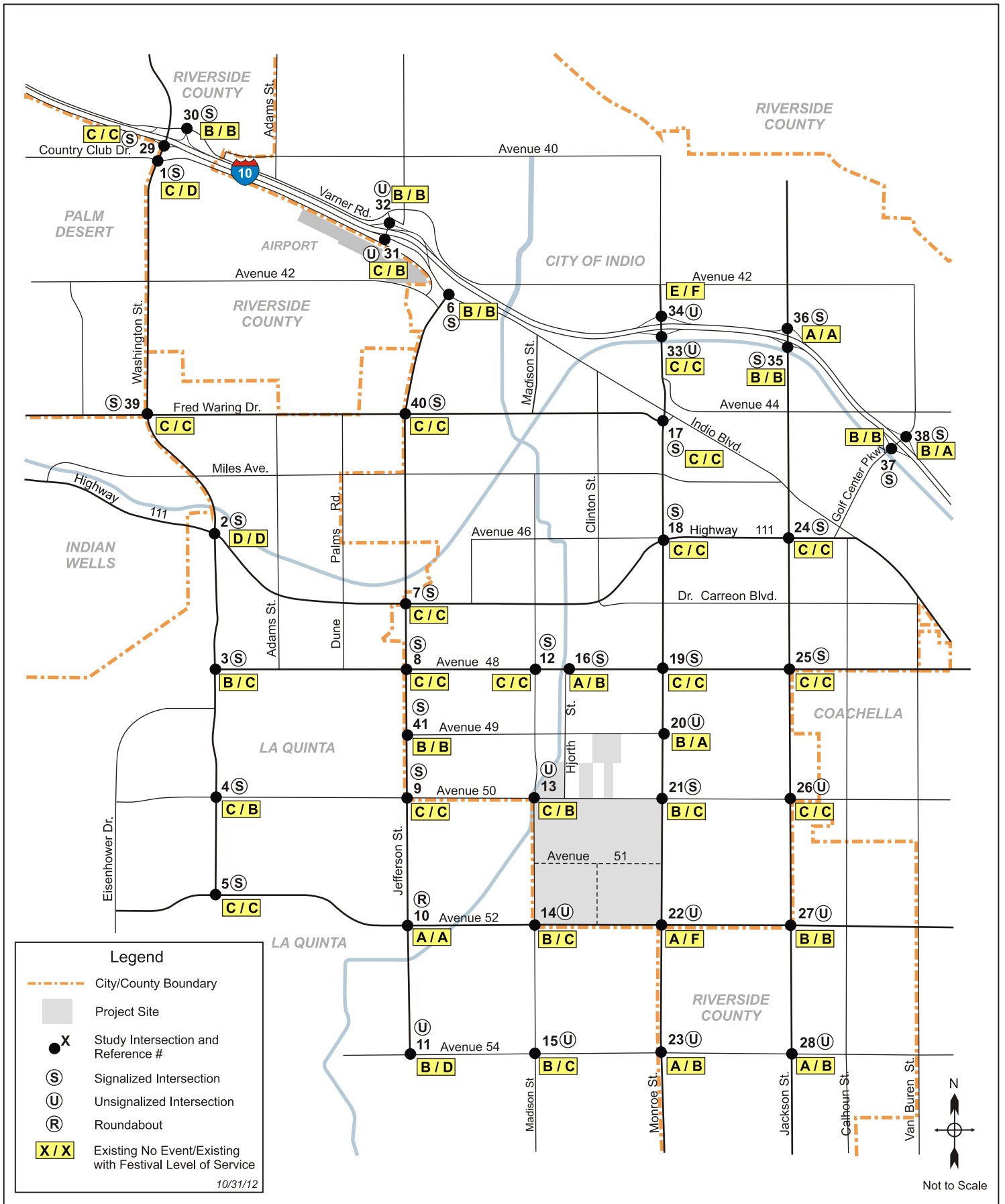


Figure III-8b  
 Existing Conditions – 2012 With Coachella Festival – Intersection Level of Service – Saturday 2:00-3:00 PM

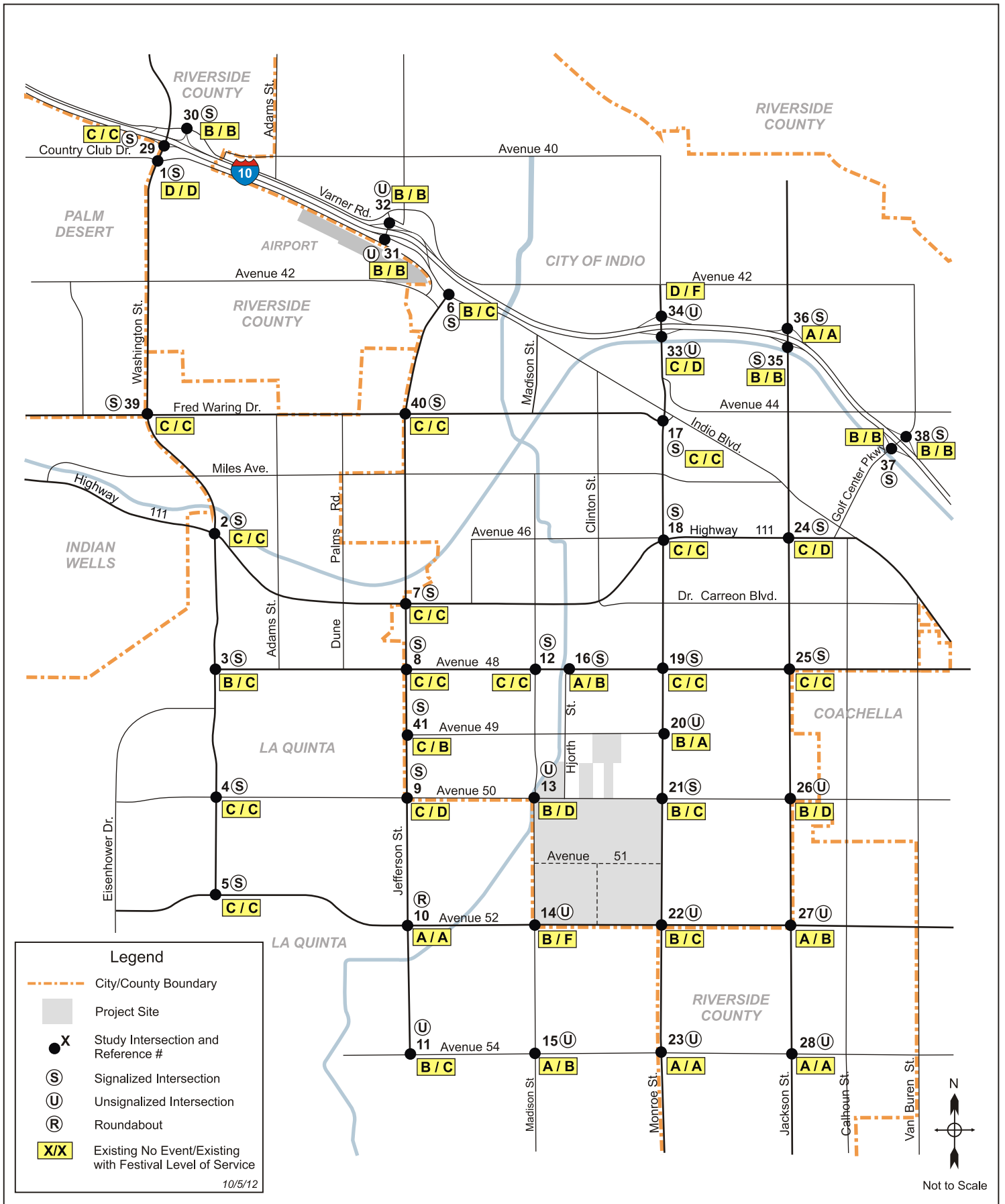


Figure III-8c  
 Existing Conditions – 2012 With Coachella Festival – Intersection Level of Service – Monday 8:00-9:00 AM

- 26. Jackson Street & Avenue 50 LOS E
- 33. Monroe Street & I-10 Eastbound Freeway Ramps LOS E
- 34. Monroe Street & I-10 Westbound Freeway Ramps LOS F

This compares to the no-event conditions when all intersections in the study area operated at LOS D or better with two exceptions (as shown in Table II-3 and Figure II-7a.), which were:

- 13. Madison Street & Avenue 50 LOS E
- 34. Monroe Street & I-10 Westbound Freeway Ramps LOS F

The number of intersections that operated by each level service category during the 2012 Coachella Festival are as follows, including a comparison to the no-festival existing conditions:

<i>Level of Service</i>	<i>2012 No-Festival</i>	<i>2012 Coachella Festival</i>
LOS A	4 intersections	3 intersections
LOS B	11 intersections	10 intersections
LOS C	19 intersections	21 intersections
LOS D	5 intersections	2 intersections
LOS E	1 intersections	3 intersections
LOS F	1 intersections	2 intersections

Intersection levels of service were slightly worse with the 2012 Festival than for the non-festival condition, with the majority of intersections remaining at the same level of service or worsening by one level. With the festival, there were five intersections operating at a level of service worse than LOS D, compared to two intersections for the no-festival condition. Of those five intersections, three operated at LOS E and two operated at LOS F (see Figure III-8a).

*Saturday: 2:00 – 3:00 PM*

As shown in Table III-10 and Figure III-8b, all intersections in the study area operated at LOS D or better during the 2012 Coachella Festival, with two exceptions which were:

- 22. Monroe Street & Avenue 52 LOS F
- 34. Monroe Street & I-10 Westbound Freeway Ramps LOS F

This compares to the no-event conditions when all intersections in the study area operated at LOS D or better (Table II-3 and Figure II-7b), with one exception, which was:

- 34. Monroe Street & I-10 Westbound Freeway Ramps      LOS E

The number of intersections that operated at each level service category during the 2012 Coachella Festival were as follows, including a comparison to the no-festival existing conditions:

<i>Level of Service</i>	<i>2012 No-Festival</i>	<i>2012 Coachella Festival</i>
LOS A	6 intersections	4 intersections
LOS B	14 intersections	13 intersections
LOS C	19 intersections	19 intersections
LOS D	1 intersections	3 intersections
LOS E	1 intersections	0 intersections
LOS F	0 intersections	2 intersections

Intersection levels of service were slightly worse with the 2012 Festival than for the non-festival condition, with the majority of intersections remaining at the same level of service or worsening by one level. With the festival, there were two intersections operating at a level of service worse than LOS D, compared to one intersection for the no-festival condition. Of those two intersections, both operated at LOS F (see Figure III-8b).

*Monday: 8:00 – 9:00 AM*

As shown in Table III-10 and Figure III-8c, all intersections in the study area operated at LOS D or better during the 2012 Coachella Festival, with two exceptions which are:

- 14. Madison Street & Avenue 52      LOS F
- 34. Monroe Street & I-10 Westbound Freeway Ramps      LOS F

This compares to the no-event conditions when all intersections in the study area operated at LOS D or better with one exception (Table II-3 and Figure II-7b) which was:

The number of intersections that operated at each level service category during the 2012 Coachella Festival are as follows, including a comparison to the no-festival existing conditions:

<i>Level of Service</i>	<i>2012 No-Festival</i>	<i>2012 Coachella Festival</i>
LOS A	7 intersections	5 intersections
LOS B	15 intersections	10 intersections
LOS C	17 intersections	18 intersections
LOS D	21 intersections	6 intersections
LOS E	0 intersections	0 intersections
LOS F	0 intersections	2 intersections

Intersection levels of service were slightly worse with the 2012 Festival than for the non-festival condition, with the majority of intersections remaining at the same level of service or worsening by one level. With the festival, there were two intersections operating at a level of service worse than LOS D, compared to no intersections for the no-festival condition. Of those three intersections, all operated at LOS F (see Figure II-8c).

### Traffic Queues

With major festivals such as Coachella and Stagecoach, heavy temporary peak traffic loads and traffic queues are to be expected, due to the high volumes and the peaking characteristics of patrons arriving and departing over short periods of time. As would therefore be expected, traffic queues occurred at certain times on the major access and egress routes. The traffic queues are often discontinuous with gaps occurring in the queues between intersections, and often build up and disperse quite quickly (within 15 – 30 minutes). The queues can be caused by a multiplicity of situations during the festival weekend, and were managed by real-time monitoring including adjusting parking access and egress routes at the festival site, by traffic control personnel directing traffic, and by implementing temporary intersection reconfigurations to enhance traffic flow.

The following is a discussion of the principal traffic queues that occurred during the festivals by day, based on data collection and observations.

#### *Camping Load In (Thursdays)*

The key queues that occurred during the camping load-in on Thursday are shown in Figure III-9a. This figure shows the average queue lengths, the maximum queue lengths and the time that the maximum queues occurred. All camping access occurred through Lot 13A in the south-west corner of the festival site, via access driveways from Madison Street just north of Avenue 52. Inbound access routes are shown in Figure III-3. Throughout the day, car

camping vehicles used primarily Jefferson Street and Monroe Street to access the festival site, with a minimal number of vehicles using either Washington Street or Jackson Street.

The principal traffic queues occurred on the approach roadways to Lot 13A, on westbound Avenue 52 between Madison Street & Monroe Street, and on southbound Madison Street between Avenue 51 & Madison Street.

For the Coachella Festivals, early morning traffic queues waiting for entry to Lot 13A were generally minimal. At 6:00am the only queue was along Avenue 52 from Madison Street and extended almost to Clinton Street. The queue was on the side of the road and did not block the westbound traffic lane so did not impact traffic. Between 8:00 and 9:00am this queue extended east of Clinton Street and almost to Monroe Street.

Over the course of the day, there were at times a steady flow of vehicles on Avenue 52, Monroe Street, and Madison Street, with some queues at times but there were generally no major queues. Queues developed on southbound Madison Street from the Lot 13A entry just north of Avenue 52, with the maximum queue occurring to about Avenue 51 (in the 4:00 to 5:00pm hour. Short queues occurred at times along southbound Monroe Street due to the normal traffic signal operation at Avenue 50 and due to production vehicles entering the festival site between Avenue 50 and Avenue 52. Because of their short length these queues generally had little impact on peak hour traffic.

There were no queues observed on Jefferson Street and no queues on Avenue 50 west of Madison Street, other than normal day-to-day conditions. There was little observable incoming festival traffic on Washington Street or Jackson Street throughout the day. Inbound traffic generally continued through the evening without other than normal queues.

#### *Inbound Festival Traffic*

Inbound festival traffic occurred between about 11:00 am and 7:00 pm each day and was generally over by about 5:00pm or 6:00pm, with some variation between days, due to weather conditions and to the event schedule. Figures III-9b to III-9d show the extent of typical and peak inbound traffic queue lengths observed during the festivals, and the times of the peak queues, for Friday, Saturday and Sunday respectively.

The principal traffic queues occurred on westbound Avenue 52 from Clinton Street (access to Day Parking Lots) to Monroe Street, and on southbound Monroe Street from Avenue 52 typically extending north to Avenue 50. The peak queues typically occurred between 1:00 pm and 4:00 pm. The maximum queues typically extended to a short distance beyond Avenue 49, and sometimes reached Avenue 48. There were a few isolated times when the inbound queues reached just south of Dr. Carreon Boulevard. Rather than being one continual line of cars, the queues were often discontinuous and broken up by intersections along the route (i.e. queues occurred on Monroe Street from Avenue 52 to around Avenue 51, then would start



again at Avenue 50, or at Avenue 49). Queues often dispersed within a half-hour, and did not cause traffic backups on cross-streets.

The inbound traffic queues on eastbound Avenue 50 and Avenue 52 extending from Madison Street were generally less than approximately 750 feet, although were longer at certain times but rarely extended beyond about half the distance between Madison Street and Jefferson Street (see Figures III-9b to III-9d). Traffic queues did not cause any blockages of residential driveways, including entrances/exits to residential developments on Madison Street, Avenue 50, Avenue 52, or Jefferson Street.

There was very little evidence of inbound traffic queues or even heavy traffic on Jefferson Street during all three festivals. Similarly there was little evidence of festival traffic or traffic queues on Jackson Street and Washington Street.

Relatively short traffic queues occurred at times on northbound Madison Street south of Avenue 52, from vehicles accessing the Taxi/Pick-Up & Drop-Off (PUDO) Lot at Madison Street & Avenue 52.

Some traffic queues occurred on Hjorth Street, primarily southbound. These occurred both northbound and southbound on the Friday between 3:00 and 4:00 pm, when the Elementary School let out, and primarily southbound at other times as shuttles approached the Shuttle Lot on Avenue 50.

#### *Outbound Festival Traffic*

Outbound festival traffic generally occurred between 10:00 pm and 3:00 am, with a peak after the end of the event at 1:00 pm. Outbound traffic dispersed within about one and a half hours to two hours of the end of the event.

The principal outbound routes are shown in Figure III-4, and generally used Monroe Street northbound, Avenue 52 eastbound to Jackson Street northbound, and Avenue 52 and Avenue 50 to Jefferson Street northbound. Key traffic queue locations are shown in Figure III-9e.

Outbound (northbound) traffic queues occurred on Monroe Street, with maximum queues extending south from Avenue 48 almost to Avenue 52. Traffic control officers were usually effective in moderating these northbound queues by sending traffic leaving the festival site south on Monroe Street and/or east on Avenue 52 instead when traffic was particularly heavy on northbound Monroe Street.

Outbound traffic queues occurred on eastbound Avenue 52 from Clinton Street to Jackson Street and on northbound Jackson Street extending back from Avenue 50. Traffic was

generally kept moving with the use of traffic control officers at the intersections of Jackson Street & Avenue 52 and at Jackson Street & Avenue 50.

No westbound traffic queues were observed on Avenue 52 between Monroe Street and Madison Street – partly because all exiting traffic from Day Parking was usually sent east in order to avoid conflicts at Madison Street with the Taxi/Pick-Up/Drop-Off (PUDO) Lot.

No appreciable outbound traffic queues were observed on Jefferson Street after the end of events. Traffic queues were observed at times on westbound Avenue 50 to Jefferson Street, but rarely on Avenue 52 to Jefferson Street.

Some traffic queues occurred on northbound Madison Street south of Avenue 52, and on eastbound Avenue 52 west of Madison Street, typically between about 11:00 pm and 2:00 am, from vehicles accessing the Taxi/PUDO Lot at Madison Street & Avenue 52.

#### *Camping Load-Out (Mondays)*

For the Coachella Festivals, camping load out occurred on a steady basis on the Monday mornings. There was little outbound traffic until about 8:00am when a steady stream of traffic started. The majority of traffic occurred after 9:00am so did not coincide with the morning commute hour. Exiting car camping traffic primarily used westbound Avenue 50 and northbound Jefferson Street. Key traffic queue locations are shown in Figure III-9f. There were some, short queues on northbound Monroe Street at times. Some festival traffic was observed on northbound Washington Street but it did not cause any traffic queues. Southbound Madison Street between Avenue 50 and Avenue 52 was closed at certain times after 9:00am to facilitate car camping traffic exiting the festival site. Traffic queues developed on northbound Madison Street leaving the site, and on westbound Avenue 50 to Jefferson Street. Queues on westbound Avenue 50 from Jefferson Street extended almost to Madison Street at times.

Between approximately 9:00am and 11:00am traffic queues occurred on northbound Jefferson Street in two principal locations. Firstly, from Highway 111 back to Avenue 48 at times and occasionally to Avenue 49. Also, queues were observed approaching Avenue 42 and Indio Boulevard in the left lanes to access the I-10 freeway westbound. Once traffic passed through the intersection of Jefferson Street and Indio Boulevard, there were no backups accessing the freeway. The traffic queues had generally dissipated by 11:00 am and the car camping lots were virtually empty by 11:30 am.

#### Existing Conditions – Shuttle Operations

The shuttle operation established for the festivals was described earlier in this chapter. The planned shuttle routes were successful in allowing shuttles effective access into and out of the

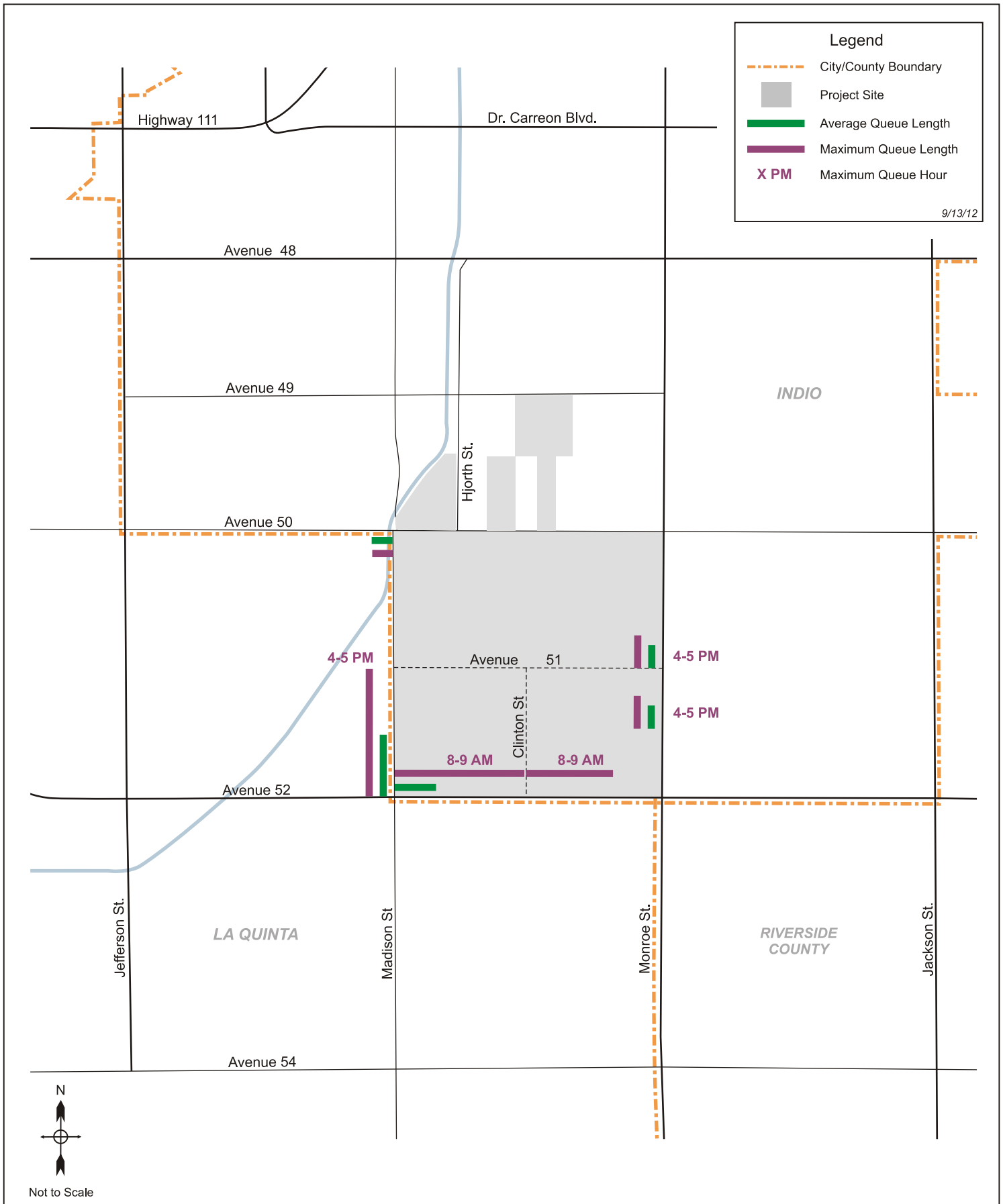


Figure III-9a  
 Observed Traffic Queues - Existing 2012 Festival - Coachella 1 - Camping Load-In Inbound -Thursday

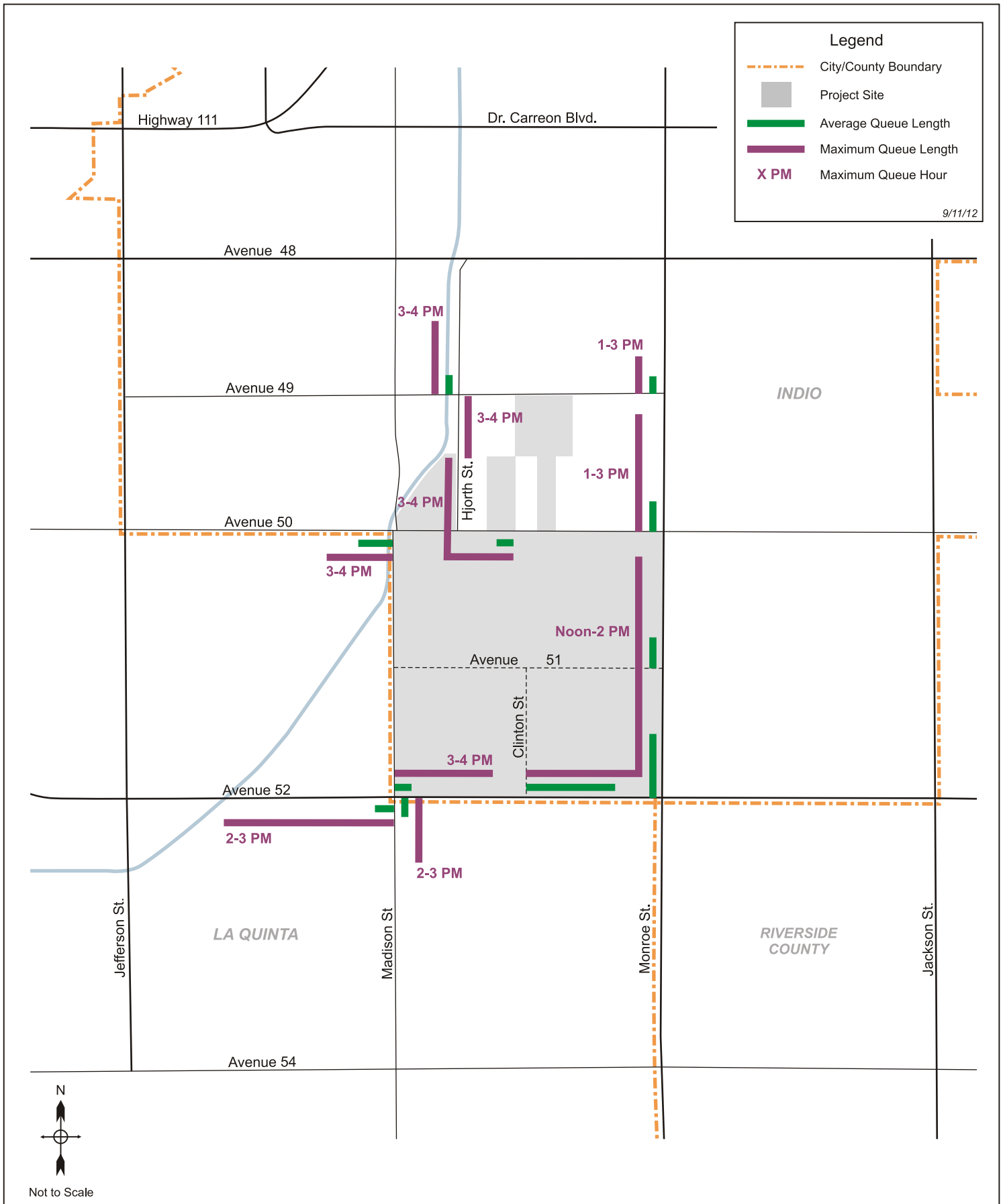


Figure III-9b  
 Observed Traffic Queues - Existing 2012 Festival - Coachella 1 - Day Parking Inbound - Friday

**Legend**

- City/County Boundary
- Project Site
- Average Queue Length
- Maximum Queue Length
- X PM Maximum Queue Hour

9/11/12

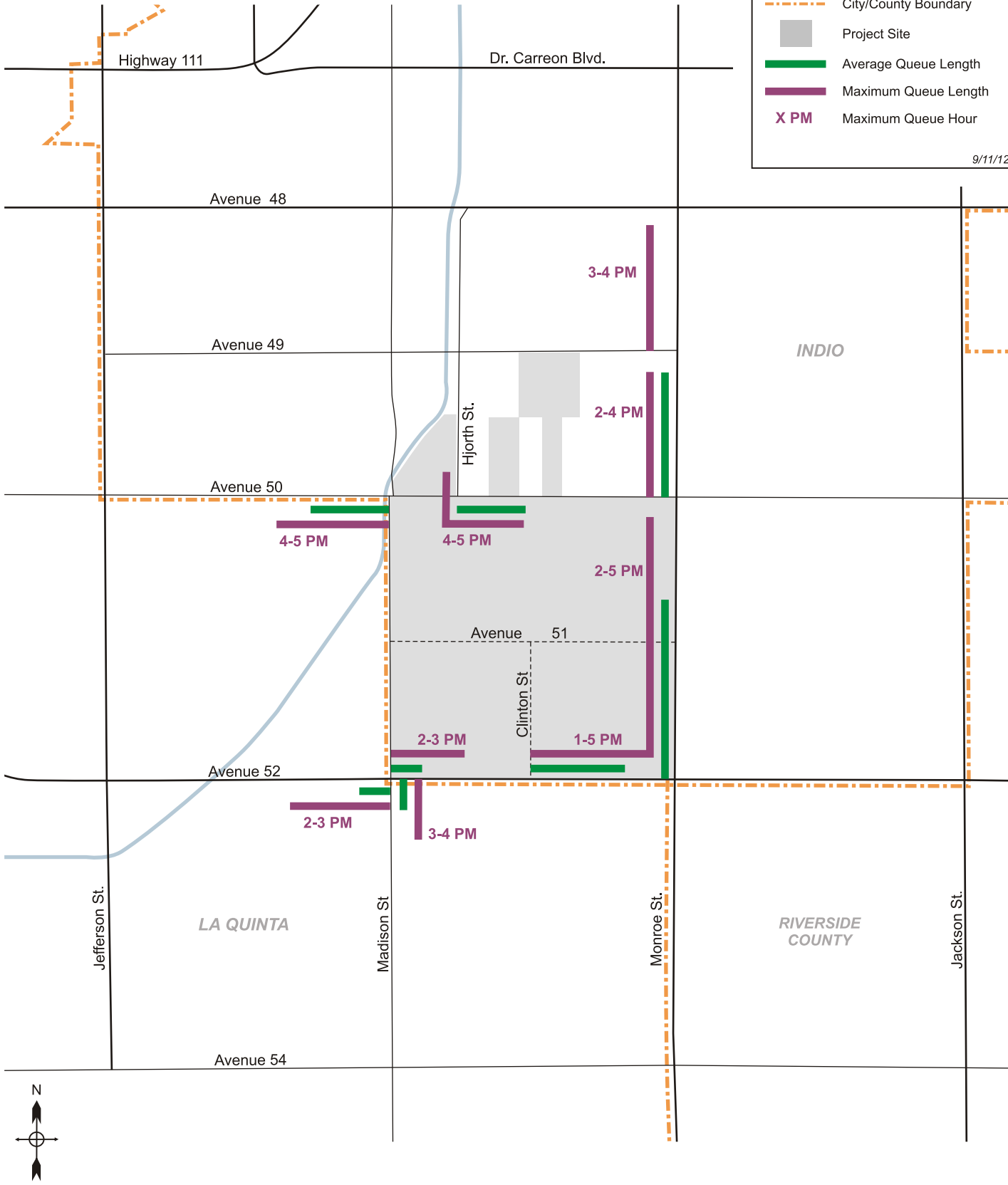


Figure III-9c  
Observed Traffic Queues - Existing 2012 Festival - Coachella 1 - Day Parking Inbound - Saturday

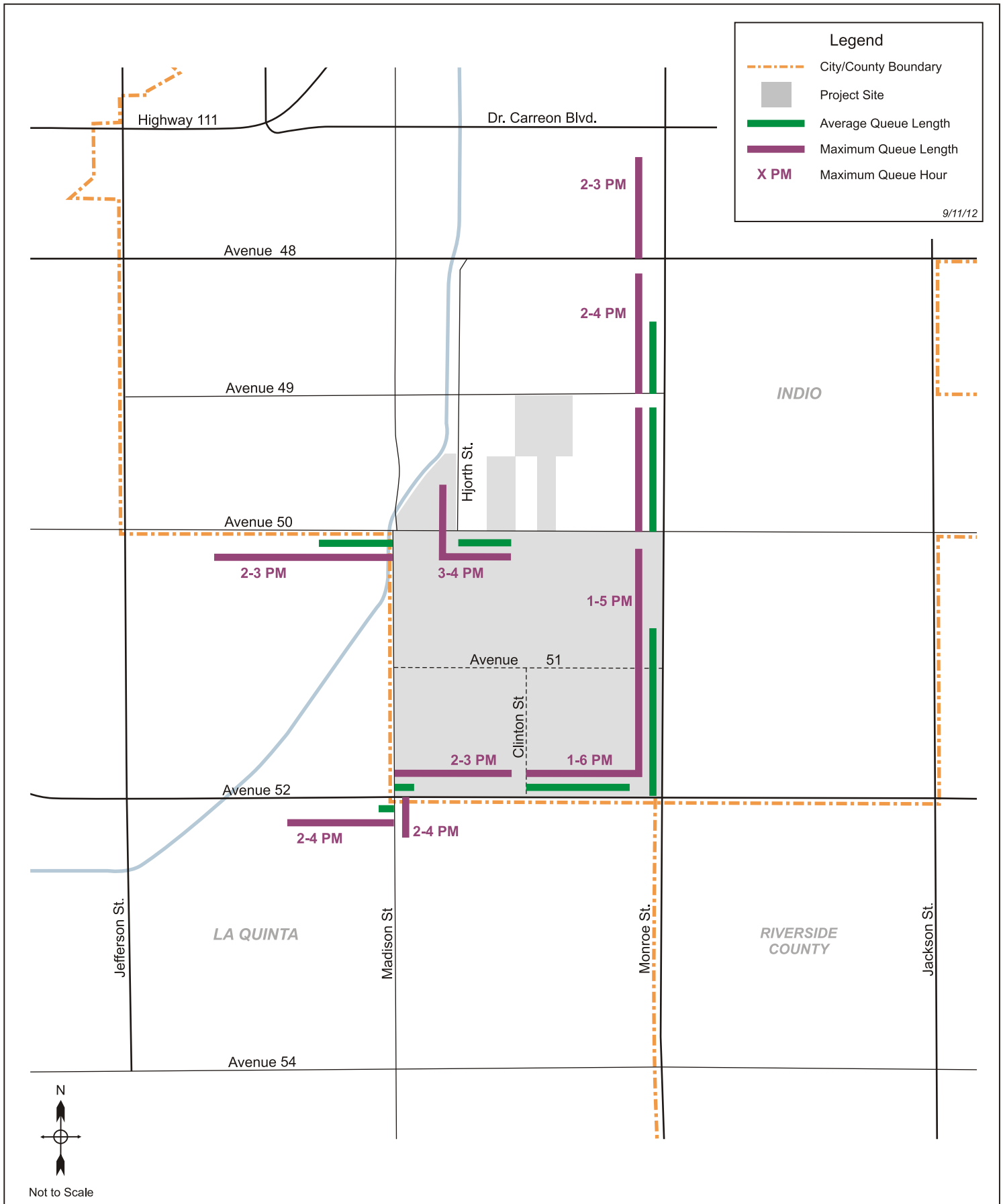


Figure III-9d  
 Observed Traffic Queues - Existing 2012 Festival - Coachella 1- Day Parking Inbound - Sunday

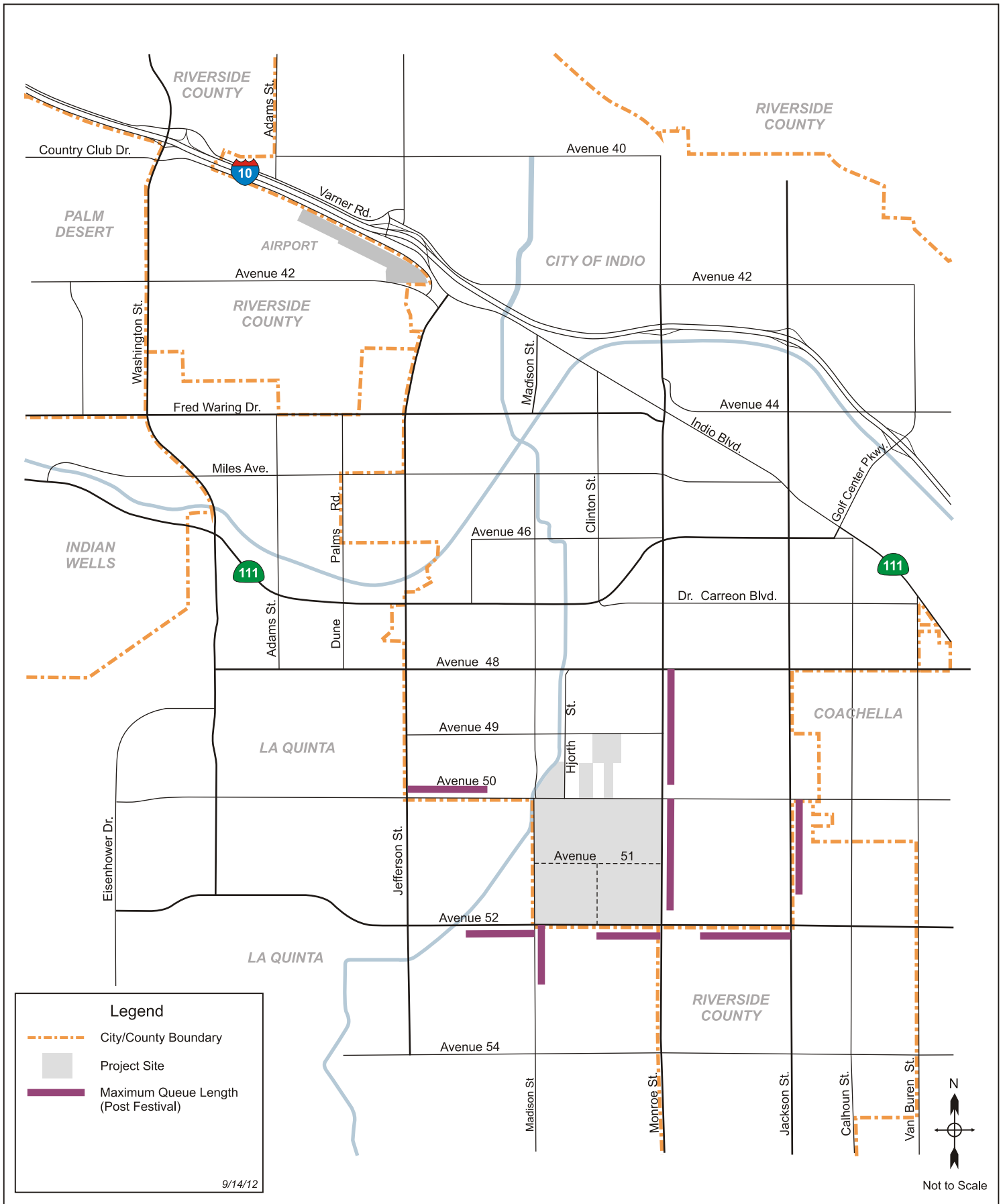


Figure III-9e  
 Observed Traffic Queues - Existing 2012 - Coachella Festival - Day Parking Outbound

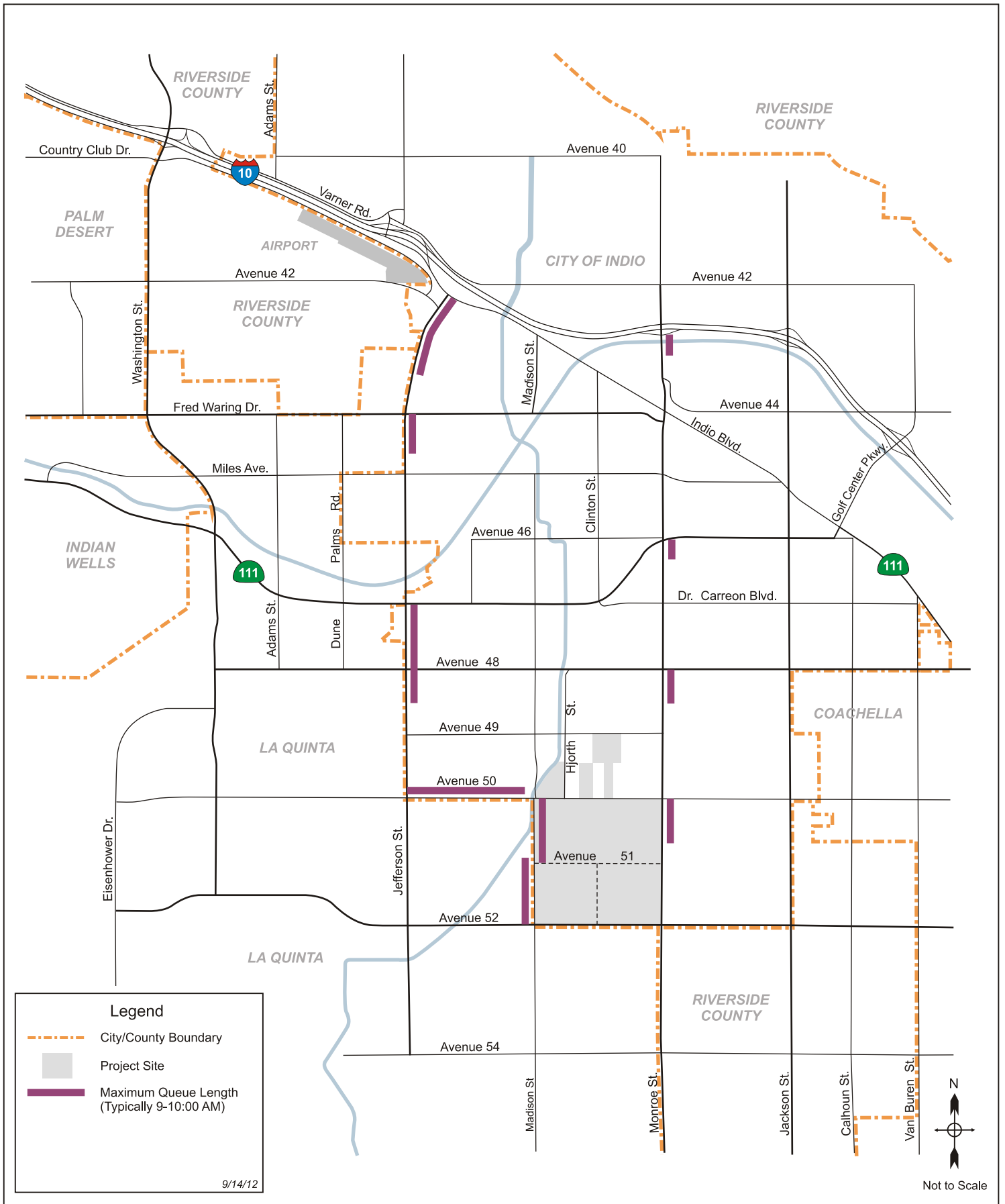


Figure III-9f  
 Observed Traffic Queues - Existing 2012 - Coachella Festival - Camping Load-Out - Monday



festival site. The shuttle operation did not cause any noticeable impacts on regular traffic on any of the shuttle routes. Overall, the shuttle program implemented for the 2012 Festivals was operated effectively and successfully.

#### Existing Conditions – Public Transit

A negligible volume of festival patrons used public transit as there are no existing routes directly serving the Festival Site. Public transit operations were not affected by festival traffic as traffic queues did not extend to streets used by Sunline Transit (see Figure II-5).

#### Existing Conditions With 2012 Festival – Freeways

##### *Freeway Segments*

Existing traffic volumes on the freeway segments, and corresponding D/C ratios, for the 2012 Festival conditions are shown in Table III-11 for each of the analysis hours. These may be compared to the LOS conditions shown in Table II-5 for existing condition with no festival. While the D/C ratios are marginally higher for the Festival condition, the level of service in each of the three analysis hours is the same for all analysis locations between the two conditions, with two exceptions. During the Monday 8:00 to 9:00 am hour at I-10 westbound, west of Washington Street, the level of service was LOS B for the no festival condition and LOS D with the festival, and at I-10 westbound, west of Jefferson Street, where the level of service was LOS B for the no festival condition and LOS C with the festival.

##### *Freeway Off-Ramps*

Existing traffic conditions on the freeway off-ramps for the 2012 Festival conditions are shown in Table III-12. These may be compared to the LOS conditions shown in Table II-6 for existing conditions with no festival. The off-ramp analysis shows that while queue lengths were generally longer with the Festival, vehicle queues did not exceed the ramp storage lengths at any of the off-ramp locations under the 2012 Festival conditions.

##### *Freeway On-Ramps*

Existing traffic conditions on the freeway on-ramps for the 2012 Festival conditions are shown in Table III-13. These may be compared to the LOS conditions shown in Table II-7 for existing condition with no festival. The on-ramp analysis shows that while vehicle volumes were generally higher with the Festival, they did not exceed the on-ramp capacities at any of the on-ramp locations under the 2012 Festival conditions.

**Table III-11 Existing Conditions - Freeway Segment Level of Service - 2012 With Festival**

No.	Location	Notes	DIR	No of Lanes	Capacity (veh/hr)	Existing - Friday 3-4 PM <sup>2</sup>			Existing - Saturday 2-3 PM <sup>2</sup>			Existing - Monday 8-9 AM <sup>2</sup>		
						Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	1	EB	3 G	6,000	4,551	0.758	D	4,425	0.737	D	3,884	0.647	C
			WB	3 G	6,000	3,764	0.627	C	3,020	0.503	C	4,605	0.767	D
2	I - 10 b/w Washington Street and Jefferson Street	1	EB	3 G	6,000	4,050	0.675	C	3,939	0.656	C	3,457	0.576	C
			WB	3 G	6,000	3,351	0.558	C	2,688	0.448	B	3,991	0.665	C
3	I - 10 b/w Jefferson Street and Monoe Street	1	EB	3 G	6,000	3,247	0.541	C	3,204	0.534	C	2,817	0.469	B
			WB	3 G	6,000	2,730	0.455	B	2,190	0.365	B	2,351	0.392	B
4	I - 10 b/w Monoe Street and Jackson Street	1	EB	3 G	6,000	2,936	0.489	B	2,911	0.485	B	2,657	0.443	B
			WB	3 G	6,000	2,482	0.414	B	1,991	0.332	B	1,963	0.327	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	1	EB	3 G	6,000	2,691	0.449	B	2,668	0.445	B	2,443	0.407	B
			WB	3 G	6,000	2,281	0.380	B	1,826	0.304	B	1,800	0.300	A
6	I - 10 east of Golf Center Pkwy	1	EB	3 G + 1 A	7,000	2,496	0.357	B	2,474	0.353	B	2,367	0.338	B
			WB	4 G	8,000	2,122	0.265	A	1,694	0.212	A	1,669	0.209	A

Notes:

G - General Purpos Lane

A - Auxilliary Lane

1. Freeway AADT from Caltrans 2011 AADT Traffic Volumes.

2. Peak hour and directional volumes obtained by using appropriate K & D factors from Caltrans' 2010 *Peak Hour Volume Data Report* .

**Table III-12 Existing Conditions - Freeway Off-Ramp Analysis - 2012 With Festival**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Existing Conditions								
					Friday 3-4 PM			Saturday 2-3 PM			Monday 8-9 PM		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From I-10 West</u>													
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	246	154	No	230	132	No	191	132	No
		EB RT	2	1,025	784	748	No	719	550	No	466	418	No
		RAMP TOTAL	4	2,090	1,030	902	No	949	682	No	657	550	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	134	22	No	138	22	No	81	22	No
		EB TH <sup>1</sup>	1	705	802	0	No	659	0	No	540	0	No
		RAMP TOTAL	2	1,410	936	22	No	797	22	No	621	22	No
3 Monroe Street EB Off ramp	2-Way Stop	EB LT/TH	1	695	78	66	No	85	44	No	65	88	No
		EB RT	1	695	510	242	No	452	132	No	301	88	No
		RAMP TOTAL	2	1,390	588	308	No	537	176	No	366	176	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	332	352	No	254	242	No	181	198	No
		EB RT	1	775	269	264	No	170	154	No	166	154	No
		RAMP TOTAL	2	1,550	601	616	No	424	396	No	347	352	No
<u>From I-10 East</u>													
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	86	88	No	46	66	No	61	66	No
		WB RT	1	355	83	88	No	74	88	No	35	44	No
		RAMP TOTAL	2	710	169	176	No	120	154	No	96	110	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	59	66	No	36	44	No	33	44	No
		WB RT	1	740	225	0	No	194	0	No	113	0	No
		RAMP TOTAL	2	1,480	284	66	No	230	44	No	146	44	No
7 Monroe Street WB Off ramp	2-Way Stop	WB LT/TH	1	685	92	154	No	103	88	No	30	110	No
		WB RT	1	685	38	22	No	18	22	No	49	22	No
		RAMP TOTAL	2	1,370	130	176	No	121	110	No	79	132	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	164	44	No	130	22	No	129	44	No
		WB RT	1	503	418	66	No	316	44	No	353	66	No
		RAMP TOTAL	2	1,006	582	110	No	446	66	No	482	110	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.

**Table III-13 Existing Conditions - Freeway On-Ramp Analysis - 2012 With Festival**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Existing Conditions					
			Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM	
			Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity
<u>To I-10 West</u>								
1 Washington Street WB On ramp	1	900	528	No	428	No	736	No
2 Jefferson Street WB On ramp	1	900	91	No	80	No	144	No
3 Monroe Street WB On ramp	1	900	435	No	332	No	737	No
4 Jackson Street WB On ramp	1	900	416	No	370	No	410	No
<u>To I-10 East</u>								
5 Golf Center Pkwy EB On ramp	1	900	136	No	102	No	138	No
6 Jackson Street EB On ramp	1	900	230	No	203	No	127	No
7 Monroe Street EB On ramp	1	900	216	No	156	No	165	No
8 Jefferson Street EB On ramp	1	900	121	No	79	No	114	No

Notes:

1. Number of lanes on ramp.
2. Capacity for one lane on-ramp = 900 veh/hr/ln
3. Existing volumes from 2012 intersection counts unless otherwise noted.

### New Transportation Measures Implemented for the 2012 Festivals

Three key new transportation management measures were implemented for the 2012 Festivals, which are described below.

#### *Expansion of Shuttle Operations*

The shuttle operation was expanded for 2012. As described earlier the shuttle was effective in transporting an average of over 16,700 passengers per day at the 2012 Coachella Festival on a total of eight routes. In 2011 the shuttle operated over seven routes, and carried approximately 12,500 passengers per day.

#### *Pedestrian Prohibitions*

New pedestrian restrictions were enforced on Monroe Street and Madison Street between Avenue 50 & Avenue 52 in 2012. These were very effective and eliminated the pedestrian-vehicle conflicts that had occurred in these areas in previous years.

#### *New Location for the Taxi/Pick Up and Drop Off (PUDO) Lot*

A new feature of the Traffic and Parking Plan for 2012 was the Taxi/PUDO Lot established at the southern end of Lot 13A (the northeast corner of the Madison Street & Avenue 52 intersection with access from Madison Street).

This lot was very successful in terms of the number of patrons served, both for taxis and pick up/drop-off. In fact use of the lot was higher than expected, so there were initially some problems during the early days of the festivals - primarily with traffic access and egress at the lot driveways, the size of the lot – which was initially too small, traffic queues developing on eastbound Avenue 52 west of Madison Street and on northbound Madison Street south of Avenue 52 to access the lot, and with some pick-up and drop-off activity occurring on-street rather than in the lot. These were largely resolved during the course of the festivals. The Applicant, working with the Cities of Indio and La Quinta did respond successfully to these initial problems, by enlarging the size of the lot, by providing separate areas for taxis and for the PUDO operation, by improving the access/egress circulation, and by improving traffic and pedestrian control procedures at the intersection of Avenue 52 and Madison Street. These modifications improved the operation considerably, although some of the same issues occurred at times but to a far lesser extent, and with continued but significantly less unofficial pick up activity on the streets after the event. With further improvements in the future, this operation should work successfully (see proposed Project Design Features in Chapter V).

## **IV. Future Without Project Conditions**

This chapter describes and analyzes future traffic conditions in the Project study area that will occur without the Project, as a baseline against which to analyze Project impacts. This is referred to in this chapter and throughout the report as the “Future Without Project Conditions. The analysis builds on the Existing Conditions – No Event analysis in Chapter II and adds anticipated traffic growth (without the Festival) to a future horizon year. The analysis addresses a future year of 2014, which is the first year the attendance capacities proposed by the Project would be authorized. The analysis includes traffic projections to the year 2014, and also includes planned and programmed public infrastructure improvements that will be completed in the study area by April 2014 (the first month the festivals would be held).

### **IV.1 Traffic Forecasts**

Traffic forecasts to the year 2014 were prepared using the most recent travel forecasts in the City of Indio General Plan and the City of La Quinta General Plan. The City of Indio adopted a Circulation Plan Update in 2008, which included traffic forecasts using the City of Indio Traffic Model with updated land use forecasts. The City of La Quinta General Plan Update is currently scheduled for adoption in October 2012. This includes traffic forecasts that were developed using the La Quinta Traffic Analysis Model. Both local models were consistent with SCAG sub-regional and regional models. These were therefore the most recent and applicable sources for the traffic forecasts used in this study. These travel forecasts covered the Project study area and provided information for all of the study intersection locations.

CEQA allows future traffic forecasts to be prepared either using General Plan forecasts or using a list of development (related) projects that might reasonably be expected to be built by the opening year of the proposed project. Both methods were considered for this study and the use of General Plan forecasts was considered to be the most accurate and conservative method for a number of reasons.

The cities in the Coachella Valley have in the past experienced major growths in land uses (until the economic recession) and the forecasts in the future are for major growth to continue. As these growths occur, there will be many trip-making interactions between specific land use types and developments – for example from residential uses to commercial, institutional and entertainment/recreational uses, as well as from commercial uses to other commercial uses. The City forecasting models not only include the most comprehensive forecasts of land uses in the study area, they also provide the most accurate and reliable methods for forecasting future travel demands. This is because the area wide models, with their more comprehensive

nature and greater technical sophistication are better able to directly account for the interaction between the different land uses with respect to trip making.

In addition the current economic recession has created considerable uncertainty in the development community. With little or no current development activity, many projects have been stopped, or withdrawn, or there is uncertainty as to if and when they might proceed. By using the General Plan forecasts, the current inactivity and uncertainty is avoided. The General Plan forecasts translate into relatively high annual traffic growth ratios (typically 4% or higher per year), and so provide conservatively high growth estimates.

The existing traffic volumes and future horizon year traffic forecasts from these sources were used to first determine the overall forecast traffic growth, and then to determine an average annual traffic growth rate, for each intersection approach at all study intersection locations<sup>1</sup>. This ensured greater accuracy by applying specific traffic growth forecasts for each intersection location, rather than applying an area wide average. The annual growth factors were then converted to growth rates between 2012 and 2014. The growth factors for each intersection approach were applied to the existing 2012 turning volumes at each intersection, through an iterative growth factoring process<sup>2</sup>, to obtain 2014 intersection volume forecasts for each of the three analysis time periods. The traffic growth factors were based on the average daily traffic forecasts for weekdays and the same factors applied to the Friday 3:00 to 4:00 pm hour, the Saturday 2:00 to 3:00 pm hour and the Monday 8:00 to 9:00 am hour. (Weekend day traffic forecasts were not directly available, so the methodology assumes that future weekend traffic *growth* rates would be the same as weekday traffic *growth* rates – i.e., that the growth in travel is similar for weekdays and weekends. This is a reasonable assumption as current travel behavior in that respect is likely to remain constant in the future). The traffic growth factors are shown in Table A.IV-1 in Appendix A.

The Indio General Plan forecasts were used for study intersection locations in the City of Indio. The La Quinta General Plan forecasts were used for study intersection locations in the City of La Quinta. For the few other remaining locations, the City of Indio forecasts were used as the Indio General Plan travel model covered the entire study area.

The annual traffic growth forecasts typically ranged from 3% to 5% per year, with some being lower in the 1% to 2% per year range, and a few rates being higher in the 7% to 10% per year range<sup>3</sup>. The Future Without Project traffic forecasts are shown in Figure IV-1, for each time period.

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<sup>1</sup> The horizon year for the Indio General Plan traffic forecasts was 2050, and the horizon year for the La Quinta General Plan traffic forecasts was 2035.

<sup>2</sup> This was accomplished using the methodology outlined in National Cooperative Highway Research Program Report (NCHRP) 255, Highway Traffic Data for Urbanized Areas Project Planning and Design, Transportation Research Board, 1982.

<sup>3</sup> Detailed growth factors are shown in Table A.IV-1 in Appendix A.IV.

## IV.2 Future Roadway Improvements

A number of roadway improvements will be implemented in the study area by April 2014. Those improvements programmed for completion by that time<sup>4</sup> were all included in the analysis, and are listed in Table IV-1 and shown in Figure IV-2. They include improvements to Monroe Avenue between Avenue 49 and Avenue 52 - to provide two lanes in each direction compared to the mostly one lane in each direction today. This will provide two lanes in each direction from Fred Waring Drive all the way south to Avenue 52. Another key improvement will be to Madison Street between Avenue 50 and Avenue 52, in the City of Indio – to modify the current one lane in each direction to provide one lane in each direction with a central left turn lane. Both of these improvements will enhance roadway capacity on these key roadways adjacent to and serving the Project Site. Other improvements that will be in place by 2014 include adding a permanent traffic signal at Monroe Street & Avenue 49, improving the traffic signal at Monroe Street & Avenue 50, installing traffic signals and ramp improvements at the I-10 & Monroe Street eastbound and westbound ramp intersections, adding traffic lanes to the intersection of Highway 111 and Washington Street, improving the signal operation at Jackson Street & Avenue 48, and adding traffic lanes at Washington Street & Avenue 48 . Future intersection lane configurations that were input to the analysis are shown in Figure A.IV-1 in Appendix A.IV. The improvements along Monroe Avenue in particular will enhance traffic capacity and operational efficiency on this key festival access/egress route.

## IV.3 Future Without Project Traffic Conditions

### Intersection Conditions – Level of Service

The intersection level of service analysis for the Future Without Project Conditions is summarized in Table IV-2, which shows the calculated vehicle delay and associated level of service for each of the study intersections for each of the three analysis hours. As with the Existing Conditions analysis in Chapter 2, this analysis represents conditions without a festival. The intersection levels of service are also shown in Figure IV-3.

*Friday: 3:00 – 4:00 PM*

As shown in Table IV-2 and Figure IV-3a, all intersections in the study area will operate at LOS D or better, with three exceptions which are:

13. Madison Street & Avenue 50	LOS F
26. Jackson Street & Avenue 50	LOS F
31. Jefferson Street/Indio Blvd & I-10 Eastbound Freeway Ramps	LOS E

<sup>4</sup> City of Indio and City of La Quinta Capital Improvement Plans (projects programmed for 2012-2013 included),



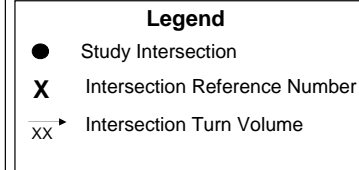
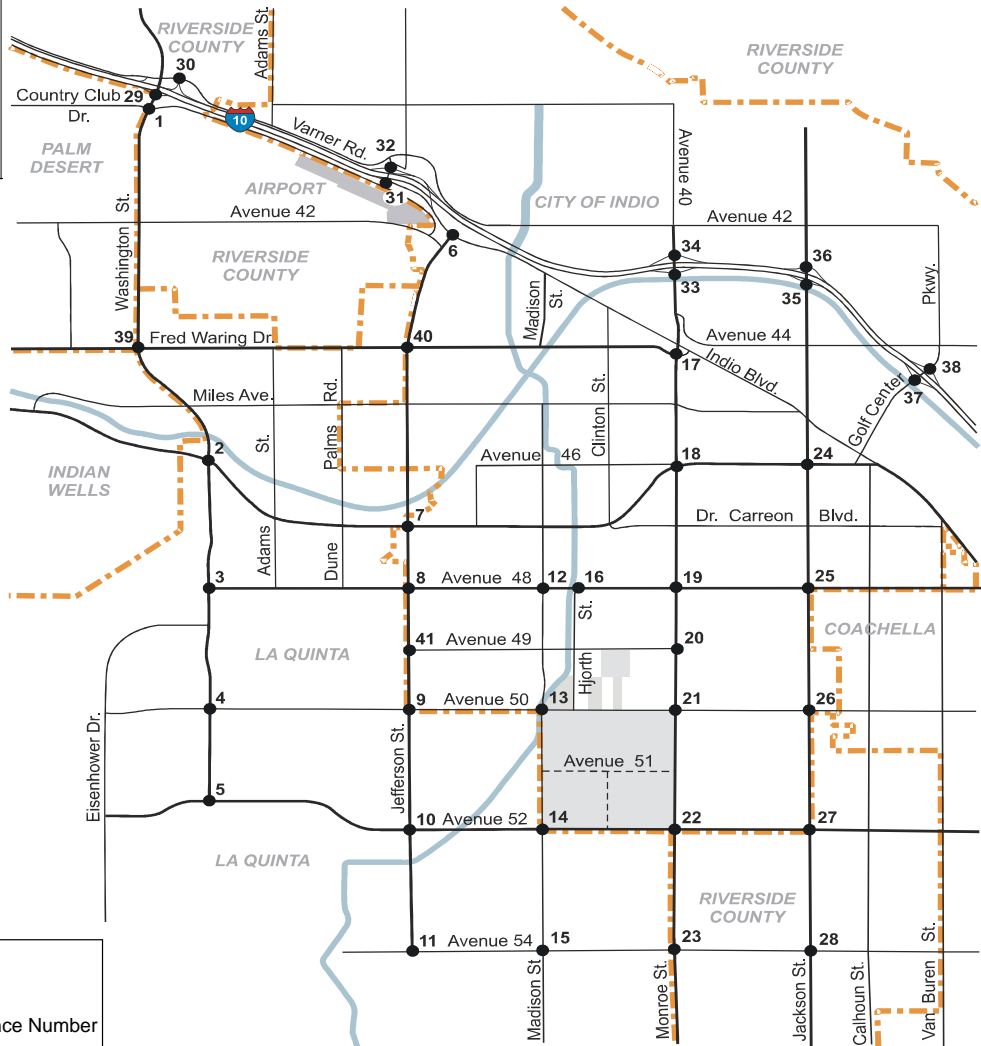
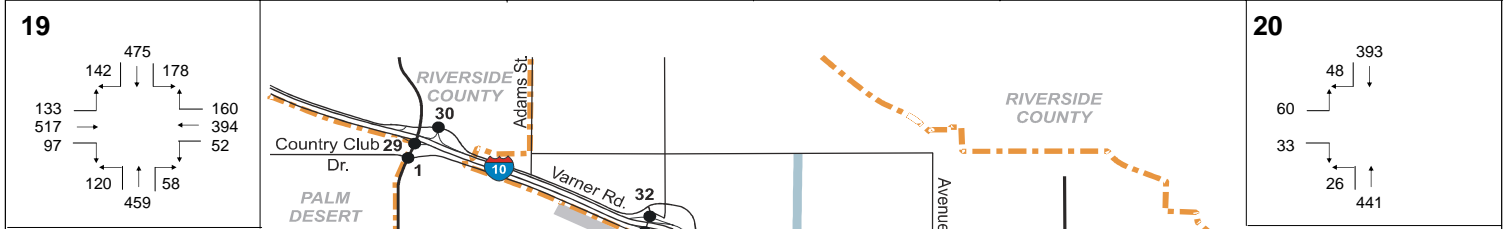
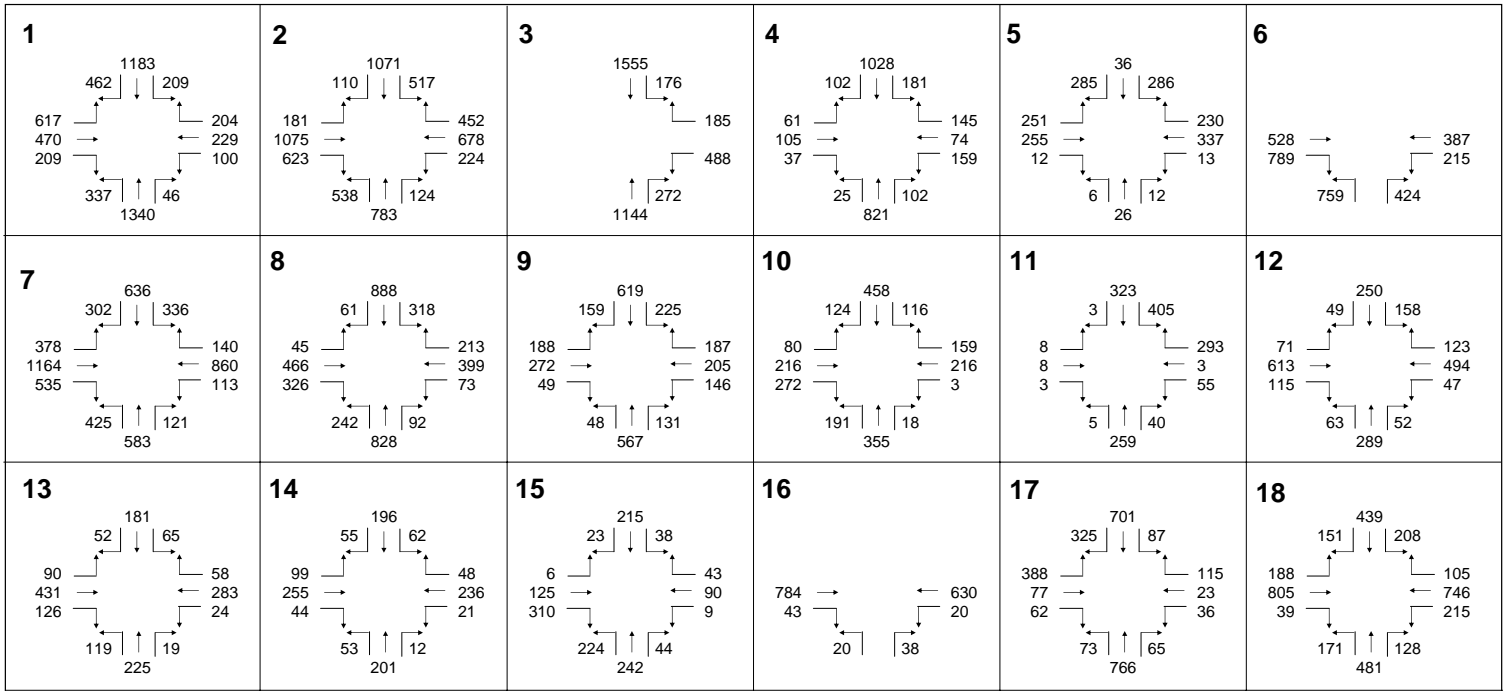


Fig IV-1a  
 Future Without Project – No Event – Traffic Volumes – Friday 3-4 PM

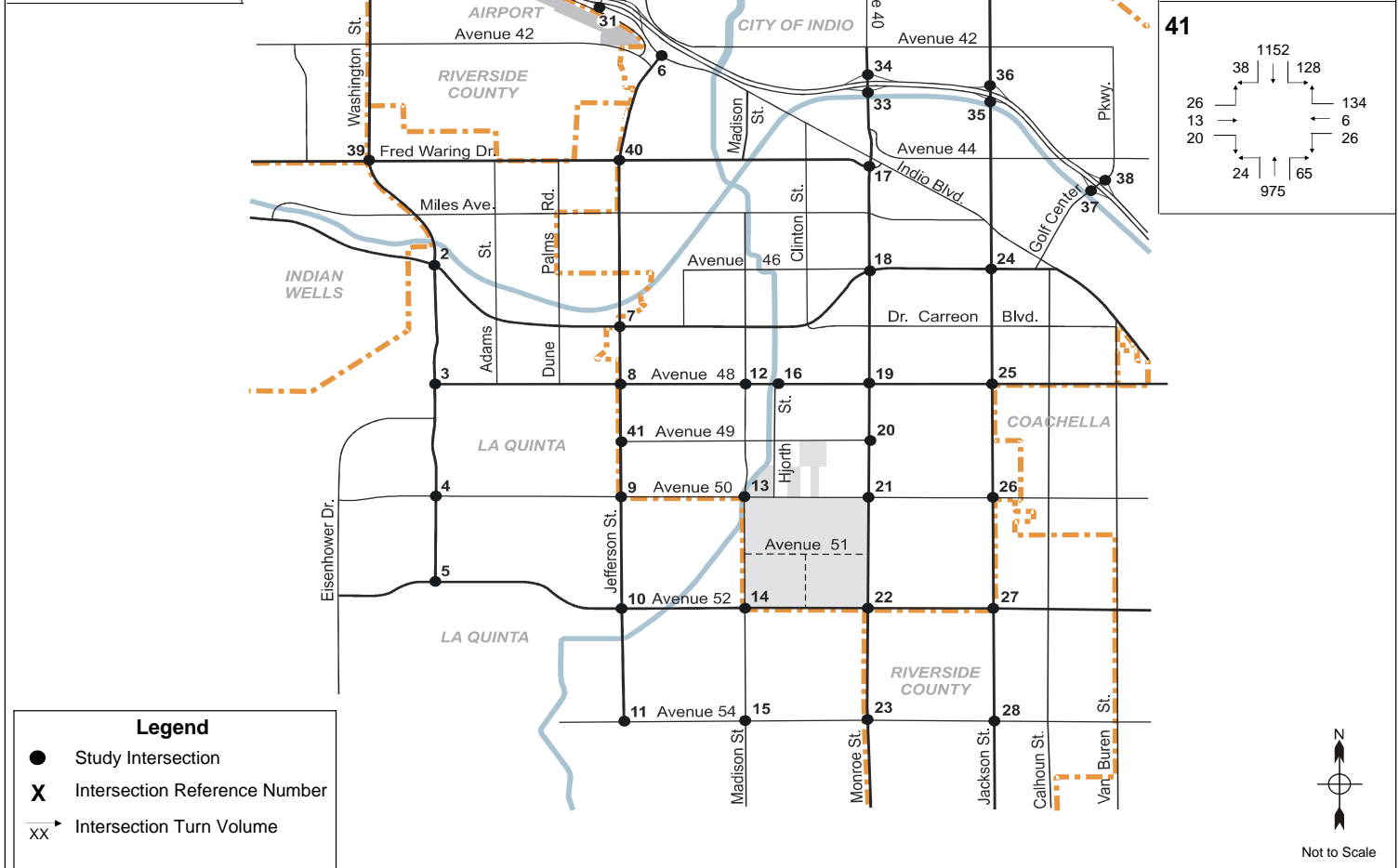
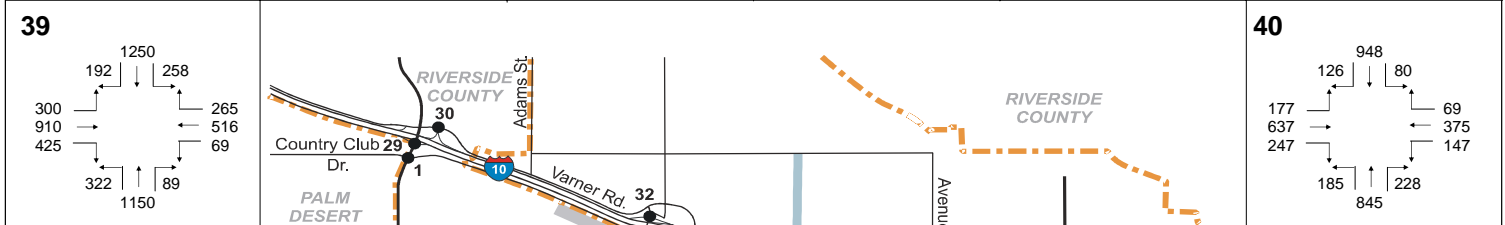
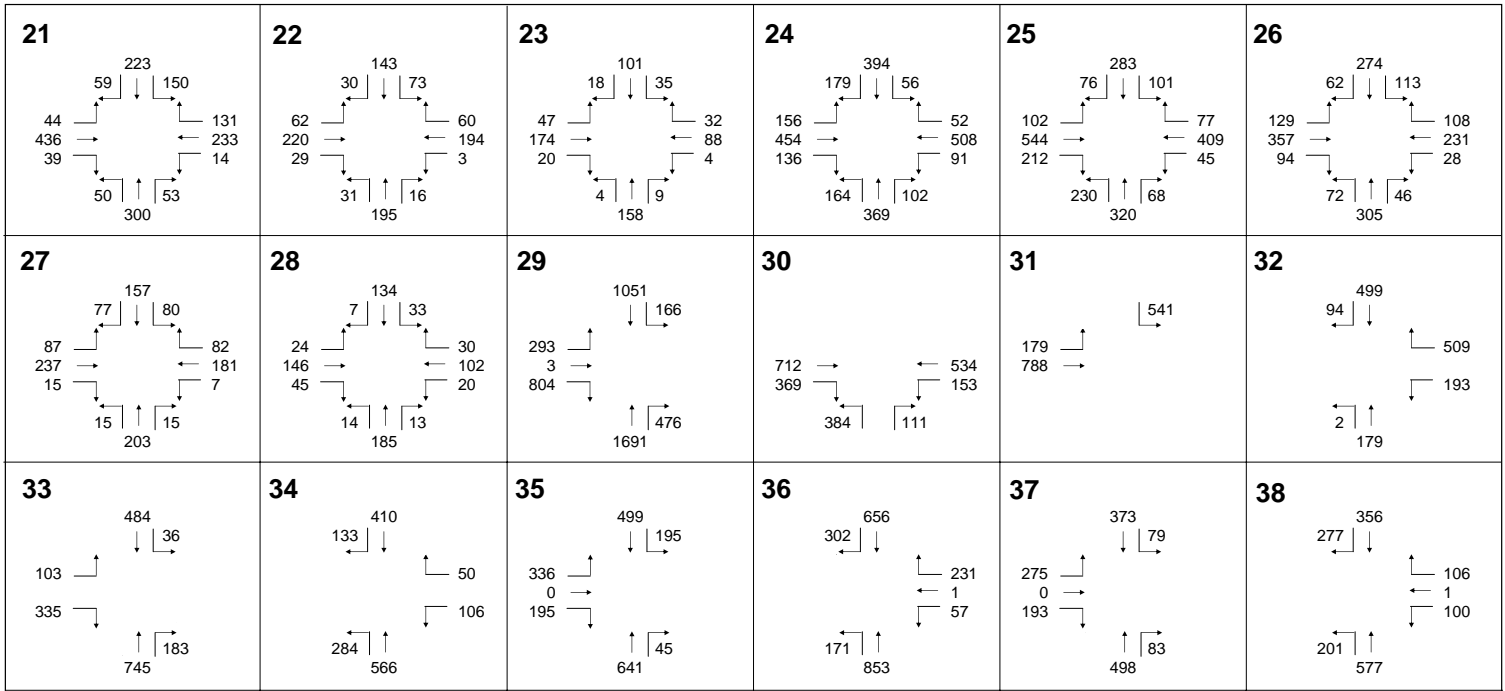


Fig IV-1a cont.  
 Future Without Project – No Event – Traffic Volumes – Friday 3-4 PM

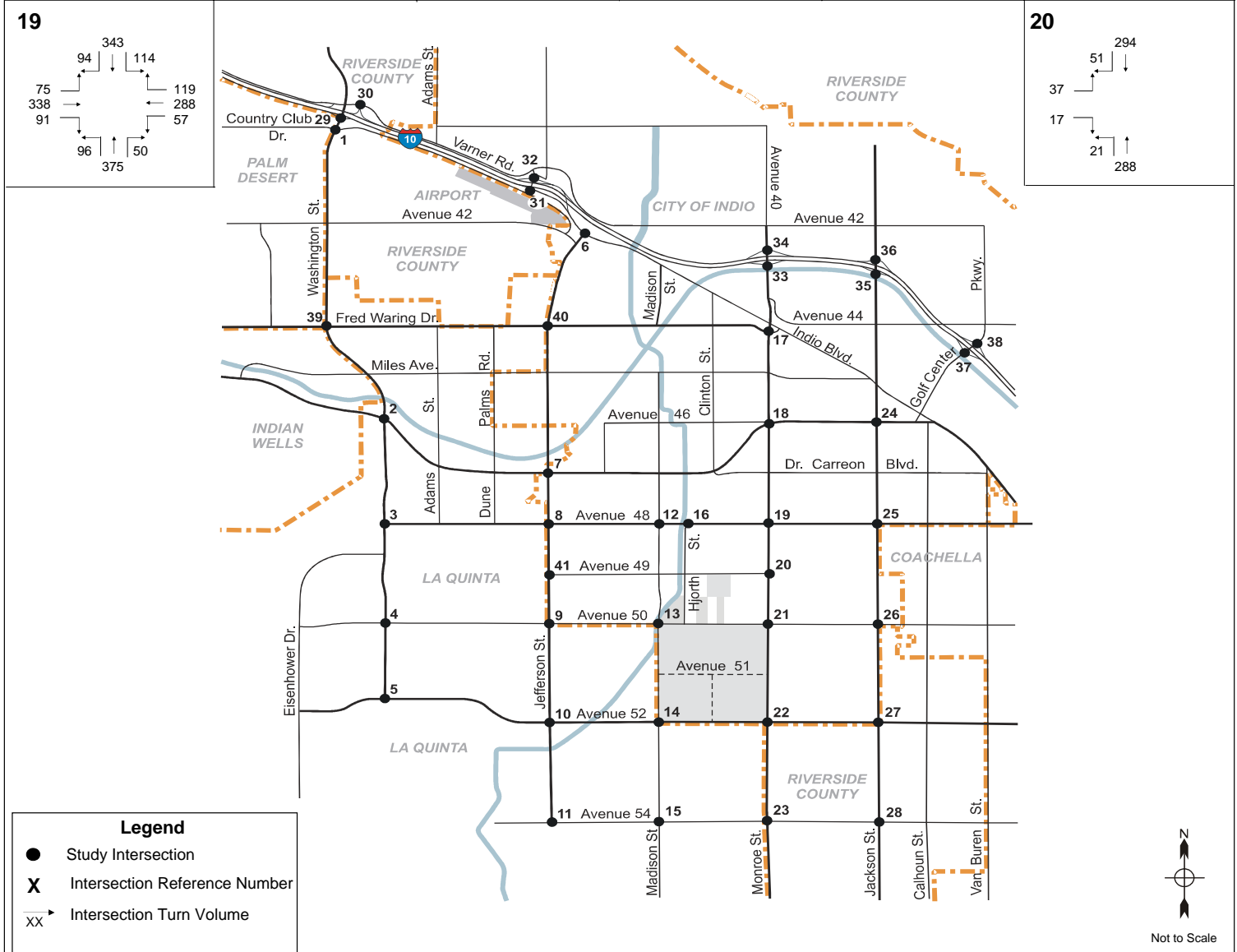
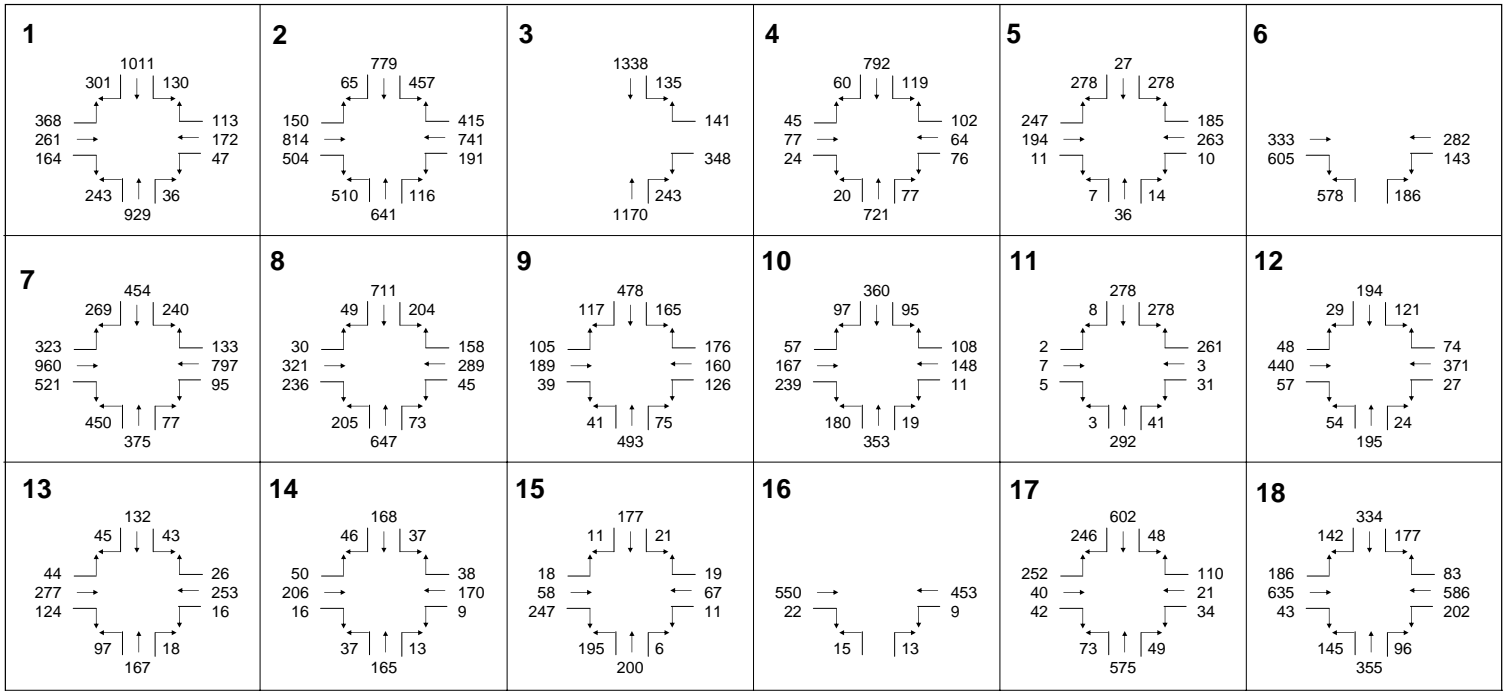
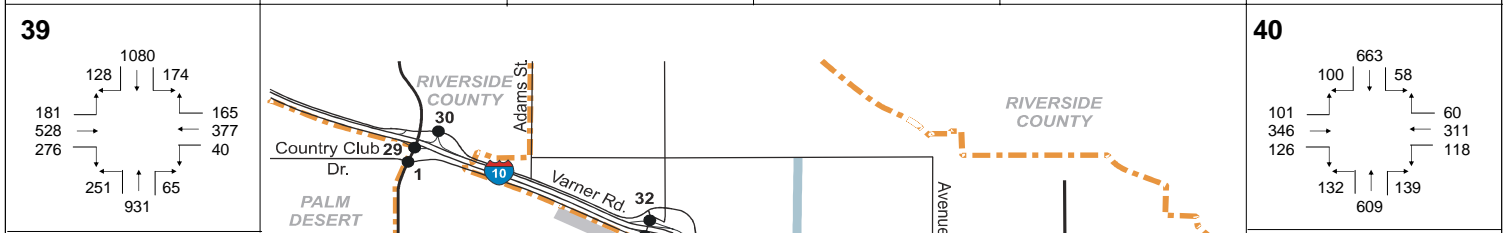
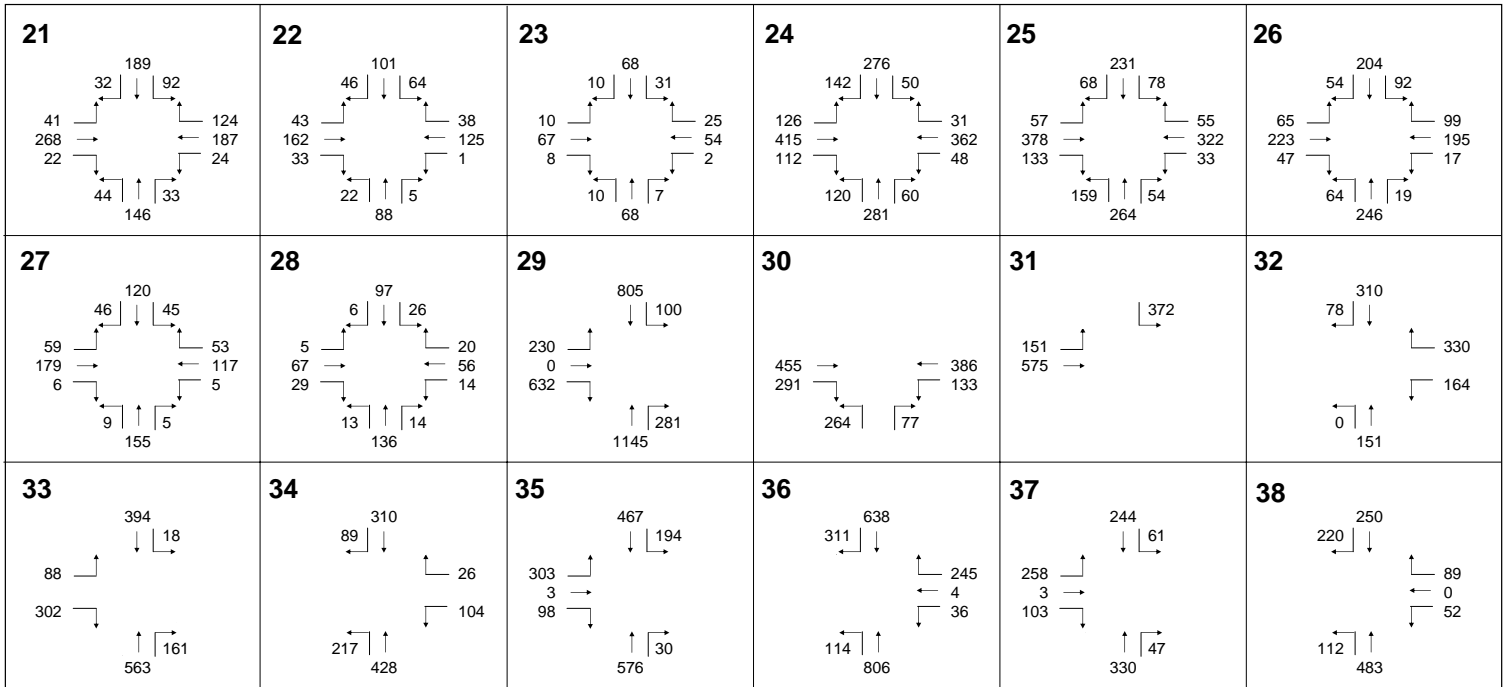


Fig IV-1b  
 Future Without Project – No Event – Traffic Volumes – Saturday 2-3 PM



**Legend**

- Study Intersection
- X Intersection Reference Number
- XX Intersection Turn Volume

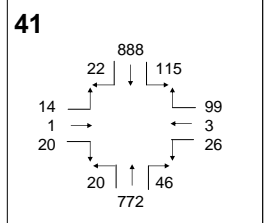
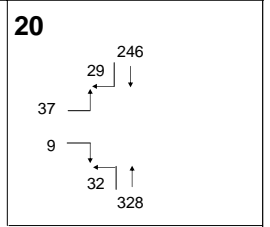
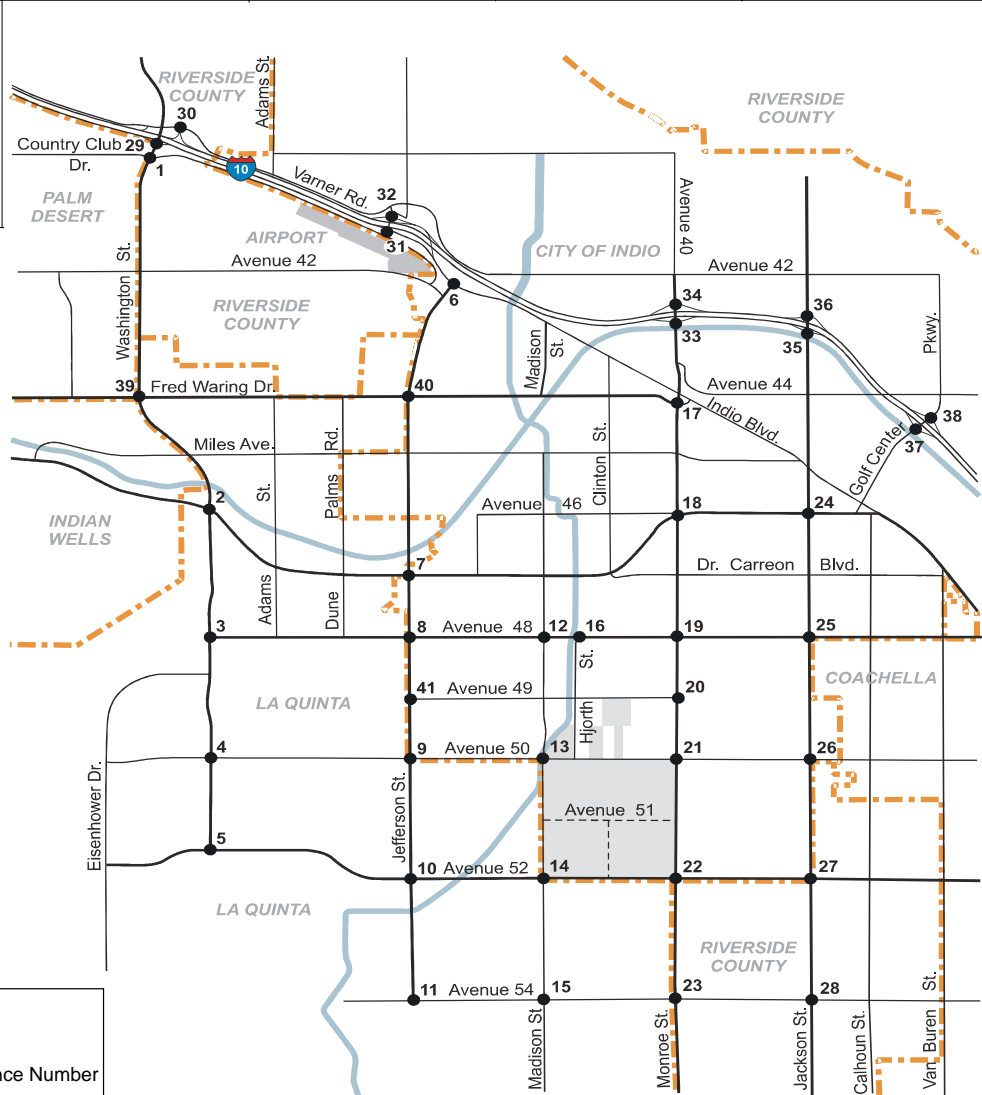
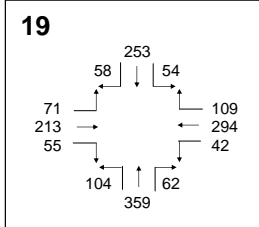
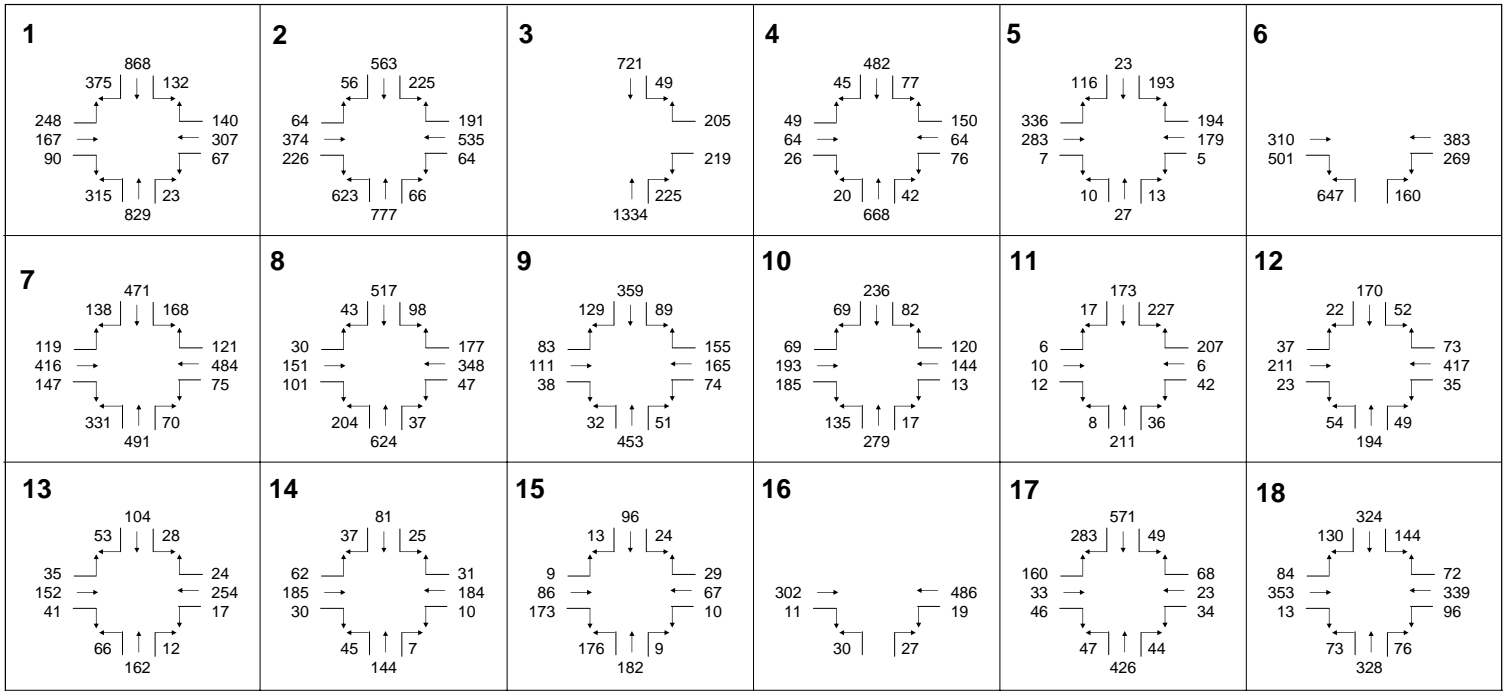


Fig IV-1b cont.  
 Future Without Project – No Event – Traffic Volumes – Saturday 2-3 PM



**Legend**

- Study Intersection
- X Intersection Reference Number
- xx Intersection Turn Volume



Not to Scale

Fig IV-1c  
 Future Without Project – No Event – Traffic Volumes – Monday 8-9 AM

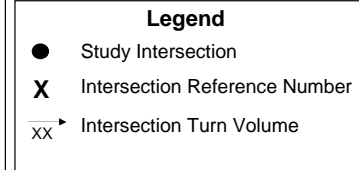
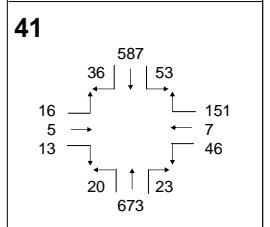
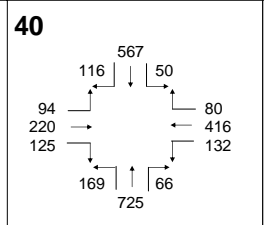
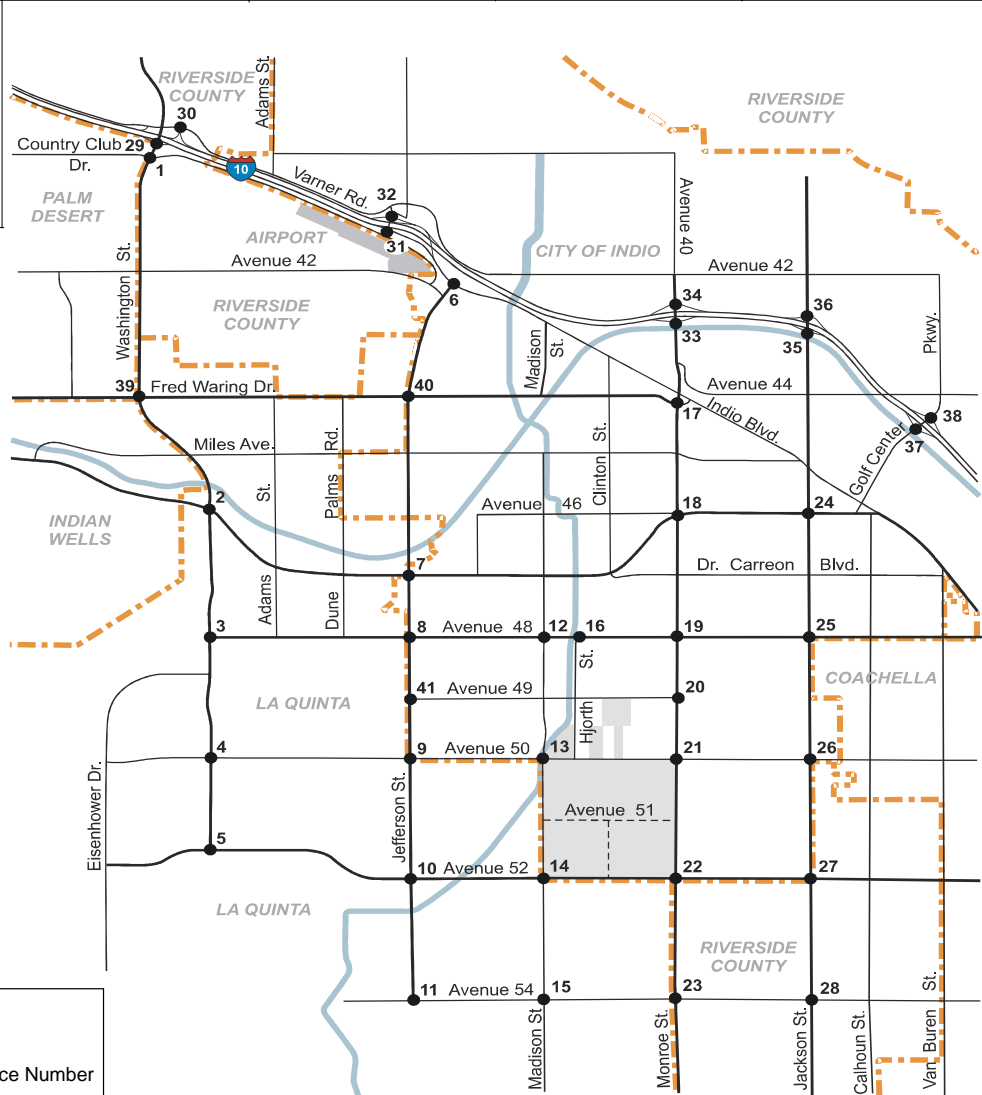
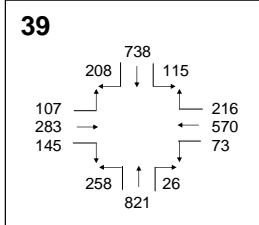
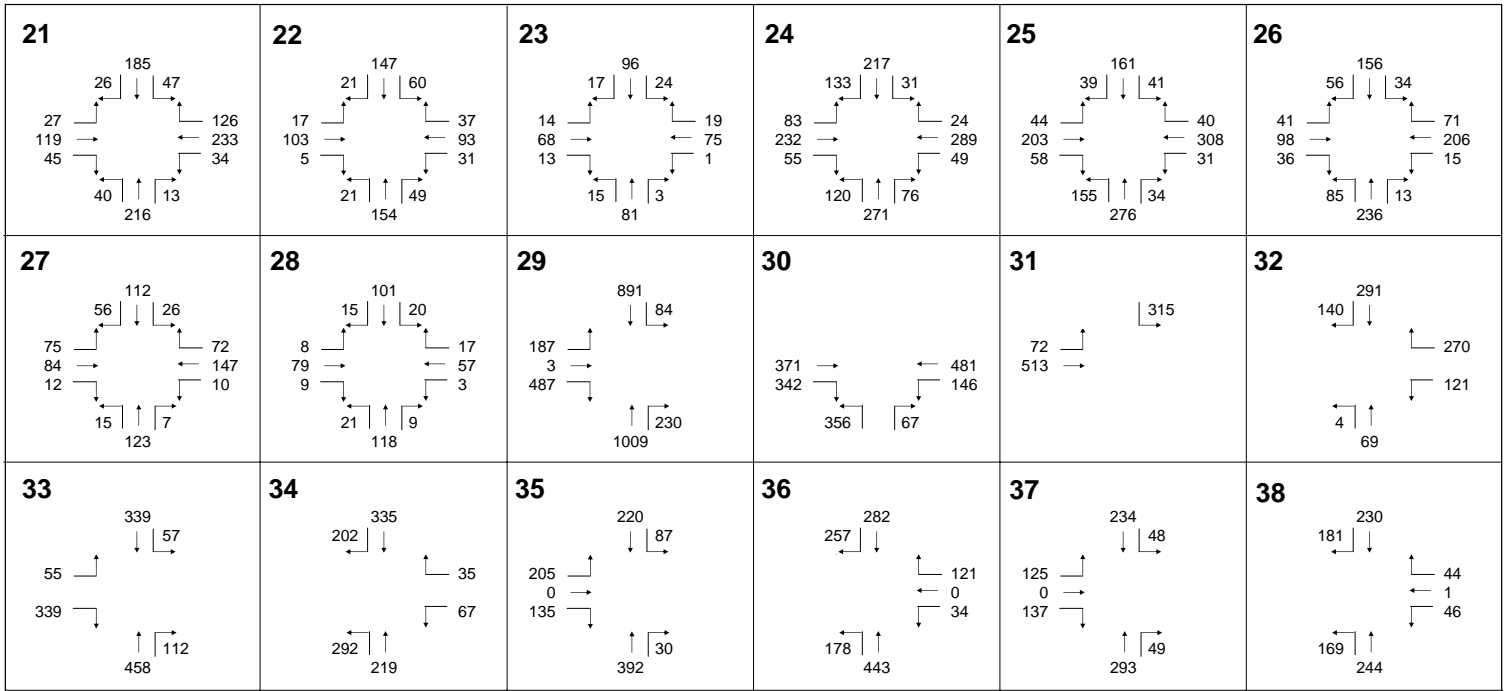


Fig IV-1c cont.  
 Future Without Project – No Event – Traffic Volumes – Monday 8-9 AM

**Table IV-1 Future Roadway Improvement Projects to be Completed by 2014**

City	Project Location	Project Description
City of Indio	1. Monroe Street Improvements (Avenue 49 – Avenue 52)	<ol style="list-style-type: none"> <li>1. Widen Monroe Street to include 2 NB travel lanes, 2 SB travel lanes and a two-way left turn lane from Avenue 49 to Avenue 52.</li> <li>2. Redesign traffic signal at Monroe St &amp; Avenue 50 to include NB and SB protected left turns and WB right turn overlap.</li> <li>3. Install traffic signal at Monroe St &amp; Avenue 49.</li> </ol>
	2. Madison Street Improvements (Avenue 50 – Avenue 52)	<ol style="list-style-type: none"> <li>1. Widen Madison Street to include 1 NB travel lane, 1 SB travel lane and 1 two-way left turn lane from Avenue 50 to Avenue 52.</li> </ol>
	3. Monroe Street/I-10 Ramp Widening and Traffic Signals	<ol style="list-style-type: none"> <li>1. Install traffic signal with protected/permissive left turn phasing for EB/WB ramps.</li> <li>2. Widen WB Off-ramp to include 1 WB LT/TH lane and 1 WB free RT lane.</li> <li>3. Widen EB Off-ramp to include 1 EBLT/TH lane and 1 EBRT lane.</li> </ol>
	4. Jackson Street – Avenue 48 Intersection	<ol style="list-style-type: none"> <li>1. Add EB right turn overlap phase to traffic signal.</li> </ol>
City of La Quinta	5. Highway 111 – Washington Street Intersection	<ol style="list-style-type: none"> <li>1. Addition of 1 NB left turn lane.</li> <li>2. Addition of 1 SB left and 1 SB right turn lanes.</li> <li>3. Addition of 1 EB right turn lane.</li> <li>4. Addition of 1 WB right turn lane.</li> </ol>
	6. Washington Street – Avenue 48 Intersection	<ol style="list-style-type: none"> <li>1. Restripe WB approach to include 3 WB left lanes and 1 WB right lane.</li> <li>2. Widen SB approach to include 1 additional SB left turn lane.</li> </ol>

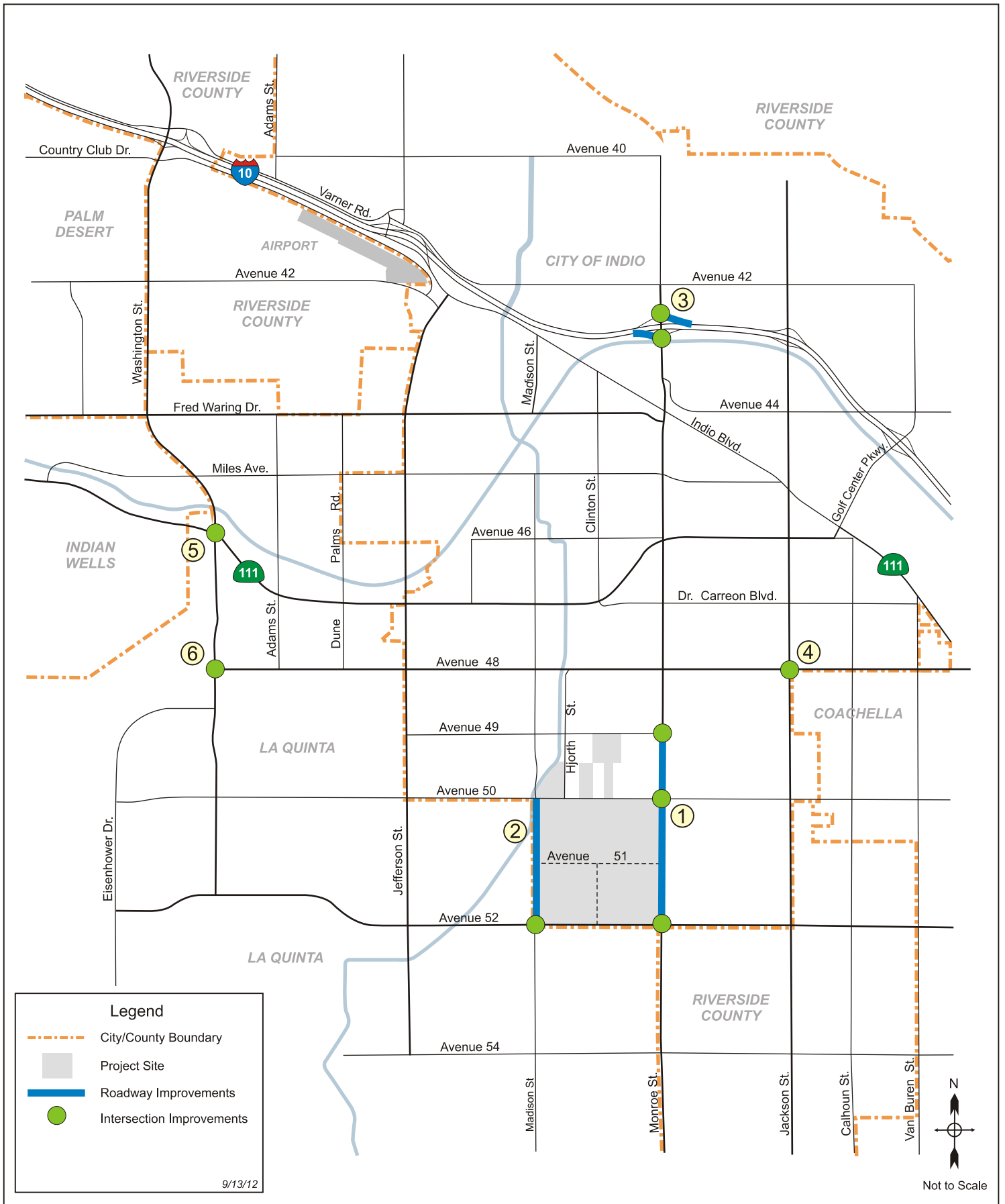


Figure IV-2  
 Future Roadway Improvements to be Completed by 2014



The number of intersections operating by each level service category would be as follows, including a comparison to the existing conditions:

<i>Level of Service</i>	<i>2012 Existing Conditions</i>	<i>2014 Future Without Project</i>
LOS A	4 intersections	4 intersections
LOS B	11 intersections	12 intersections
LOS C	19 intersections	19 intersections
LOS D	5 intersections	3 intersections
LOS E	1 intersections	1 intersections
LOS F	1 intersections	2 intersections

Intersection levels of service will therefore be very similar in 2014 without the Project to existing conditions, with the vast majority of intersections continuing to operate at LOS D or better. In 2014, there will be three intersections operating at a level of service worse than LOS D, compared to two intersections for the existing condition. Of those three intersections, one will operate at LOS E and two will operate at LOS F (see above and Figure IV-3a).

*Saturday: 2:00 – 3:00 PM*

As shown in Table IV-2 and Figure IV-3b, all intersections in the study area will operate at LOS D or better in 2014 without the Project, with no exceptions.

The number of intersections operating by each level service category would be as follows, including a comparison to the existing conditions:

<i>Level of Service</i>	<i>2012 Existing Conditions</i>	<i>2014 Future Without Project</i>
LOS A	6 intersections	6 intersections
LOS B	14 intersections	16 intersections
LOS C	19 intersections	18 intersections
LOS D	1 intersections	1 intersections
LOS E	1 intersections	0 intersections
LOS F	0 intersections	0 intersections

**Table IV-2 Future Without Project Conditions - Intersection Level of Service - No Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM				Saturday 2-3 PM				Monday 8-9 AM			
				Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	41.7	D	42.8	D	34.8	C	35.3	D	37.2	D	37.5	D
2	Washington St & Hwy-111	LQ	Signalized	48.5	D	35.4	D	37.1	D	33.1	C	33.4	C	32.0	C
3	Washington St & Ave 48	LQ	Signalized	23.4	C	20.5	C	18.5	B	16.1	B	16.0	B	16.0	B
4	Washington St & Ave 50	LQ	Signalized	21.9	C	22.0	C	20.2	C	20.2	C	23.7	C	23.7	C
5	Washington St & Ave 52	LQ	Signalized	25.7	C	25.8	C	26.3	C	26.5	C	26.7	C	26.8	C
6	Jefferson St & Indio Blvd	I	Signalized	23.2	C	24.8	C	18.0	B	18.4	B	19.7	B	20.0	C
7	Jefferson St & Hwy-111	LQ	Signalized	31.4	C	31.9	C	29.8	C	30.1	C	30.5	C	30.4	C
8	Jefferson St & Ave 48	LQ	Signalized	32.1	C	32.5	C	30.4	C	30.6	C	30.4	C	30.5	C
9	Jefferson St & Ave 50	LQ	Signalized	33.0	C	33.7	C	32.1	C	32.5	C	31.0	C	31.4	C
10	Jefferson St & Ave 52	LQ	Roundabout	2.2	A	2.3	A	2.0	A	2.1	A	2.0	A	2.0	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	13.0	B	14.3	B	12.9	B	14.1	B	10.3	B	10.8	B
12	Madison St & Ave 48	I	Signalized	25.2	C	25.9	C	24.7	C	25.3	C	22.9	C	23.7	C
13	Madison St & Ave 50	I	4-Way Stop	38.9	E	64.9	F	16.6	C	22.6	C	11.3	B	12.4	B
14	Madison St & Ave 52	LQ	4-Way Stop	15.5	C	16.8	C	11.8	B	12.4	B	11.0	B	11.6	B
15	Madison St & Ave 54	LQ	4-Way Stop	12.6	B	14.4	B	10.5	B	11.3	B	9.9	A	10.5	B
16	Hjorth St & Ave 48	I	Signalized	5.9	A	5.9	A	5.1	A	5.1	A	7.5	A	7.4	A
17	Monroe St & Fred Waring Dr.	I	Signalized	25.0	C	25.1	C	23.9	C	23.7	C	20.2	C	20.1	C
18	Monroe St & Hwy-111	I	Signalized	33.6	C	34.0	C	32.3	C	32.5	C	30.4	C	30.5	C
19	Monroe St & Ave 48	I	Signalized	27.9	C	28.1	C	27.2	C	26.6	C	25.6	C	25.2	C
20	Monroe St & Ave 49	I	2-Way Stop <sup>1</sup>	13.1	B	5.0	A	11.5	B	4.0	A	11.5	B	3.9	A
21	Monroe St & Ave 50	I	Signalized	19.9	B	16.8	B	16.9	B	15.0	B	17.8	B	14.8	B

**Table IV-2 Future Without Project Conditions - Intersection Level of Service - No Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM				Saturday 2-3 PM				Monday 8-9 AM			
				Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
22	Monroe St & Ave 52	I	4-Way Stop	12.3	B	12.9	B	10.0	A	10.1	B	10.3	B	10.5	B
23	Monroe St & Ave 54	LQ	4-Way Stop	9.9	A	10.6	B	8.4	A	8.7	A	8.6	A	8.9	A
24	Jackson St & Hwy-111	I	Signalized	32.3	C	33.4	C	29.7	C	29.9	C	30.9	C	31.1	C
25	Jackson St & Ave 48	I	Signalized	27.1	C	27.8	C	26.5	C	27.0	C	26.6	C	26.7	C
26	Jackson St & Ave 50	I	4-Way Stop	34.1	D	53.1	F	15.1	C	18.0	C	11.6	B	12.7	B
27	Jackson St & Ave 52	CR	4-Way Stop	12.6	B	13.7	B	10.1	B	10.5	B	9.6	A	9.9	A
28	Jackson St & Ave 54	CR	4-Way Stop	10.3	B	11.2	B	8.3	A	8.6	A	8.2	A	8.5	A
29	I-10 EB Ramps & Washington St	C	Signalized	31.9	C	33.7	C	26.0	C	26.4	C	23.2	C	23.5	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	12.9	B	13.3	B	12.3	B	12.8	B	12.7	B	13.2	B
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	33.8	D	41.0	E	16.7	C	18.0	C	13.0	B	13.6	B
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	17.5	C	19.8	C	12.1	B	12.6	B	10.9	B	11.1	B
33	I-10 EB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	32.4	D	27.9	C	18.8	C	17.4	B	16.8	C	17.4	B
34	I-10 WB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	125.6	F	10.3	B	37.9	E	10.1	B	34.4	D	11.1	B
35	I-10 EB Ramps & Jackson St	C	Signalized	21.2	C	24.7	C	15.7	B	16.9	B	14.2	B	14.4	B
36	I-10 WB Ramps & Jackson St	C	Signalized	8.4	A	9.0	A	7.4	A	8.1	A	8.7	A	8.4	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	15.5	B	16.0	B	15.0	B	15.2	B	13.4	B	13.6	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.1	B	12.4	B	10.9	B	11.0	B	12.3	B	12.3	B
39	Washington St & Fred Waring Dr	LQ	Signalized	34.7	C	35.5	D	30.6	C	30.7	C	29.6	C	29.8	C
40	Jefferson St & Fred Waring Dr	I	Signalized	27.6	C	27.8	C	27.0	C	27.1	C	26.4	C	26.5	C
41	Jefferson St & Ave 49	LQ	Signalized	16.3	B	17.2	B	16.1	B	16.5	B	21.7	C	22.1	C

Note: 1. Intersection would be signalized in the Future Without Project conditions.

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

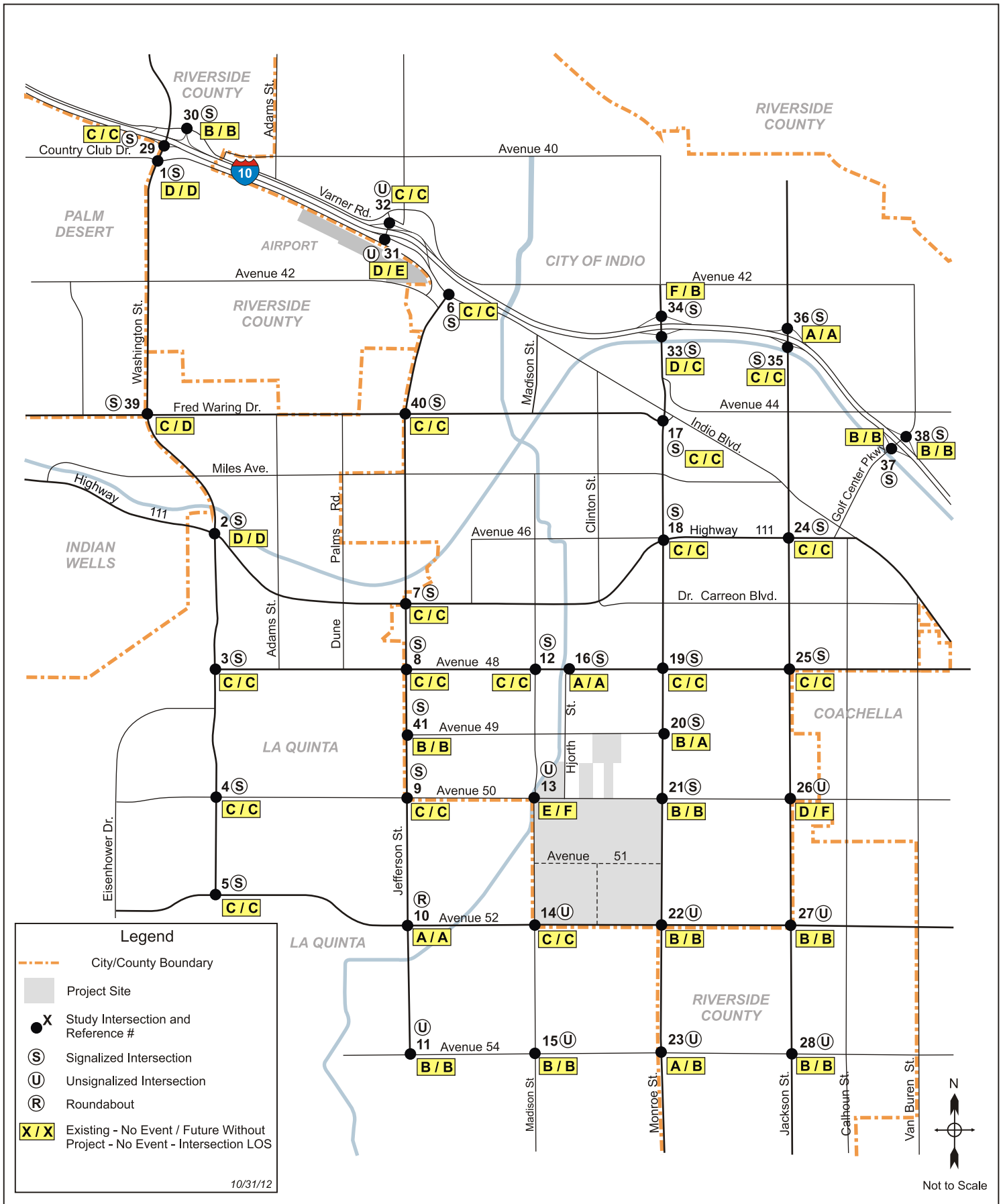


Figure IV-3a

Future Without Project Conditions - No Event - Intersection Level of Service - Friday 3:00-4:00 PM

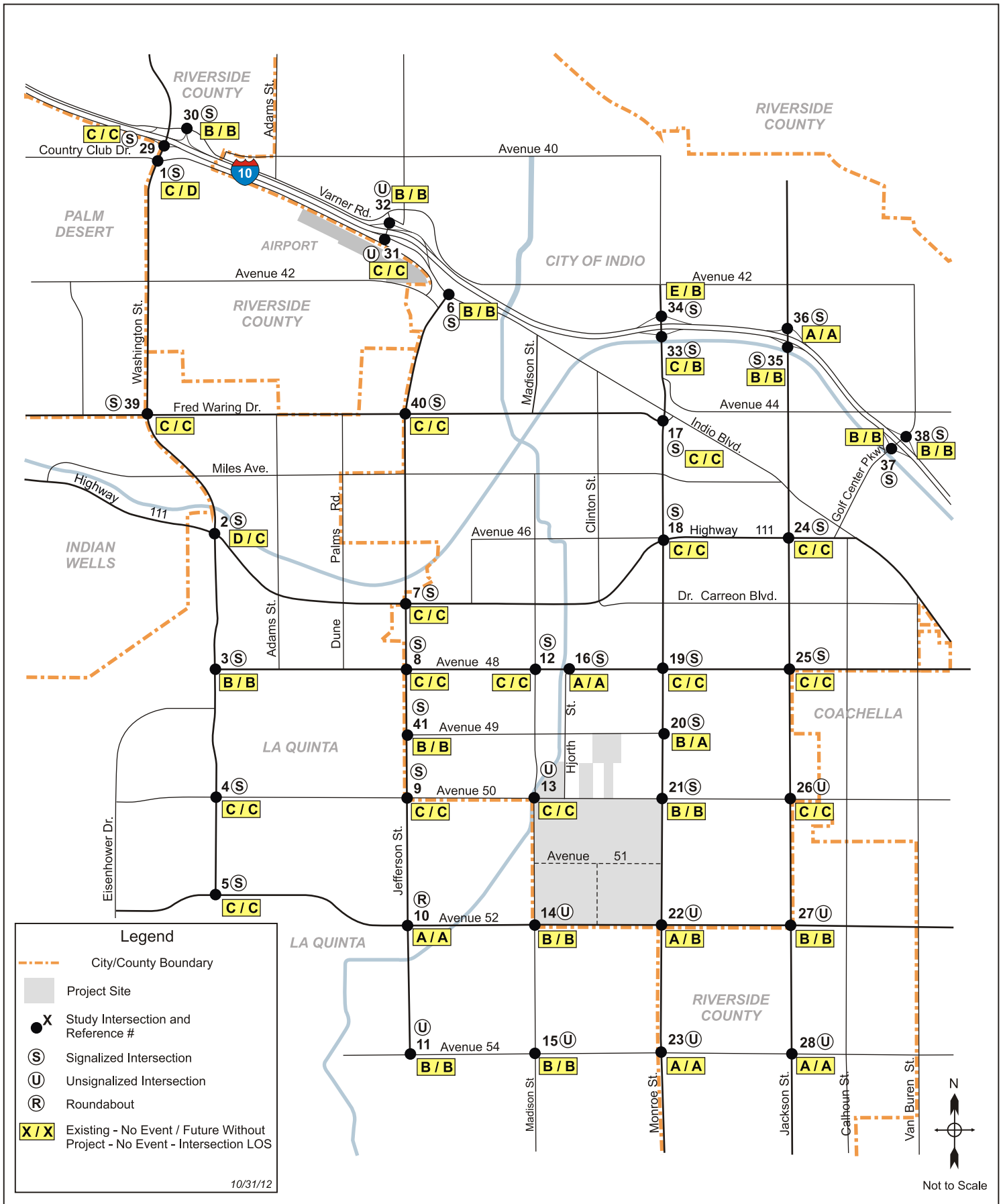


Figure IV-3b  
 Future Without Project Conditions - No Event - Intersection Level of Service - Saturday 2:00-3:00 PM

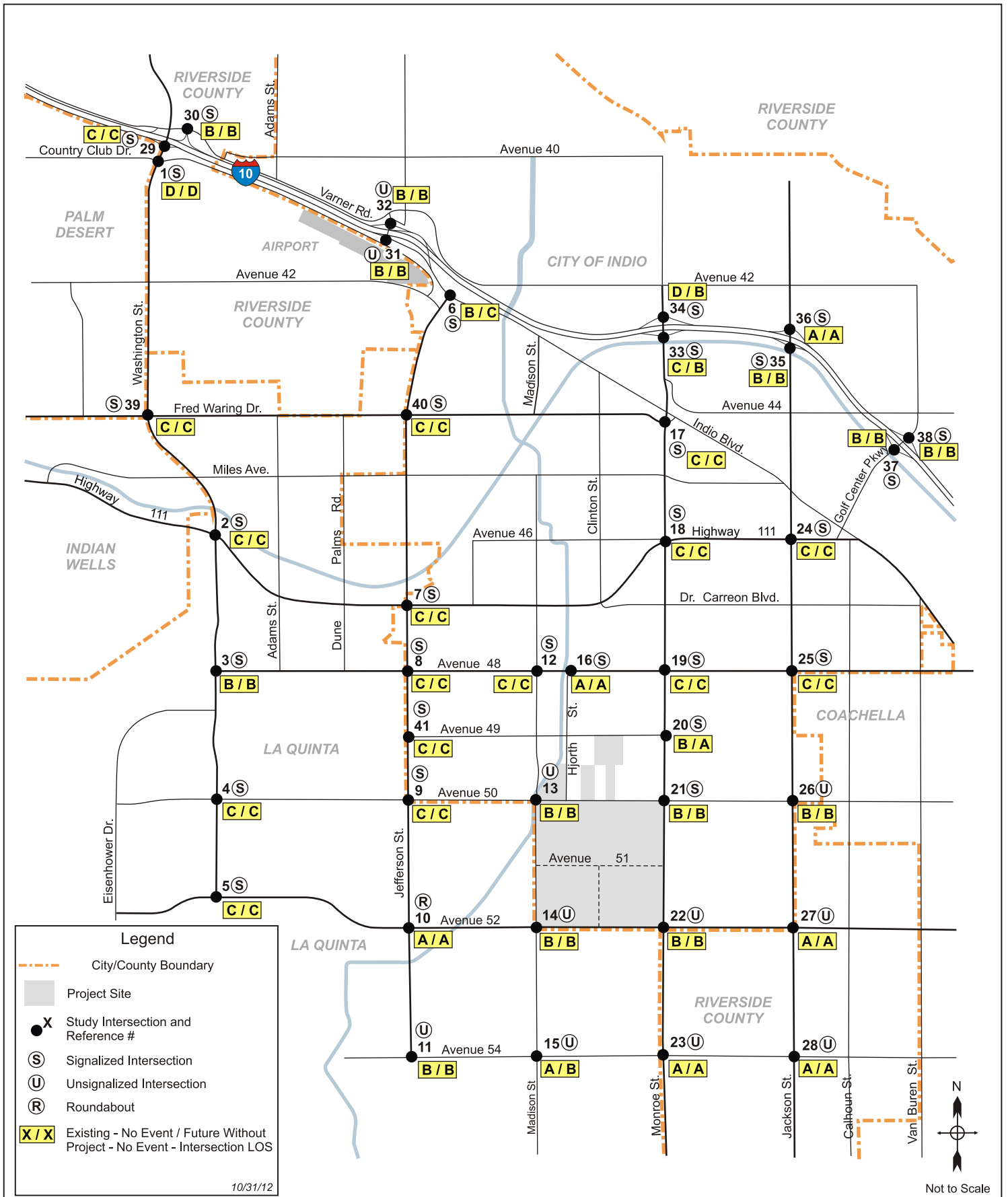


Figure IV-3c  
 Future Without Project Conditions - No Event - Intersection Level of Service - Monday 8:00-9:00 AM

Intersection levels of service will be very similar in 2014 without the Project to existing conditions, with all intersections continuing to operate at LOS D or better. The level of service would improve at certain intersections because of the roadway improvements that will be implemented at those locations(see Figure IV-3b).

*Monday: 8:00 – 9:00 AM*

As shown in Table IV-2 and Figure IV-3c, all intersections in the study area will continue to operate at LOS D or better in 2014 without the Project, with no exceptions.

The number of intersections operating by each level service category are as follows, including a comparison to the existing conditions:

<i>Level of Service</i>	<i>2012 Existing Conditions</i>	<i>2014 Future Without Project</i>
LOS A	7 intersections	7 intersections
LOS B	15 intersections	16 intersections
LOS C	17 intersections	17 intersections
LOS D	2 intersections	1 intersections
LOS E	0 intersections	0 intersections
LOS F	0 intersections	0 intersections

Intersection levels of service will be very similar in 2014 without the Project to existing conditions, with all intersections continuing to operate at LOS D or better. The level of service would improve at certain intersections because of the roadway improvements that will be implemented at those locations(see Figure IV-3c).

*Summary*

Virtually all intersections in the study area would continue to operate at acceptable levels of service (generally LOS D) during the analysis hours. Two intersections in the City of Indio would exceed current standards during the Friday 3:00 to 4:00 pm hour – the intersections of Madison Street & Avenue 50 (LOS F), and Jackson Street & Avenue 50 (LOS F). One ramp intersection would exceed Caltrans standards – the I-10 eastbound ramps at Indio Boulevard (LOS E).

## Future Without Project Conditions – Freeways

### *Freeway Segments*

The Future Without Project traffic volumes on the freeway segments, and corresponding D/C ratios, are shown in Table IV-3 for each of the analysis hours. A comparison is also provided to Existing Conditions. The Future Without Project freeway segment level of service conditions would be very similar to Existing Conditions, and would range from LOS A to LOS C in the study area for the three analysis hours for all locations with the majority of freeway segments operating at LOS B or LOS C. The two exceptions would be eastbound I-10 west of Washington Street which would continue to operate at LOS D in the Friday 3:00pm to 4:00pm hour and in the Saturday 2:00pm to 3:00pm hour.

### *Freeway Off-Ramps*

The off-ramp analysis for Future Without Project Conditions is summarized in Table IV-4, which shows that vehicle queue lengths would increase slightly over Existing Conditions, but would not exceed the ramp storage lengths at any of the off-ramp locations.

### *Freeway On-Ramps*

The on-ramp analysis for Future Without Project Conditions is summarized in Table IV-5, which shows that while vehicle volumes would be somewhat higher than under Existing Conditions they would not exceed the on-ramp capacities at any of the on-ramp locations.



**Table IV-3a Future Without Project - Freeway Segment Level of Service - Friday 3-4 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Existing Friday 3-4 PM			Future Without Project Friday 3-4 PM		
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	EB	3 G	6,000	4,453	0.742	D	4,685	0.781	D
		WB	3 G	6,000	3,764	0.627	C	3,953	0.659	C
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	3,964	0.661	C	4,186	0.698	C
		WB	3 G	6,000	3,351	0.558	C	3,532	0.589	C
3	I - 10 b/w Jefferson Street and Monoe Street	EB	3 G	6,000	3,230	0.538	C	3,449	0.575	C
		WB	3 G	6,000	2,730	0.455	B	2,889	0.481	B
4	I - 10 b/w Monoe Street and Jackson Street	EB	3 G	6,000	2,936	0.489	B	3,136	0.523	C
		WB	3 G	6,000	2,482	0.414	B	2,631	0.438	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,691	0.449	B	2,896	0.483	B
		WB	3 G	6,000	2,275	0.379	B	2,444	0.407	B
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,496	0.357	B	2,670	0.381	B
		WB	4 G	8,000	2,110	0.264	A	2,257	0.282	A

Notes

G - General Purpose Lane

A - Auxiliary Lane

**Table IV-3b Future Without Project - Freeway Segment Level of Service - Saturday 2-3 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Existing Saturday 2-3 PM			Future Without Project Saturday 2-3 PM		
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	EB	3 G	6,000	4,415	0.736	D	4,644	0.774	D
		WB	3 G	6,000	3,020	0.503	C	3,171	0.528	C
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	3,930	0.655	C	4,150	0.692	C
		WB	3 G	6,000	2,688	0.448	B	2,833	0.472	B
3	I - 10 b/w Jefferson Street and Monoe Street	EB	3 G	6,000	3,202	0.534	C	3,420	0.570	C
		WB	3 G	6,000	2,190	0.365	B	2,317	0.386	B
4	I - 10 b/w Monoe Street and Jackson Street	EB	3 G	6,000	2,911	0.485	B	3,109	0.518	C
		WB	3 G	6,000	1,991	0.332	B	2,111	0.352	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,668	0.445	B	2,871	0.479	B
		WB	3 G	6,000	1,825	0.304	B	1,960	0.327	B
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,474	0.353	B	2,647	0.378	B
		WB	4 G	8,000	1,693	0.212	A	1,811	0.226	A

Notes

G - General Purpose Lane

A - Auxilliary Lane

**Table IV-3c Future Without Project - Freeway Segment Level of Service - Monday 8-9 AM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Existing Monday 8-9 AM			Future Without Project Monday 8-9 AM		
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	EB	3 G	6,000	3,884	0.647	C	4,085	0.681	C
		WB	3 G	6,000	2,978	0.496	B	3,127	0.521	C
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	3,457	0.576	C	3,650	0.608	C
		WB	3 G	6,000	2,651	0.442	B	2,794	0.466	B
3	I - 10 b/w Jefferson Street and Monoe Street	EB	3 G	6,000	2,817	0.469	B	3,008	0.501	C
		WB	3 G	6,000	2,160	0.360	B	2,285	0.381	B
4	I - 10 b/w Monoe Street and Jackson Street	EB	3 G	6,000	2,561	0.427	B	2,735	0.456	B
		WB	3 G	6,000	1,963	0.327	B	2,081	0.347	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,347	0.391	B	2,526	0.421	B
		WB	3 G	6,000	1,800	0.300	A	1,933	0.322	B
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,176	0.311	B	2,329	0.333	B
		WB	4 G	8,000	1,669	0.209	A	1,786	0.223	A

Notes

G - General Purpose Lane

A - Auxiliary Lane

**Table IV-4 Future Without Project Conditions - Freeway Off-Ramp Analysis - No Festival**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Friday 3-4 PM						Saturday 2-3 PM					
					Existing Conditions			Future Without Project Conditions			Existing Conditions			Future Without Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>																
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	288	176	No	296	198	No	224	132	No	230	154	No
		EB RT	2	1,025	773	726	No	804	770	No	608	462	No	632	484	No
		RAMP TOTAL	4	2,090	1,061	902	No	1,100	968	No	832	594	No	862	638	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	173	88	No	179	110	No	146	44	No	151	44	No
		EB TH	1	705	759	88	No	788	110	No	554	22	No	575	44	No
		RAMP TOTAL	2	1,410	932	176	No	967	220	No	700	66	No	726	88	No
3 Monroe Street EB Off ramp <sup>1</sup>	2-Way Stop	EB LT/TH	1	870	93	88	No	103	88	No	78	44	No	88	66	No
		EB RT	1	870	325	88	No	335	462	No	294	66	No	302	330	No
		RAMP TOTAL	2	1,740	418	176	No	438	550	No	372	110	No	390	396	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	320	374	No	336	418	No	292	286	No	306	308	No
		EB RT	1	775	191	154	No	195	154	No	94	66	No	98	88	No
		RAMP TOTAL	2	1,550	511	528	No	531	572	No	386	352	No	404	396	No
<u>From East on I-10</u>																
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	98	110	No	101	110	No	52	44	No	52	44	No
		WB RT	1	355	96	110	No	106	110	No	81	88	No	89	88	No
		RAMP TOTAL	2	710	194	220	No	207	220	No	133	132	No	141	132	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	56	66	No	58	66	No	34	44	No	40	44	No
		WB RT	1	740	193	0	No	231	0	No	206	0	No	245	0	No
		RAMP TOTAL	2	1,480	249	66	No	289	66	No	240	44	No	285	44	No
7 Monroe Street WB Off ramp <sup>1</sup>	2-Way Stop	WB LT/TH	1	685	99	132	No	106	132	No	96	66	No	104	110	No
		WB RT	1	685	41	22	No	50	0	No	21	22	No	26	0	No
		RAMP TOTAL	2	1,370	140	154	No	156	132	No	117	88	No	130	110	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	176	66	No	193	88	No	150	22	No	164	44	No
		WB RT	1	503	478	88	No	509	110	No	310	44	No	330	44	No
		RAMP TOTAL	2	1,006	654	154	No	702	198	No	460	66	No	494	88	No

Note:

1. Intersection would be signalized in Future Without Project conditions.

**Table IV-4 Future Without Project Conditions - Freeway Off-Ramp Analysis - No Festival**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Monday 8-9 AM					
					Existing Conditions			Future Without Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>										
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	185	110	No	190	110	No
		EB RT	2	1,025	468	352	No	487	374	No
		RAMP TOTAL	4	2,090	653	462	No	677	484	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	70	22	No	72	22	No
		EB TH	1	705	494	22	No	513	22	No
		RAMP TOTAL	2	1,410	564	44	No	585	44	No
3 Monroe Street EB Off ramp <sup>1</sup>	2-Way Stop	EB LT/TH	1	870	49	22	No	55	44	No
		EB RT	1	870	327	66	No	339	330	No
		RAMP TOTAL	2	1,740	376	88	No	394	374	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	196	176	No	205	198	No
		EB RT	1	775	131	110	No	135	110	No
		RAMP TOTAL	2	1,550	327	286	No	340	308	No
<u>From East on I-10</u>										
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	46	44	No	47	44	No
		WB RT	1	355	40	44	No	44	44	No
		RAMP TOTAL	2	710	86	88	No	91	88	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	34	44	No	34	44	No
		WB RT	1	740	102	0	No	121	0	No
		RAMP TOTAL	2	1,480	136	44	No	155	44	No
7 Monroe Street WB Off ramp <sup>1</sup>	2-Way Stop	WB LT/TH	1	685	62	44	No	67	88	No
		WB RT	1	685	30	22	No	35	0	No
		RAMP TOTAL	2	1,370	92	66	No	102	88	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	110	22	No	121	22	No
		WB RT	1	503	255	22	No	270	22	No
		RAMP TOTAL	2	1,006	365	44	No	391	44	No

Note:

1. Intersection would be signalized in Future Without Project conditions.

**Table IV-5 Future Without Project Conditions - Freeway On-Ramp Analysis - No Festival**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Friday 3-4 PM				Saturday 2-3 PM				Monday 8-9 AM				
			Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions		Existing Conditions		Future Without Project Conditions		
			Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	
<u>To I-10 West</u>															
1	Washington Street WB On ramp	1	900	466	No	522	No	380	No	424	No	436	No	488	No
2	Jefferson Street WB On ramp	1	900	86	No	99	No	69	No	78	No	129	No	144	No
3	Monroe Street WB On ramp	1	900	386	No	417	No	283	No	306	No	456	No	494	No
4	Jackson Street WB On ramp	1	900	432	No	474	No	386	No	429	No	402	No	435	No
<u>To I-10 East</u>															
5	Golf Center Pkwy EB On ramp	1	900	151	No	162	No	104	No	111	No	91	No	97	No
6	Jackson Street EB On ramp	1	900	215	No	240	No	203	No	224	No	105	No	117	No
7	Monroe Street EB On ramp	1	900	205	No	219	No	167	No	179	No	158	No	169	No
8	Jefferson Street EB On ramp	1	900	145	No	155	No	107	No	114	No	96	No	103	No

Note

- 1. Number of lanes on ramp.
- 2. Capacity based on 900 veh/hr/ln.
- 3. Traffic volumes from 2012 intersection counts.

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## V. Future With Project Conditions

This chapter describes and analyzes the Future Conditions With the Project. As previously described, the analysis addresses a future year of 2014. As discussed in Chapter I, this impact analysis conservatively analyzes the potential traffic impacts of a future capacity attendance of 99,000 persons compared against the Future Without Conditions where no festivals are taking place on the Project Site (described in Chapter IV).

### V.1 Project Description

The Coachella Festival and the Stagecoach Festival have been held on the Project Site on an annual basis since 1999 and 2007 respectively, under various special event agreements issued by the City of Indio. The current 2012 – 2013 Special Events Agreement permits events on up to three weekends per year. The Project would continue to allow music festival events to be held on the Project Site and would permit events on up to five weekends each year with up to three of these events allowed on consecutive weekends each spring and the remaining two events in the fall. The maximum allowed attendance, including all staff, would be 99,000 for three of the events, and 75,000 for two of the events. The Project would therefore increase the permitted capacity of a Coachella-type festival from 95,000 to 99,000 total persons and of a Stagecoach-type festival from 65,000 to 75,000.

The impact analysis in this chapter is based on a Coachella-type festival, as that would have the highest attendance. Traffic volumes and conditions were observed and analyzed for the 2012 Coachella Festival (see Chapter III), which provides the basis for evaluating traffic conditions for a 99,000 capacity festival. The background (non-event) traffic growth between 2012 and 2014 (identified in Chapter IV) was added to the 2012 Festival Conditions traffic data, and then the incremental growth from the 2012 Coachella Festival (with approximately 90,000 persons attendance) to the proposed 99,000 person capacity was added to determine the projected total traffic volumes for the Future With Project condition. These were then compared to the Future Without Project conditions to identify potential impacts due to the Project.

#### Site Characteristics – 99,000 Capacity (Coachella Configuration)

Future festivals at the 99,000 person capacity level would have an overall site configuration similar to the 2012 Coachella Festival, and future festivals at the 75,000 person capacity level would have a similar overall site configuration to the 2012 Stagecoach Festival. The



Proposed Project description is therefore based largely on the 2012 Coachella Festival, as the majority of the site would continue to be operated as it was in the 2012 Festival. Proposed changes between the 2012 Coachella Festival and the Proposed Project regarding transportation would occur within the existing festival site area. The key changes with regard to transportation, which are defined as Project Design Features, would be as follows.

Project Design Features

*Parking Capacity*

The principal changes would concern the parking supply. The existing and proposed parking supply is shown in Table V-1. The existing on-site parking supply of 29,610 spaces would be increased to approximately 31,270 spaces, and would be comprised by parking type as shown in Table V-1.

**Table V-1 Proposed Project Parking Supply  
99,000 Person Capacity Festival & Comparison to 2012 Festival**

<i>Parking Type</i>	<i>2012 Festival</i>	<i>99,000 Capacity Festival</i>
Car Camping	10,200	12,500
Tent Camping	1,010	1,010
Companion Parking	3,000	1,700
Day Parking	10,340	10,900
Staff Parking	5,060	5,160
<i>Total</i>	<i>29,610</i>	<i>31,270</i>

The following key changes would be made (as also shown in Figure V-1). An additional 2,300 car camping spaces would be provided, to increase the total from 10,200 to 12,500 spaces. The 2,300 additional car camping spaces would be located in Lot 4A/B at the north-west corner of the site. A total of 380 tent camping spaces would be retained in Lot 4A/B, but 630 tent camping spaces would be relocated to Lot 13C. A total of 240 day parking spaces would be removed from Lot 4A/B.

The number of tent camping spaces would remain at 1,010 spaces.

An additional 1,000 day parking spaces would be provided, in Lot 15.

Staff parking would increase from 5,060 to 5,160 spaces, to reflect a projected 2% increase in staff needs.

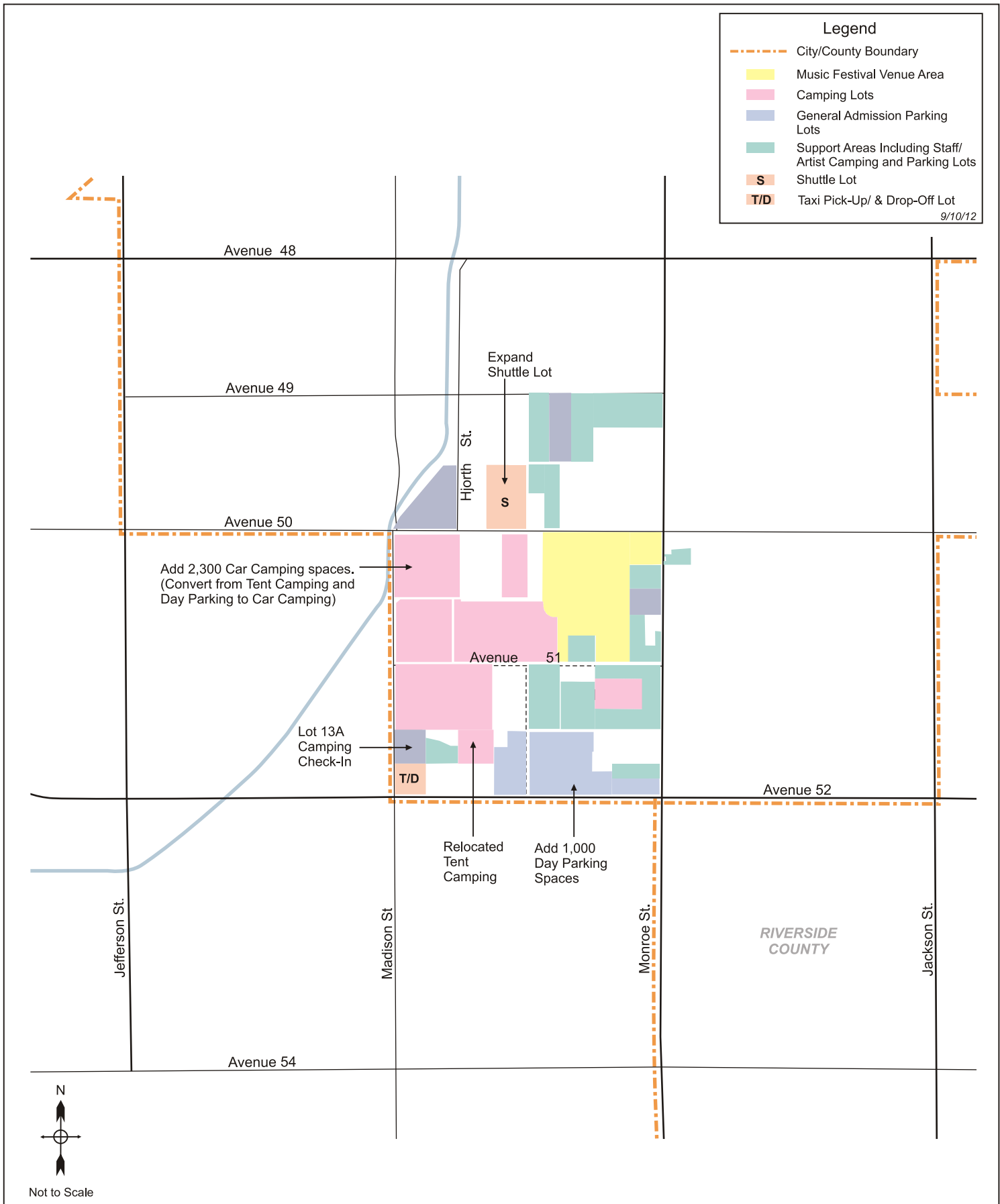


Figure V-1  
Future Festival Site and Use by Area

There would be a number of on-site “housekeeping” changes to the on-site supply, which would mainly rearrange parking designations and would result in only minor changes to the overall number of spaces. Companion parking in Lot 2A would be reduced from 3,000 spaces to 1,700 spaces. A total of 1,300 spaces in Lot 2A would be converted from companion parking to day parking. This change would more closely reflect the actual usage of this lot in 2012 and previous years. A total of 1,500 day parking spaces would be removed from Lot 1A. These are rarely used for this function as Lot 1A is used primarily for production vehicle parking and only occasionally for small amounts of overflow day parking, so this change would allow additional space for production and support vehicles.

With the above changes in day parking, including additional spaces, eliminated spaces, and converted spaces, the net increase in day parking would be 560 spaces, which would increase the overall total from 10,340 to 10,900 spaces.

### *Shuttle Operation*

The extent of the shuttle operation (service levels) would remain virtually the same, with generally the same overall capacity, shuttle lines, access/egress routes, although there may be minor changes to respond to specific demands (e.g. hotel locations and packages). The on-site Shuttle Terminal would be improved. It would remain in its current location in Lot 2B but would be enlarged to include the adjacent Lot 2C. This would improve on-site shuttle capacity (from 150 to 200 shuttle staging spaces) and on-site access/egress circulation to provide for improved operational efficiency.

### *Access/Egress along Hjorth Street and Avenue 50 to On-Site Shuttle Terminal*

The Proposed Project would include improved traffic control measures along Hjorth Street to facilitate shuttle bus operations and minimize conflicts with other traffic – particularly with school traffic on Fridays. This would include improved traffic control at Hjorth Street & Avenue 49, to allow northbound and southbound movements simultaneously. It would also include improved traffic control measures at Hjorth Street & Avenue 50, and at the entrance/exit to the Shuttle Terminal on Avenue 50, to minimize conflicts with pedestrians, and enhance the flow of shuttle buses. These improved traffic control measures would reduce the traffic queues that occurred during the 2012 Festival.

### *Improvements to On-Site Taxi and Pick-Up/Drop-Off Lot*

The taxi and pick-up/drop-off lot in Lot 13A would be improved, including enlarging the size of the lot, relocating access/egress driveways further away from the intersection of Madison Street & Avenue 52, improving the design of the access/egress driveways to minimize vehicular conflicts, and improving pedestrian circulation facilities and control methods to minimize pedestrian-vehicle conflicts. These improvements would reduce the vehicle

queuing that occurred to enter this lot, and the pedestrian-vehicle conflicts that occurred at the Madison Street & Avenue 52 intersection, during certain times of the 2012 Festival.

### *Summary*

The above changes represent the maximum additional parking supply that would be provided. The stated intent of the Applicant is to increase shuttle use and decrease auto use in the future. However, these increases in parking supply are analyzed in this report in order to provide a conservative analysis with respect to potential increases in traffic due to the Project. If the Applicant were to achieve higher use of the shuttle service, and not provide as much parking, then the number of vehicle trips to/from the Project site would be lower than analyzed in this report.

## **V.2 Project Transportation Characteristics**

### Trip Generation – Festival Attendees by Type and Mode of Arrival

The most accurate method of estimating the transportation characteristics of the Proposed Project of a 99,000 person capacity festival is to use the 2012 Coachella Festival as a base, and then project the changes that would occur from the approximately 90,000 attendance at that event to the increased capacity for the Project. The impact analysis will compare the Proposed Project of a 99,000 person capacity festival to the no-event condition. This section therefore describes the estimated transportation characteristics of the Proposed Project and a comparison to the 2012 Festival. The increase in capacity to 99,000 persons represents about a 10% increase over the approximately 90,000 attendance at the 2012 Festival.

### *Persons*

Based on the proposed site characteristics described above, the breakdown of festival attendees by type and by mode of arrival was estimated for the Proposed Project and compared to the 2012 conditions for informational purposes, and is shown in Table IV-2. There would be an overall increase of 9,000 persons attending the festival.

As shown in Table V-2, the largest increase in arrival mode would be in the number of people camping (73% of the total increase). These people only arrive once and depart once (the vast majority arrive on Thursday or early Friday morning, and depart Monday morning), so would not add to daily trips during the festival weekend. The second largest increase would be in day parking (18% of the total increase). The remainder of the increase in attendance (9% of the total increase) would occur on the shuttle, by taxi/PUDO and walk/bike, and by staff arrivals.

**Table V-2 Festival Attendees - Estimates by Type & Mode of Arrival  
Coachella - 99,000 Capacity Festival & Comparison to 2012 90,000 Attendance Festival**

Type	99,000 Capacity			2012 Existing			Net Change		
	Vehicles	Persons	% of Total	Vehicles	Persons	% of Total	Vehicles Increase	Persons Increase	% Increase
Car Camping	10,619	28,140	28%	8,319	22,045	24%	2,300	6,095	28%
Tent Camping	450	1,193	1%	450	1,193	1%	0	0	0%
Sub-Total Camping	11,069	29,333	30%	8,769	23,238	26%	2,300	6,095	26%
Companion Camping	1,021	2,236	2%	800	1,752	2%	221	484	28%
<b>Total - Camping</b>	<b>12,090</b>	<b>31,570</b>	<b>32%</b>	<b>9,569</b>	<b>24,990</b>	<b>28%</b>	<b>2,521</b>	<b>6,580</b>	<b>26%</b>
Day Parking	11,452	34,082	34%	10,892	32,458	36%	560	1,624	5%
Shuttle	N/A	17,745	18%	N/A	17,256	19%	N/A	489	3%
Taxi/PUDO	2,262	6,426	6%	2,218	6,300	7%	44	126	2%
Walk/Bike	N/A	1,632	2%	N/A	1,600	2%	N/A	32	2%
<b>Total - Patron</b>		<b>91,455</b>	<b>92%</b>		<b>82,604</b>	<b>92%</b>	<b>3,110</b>	<b>8,851</b>	<b>11%</b>
Staff/Security	4,943	7,545	8%	4,846	7,397	8%	97	148	2%
<b>GRAND TOTAL</b>	<b>30,747</b>	<b>99,000</b>	<b>100%</b>	<b>27,525</b>	<b>90,000</b>	<b>100%</b>	<b>3,222</b>	<b>9,000</b>	<b>10%</b>

As also shown in Table V-2, the overall number of vehicle trips that would be generated by the Project would be approximately 30,747 trips, compared to approximately 27,525 trips for the 2012 Festival<sup>1</sup>, or about a 12% increase.

### *Vehicle Trips During Analysis Hours*

The trip totals were converted to vehicle trip estimates for the three analysis hours. Table V-3 shows the estimated vehicle trips for each of the three analysis hours for the Coachella 2012 Festival. Table V-4 shows the estimated vehicle trips for a 99,000 capacity festival. For informational purposes, Table V-5 shows the number of additional vehicle trips that would occur with a 99,000 capacity festival compared to the trips that occurred for the Coachella 2012 Festival.

While the increase in attendance at the festival over 2012 conditions would be about 9,000 people, some people would arrive by shuttle and taxi/pick-up drop off. Those that arrive by car do not drive alone (with average vehicle occupancies of between 2.65 and 2.98 people per car, as identified in Chapter III.4). As the subsequent analysis shows, an additional 9,000 people would generate 3,222 additional vehicles. Approximately 2,521 vehicles (the majority) would be associated with car camping, and 560 vehicles would be associated with day parking. These additional vehicles would not all be on the roadway system at the same time, because their arrivals are spread out over a number of hours. The following analysis therefore identifies the proportion of the trips that would actually occur during the three peak analysis hours, as described below, and in Tables V-3 to V-5.

These tables show the total daily vehicle trips by each type (except for trips associated with camping, which reflect the total trips for the entire festival), and the estimated percentage of the daily total that would occur in each of the analysis hours. These hourly estimates were based on scan data from the 2012 Festival showing activity by hour of day where available, on counts where available, or on the operating experience of festival staff and on the observations made by The Mobility Group during the 2012 Festival.

**Friday 3:00 to 4:00 pm Hour:** As shown in Table V-3, there were approximately 3,309 vehicle trips that were generated by the Coachella 2012 Festival during this hour. The Proposed Project would generate a total of approximately 3,462 vehicle trips in the Friday 3:00 to 4:00 pm hour, as shown in Table V-4. This would represent an increase of 153 additional vehicle trips in the Friday 3:00 to 4:00 pm hour as shown in Table V-5. These trips would include a small amount of inbound camping arrivals (the vast majority of camping patrons have already arrived by this time), and the majority would be inbound trips to day

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<sup>1</sup> From estimates of mode breakdown for persons attending festival. Represents all camping arrivals, plus day arrivals for highest day. Actual daily vehicle arrivals (non-camping) for highest day estimated at 18,657 vehicles for Proposed Project and 17,956 vehicles for 2012 Festival.

**Table V-3 Vehicle Trips by Key Hour – 2012 Festival**

Type	Total Vehicles	Friday 3-4 pm		Saturday 2-3 pm		Monday 8-9 am	
		%	Total	%	Total	%	Total
Camping	9,569 <sup>1</sup>	1.2% <sup>3</sup>	115	0.12% <sup>3</sup>	11	25% <sup>4</sup>	2,393
Day Parking	10,892 <sup>2</sup>	16.6% <sup>3</sup>	1,808	15.4% <sup>3</sup>	1,677	0%	0
Shuttle	17,259 pers.	11.6% <sup>4</sup>	166	12.0% <sup>4</sup>	198	0%	0
Taxi/PUDO	2,218 <sup>2</sup>	16.6% <sup>3</sup>	736	15.4% <sup>3</sup>	684	0%	0
Staff/Security	4,846 <sup>2</sup>	5.0% <sup>5</sup>	484	5.0% <sup>4</sup>	484	1% <sup>5</sup>	97
<b>Total</b>	<b>27,525</b>		<b>3,309</b>		<b>3,054</b>		<b>2,490</b>

<sup>1</sup> Total for festival.

<sup>2</sup> Daily total – Saturday of Coachella 1. (Highest day of Festival.)

<sup>3</sup> Estimates from scan data.

<sup>4</sup> From count data.

<sup>5</sup> Estimates from Goldenvoice and The Mobility Group observations.

**Table V-4 Estimated Vehicle Trips by Key Hour – 99,000 Capacity Coachella Festival**

Type	Total Vehicles	Friday 3-4 pm		Saturday 2-3 pm		Monday 8-9 am	
		%	Total	%	Total	%	Total
Camping	12,090	1.2%	145	0.12%	15	25%	3,023
Day Parking	11,452	16.6%	1,901	15.4%	1,764	0%	0
Shuttle	17,745 pers.	11.6%	172	12.0%	202	0%	0
Taxi/PUDO	2,262	16.6%	750	15.4%	696	0%	0
Staff/Security	4,943	5.0%	494	5.0%	494	1%	99
<b>Total</b>	<b>30,747</b>		<b>3,462</b>		<b>3,171</b>		<b>3,122</b>

**Table V-5 Estimated Vehicle Trips by Key Hour – Increase from 2012 Coachella Festival to 99,000 Capacity Festival**

Type	Total Vehicles	Friday 3-4 pm				Saturday 2-3 pm				Monday 8-9 am			
		%	In	Out	Total	%	In	Out	Total	%	In	Out	Total
Camping	2,521	1.2%	30		30	0.12%	3		3	25%		630	630
Day Parking	560	16.6%	93		93	15.4%	86		86	0%			0
Shuttle	489 pers.	11.6%	3	3	6	12.0%	3	3	6	0%			0
Taxi/PUDO	44	16.6%	7	7	14	15.4%	7	7	14	0%			0
Staff/Security	97	5.0%	5	5	10	5.0%	5	5	10	2%	2	2	4
<b>Total</b>	<b>3,222</b>		<b>138</b>	<b>15</b>	<b>153</b>		<b>104</b>	<b>15</b>	<b>119</b>		<b>2</b>	<b>632</b>	<b>634</b>

Note: All trips in one directions, except shuttle, taxi/PUDO, and staff security which are two directional.



parking. The trips by shuttle buses, to taxi/pick-up/drop-off, and staff trips would be comprised of both inbound and outbound trips.

Saturday 2:00 to 3:00 pm Hour: As also shown in Table V-3 there were approximately 3,054 vehicle trips that were generated by the Coachella 2012 Festival during this hour. The Proposed Project would generate a total of approximately 3,171 vehicle trips in the Saturday 2:00 to 3:00 pm hour, as shown in Table V-4. This would represent an increase of 119 additional vehicle trips in the Saturday 2:00 to 3:00 pm hour as shown in Table V-5. This would include a very small number of inbound camping patrons as virtually all camping arrivals have occurred by that time, so the vast majority of these additional trips would be inbound to day parking. The trips by shuttle buses, to taxi/pick-up/drop-off, and staff trips would be comprised of both inbound and outbound trips.

Monday 8:00 to 9:00 am Hour: As also shown in Table V-3 there were approximately 2,490 vehicle trips that were generated by the Coachella 2012 Festival during this hour. The Proposed Project would generate a total of approximately 3,122 vehicle trips in the Monday 8:00 to 9:00 am hour, as shown in Table V-4. This would represent an increase of 634 additional vehicle trips in the Monday 8:00 to 9:00 am hour as shown in Table V-5. The vast majority of these trips would be outbound from the Project Site, being camping patrons leaving the site.

#### Distribution of Additional Vehicle Trips

The estimated distribution of additional trips is shown in Figure V-2 for Car Camping (both inbound and outbound), and in Figure V-3 for Day Parking. These were estimated from traffic volume data for the no-event and festival conditions, from operating experience of festival staff, and from observations taken during both non-event and festival weekends.

#### Future With Project Traffic Volumes

The traffic volumes that occurred for the 2012 Festival with 90,000 attendance were counted and observed during the festival. This provides a comprehensive base of traffic characteristics during the festival, and is the best source on which to base future festival traffic conditions.

The Future With Project traffic volumes projections were therefore obtained by (1) using the 2012 Festival conditions as a base, (2) adding the background growth in traffic on the roadway system between 2012 and 2014 described in Chapter IV, and (3) adding the projected growth in Festival traffic from a 90,000 attendance to a 99,000 capacity event as described above in this chapter, to obtain total future traffic with a 99,000 capacity festival.

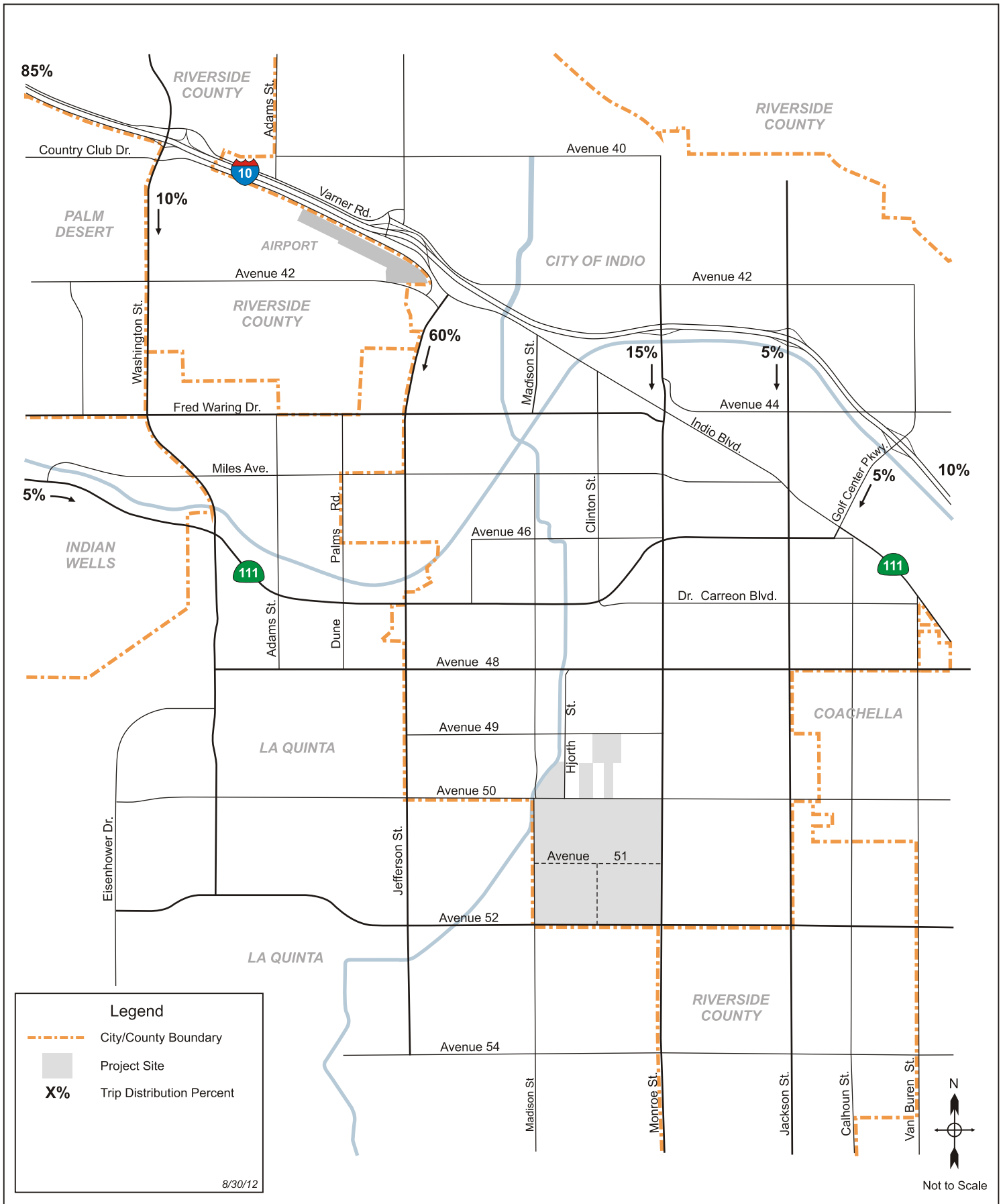


Figure V-2  
 Trip Distribution - Additional Vehicles Car Camping

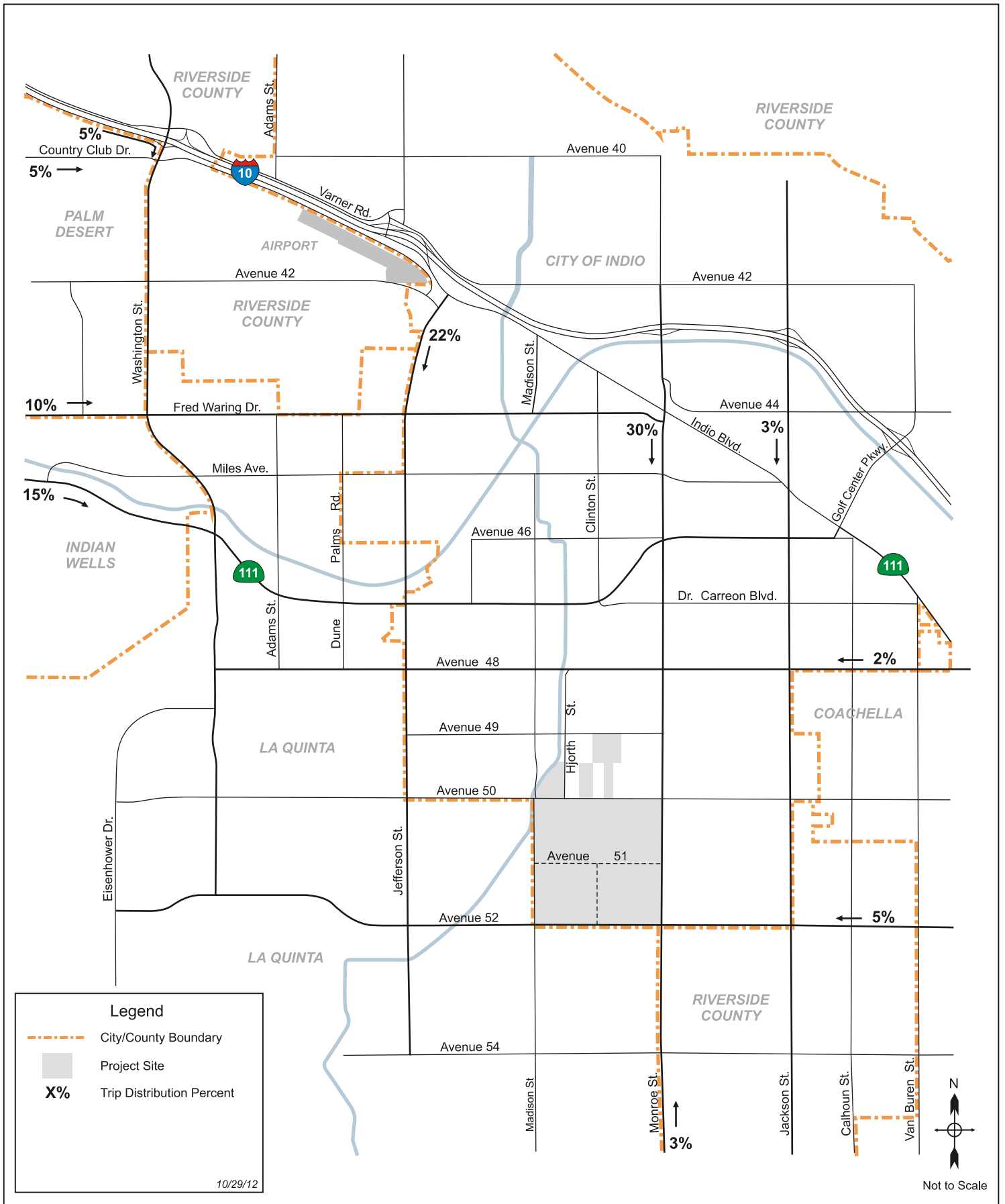
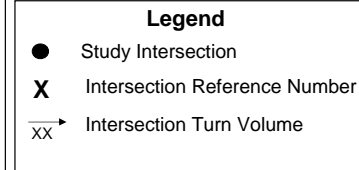
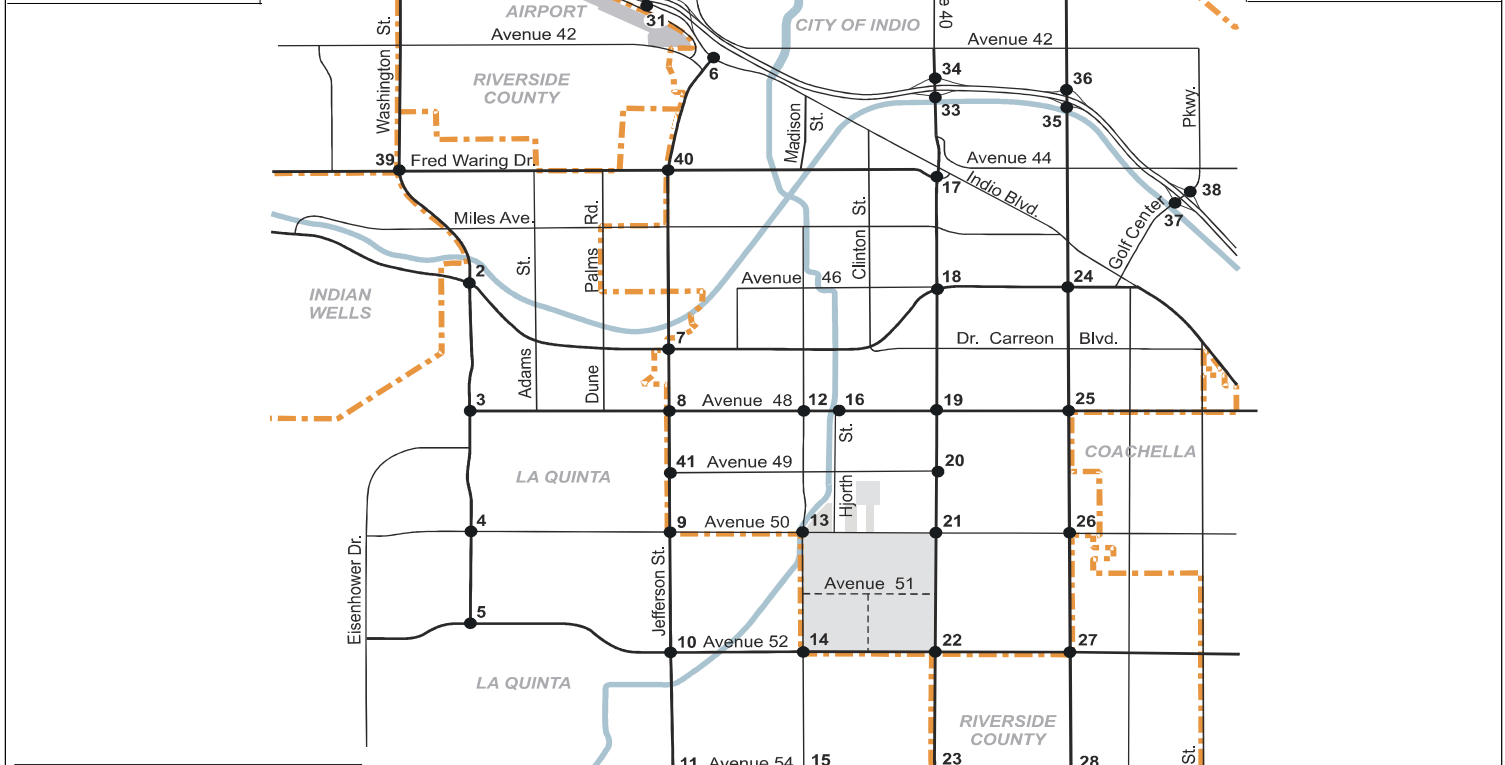
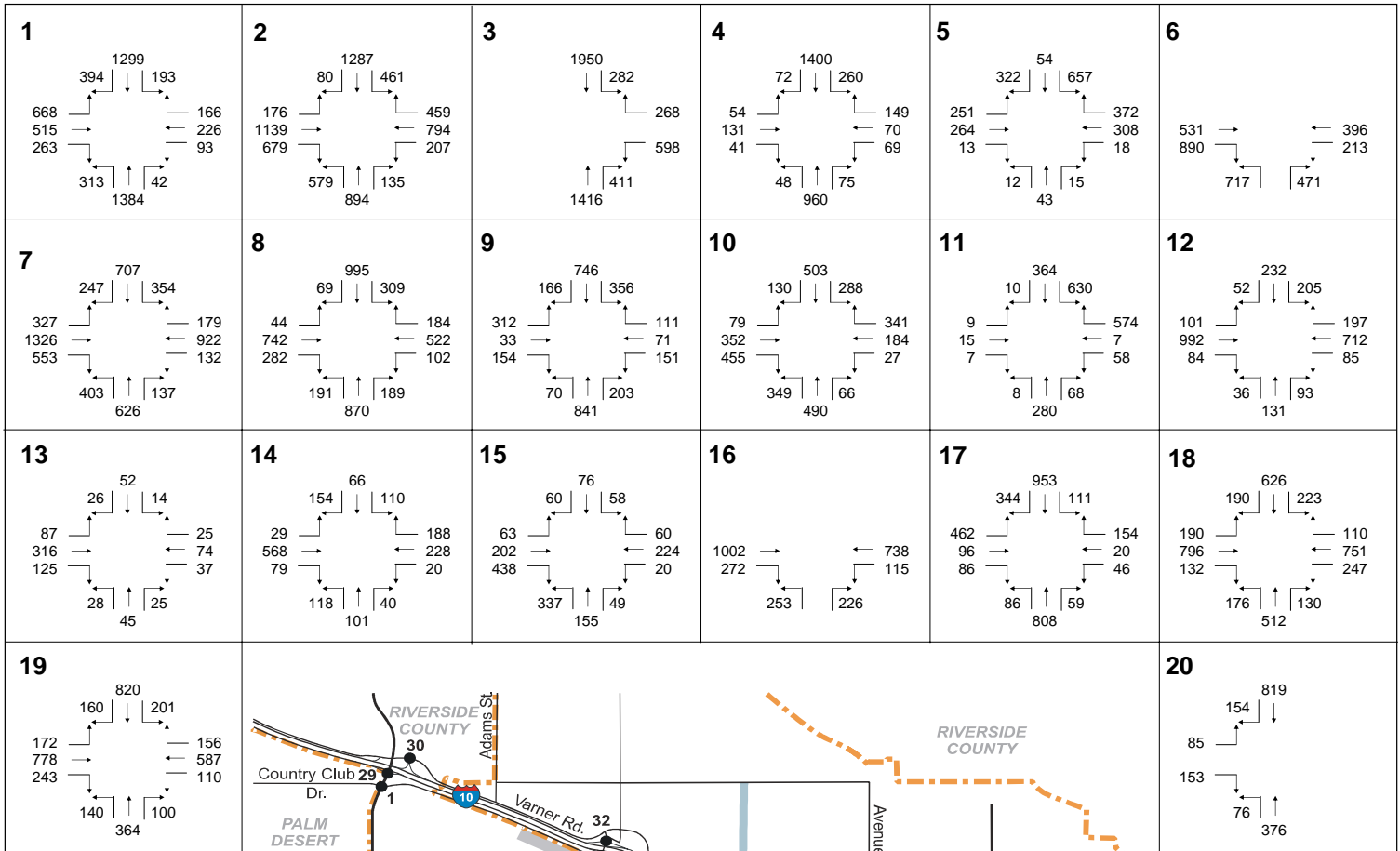


Figure V-3  
 Trip Distribution - Additional Vehicles - Day Parking

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Not to Scale

Fig V-4a  
 Future With Project – Traffic Volumes – Friday 3-4 PM

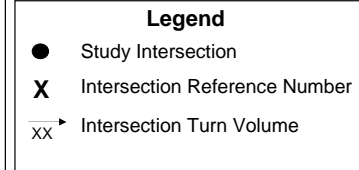
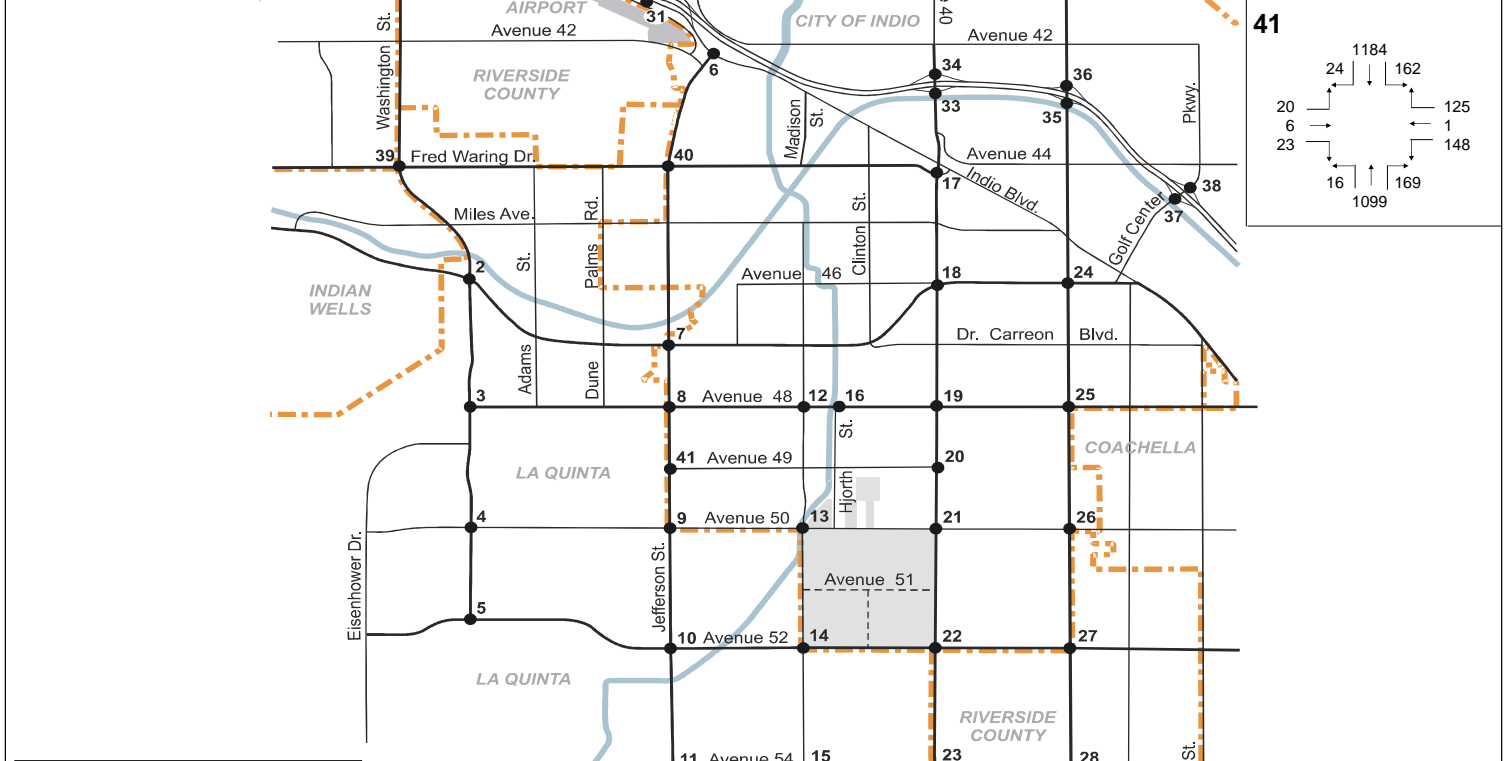
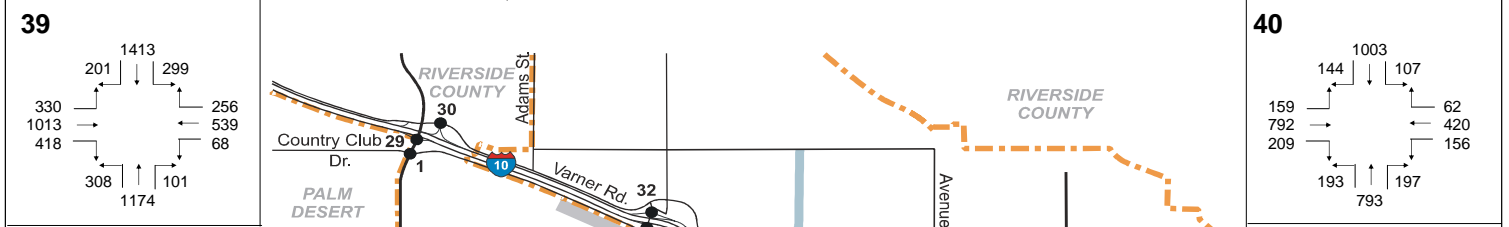
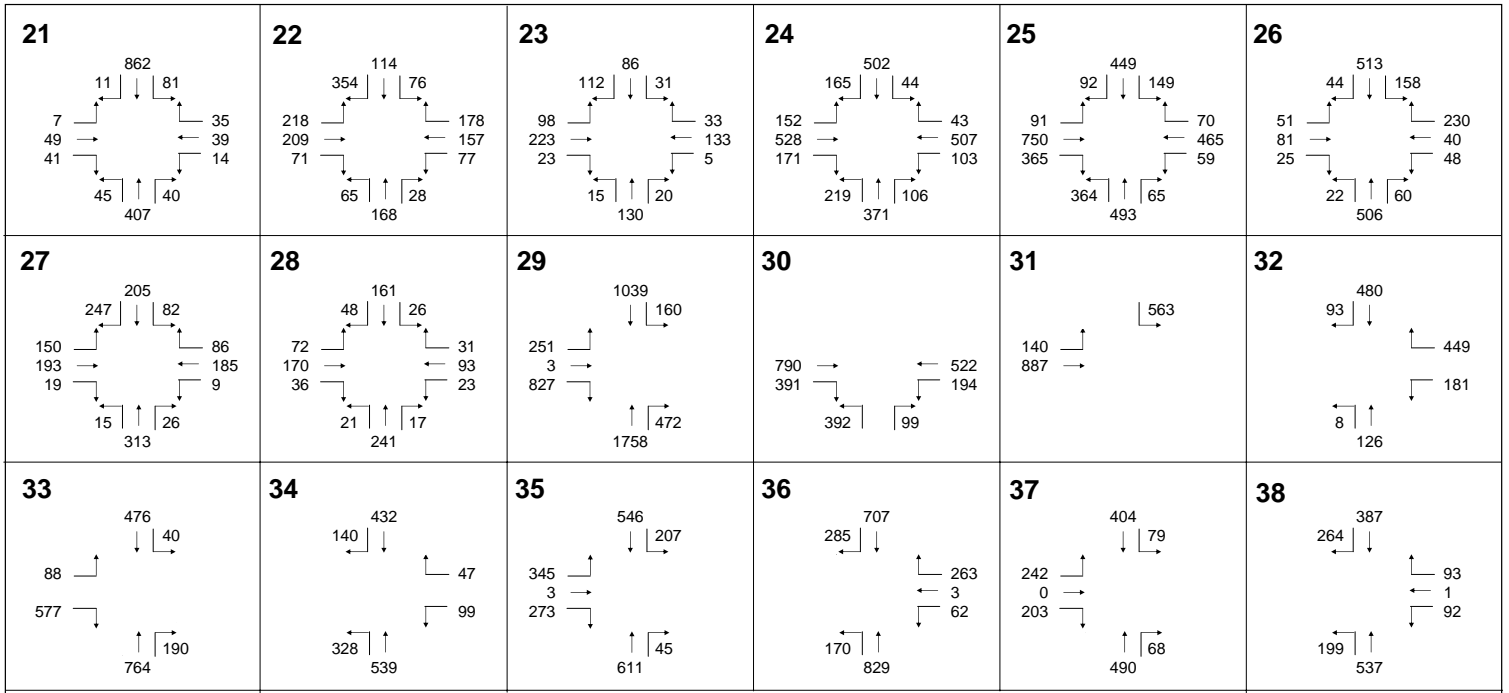
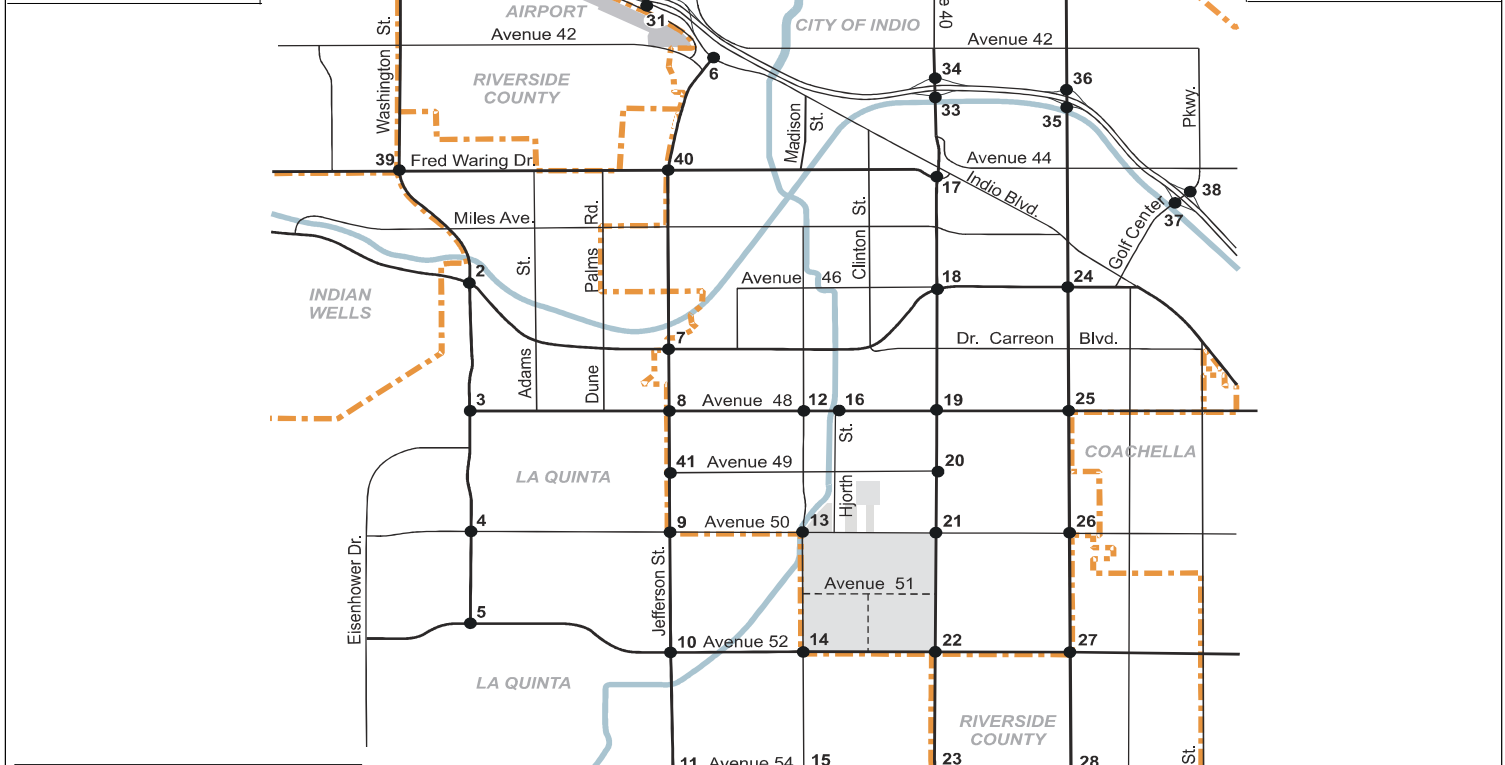
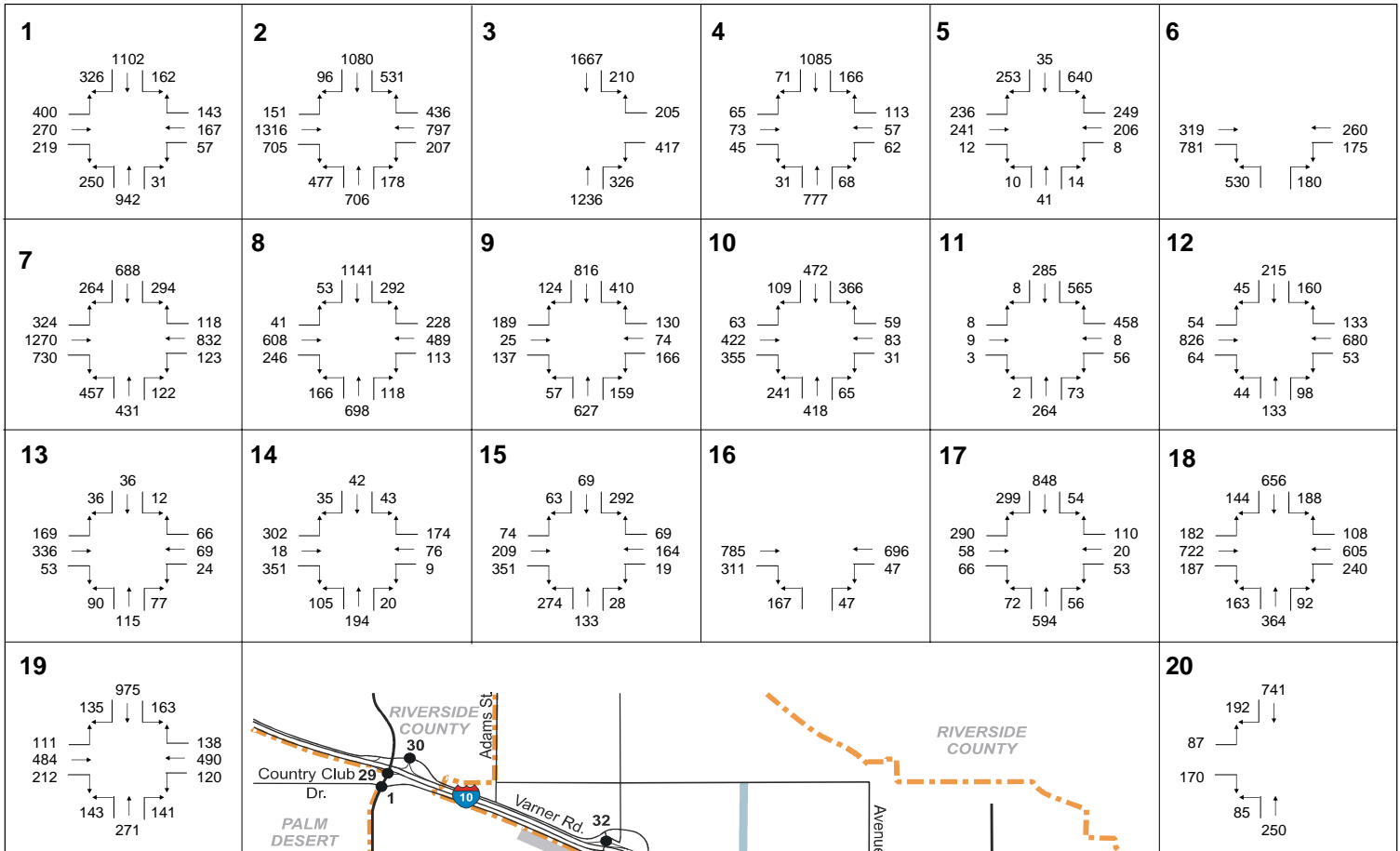


Fig V-4a cont.  
 Future With Project – Traffic Volumes – Friday 3-4 PM



**Legend**

- Study Intersection
- X Intersection Reference Number
- XX Intersection Turn Volume



Fig V-4b  
 Future With Project – Traffic Volumes – Saturday 2-3 PM

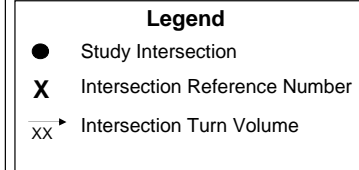
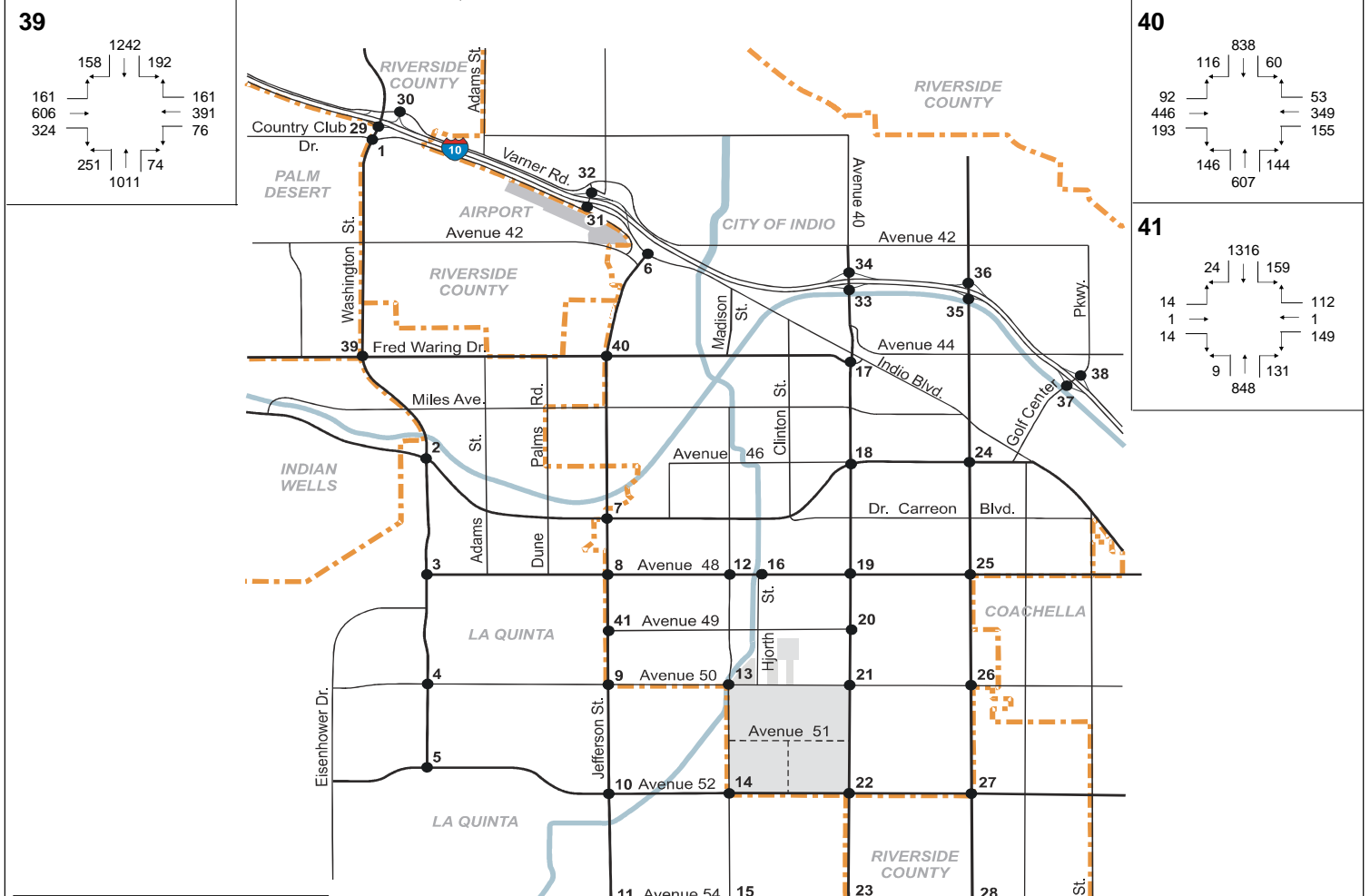
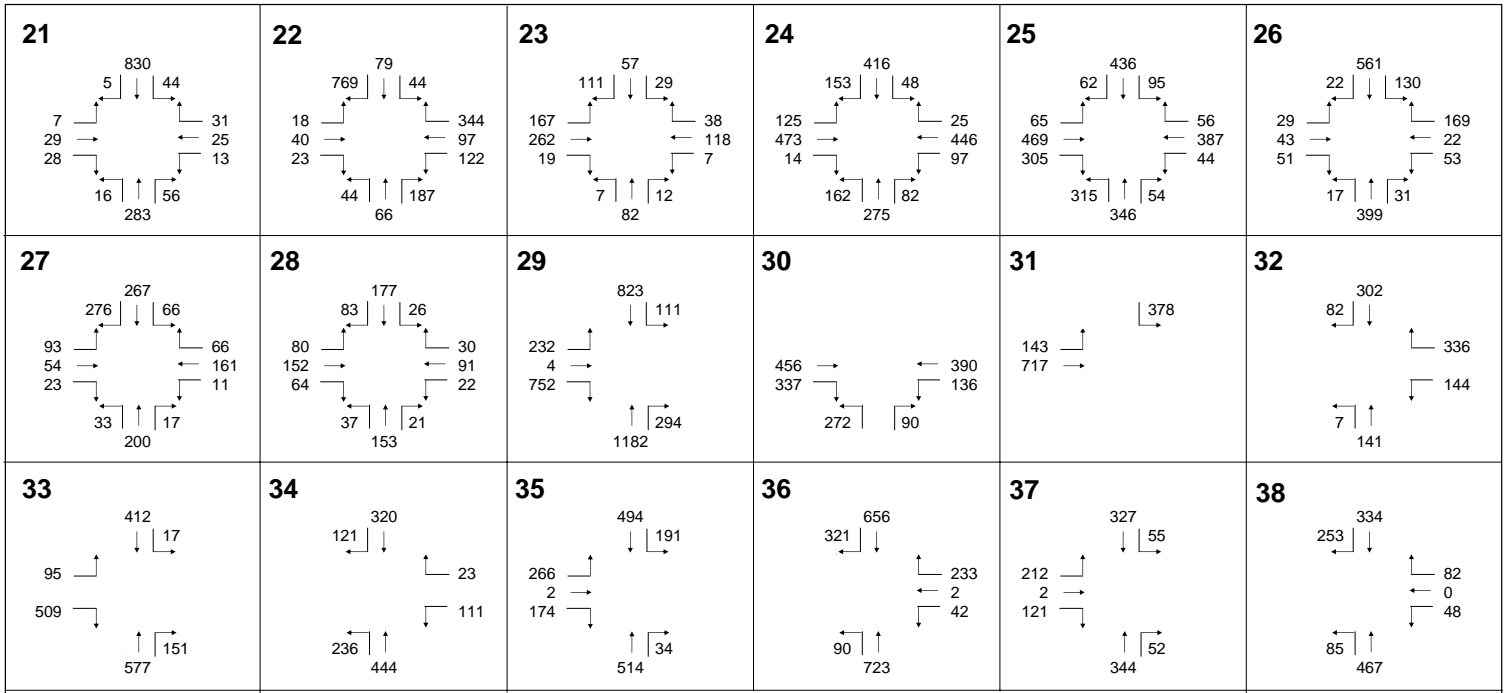
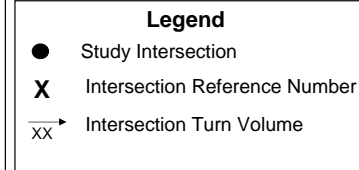
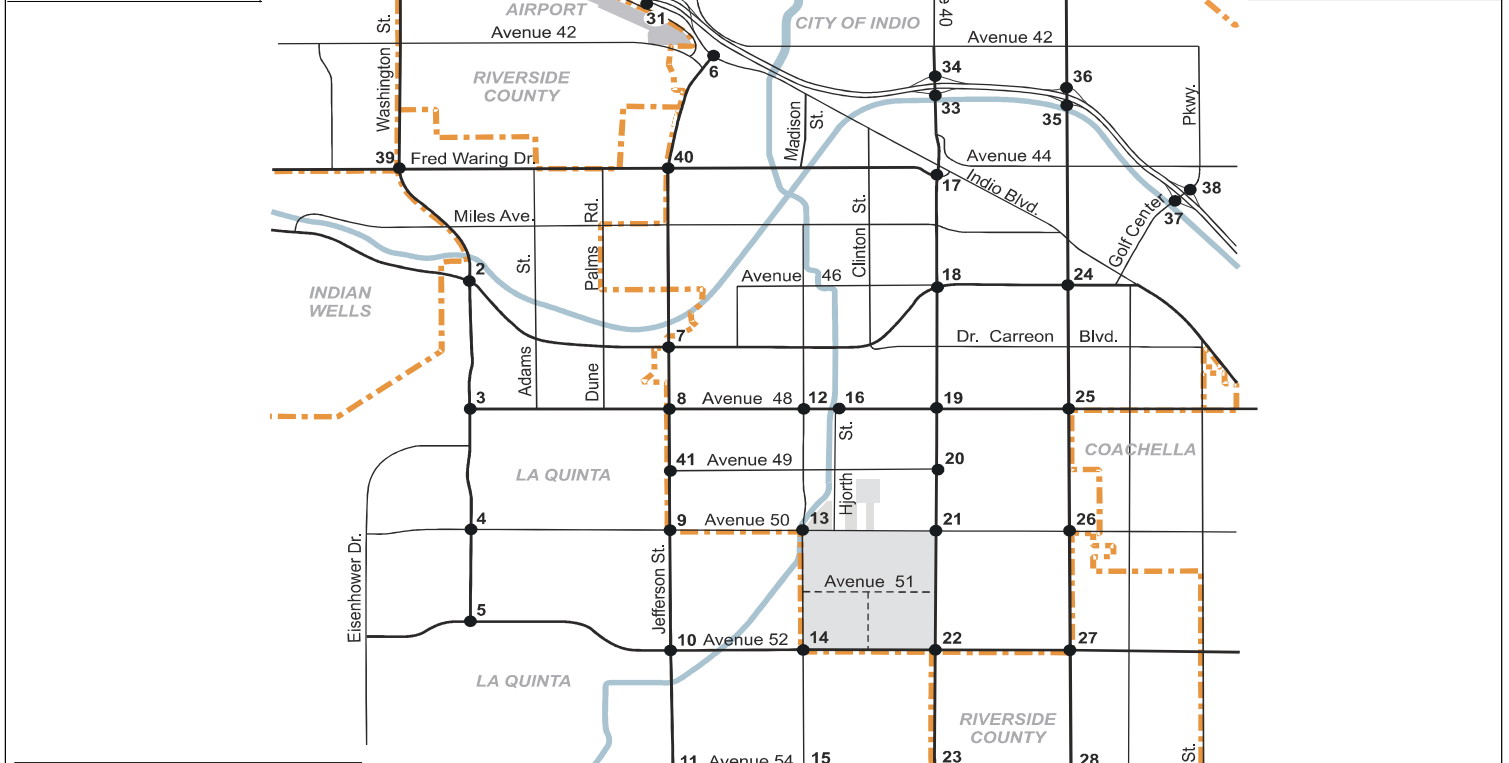
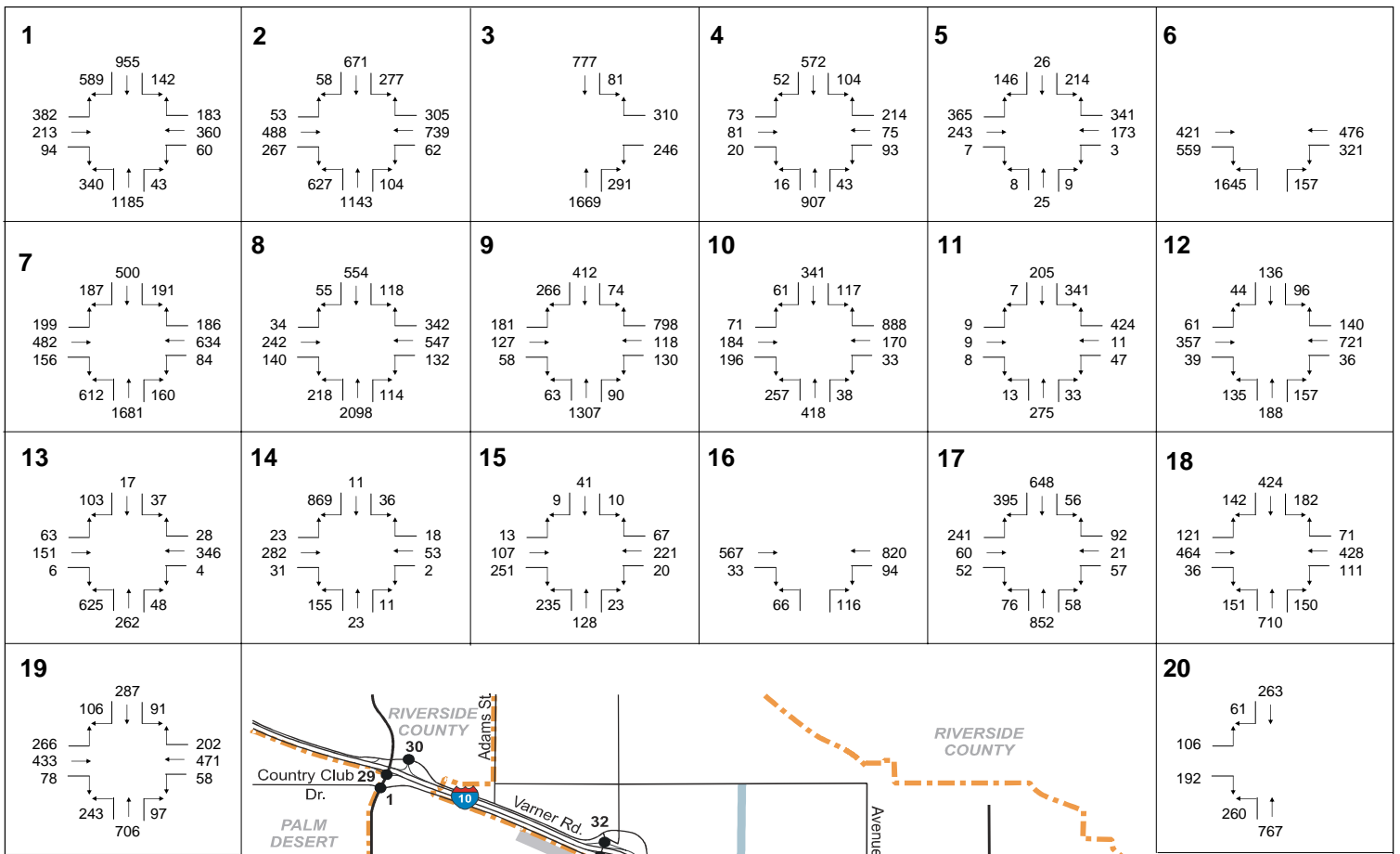


Fig V-4b cont.  
 Future With Project – Traffic Volumes – Saturday 2-3 PM





Not to Scale

Fig V-4c  
 Future With Project – Traffic Volumes – Monday 8-9 AM

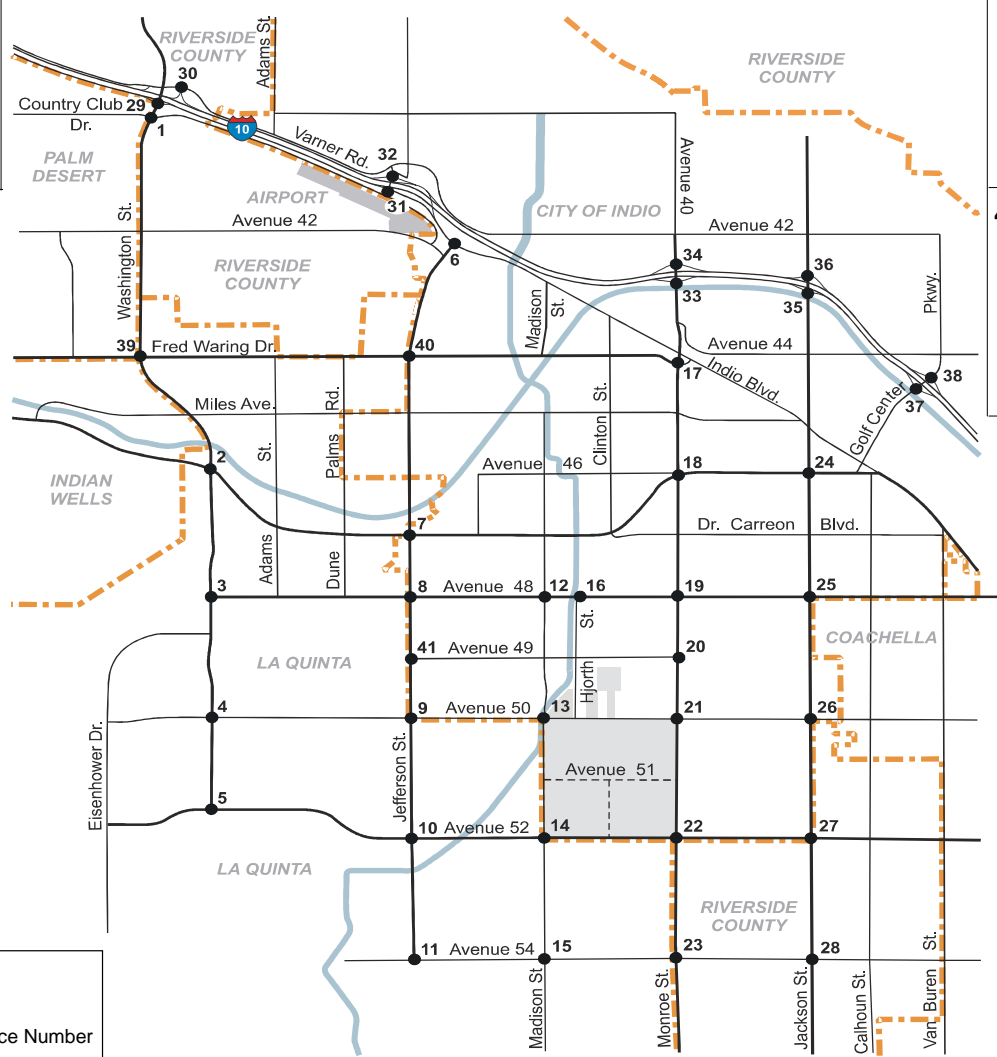
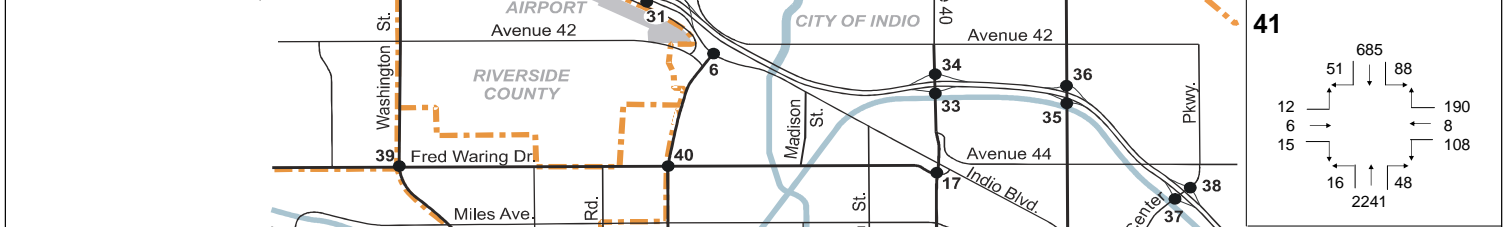
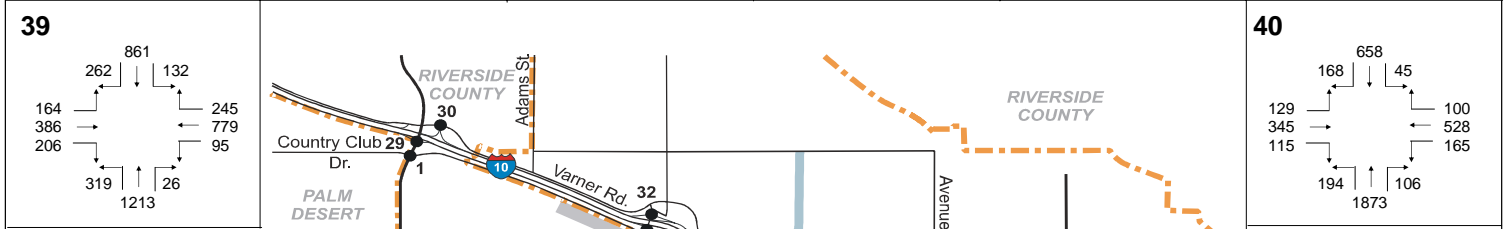
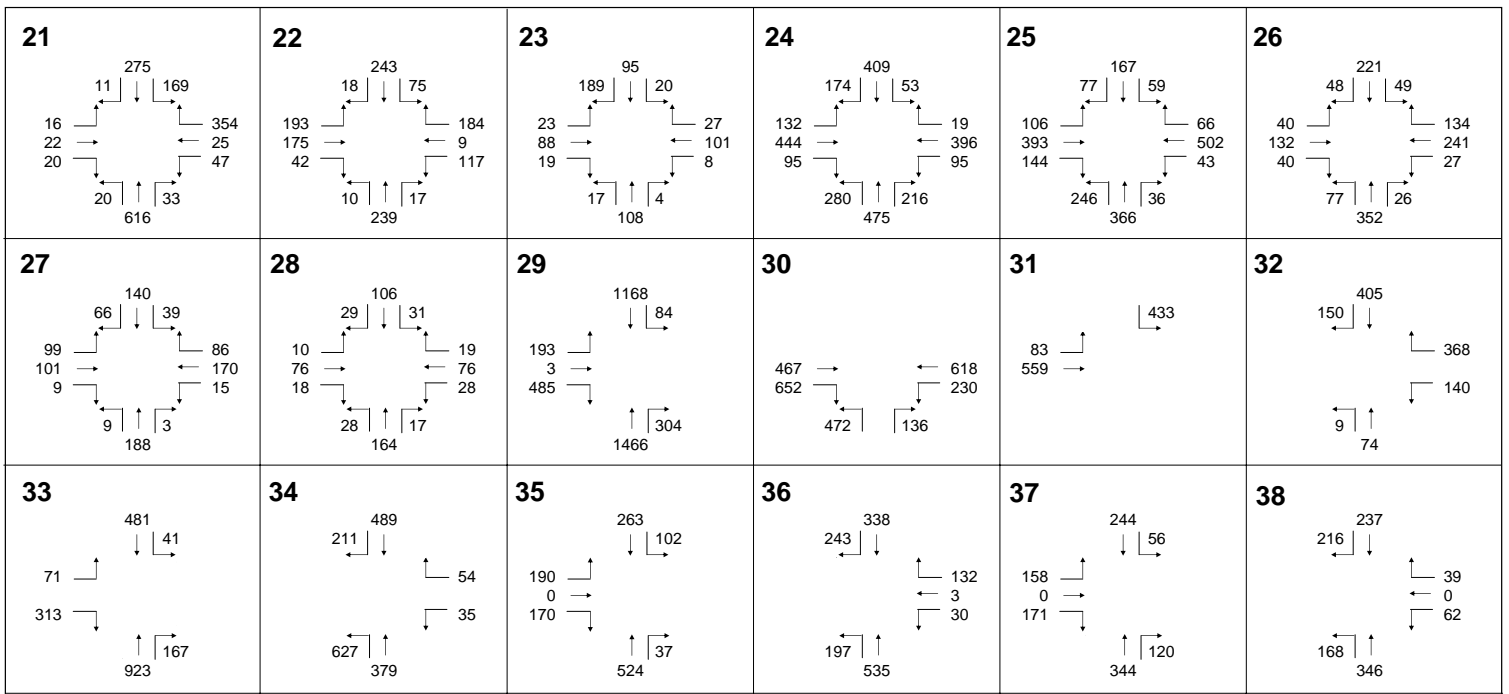


Fig V-4c cont.  
 Future With Project – Traffic Volumes – Monday 8-9 AM

The Future With Project traffic volume projections are shown in Figure V-4 for each of the three analysis hours.

### V.3 Future With Project Traffic Conditions

#### Significant Impact Thresholds

The Proposed Project is located completely within the City of Indio, which is the lead agency for the EIR and entitlements. The significant impact thresholds employed by the City of Indio are therefore used for all intersections in Indio. For intersections in other jurisdictions (as defined in Chapter II), the intersection analysis is conducted using the significant impact thresholds of the relevant jurisdiction. The significant impact thresholds of each jurisdiction are described below. It should be noted that these thresholds were developed for and are typically applied to normal weekday peak period conditions. They therefore do not address weekend hours (such as the Saturday 2:00 to 3:00 pm hour addressed in this study) and do not address temporary special event conditions. Nevertheless, for purposes of preparing a conservative analysis, these thresholds are applied in this study.

#### City of Indio Significance Thresholds

Policy CIR-1.1 of the City of Indio 2008 Circulation Plan Update establishes the performance standard of Level of Service “D” (LOS D), at all intersections during peak hours, except under certain conditions where a peak hour intersection LOS D is not reasonable or feasible, then Level of Service “E” shall be the standard. The following factors shall be considered when determining whether operation at LOS D is reasonable and feasible:

- Excessive right of way acquisition to attain LOS D;
- Unreasonable costs to attain LOS D;
- Impacts to other environmental resources to achieve LOS D, such as biological resources or cultural resources (e.g., historic properties); and
- Conflicts with other *City of Indio 2008 General Plan Update* policies, such as provisions for alternative transportation (e.g., public transit, pedestrian facilities and/or bicycle routes) or provisions for neighborhood preservation.

Beyond the General Plan standards, the City of Indio has not adopted specific thresholds for determining significant impacts for traffic impact studies. For the purposes of this study it was considered that a significant impact would occur (a) if the proposed Project caused the level of service to exceed LOS D, or (b) if the level of service without the Project already exceeded LOS D then if the Project caused the level of service to change from LOS E to LOS

F, or (c) if the proposed Project causes it to exceed LOS E where it was determined to be unreasonable or infeasible to maintain LOS D (per the above standards).

City of La Quinta Significance Thresholds

The City of La Quinta Traffic Impact Study Guidelines (City of La Quinta Engineering Bulletin #06-13) state that a potentially significant project specific traffic impact is defined to occur at any signalized intersection if the addition of project trips will result in that intersection either operating at LOS E or F or exceeding the following criteria, if already operating at LOS E or F:

<i>Intersection Operation</i>	<i>Significance Threshold</i>
LOS E	An increase in delay of 2 seconds or more on critical movements per lane*
LOS F	An increase in delay of 1 second or more on critical movements per lane*

\*Critical movements are the controlling movements when the sums of the maximum volumes per lane for conflicting movements on each roadway are compared. Typically there are two pairs of critical movements (one left with its opposing through movement) for a four legged intersection.

For an unsignalized intersection, a potentially significant impact is defined to occur when, with project traffic included, an intersection has a projected LOS “F” on a side street for two-way stop control or LOS “E” or worse for the intersection at an all-way stop controlled intersection and the addition of project traffic results in an addition of 3 seconds or more of delay for any movement.

County of Riverside Significance Thresholds

Policy C.2.1 of the County of Riverside General Plan Circulation Element, adopted in October 2003, states that the County has established a target Level of Service of LOS “C” for all County maintained roads and conventional state highways and intersections. As an exception, LOS “D” may be allowed in Community Development areas (specific regions of the County where urban and suburban development are deemed appropriate), only at intersections of any combination of the following:

- Secondary Highways

- Major Highways
- Arterials
- Urban Arterials
- Expressways
- Conventional State Highways
- Freeway Ramp Intersections

LOS “E” may be allowed in designated community centers (areas of greater residential and economic densities) to the extent that it would support transit-oriented development and walkable communities. Neither of the two study intersections under County jurisdiction are located in either Community Development area or community centers.

Beyond the General Plan standards, the County of Riverside does not have specific significant impact criteria thresholds for traffic impact studies. For the purposes of this study it was considered that a significant impact would occur if the proposed project caused the level of service to exceed LOS C, or if the level of service without the project already exceeded LOS C then if the project caused the level of service to change from LOS D to LOS E, or from LOS E to LOS F.

#### City of Palm Desert Significance Thresholds

Program 1.A of the Goals, Policies and Programs section of the City of Palm Desert General Plan Circulation Element, adopted in March 2004, states that the City has established a goal of Level of Service “C” for City roadway and intersection operations. For peak operating periods, LOS “D” is provisionally considered the general acceptable service level. Exceedance of the City’s LOS “C” goal is only acceptable where maximum feasible intersection improvements have been implemented.

Beyond the General Plan standards, the City of Palm Desert does not have specific significant impact criteria thresholds for traffic impact studies. For the purposes of this study it was considered that a significant impact would occur if the proposed project caused the level of service to exceed LOS D, or if the level of service without the project already exceeded LOS D then if the project caused the level of service to change from LOS E to LOS F.

#### Caltrans Significance Thresholds

Per the California Department of Transportation (Caltrans) Guide for the Preparation of Traffic Impact Studies, 2003, Caltrans has set the target Level of Service for freeway segments, signalized intersections and ramp terminals as the transition between LOS “C” and LOS “D”. This effectively sets the target level of service at LOS C. However Caltrans

acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than the appropriate target LOS, then the Caltrans guidelines state that the existing LOS should be maintained.

Caltrans has not adopted specific thresholds of significance for determining whether an impact is significant. For the purposes of this study, and in common with most all of the other jurisdictions described above, it was considered that a significant impact would occur if the proposed project caused the level of service to exceed LOS D, or if the level of service without the project already exceeded LOS D then if the project caused the level of service to change from LOS E to LOS F.

**Future Conditions With Project – Intersections**

The intersection level of service analysis for the Future With Project Conditions is summarized in Table V-6, which shows the calculated vehicle delay and associated level of service for each of the study intersections for each of the three analysis hours. The table also compares the level of service conditions to the Future Without Project (No Event). The intersection levels of service for both conditions are also shown in Figure V-6.

*Friday: 3:00 – 4:00 PM*

As shown in Table V-6 and Figure V-6a during the peak hours analyzed, most intersections would continue to operate at similar levels of service with the Proposed Project with the vast majority of intersections continuing to operate at LOS D or better. A total of 38 intersections would operate at LOS D or better, compared to 38 intersections in the Future Without Project condition. The number of intersections operating by each level service category would be as follows, including a comparison to the Future Without Project conditions:

<i>Level of Service</i>	<i>2014 Future Without Project</i>	<i>2014 Future With Project</i>
LOS A	4 intersections	3 intersections
LOS B	12 intersections	9 intersections
LOS C	19 intersections	21 intersections
LOS D	3 intersections	5 intersections
LOS E	1 intersections	1 intersections
LOS F	2 intersections	2 intersections

**Table V-6 Future With Project Conditions - Intersection Level of Service**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM						Saturday 2-3 PM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
1	Washington St & Country Club Dr.	PD	Signalized	42.8	D	42.3	D	-0.5	No	35.3	D	37.6	D	2.3	No
2	Washington St & Hwy-111	LQ	Signalized	35.4	D	37.5	D	2.1	No	33.1	C	34.8	C	1.7	No
3	Washington St & Ave 48	LQ	Signalized	20.5	C	24.3	C	3.8	No	16.1	B	18.8	B	2.7	No
4	Washington St & Ave 50	LQ	Signalized	22.0	C	19.9	B	-2.1	No	20.2	C	19.6	B	-0.6	No
5	Washington St & Ave 52	LQ	Signalized	25.8	C	25.0	C	-0.8	No	26.5	C	23.8	C	-2.7	No
6	Jefferson St & Indio Blvd	I	Signalized	24.8	C	31.2	C	6.4	No	18.4	B	19.8	B	1.4	No
7	Jefferson St & Hwy-111	LQ	Signalized	31.9	C	32.4	C	0.5	No	30.1	C	31.8	C	1.7	No
8	Jefferson St & Ave 48	LQ	Signalized	32.5	C	32.9	C	0.4	No	30.6	C	32.1	C	1.5	No
9	Jefferson St & Ave 50	LQ	Signalized	33.7	C	33.9	C	0.2	No	32.5	C	32.7	C	0.2	No
10	Jefferson St & Ave 52	LQ	Roundabout	2.3	A	3.1	A	0.8	No	2.1	A	2.9	A	0.8	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.3	B	79.6	F	65.3	Yes	14.1	B	39.1	E	25.0	Yes
12	Madison St & Ave 48	I	Signalized	25.9	C	25.1	C	-0.8	No	25.3	C	23.8	C	-1.5	No
13	Madison St & Ave 50	I	4-Way Stop	64.9	F	15.5	C	-49.4	No	22.6	C	17.2	C	-5.4	No
14	Madison St & Ave 52	LQ	4-Way Stop	16.8	C	27.6	D	10.8	No	12.4	B	19.3	C	6.9	No
15	Madison St & Ave 54	LQ	4-Way Stop	14.4	B	30.1	D	15.7	No	11.3	B	28.4	D	17.1	No
16	Hjorth St & Ave 48	I	Signalized	5.9	A	17.9	B	12.0	No	5.1	A	13.2	B	8.1	No
17	Monroe St & Fred Waring Dr.	I	Signalized	25.1	C	27.1	C	2.0	No	23.7	C	22.9	C	-0.8	No
18	Monroe St & Hwy-111	I	Signalized	34.0	C	34.9	C	0.9	No	32.5	C	33.8	C	1.3	No
19	Monroe St & Ave 48	I	Signalized	28.1	C	32.6	C	4.5	No	26.6	C	29.7	C	3.1	No
20	Monroe St & Ave 49	I	2-Way Stop <sup>1</sup>	5.0	A	6.6	A	1.6	No	4.0	A	7.6	A	3.6	No
21	Monroe St & Ave 50	I	Signalized	16.8	B	11.9	B	-4.9	No	15.0	B	10.9	B	-4.1	No

**Table V-6 Future With Project Conditions - Intersection Level of Service**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM						Saturday 2-3 PM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
22	Monroe St & Ave 52	I	4-Way Stop	12.9	B	23.7	C	10.8	No	10.1	B	161.3	F	151.2	Yes
23	Monroe St & Ave 54	LQ	4-Way Stop	10.6	B	11.8	B	1.2	No	8.7	A	13.1	B	4.4	No
24	Jackson St & Hwy-111	I	Signalized	33.4	C	34.5	C	1.1	No	29.9	C	33.1	C	3.2	No
25	Jackson St & Ave 48	I	Signalized	27.8	C	33.1	C	5.3	No	27.0	C	29.5	C	2.5	No
26	Jackson St & Ave 50	I	4-Way Stop	53.1	F	63.2	F	10.1	No	18.0	C	26.5	D	8.5	No
27	Jackson St & Ave 52	CR	4-Way Stop	13.7	B	18.4	C	4.7	No	10.5	B	14.3	B	3.8	No
28	Jackson St & Ave 54	CR	4-Way Stop	11.2	B	12.3	B	1.1	No	8.6	A	14.3	B	5.7	No
29	I-10 EB Ramps & Washington St	C	Signalized	33.7	C	34.9	C	1.2	No	26.4	C	28.7	C	2.3	No
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.3	B	13.7	B	0.4	No	12.8	B	12.6	B	-0.2	No
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	41.0	E	17.8	C	-23.2	No	18.0	C	11.7	B	-6.3	No
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	19.8	C	16.6	C	-3.2	No	12.6	B	12.7	B	0.1	No
33	I-10 EB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	27.9	C	71.4	E	43.5	Yes	17.4	B	30.4	C	13.0	No
34	I-10 WB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	10.3	B	10.7	B	0.4	No	10.1	B	10.6	B	0.5	No
35	I-10 EB Ramps & Jackson St	C	Signalized	24.7	C	20.8	C	-3.9	No	16.9	B	15.6	B	-1.3	No
36	I-10 WB Ramps & Jackson St	C	Signalized	9.0	A	9.7	A	0.7	No	8.1	A	7.9	A	-0.2	No
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	16.0	B	15.3	B	-0.7	No	15.2	B	14.2	B	-1.0	No
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.4	B	12.1	B	-0.3	No	11.0	B	9.7	A	-1.3	No
39	Washington St & Fred Waring Dr	LQ	Signalized	35.5	D	36.4	D	0.9	No	30.7	C	31.4	C	0.7	No
40	Jefferson St & Fred Waring Dr	I	Signalized	27.8	C	28.2	C	0.4	No	27.1	C	27.6	C	0.5	No
41	Jefferson St & Ave 49	LQ	Signalized	17.2	B	20.4	C	3.2	No	16.5	B	18.6	B	2.1	No

Note: 1. Intersection would be signalized in the Future Without Project conditions.

I - City of Indio; LQ - City of La Quinta; CR - County of Riverside;  
 PD - City of Palm Desert; C - Caltrans



**Table V-6 Future With Project Conditions - Intersection Level of Service**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
1	Washington St & Country Club Dr.	PD	Signalized	37.5	D	39.5	D	2.0	No
2	Washington St & Hwy-111	LQ	Signalized	32.0	C	32.4	C	0.4	No
3	Washington St & Ave 48	LQ	Signalized	16.0	B	20.3	C	4.3	No
4	Washington St & Ave 50	LQ	Signalized	23.7	C	25.2	C	1.5	No
5	Washington St & Ave 52	LQ	Signalized	26.8	C	26.2	C	-0.6	No
6	Jefferson St & Indio Blvd	I	Signalized	20.0	C	62.6	E	42.6	Yes
7	Jefferson St & Hwy-111	LQ	Signalized	30.4	C	30.5	C	0.1	No
8	Jefferson St & Ave 48	LQ	Signalized	30.5	C	50.4	D	19.9	No
9	Jefferson St & Ave 50	LQ	Signalized	31.4	C	89.3	F	57.9	Yes
10	Jefferson St & Ave 52	LQ	Roundabout	2.0	A	2.3	A	0.3	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	10.8	B	22.4	C	11.6	No
12	Madison St & Ave 48	I	Signalized	23.7	C	25.2	C	1.5	No
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	118.3	F	105.9	Yes
14	Madison St & Ave 52	LQ	4-Way Stop	11.6	B	133.4	F	121.8	Yes
15	Madison St & Ave 54	LQ	4-Way Stop	10.5	B	12.5	B	2.0	No
16	Hjorth St & Ave 48	I	Signalized	7.4	A	12.9	B	5.5	No
17	Monroe St & Fred Waring Dr.	I	Signalized	20.1	C	21.0	C	0.9	No
18	Monroe St & Hwy-111	I	Signalized	30.5	C	32.2	C	1.7	No
19	Monroe St & Ave 48	I	Signalized	25.2	C	33.0	C	7.8	No
20	Monroe St & Ave 49	I	2-Way Stop <sup>1</sup>	3.9	A	8.1	A	4.2	No
21	Monroe St & Ave 50	I	Signalized	14.8	B	15.5	B	0.7	No

**Table V-6 Future With Project Conditions - Intersection Level of Service**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	16.3	C	5.8	No
23	Monroe St & Ave 54	LQ	4-Way Stop	8.9	A	10.1	B	1.2	No
24	Jackson St & Hwy-111	I	Signalized	31.1	C	47.6	D	16.5	No
25	Jackson St & Ave 48	I	Signalized	26.7	C	27.9	C	1.2	No
26	Jackson St & Ave 50	I	4-Way Stop	12.7	B	36.2	E	23.5	Yes
27	Jackson St & Ave 52	CR	4-Way Stop	9.9	A	11.2	B	1.3	No
28	Jackson St & Ave 54	CR	4-Way Stop	8.5	A	9.4	A	0.9	No
29	I-10 EB Ramps & Washington St	C	Signalized	23.5	C	22.2	C	-1.3	No
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.2	B	15.9	B	2.7	No
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	13.6	B	13.9	B	0.3	No
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	11.1	B	15.0	B	3.9	No
33	I-10 EB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	17.4	B	60.9	E	43.5	Yes
34	I-10 WB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	11.1	B	26.4	C	15.3	No
35	I-10 EB Ramps & Jackson St	C	Signalized	14.4	B	14.7	B	0.3	No
36	I-10 WB Ramps & Jackson St	C	Signalized	8.4	A	8.3	A	-0.1	No
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	13.6	B	14.2	B	0.6	No
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.3	B	12.0	B	-0.3	No
39	Washington St & Fred Waring Dr	LQ	Signalized	29.8	C	31.5	C	1.7	No
40	Jefferson St & Fred Waring Dr	I	Signalized	26.5	C	26.2	C	-0.3	No
41	Jefferson St & Ave 49	LQ	Signalized	22.1	C	18.2	B	-3.9	No

Note: 1. Intersection would be signalized in the Future Without Project conditions.

I - City of Indio; LQ - City of La Quinta; CR - County of Riverside;  
 PD - City of Palm Desert; C - Caltrans

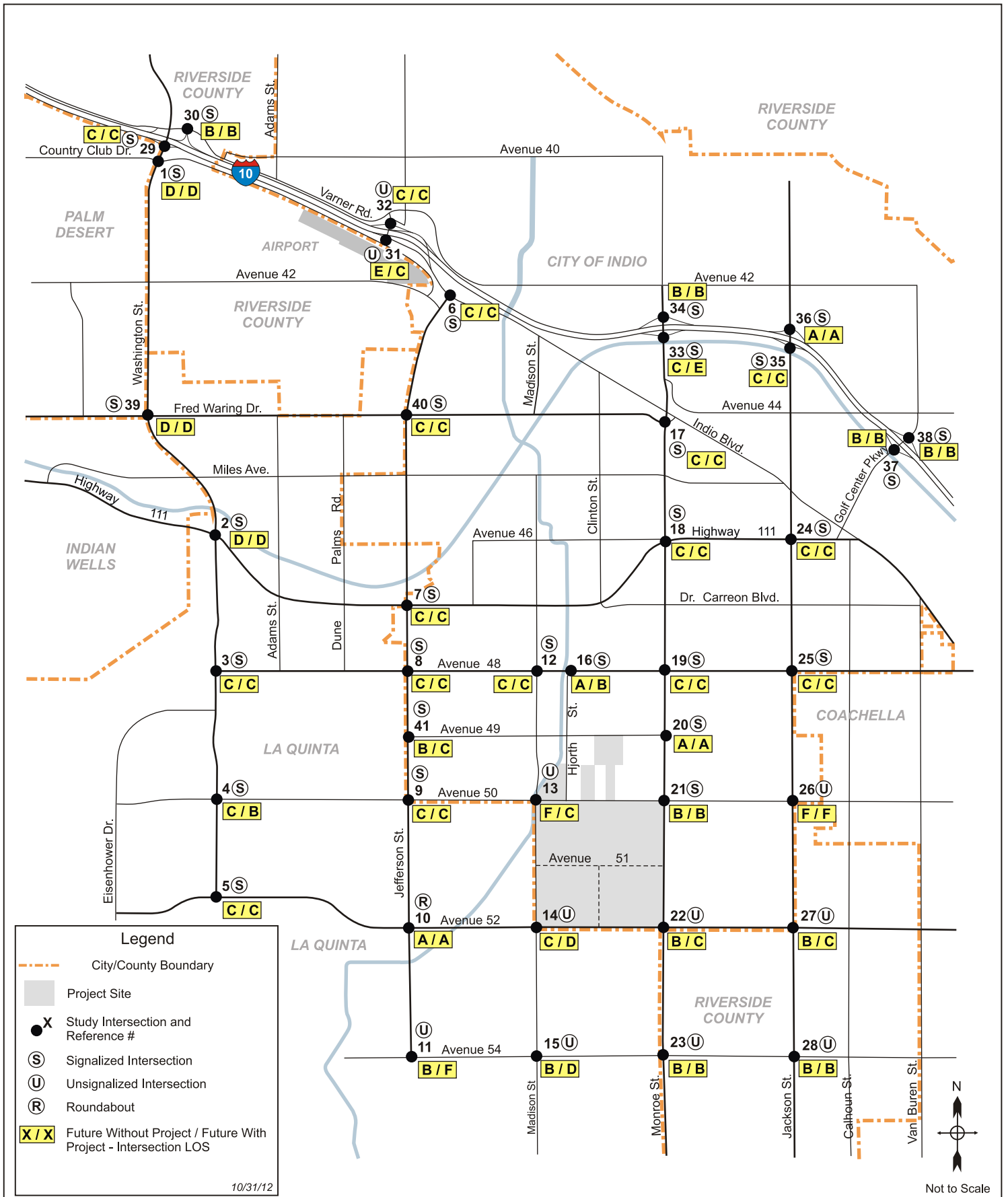


Figure V-5a  
 Future With Project - Intersection Level of Service - Friday 3:00-4:00 PM

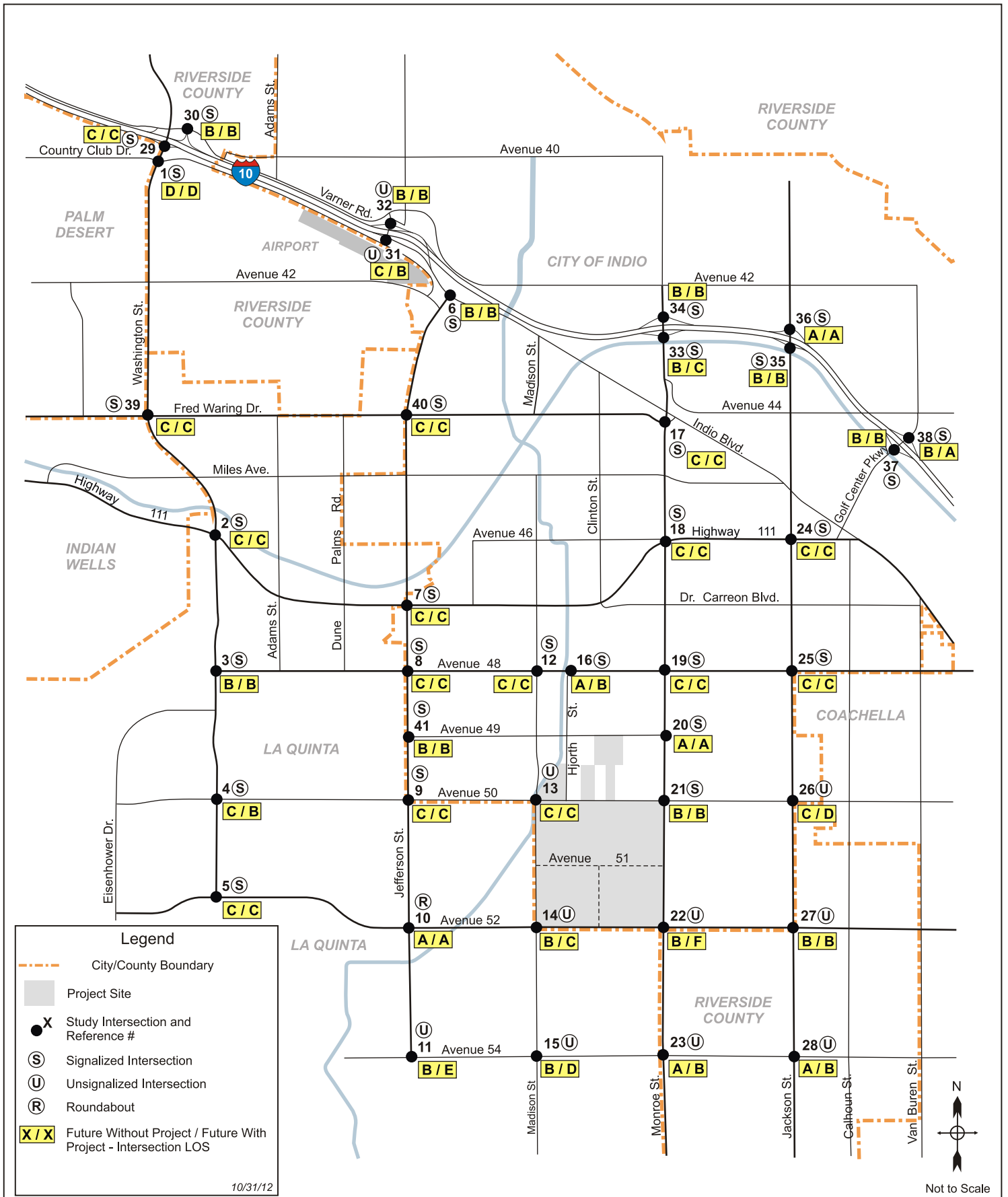
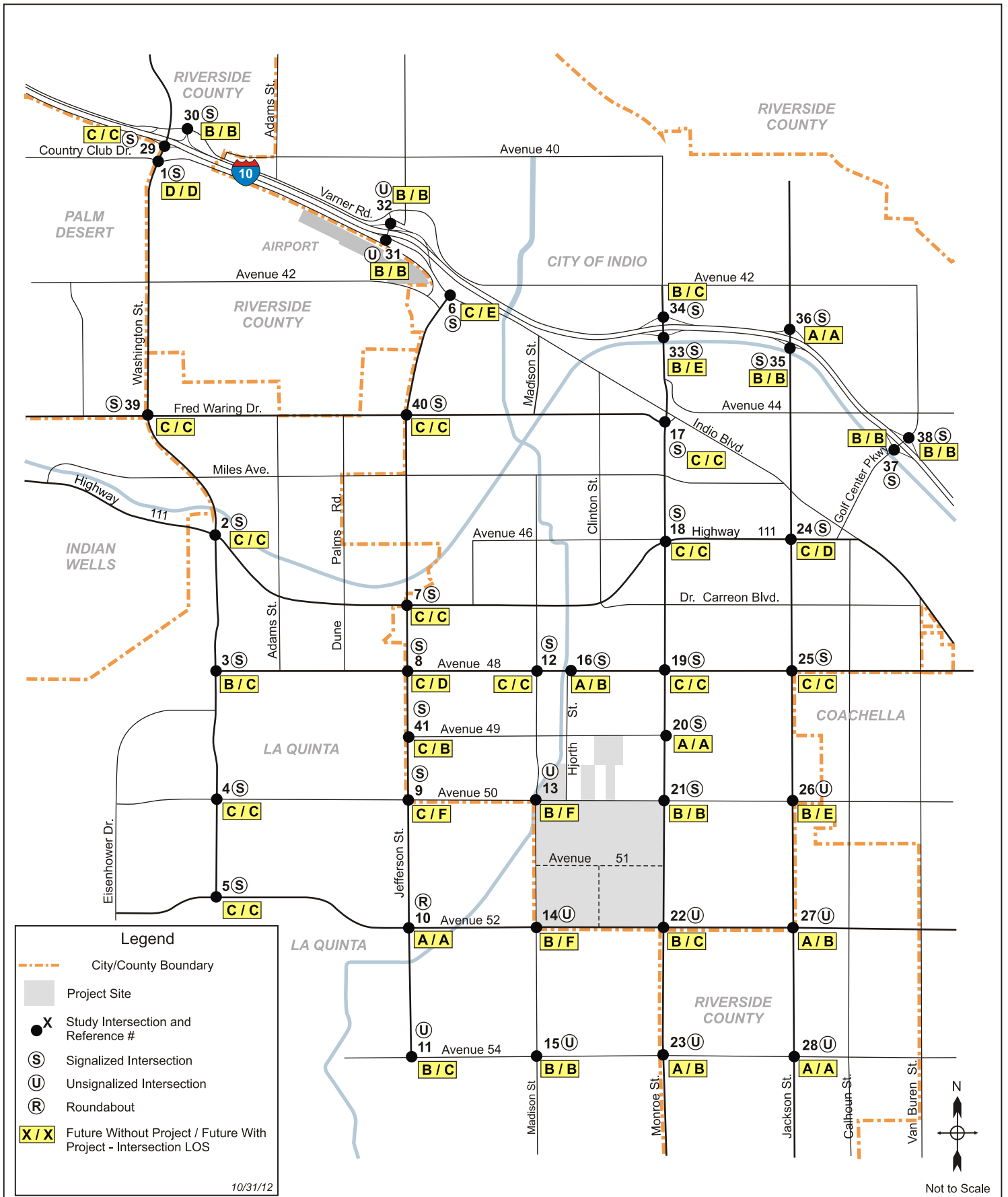


Figure V-5b  
 Future With Project Conditions - Intersection Level of Service - Saturday 2:00-3:00 PM



FigureV-5c  
 Future With Project - Intersection Level of Service - Monday 8:00-9:00 AM

In the Future Without Project conditions, a total of three intersections would operate at worse than LOS D, as follows:

13. Madison Street & Avenue 50	LOS F
26. Jackson Street & Avenue 50	LOS F
31. I-10 Eastbound Freeway Ramps & Jefferson Street/Indio Blvd	LOS E

In the Future With Project conditions, a total of three intersections would operate at worse than LOS D, as follows:

11. Jefferson Street & Avenue 54 <sup>1</sup>	LOS F
26. Jackson Street & Avenue 50	LOS F
33. I-10 Eastbound Freeway Ramps & Monroe Street	LOS E

According to the criteria for significant impacts adopted for this study, the Future With Project conditions would result in two significant impacts in this time period. These would be at:

- Intersection #11 - Jefferson Street & Avenue 54, where the level of service would increase from LOS B to LOS F. This impact would be caused primarily by diverted traffic using Avenue 54 and Jefferson Street, and would arise from heavy westbound right turn and southbound left turn volumes.
- Intersection #33 - I-10 Eastbound Freeway Ramps & Monroe Street, where the level of service would increase from LOS C to LOS E. This impact would be caused primarily by festival traffic exiting the freeway at Monroe Street.

At the other intersection where the level of service would be worse than LOS D, a significant impact would not occur, as the level of service at Intersection # 26 - Jackson Street & Avenue 50, would be LOS F both without and with the Project.

Vicinity of the Project Site

Intersections in the vicinity of the Project Site would generally operate at the same, or in some cases better, levels of service with the Project as without the Project. This would be due to a

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<sup>1</sup> These level of service conditions are stated for the intersection as a whole (and represent a weighted average), but do not necessarily represent those conditions for all approaches or every specific turn movement. For example, at the intersection of Jefferson Street and Avenue 54 the LOS F condition is a result of the southbound left and westbound right turn moves. Other moves at the intersection, for example, into and out of PGA West would generally continue to operate at LOS C or better.

number of reasons. While the festival adds traffic, the background (non-festival) traffic may in fact decrease during festival weekends – as some residents may leave town for the weekend, and other residents may not make their normal day-to-day trips on roads near the festival site to avoid those roads serving as access routes to the Project Site. Traffic volumes observed during the festival are therefore the combined result of added festival traffic and changes in the background traffic.

Also, during the festival, at certain intersections in the vicinity of the Project Site some streets may be closed and/or some turns may be prohibited. So while the traffic volumes in one direction (i.e. inbound to the festival) may increase, traffic in other directions may reduce or even be eliminated with street closures. This represents a key traffic management measure during special events – to reduce conflicting traffic movements to enable more efficient operation for the higher event volumes. In these instances there will be fewer conflicting movements at the intersections and the level of service (for the intersection as a whole) may be better than during normal conditions. However, there may also be traffic queues in one key direction, which is discussed further below.

#### Intersections Further from the Project Site

In locations further from the Project Site, background (non-event) traffic could increase, if residents continue to make trips but use alternate routes to avoid closed streets and/or festival traffic. Again, traffic volumes observed during the festival are the combined result of added festival traffic and changes in the background traffic. As Table V-6 shows, there would generally be no significant impacts further from the Project Site - which indicates there is sufficient roadway capacity in these locations to accommodate both any additional festival traffic and any diverted traffic volumes occurring because of the Festival.

The two exceptions are the locations identified earlier where significant impacts would occur – at Jefferson Street & Avenue 54 and at the I-10 Eastbound Ramps & Monroe Street.

These conclusions are supported by the analysis and observations of the 2012 Festival traffic conditions (described in Chapter III) which indicated that the vast majority of intersections operated at satisfactory conditions (LOS D or better). Intersection conditions with the Project, would be very similar to the conditions that occurred for the 2012 Festival because the increase in traffic volumes during the Friday 3:00 to 4:00 pm hour would be small – approximately 135 total vehicle trips or a 5% increase (see Table V-5).

#### Traffic Queues

As discussed earlier, in Chapter III, another component of traffic conditions is traffic queues. While levels of service may not necessarily worsen for an intersection as a whole, there may be queues of traffic through the intersection. With major festivals such as Coachella, heavy temporary peak traffic loads and traffic queues are to be expected, due to the high volumes

and the peaking characteristics of patrons arriving and departing over short periods of time. The traffic queues are often discontinuous with gaps occurring in the queues between intersections, and often build up and disperse quite quickly (within 15 – 30 minutes). The queues can be caused by a multiplicity of situations during the festival weekend, primarily by access to parking lots, but also can be affected by traffic control decisions, redirection of traffic, and adjusting parking access and egress routes at the festival site. Unlike for regular traffic conditions, it is therefore not possible to accurately quantify projected queue lengths.

However, it would be expected that traffic queue lengths would be similar to those observed for the 2012 Festival (and shown in Figure III.9b). Because the increase in traffic during the Friday 3:00 to 4:00 pm hour would be marginal, at only 5%, queue lengths would not be expected to noticeably increase.

The eastbound queues on Avenue 50 at Madison Street would not be expected to materially increase in length, as the increase in day parking spaces would occur in Lot 15 at the south of the Project Site with the principal access route via Monroe Street. The other queue lengths with the Project would be expected to be shorter than those identified for the 2012 Festival, due to certain Project Design Features that would be incorporated into the Project (as described earlier in this chapter) and due to roadway improvements that would be in place by 2014. Queue lengths at the intersection of Madison Street & Avenue 52 on eastbound Avenue 52 and northbound Madison Street would be expected to decrease due to the improvements that will be implemented at the Taxi & Pick-Up/Drop-Off Area at Lot 13A, even though there would be a slight increase in usage of the lot. Queues on Hjorth Street would be expected to decrease due to improved traffic control measures that will be implemented in this corridor for shuttle buses. Southbound queues on Monroe Street would be expected to be shorter because of the additional roadway capacity that will be implemented by the City of Indio by 2014 (additional southbound lane between Avenue 49 and Avenue 52). Based on these increases in capacity it is anticipated that the maximum queue would not extend much beyond Avenue 50, compared to extending past Avenue 49 during the 2012 Festival.

In evaluating the potential queue impacts, the threshold of significance that was adopted for this study was that a significant impact would occur if the proposed Project caused people to be substantively inconvenienced by the queues (i.e. more than by any regular queues that occur during typical non-event conditions).

Those people primarily affected by the traffic queues would be the festival patrons who are in the queue. As patrons attending the festival expect traffic queues to access parking and as patrons attend voluntarily and many are repeat patrons, and as the festival was quickly sold out indicating its popularity, it can be concluded that festival patrons are not inconvenienced by the traffic queues and are not significantly impacted.



The traffic queues would not be expected to cause impacts to other general traffic (e.g. non-event traffic on streets that cross the queues), as the intersection level of service analysis shows acceptable levels of service along the routes of the queues (see Table V-6), so traffic would not be substantively inconvenienced.

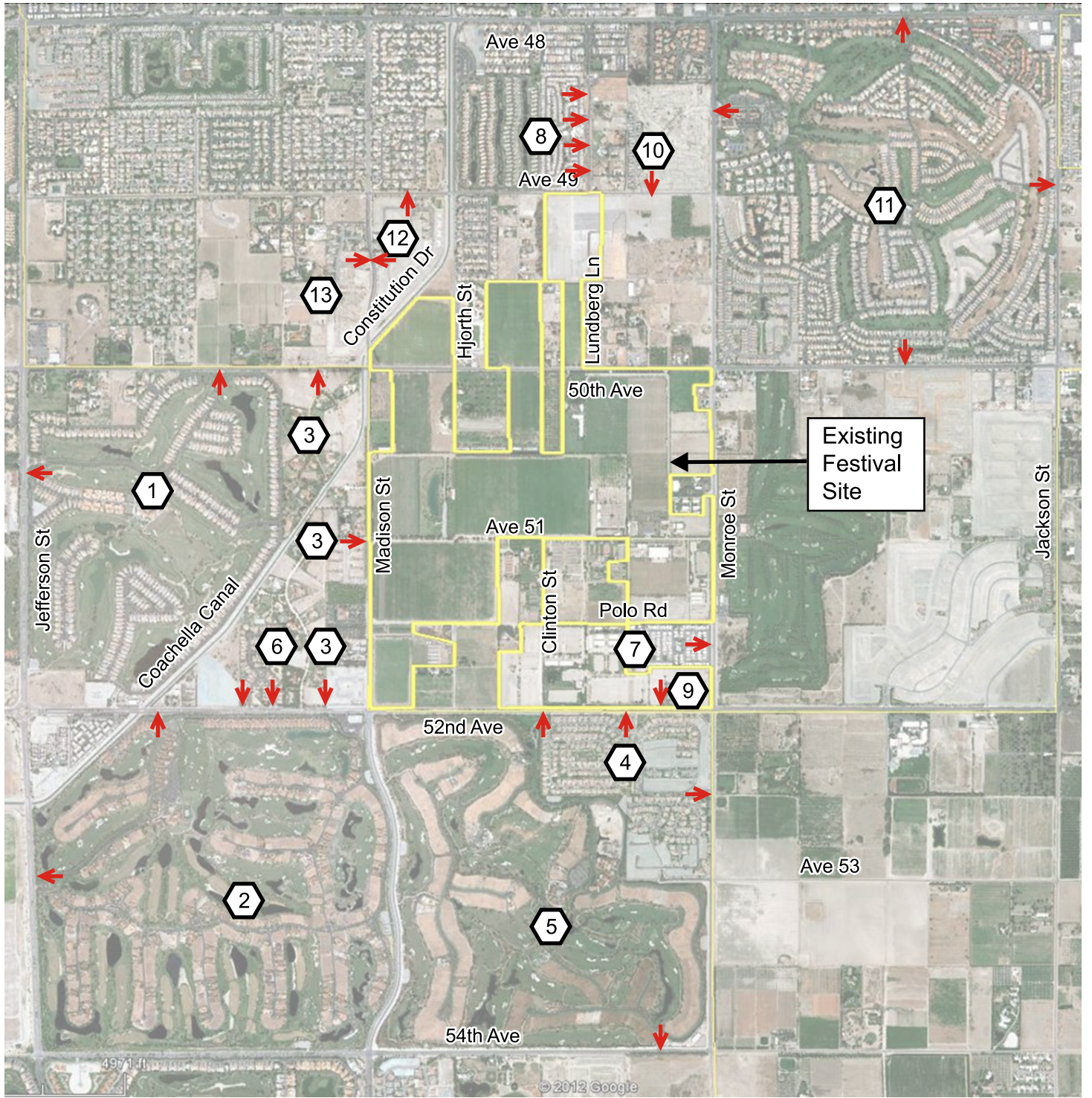
However, residents who live along the streets where queues occur could be expected to be temporarily inconvenienced if they are delayed in reaching their properties along the streets in question.

This would particularly apply to residents who live in locations where alternate routes are not available. These include along Monroe Street between Avenue 48 & Avenue 52, including the La Quinta Ridge Mobile Home Park with driveway on Monroe Street just north of Avenue 52; the La Canada Mobile Home Park with driveway on Avenue 52 just west of Monroe Street; and along Avenue 50 between Monroe Street & Madison Street. While the increases in inconvenience from traffic queues compared to the 2012 Festival is expected to be nominal — as demonstrated in the evaluation described above — they would be potentially significant with the proposed Project compared to the Future Without Project Conditions. It should be noted that the Festival Operators and the City of Indio provide advance notice and information on streets likely to be affected by the festival so that residents can plan ahead to minimize impacts.

Residents in most other areas adjacent to or near the festival site have alternative routes of access/egress to the residential developments, so they can avoid the traffic queues where they occur. As shown in Figure V-6, these include:

- Rancho Santana, with driveway on Avenue 52 west of Monroe Street (alternate access on Monroe Street south of Avenue 52),
- The Madison Club, with driveway on on Avenue 52 between Madison Street & Monroe Street,
- The Hideaway, with driveway on Avenue 52 between Madison Street & Jefferson Street (alternate access on Jefferson Street between Avenue 52 & Avenue 54),
- Mountain View Country Club, with driveway on Avenue 50 between Madsion Street & Jefferson Street (alternate access on Jefferson Street between Avenue 50 & Avenue 52),
- The Indian Palms County Club, with driveway on Monroe Street between Avenue 48 & Avenue 49 (alternate access on Avenue 48, Jackson Street, and Avenue 50),
- Desert Aire Mobile Home Park, with access from Avenue 49 between Madison Street & Monroe Street (alternate access on Avenue 48),
- Madison Estates, with driveway on Hjorth Street between Avenue 50 and Avenue 49 (alternate access on Avenue 48).

The Festival Operators and the City of Indio provide advance notice and information on streets likely to be affected by the festival so these residents can plan ahead to minimize



**Legend**

<ul style="list-style-type: none"> <li> City/County Boundary</li> <li> Nearby Residential Neighborhoods</li> <li> Driveway</li> </ul>	<ul style="list-style-type: none"> <li>1. Mountain View</li> <li>2. The Hideaway</li> <li>3. La Quinta Polo Estates</li> <li>4. Rancho Santana</li> <li>5. The Madison Club</li> <li>6. La Cantera</li> <li>7. La Quinta Ridge Mobile Home Park</li> <li>8. Desert Aire Mobile Home Park</li> <li>9. La Canada Mobile Home Park</li> <li>10. Anastasia</li> </ul>	<ul style="list-style-type: none"> <li>11. Indian Palms Country Club</li> <li>12. Madison Estates</li> <li>13. Stonefield Estates</li> </ul>
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12/18/12

Not to Scale  
 SOURCE: Meridian Consultants  
 Google Earth 2012

Figure V-6  
Adjacent Residential Areas and Access Locations

impacts. Because they have alternate routes, on streets that are not materially affected by festival traffic (such as Avenue 54, Jefferson Street, Jackson Street, Avenue 48) these residents would not be substantively inconvenienced by the festival traffic queues and this would not be significantly impacted.

Two other residential developments have single access locations, but have access routes that can avoid festival traffic queues. These are:

- Anastasia, with driveway on Avenue 49 west of Monroe Street (alternate access from Avenue 49 to the west), and
- Stonefield Estates, with driveway on Madison Street Between Avenue 50 and Avenue 49 (no traffic queues occur on Madison Street north of Avenue 50 as this stretch is closed to general traffic during the festivals).

Because these alternate routes would not be affected by festival traffic queues these residents would not be significantly impacted.

There are two exceptions where residential developments have only one point of access and these include:

- The La Quinta Polo Estates, with driveway on Avenue 50 west of Madison Street,
- La Cantera with driveway on Avenue 52 between Madison Street and Jefferson Street.

Residents accessing these developments could at times be temporarily substantively inconvenienced by festival traffic queues, so in these cases the impacts of the festival traffic queues would be potentially significant.

In addition, the portion of the La Quinta Polo Estates located south of the Coachella Canal, has access to both Madison Street, at Avenue 51 and to Avenue 52 west of Madison Street. Residents using both streets near these access points could be temporarily substantively inconvenienced by festival traffic queues, so in these cases the impacts of festival traffic queues would be potentially significant.

Observations during the 2012 Festivals showed that access/egress driveways to/from residential development driveways were not blocked during festival traffic. As traffic queues would not be expected to be appreciably longer with the Proposed Project, this situation would likely not change so no significant impacts to residential project driveway access would occur.

Along Hjorth Street, observations at the 2012 Festivals showed that traffic queues developed both northbound and southbound at Avenue 49, and southbound at Avenue 50 that impacted

school traffic between 3:00 and 4:00 pm as parents picked up children. The Proposed Project would not substantially increase traffic or shuttle volumes along this stretch of Hjorth Street so queues would not be expected to be longer than with the 2012 Festival. Queues would in fact be shorter with the traffic operations Project Design Features identified earlier in this chapter (including modified intersection controls at Hjorth Street and Avenue 49 to allow simultaneous northbound and southbound traffic), to the extent that these temporary queues and the inconvenience to school parents are likely to be minimized and not be substantive, so they would not cause significant impacts.

*Saturday: 2:00 – 3:00 PM*

As shown in Table V-6 and Figure V-6b, most intersections would continue to operate at similar levels of service with the Proposed Project with the vast majority of intersections continuing to operate at LOS D or better. A total of 39 intersections would operate at LOS D or better, compared to all 41 intersections in the Future Without Project condition. The number of intersections operating by each level service category would be as follows, including a comparison to the Future Without Project conditions:

<i>Level of Service</i>	<i>2014 Future Without Project</i>	<i>2014 Future With Project</i>
LOS A	6 intersections	4 intersections
LOS B	16 intersections	15 intersections
LOS C	18 intersections	17 intersections
LOS D	1 intersections	3 intersections
LOS E	0 intersections	1 intersections
LOS F	0 intersections	1 intersections

In the Future Without Project conditions, no intersections would operate at worse than LOS D.

In the Future With Project conditions, a total of two intersections would operate at worse than LOS D, as follows:

- 11. Jefferson Street & Avenue 54 LOS E
- 22. Monroe Street & Avenue 52 LOS F

According to the criteria for significant impact adopted for this study, the Future With Project conditions would result in two significant impacts in the time period. These would be at the same locations as above:

- Intersection #11 – Jefferson Street & Avenue 54, where the level of service would increase from LOS B to LOS E. This impact would be caused by diverted traffic using Avenue 54 and Jefferson Street, and would arise from heavy westbound right turn and southbound left turn volumes.
- Intersection #22 – Monroe Street & Avenue 52, where the level of service would increase from LOS B to LOS F. This impact would be caused by festival traffic accessing the day parking lots along Avenue 52.

The analysis shows that, similar to the Friday 3:00 to 4:00 pm hour, during the Saturday 2:00 to 3:00 pm hour significant impacts would be limited, and that the festival would not cause significant impacts on alternate routes further from the Project Site that would be used by area residents to avoid the festival traffic on roads in the vicinity of the site.

#### Traffic Queues

The evaluation of traffic queues for the Saturday 2:00 to 3:00 pm hour is very similar to that discussed for the Friday 3:00 to 4:00 pm hour above. Queues would not be expected to be appreciably longer, and in most cases would be shorter than the 2012 Festival to the same extent and for the same reasons as previously identified. Potentially significant impacts would occur at the same locations as identified for the Friday 3:00 to 4:00 pm hour. Similar to the Friday 3:00 to 4:00 pm hour, significant impacts due to blocking access/egress to residential project driveways is not anticipated. As schools are not in session on Saturday, there would be no significant impacts to the Elementary School on Hjorth Street due to traffic queues.

#### *Monday: 8:00 – 9:00 AM*

As shown in Table V-6 and Figure V-6c, most intersections would continue to operate at similar levels of service with the Proposed Project with the vast majority of intersections continuing to operate at LOS D or better. A total of 35 intersections would operate at LOS D or better, compared to all 41 intersections in the Future Without Project condition. The number of intersections operating by each level service category would be as follows, including a comparison to the Future Without Project conditions:

<i>Level of Service</i>	<i>2014 Future Without Project</i>	<i>2014 Future With Project</i>
LOS A	7 intersections	4 intersections
LOS B	16 intersections	12 intersections
LOS C	17 intersections	16 intersections
LOS D	1 intersections	3 intersections
LOS E	0 intersections	3 intersections
LOS F	0 intersections	3 intersections

In the Future Without Project conditions, no intersections would operate at worse than LOS D.

In the Future With Project conditions, a total of six intersections would operate at worse than LOS D, as follows:

- |  |       |
|--|-------|
| 6. Jefferson Street & Indio Boulevard            | LOS E |
| 9. Jefferson Street & Avenue 50                  | LOS F |
| 13. Madison Street & Avenue 50                   | LOS F |
| 14. Madison Street & Avenue 52                   | LOS F |
| 26. Jackson Street & Avenue 50                   | LOS E |
| 33. I-10 Eastbound Freeway Ramps & Monroe Street | LOS E |

According to the criteria for significant impact adopted for this study, the Future With Project conditions would result in six significant impacts in this time period. These would be at the same locations as above:

- Intersection #6 – Jefferson Street & Indio Boulevard, where the level of service would increase from LOS C to LOS E;
- Intersection #9 – Jefferson Street & Avenue 50, where the level of service would increase from LOS C to LOS F.
- Intersection #13 – Madison Street & Avenue 50, where the level of service would increase from LOS B to LOS F.
- Intersection #14 – Madison Street & Avenue 52, where the level of service would increase from LOS B to LOS F.
- Intersection #26 – Jackson Street & Avenue 50, where the level of service would increase from LOS B to LOS E.
- Intersection #33 – I-10 Eastbound Freeway Ramps & Monroe Street, where the level of service would increase from LOS B to LOS E.

Two of these impacts would occur at intersections adjacent to the Project Site, at Madison Street & Avenue 50, and at Madison Street & Avenue 52, and would be primarily due to festival camping traffic exiting the site.

Two of the impacts would be along Jefferson Street, at Jefferson Street & Avenue 50 and at Jefferson Street & Indio Boulevard, and would be primarily due to festival camping traffic leaving the project site.

One impact would be at Monroe Street & I-10 Eastbound ramps, and would be primarily due to festival camping traffic leaving the project site.

The remaining impact would be at Jackson Street & Avenue 50 and would likely primarily be due to background traffic diverting from Monroe Street to avoid festival traffic exiting the project site<sup>1</sup>.

#### Traffic Queues

The proposed increase in car camping (approximately 25%) would result in an equivalent increase in the number of camping vehicles leaving the festival site on the Monday morning. This would be expected to lengthen the queues that occurred with the 2012 Festival (shown in Figure II-9f). As discussed earlier, any lengthening of queues would not cause a significant impact to festival patrons – who expect such conditions at a major event.

Impacts on general (non-festival) traffic would be manifested through intersection level of service conditions - as identified in the preceding section on intersections where the changes in levels of service that would cause significant impacts where identified.

The impact on residents living in locations with multiple access/egress routes would not be expected to be otherwise significant, as by using those alternate routes they could avoid the queues (as discussed earlier in this chapter). Impacts to residents living in developments with only single access routes would be focused on Avenue 50 between Madison Street & Jefferson Street, where residents could be substantively inconvenienced due to the length of the queues so these impacts could be potentially significant. Queue lengths on Madison Street between Avenue 50 and Avenue 52 would not be expected to increase over 2012 Conditions due to the additional roadway capacity that will be provided prior to 2014. However, the queues would be expected to affect non-festival traffic, which would likely divert to other alternate routes (such as Monroe Street and Jackson Street), and where the preceding intersection analysis has identified the locations of intersection where significant impacts would occur.

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<sup>1</sup> Impact conclusion based on LOS D as the standard. However, as stated earlier in this section (page V-20), the City of Indio permits LOS E as the standard where it is unreasonable or infeasible, based on certain criteria, to achieve LOS D. See Chapter VI, Section VI.4 for a discussion regarding the impact conclusion for this intersection after consideration of the City's feasibility criteria.

## Future Conditions With Project – Freeways

### Freeway Segments

#### *Future Traffic Volumes*

In order to evaluate potential impacts on the freeway system, traffic volumes were projected using the same methodology described for intersections earlier in this chapter including the trip generation and trip distribution parameters shown in Tables V-3, V-4 and V-5, and in Figure V-2 and V-3. The Future With Project traffic volumes on the freeway segments, and corresponding D/C ratios, are shown in Table V-7 for each of the three analysis hours. A comparison is also shown to Future Without Project Conditions.

#### *Significant Impact Thresholds*

As discussed earlier in this chapter, Caltrans has not adopted specific thresholds of significance for determining whether an impact is significant. For the purposes of this study, and consistent with the approach to intersections in most of the other jurisdictions in the study area, it was considered that a significant impact would occur if the proposed project caused the level of service to exceed LOS D, or if the level of service without the project already exceeded LOS D then if the project caused the level of service to change from LOS E to LOS F.

#### *Friday: 3:00 – 4:00 PM*

As shown in Table V-7a the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS D or better, with most segments operating at LOS B or LOS C.

The level of service would exceed the Caltrans level of service target at one location, as follows:

- I-10 Eastbound between Washington Street & Jefferson Street, where the level of service would change from LOS C without the Project to LOS D with the Project.

At the I-10 Eastbound west of Washington Street the level of service would be LOS D for both the Future Without Project and the Future With Project conditions. The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations.



**Table V-7a Future With Project - Freeway Segment Level of Service - Friday 3-4 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Friday 3-4 PM			Future With Project Friday 3-4 PM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,685	0.781	D	4,810	0.802	D	0.021	No
		WB	3 G	6,000	3,953	0.659	C	3,957	0.659	C	0.001	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	4,186	0.698	C	4,299	0.716	D	0.019	No
		WB	3 G	6,000	3,532	0.589	C	3,536	0.589	C	0.001	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,449	0.575	C	3,506	0.584	C	0.010	No
		WB	3 G	6,000	2,889	0.481	B	2,891	0.482	B	0.000	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	3,136	0.523	C	3,136	0.523	C	0.000	No
		WB	3 G	6,000	2,631	0.438	B	2,631	0.438	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,896	0.483	B	2,896	0.483	B	0.000	No
		WB	3 G	6,000	2,444	0.407	B	2,448	0.408	B	0.001	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,670	0.381	B	2,670	0.381	B	0.000	No
		WB	4 G	8,000	2,257	0.282	A	2,265	0.283	A	0.001	No

Notes:

G - General Purpose Lane

A - Auxilliary Lane

**Table V-7b Future With Project - Freeway Segment Level of Service - Saturday 2-3 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Saturday 2-3 PM			Future With Project Saturday 2-3 PM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,644	0.774	D	4,738	0.790	D	0.016	No
		WB	3 G	6,000	3,171	0.528	C	3,175	0.529	C	0.001	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	4,150	0.692	C	4,236	0.706	C	0.014	No
		WB	3 G	6,000	2,833	0.472	B	2,837	0.473	B	0.001	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,420	0.570	C	3,469	0.578	C	0.008	No
		WB	3 G	6,000	2,317	0.386	B	2,319	0.387	B	0.000	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	3,109	0.518	C	3,109	0.518	C	0.000	No
		WB	3 G	6,000	2,111	0.352	B	2,111	0.352	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,871	0.479	B	2,871	0.479	B	0.000	No
		WB	3 G	6,000	1,960	0.327	B	1,962	0.327	B	0.000	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,647	0.378	B	2,647	0.378	B	0.000	No
		WB	4 G	8,000	1,811	0.226	A	1,816	0.227	A	0.001	No

Notes:

G - General Purpose Lane

A - Auxilliary Lane

**Table V-7c Future With Project - Freeway Segment Level of Service - Monday 8-9AM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Monday 8-9 AM			Future With Project Monday 8-9 AM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,085	0.681	C	4,085	0.681	C	0.000	No
		WB	3 G	6,000	3,127	0.521	C	3,662	0.610	C	0.089	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	3,650	0.608	C	3,650	0.608	C	0.000	No
		WB	3 G	6,000	2,794	0.466	B	3,235	0.539	C	0.074	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,008	0.501	C	3,008	0.501	C	0.000	No
		WB	3 G	6,000	2,285	0.381	B	2,348	0.391	B	0.011	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	2,735	0.456	B	2,767	0.461	B	0.005	No
		WB	3 G	6,000	2,081	0.347	B	2,081	0.347	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,526	0.421	B	2,558	0.426	B	0.005	No
		WB	3 G	6,000	1,933	0.322	B	1,933	0.322	B	0.000	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,329	0.333	B	2,393	0.342	B	0.009	No
		WB	4 G	8,000	1,786	0.223	A	1,786	0.223	A	0.000	No

Notes:

G - General Purpose Lane

A - Auxilliary Lane

While the level of service would exceed the Caltrans target at the above location, it would not constitute a significant impact due to the Project because the level of service would not exceed LOS D which is the criteria for significance established for this study.

*Saturday: 2:00 – 3:00 PM*

As shown in Table V-7b the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS D or better, with most segments operating at LOS B or LOS C.

The level of service would not exceed the Caltrans level of service target at any location. (The level of service at I-10 Eastbound west of Washington Street would be LOS D, for the Future Without Project and Future With Project conditions). The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations.

There would therefore be no significant freeway segment impacts during the Saturday 2:00 to 3:00 pm hour.

*Monday: 8:00 – 9:00 AM*

As shown in Table V-7c the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS D or better, with most segments operating at LOS B or LOS C.

The level of service would not exceed Caltrans level of service targets at any location. (The level of service at I-10 Eastbound west of Washington Street would be LOS D, for the Future Without Project and Future With Project conditions). The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations. There would therefore be no significant freeway segment impacts.

### Freeway Off-Ramps

#### *Future Traffic Volumes*

The off-ramp analysis for Future With Project Conditions is summarized in Table V-8, which shows projected traffic volumes and vehicle queue lengths for both Future With Project and Future Without Project Conditions.

### *Significant Impact Thresholds*

Caltrans has not adopted significant impact thresholds for off-ramps. The criteria used in this study was that a significant impact would occur to a freeway off-ramp if the queue length (95<sup>th</sup> percentile) exceeds the total storage length available on the off-ramp and results in queues backing into mainline travel lanes. Ramp conditions were also evaluated using a second level of analysis to determine if the queue length (95<sup>th</sup> percentile) exceeded the storage length of any individual ramp lane. However, if the lane storage queue exceeded the capacity but the overall ramp queue did not exceed the overall ramp capacity and would not back into the mainline travel lanes then it was not considered to be a significant impact.

#### *Friday: 3:00 – 4:00 PM*

During this hour festival traffic would be travelling inbound to the festival. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due to both added festival traffic and changes in background non-event traffic. As shown in Table V-8, off-ramp traffic queue lengths would not exceed the overall ramp storage lengths at any of the off-ramp locations. At the I-10 Eastbound Off-Ramp at Monroe Street, the eastbound right turn queue would exceed the storage length for this lane movement. However, the queue would not exceed the storage length for the off-ramp as a whole, so would not back into the mainline freeway, and would not constitute a significant impact.

#### *Saturday: 2:00 – 3:00 PM*

During this hour festival traffic would be travelling inbound to the festival. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due to both added festival traffic and changes in background non-event traffic. As shown in Table V-8, off-ramp queue lengths would not exceed the ramp storage lengths at any of the off-ramp locations. There would therefore be no significant impacts due to the Project.

#### *Monday: 8:00 – 9:00 AM*

During this hour festival traffic would be travelling outbound from the festival during camping load out so would not use freeway off-ramps. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due primarily to changes in background non-event traffic. As shown in Table V-8, off-ramp queue lengths would not exceed the ramp storage lengths at any of the off-ramp locations. There would therefore be no significant impacts due to the Project.

## Freeway On-Ramps

### *Future Traffic Volumes*

The on-ramp analysis for Future With Project Conditions is summarized in Table V-9, which shows projected traffic volumes and ramp capacities for both Future With Project and Future Without Project Conditions.

### *Significant Impact Thresholds*

Caltrans has not adopted significant impact thresholds for on-ramps. For purposes of this study, the criteria for determining a significant impact was if the traffic volumes in the Future With Project condition exceeded the capacity of the on-ramp.

#### *Friday: 3:00 – 4:00 PM*

As shown in Table V-9, on ramp volumes traffic volumes in the Future With Project condition would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

#### *Saturday: 2:00 – 3:00 PM*

As shown in Table V-9, on ramp traffic volumes in the Future With Project condition would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

#### *Monday: 8:00 – 9:00 AM*

As shown in Table V-9, on ramp traffic volumes would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

## **Future Conditions With Project – Emergency Response Times**

This section addresses the potential impact of the Project on emergency response times in the area. The significant impact criteria established for this evaluation was:

“Would the Project result in inadequate emergency access?”

**Table V-8**

**Future With Project Conditions - Freeway Off-Ramp Analysis**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Friday 3-4 PM						Saturday 2-3 PM					
					Future Without Project Conditions			Future With Project Conditions			Future Without Project Conditions			Future With Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>																
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	296	198	No	254	154	No	230	154	No	236	132	No
		EB RT	2	1,025	804	770	No	827	814	No	632	484	No	752	594	No
		RAMP TOTAL	4	2,090	1,100	968	No	1,081	968	No	862	638	No	988	726	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	179	110	No	140	22	No	151	44	No	143	22	No
		EB TH <sup>1</sup>	1	705	788	110	No	887	0	No	575	44	No	717	0	No
		RAMP TOTAL	2	1,410	967	220	No	1,027	22	No	726	88	No	860	22	No
3 Monroe Street EB Off ramp <sup>2</sup>	2-Way Stop	EB LT/TH	1	870	103	88	No	88	66	No	88	66	No	95	66	No
		EB RT	1	870	335	462	No	577	902	Yes	302	330	No	509	572	No
		RAMP TOTAL	2	1,740	438	550	No	665	968	No	390	396	No	604	638	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	336	418	No	348	396	No	306	308	No	268	264	No
		EB RT	1	775	195	154	No	273	264	No	98	88	No	174	154	No
		RAMP TOTAL	2	1,550	531	572	No	621	660	No	404	396	No	442	418	No
<u>From East on I-10</u>																
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	101	110	No	93	88	No	52	44	No	48	44	No
		WB RT	1	355	106	110	No	93	110	No	89	88	No	82	88	No
		RAMP TOTAL	2	710	207	220	No	186	198	No	141	132	No	130	132	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	58	66	No	65	66	No	40	44	No	44	44	No
		WB RT	1	740	231	0	No	263	0	No	245	0	No	233	0	No
		RAMP TOTAL	2	1,480	289	66	No	328	66	No	285	44	No	277	44	No
7 Monroe Street WB Off ramp <sup>2</sup>	2-Way Stop	WB LT/TH	1	685	106	132	No	99	132	No	104	110	No	111	110	No
		WB RT	1	685	50	0	No	47	0	No	26	0	No	23	0	No
		RAMP TOTAL	2	1,370	156	132	No	146	132	No	130	110	No	134	110	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	193	88	No	181	66	No	164	44	No	144	22	No
		WB RT	1	503	509	110	No	449	66	No	330	44	No	336	44	No
		RAMP TOTAL	2	1,006	702	198	No	630	132	No	494	88	No	480	66	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.
2. Intersection would be signalized in Future Without Project conditions.

**Table V-8**

**Future With Project Conditions - Freeway Off-Ramp Analysis**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Monday 8-9 AM					
					Future Without Project Conditions			Future With Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>										
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	190	110	No	196	132	No
		EB RT	2	1,025	487	374	No	485	462	No
		RAMP TOTAL	4	2,090	677	484	No	681	594	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	72	22	No	83	22	No
		EB TH <sup>1</sup>	1	705	513	22	No	559	0	No
		RAMP TOTAL	2	1,410	585	44	No	642	22	No
3 Monroe Street EB Off ramp <sup>2</sup>	2-Way Stop	EB LT/TH	1	870	55	44	No	71	66	No
		EB RT	1	870	339	330	No	313	594	No
		RAMP TOTAL	2	1,740	394	374	No	384	660	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	205	198	No	190	198	No
		EB RT	1	775	135	110	No	170	154	No
		RAMP TOTAL	2	1,550	340	308	No	360	352	No
<u>From East on I-10</u>										
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	47	44	No	62	66	No
		WB RT	1	355	44	44	No	39	44	No
		RAMP TOTAL	2	710	91	88	No	101	110	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	34	44	No	33	44	No
		WB RT	1	740	121	0	No	132	0	No
		RAMP TOTAL	2	1,480	155	44	No	165	44	No
7 Monroe Street WB Off ramp <sup>2</sup>	2-Way Stop	WB LT/TH	1	685	67	88	No	35	44	No
		WB RT	1	685	35	0	No	54	0	No
		RAMP TOTAL	2	1,370	102	88	No	89	44	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	121	22	No	140	44	No
		WB RT	1	503	270	22	No	368	66	No
		RAMP TOTAL	2	1,006	391	44	No	508	110	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.
2. Intersection would be signalized in Future Without Project conditions.



**Table V-9 Future With Project Conditions - Freeway On-Ramps**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Friday 3-4 PM				Saturday 2-3 PM				Monday 8-9 AM			
			Future Without Project Conditions		Future With Project Conditions		Future Without Project Conditions		Future With Project Conditions		Future Without Project Conditions		Future With Project Conditions	
			Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity
<u>To I-10 West</u>														
1 Washington Street WB On ramp	1	900	522	No	585	No	424	No	473	No	488	No	882	No
2 Jefferson Street WB On ramp	1	900	99	No	101	No	78	No	89	No	144	No	159	No
3 Monroe Street WB On ramp	1	900	417	No	468	No	306	No	357	No	494	No	838	No
4 Jackson Street WB On ramp	1	900	474	No	458	No	429	No	413	No	435	No	443	No
<u>To I-10 East</u>														
5 Golf Center Pkwy EB On ramp	1	900	162	No	147	No	111	No	109	No	97	No	176	No
6 Jackson Street EB On ramp	1	900	240	No	255	No	224	No	227	No	117	No	139	No
7 Monroe Street EB On ramp	1	900	219	No	230	No	179	No	168	No	169	No	208	No
8 Jefferson Street EB On ramp	1	900	155	No	131	No	114	No	86	No	103	No	121	No

Notes:

1. Number of lanes on ramp.
2. Capacity based on 900 veh/hr/ln.

## Evaluation

During the festivals, certain roads in the immediate area of the Project Site are typically closed to general traffic (but not to emergency vehicles) to minimize conflicts between vehicles and pedestrians, and to effectively manage traffic. The preceding analysis has identified a limited number of locations where the Project would result in significant traffic impacts. It also identified the areas where traffic queues typically would occur during the festivals. Response times to the Project Site, and immediately adjacent locations, and to locations along streets where traffic queues occur, could be impacted as emergency vehicles move through congested traffic. However, drivers of emergency vehicles are very experienced in navigating through areas of high traffic volumes using sirens and flashing lights to warn motorists and pedestrians and to clear a path of travel, or to drive in opposing traffic lanes that are not congested. Also, all traffic signals in the City of Indio are equipped with Opticom, which is an emergency vehicle signal preemption system that gives a green light to approaching emergency vehicles.

In addition there are typically many police officers on duty at key intersections to facilitate traffic operations and manually direct traffic, and these officers are able to readily allow emergency vehicles into closed roadway segments, and to provide priority to emergency vehicles so they can maneuver around the traffic when necessary. The Indio Police Department Festival Security Plan also includes provisions for emergency access routes and procedures, which have proven to be effective at past festivals. Both the Indio Police Department and Indio Fire Department are located on Jackson Street at Dr. Carreon Boulevard. Emergency vehicles from these departments can therefore use Jackson Street – which is not a principal access route to the festivals and therefore carries minimal festival traffic. The overall police presence during the festival is greatly enhanced so there are considerable numbers of police personnel in the area of the Project Site who are able at any time to facilitate emergency vehicles and to rapidly respond themselves to any emergency calls – so response time may in fact be quicker to many locations during the festivals. There are also emergency responders located on-site during the festivals<sup>1</sup>. The John F. Kennedy Memorial Hospital is located at the south west corner of Monroe Street and Dr. Carreon Boulevard. While there are at times southbound traffic queues on Monroe Street, emergency vehicles are able to use northbound Monroe Street and other streets (e.g. Dr. Carreon Boulevard) to reach the hospital. Again emergency vehicles typically maneuver around any traffic conditions.

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<sup>1</sup> Conversation with Sergeant Randy La Valle, Indio Police Department.

## V.4 Evaluation of 75,000 Person Capacity Stagecoach Events

The preceding section evaluated a future 99,000 person capacity event, based on the Coachella Festival format. This was selected for analysis as the Coachella Festival has historically had higher attendance than the Stagecoach Festival and would continue to do so in the future. Even though the Stagecoach Festival would continue to have a smaller permitted maximum attendance than Coachella, this section provides a review of the proposed 75,000 person capacity Stagecoach event, for purposes of providing a comprehensive analysis of the Proposed Project.

The proposed 75,000 person capacity Stagecoach events would have similar characteristics, site configurations, and transportation characteristics to the 2012 Stagecoach Festival. The person capacity would however be increased from 65,000 to 75,000 persons. In order to understand the differences between the smaller Stagecoach and larger Coachella Festivals, this evaluation first compares the 2012 Stagecoach Festival to the 2012 Coachella Festival, and then considers the proposed future growth in capacity.

### The 2012 Stagecoach Festival

#### Site Capacity and Trip Characteristics

An initial comparison of the two festivals was provided in Chapter III. The overall characteristics of the 2012 Stagecoach and Coachella Festivals are summarized in Table V-10 below. The Stagecoach Festival was considerably smaller than the Coachella Festival in all attendance parameters. Actual peak attendance was 57,500 persons for the Stagecoach Festival compared to 90,000 for the Coachella Festivals (see also Table III-1). On-site camping for Stagecoach was lower than for Coachella – with 3,633 total spaces for Stagecoach compared to 8,769 spaces for Coachella, because the larger size of recreational vehicles means fewer vehicles can be parked in camping lots. While companion parking was higher for Stagecoach, the total camping parking was still considerably less for Stagecoach with 6,948 total camping spaces (including companion parking) compared to 9,569 spaces for Coachella. Day parking was lower for Stagecoach with 7,406 spaces for Stagecoach and 10,892 spaces for Coachella. Shuttle usage was much lower for Stagecoach – at 3,585 riders compared to 17,256 for Coachella. Taxi and pick-up/drop-off vehicles, and staff vehicles, were both lower for Stagecoach.

The overall number of vehicle trips (across all categories including camping and day parking) generated by the Stagecoach Festival (20,328 vehicles) was therefore lower than for the Coachella Festival (27,525 vehicles), as shown earlier in Table III-9.

**Table V-10 Comparison of Coachella and Stagecoach 2012 Festivals**

Parameter	Units	2012 Stagecoach	2012 Coachella
Attendance	Persons	57,500	90,000
Camping	Vehicle	3,633	8,769
Companion Parking	Vehicle	3,315	800
Total Camping	Vehicle	6,948	9,569
Day Parking	Vehicle	7,406	10,892
Taxi / PUDO	Vehicle	1,838	2,218
Shuttle	Persons	3,585	17,256

Source: Table III-9, Chapter III

## Traffic Volumes

These lower vehicle numbers are reflected in the overall traffic counts conducted at numerous locations throughout the study area, and reported in Chapter II (see Figure II-5). This figure shows that the overall hourly traffic volumes throughout each day followed a very similar hourly profile during the Stagecoach Festival as during the Coachella Festival, and that overall hourly traffic volumes were lower during the Stagecoach Festival than during the Coachella Festival at virtually all times, with only a few exceptions. These were between 10:00 am and 12:00 pm on Saturday, between 11:00 pm and 1:00 am on Friday night/Saturday morning, 10:00 pm to midnight on Saturday night/Sunday morning, and 9:00 pm to 12:00 midnight on Sunday night/Monday morning, when volumes during Stagecoach were slightly higher. The Stagecoach daily patrons tended to arrive a little earlier than the Coachella daily patrons, and the Stagecoach show also ended one hour earlier each day. Overall, however, the peak traffic volumes on the roadway system during the Stagecoach Festival did not exceed the peak volumes during the Coachella Festival.

### Effect of Recreational Vehicles

Recreational vehicles (RV's) constitute the primary form of vehicle camping at the Stagecoach Festival, whereas regular automobiles are the primary vehicles in camping for the Coachella Festival. RV's are larger than automobiles, and are therefore more visible than cars in street traffic. They may also be slower moving because of their greater size and weight. This effect can be addressed in the intersection level of service analysis, by converting vehicle counts into passenger car equivalents. This concept is based on the passenger car as the standard vehicle. Larger vehicles such as buses and trucks are then assigned a higher value (passenger car equivalent) to allow for their larger size. The Federal Highway Administration (FHWA) in the Highway Capacity Manual<sup>1</sup> recommends a factor of 2.0 passenger car equivalents (pce) for buses and trucks, and this is the value commonly used in intersection level of service analysis procedures in traffic studies. This general approach was adopted in this study and the RV's in the traffic counts were thus converted to passenger car equivalents to reflect their larger size. However, not all RV's were the largest size equivalent to a regular bus or truck. Because RV's range in size from small two-axle vehicles, to medium size three-axle vehicles, to the largest at 4 or more axles, it was considered more accurate to apply a variable passenger car equivalent factor based on the number of RV axles. For two-axle RV's a pce factor of 1.5 was applied to the vehicle counts, for three-axle RV's a 1.75 pce factor was applied, and for four-plus-axle RV's a 2.00 pce factor was applied to the vehicle counts. These adjustments apply to all calculations in this report section.

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<sup>1</sup>Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, DC, 2000.

RV's were most evident in the traffic stream along Jefferson Street on the Monday morning during camping load out. An analysis was conducted of the counted traffic volumes along Jefferson Street during the 8:00 am to 9:00 am hour. This showed that the overall traffic volumes along Jefferson Street were lower during the Stagecoach Festival than for the Coachella Festival both for the actual vehicle counts and for the pce adjusted volumes (the comparison is shown in Table V.4-1 in Appendix V).

The above evaluation indicated that in general traffic conditions were no worse during the Stagecoach Festival than during the Coachella Festival. However, to provide a comprehensive assessment, an analysis was conducted of intersection level of service during the Stagecoach Festival at all locations for the three study analysis hours. This analysis is described below.

Intersection Analysis – 2012 Stagecoach Festival

The intersection analysis was conducted in exactly the same manner as was used earlier in this study for the Coachella Festival, and the level of service results for the Stagecoach Festival were compared to those obtained for the 2012 Coachella Festival. The results are shown in Table V-11.

*Friday: 3:00 – 4:00 PM*

As can be seen in Table V-11a, all intersections generally operated at a similar level of service during both festivals.

The number of intersections that operated by each level service category during each festival were as follows:

<i>Level of Service</i>	<i>2012 Coachella Festival</i>	<i>2012 Stagecoach Festival</i>
LOS A	3 intersections	3 intersections
LOS B	10 intersections	9 intersections
LOS C	21 intersections	20 intersections
LOS D	2 intersections	3 intersections
LOS E	3 intersections	3 intersections
LOS F	2 intersections	3 intersections

There were two intersections where the level of service was worse during Stagecoach than during Coachella and where LOS F occurred. These were at Intersection #22, Monroe Street & Avenue 52 where the level of service was LOS F during Stagecoach and LOS C during Coachella, and Intersection #33, I-10 EB Ramps & Monroe Street where the level of service was LOS F during Stagecoach and LOS E during Coachella.

*Saturday: 2:00 – 3:00 PM*

As shown in Table V-11b all intersections in the study area operated at a similar or better level of service during the Stagecoach Festival than during the Coachella Festival.

The number of intersections that operated at each level service category during each festival were as follows:

<i>Level of Service</i>	<i>2012 Coachella Festival</i>	<i>2012 Stagecoach Festival</i>
LOS A	4 intersections	7 intersections
LOS B	13 intersections	14 intersections
LOS C	19 intersections	19 intersections
LOS D	3 intersections	0 intersections
LOS E	0 intersections	1 intersections
LOS F	2 intersections	0 intersections

There were no intersections where the level of service was worse during the Stagecoach Festival than during the Coachella Festival.

*Monday: 8:00 – 9:00 AM*

As shown in Table V-11c all but two intersections in the study area operated at a similar or better level of service during both festivals.

There were two intersections where the level of service was worse during the Stagecoach Festival than during the Coachella Festival and one location where LOS E occurred. This occurred at Intersection #13, Madison Street & Avenue 50 where the level of service was LOS E during Stagecoach and LOS D during Coachella.

The number of intersections that operated at each level service category during each festival were as follows:

**Table V-11a Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Friday 3 - 4 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	41.2	D	40.7	D
2	Washington St & Hwy-111	LQ	Signalized	62.2	E	59.6	E
3	Washington St & Ave 48	LQ	Signalized	31.2	C	28.0	C
4	Washington St & Ave 50	LQ	Signalized	19.7	B	19.0	B
5	Washington St & Ave 52	LQ	Signalized	24.9	C	24.9	C
6	Jefferson St & Indio Blvd	I	Signalized	25.6	C	30.0	C
7	Jefferson St & Hwy-111	LQ	Signalized	31.4	C	32.9	C
8	Jefferson St & Ave 48	LQ	Signalized	31.7	C	34.3	C
9	Jefferson St & Ave 50	LQ	Signalized	32.7	C	31.6	C
10	Jefferson St & Ave 52	LQ	Roundabout	3.0	A	3.2	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	61.1	F	38.1	E
12	Madison St & Ave 48	I	Signalized	24.1	C	24.2	C
13	Madison St & Ave 50	I	4-Way Stop	11.5	B	10.1	B
14	Madison St & Ave 52	LQ	4-Way Stop	24.3	C	24.0	C
15	Madison St & Ave 54	LQ	4-Way Stop	21.5	C	18.9	C
16	Hjorth St & Ave 48	I	Signalized	17.7	B	8.7	A
17	Monroe St & Fred Waring Dr.	I	Signalized	27.0	C	25.8	C
18	Monroe St & Hwy-111	I	Signalized	34.0	C	35.1	D
19	Monroe St & Ave 48	I	Signalized	31.8	C	34.6	C
20	Monroe St & Ave 49	I	Signalized	6.7	A	19.1	C
21	Monroe St & Ave 50	I	Signalized	31.8	C	27.7	C
22	Monroe St & Ave 52	I	4-Way Stop	18.0	C	82.2	F
23	Monroe St & Ave 54	LQ	4-Way Stop	10.9	B	10.9	B
24	Jackson St & Hwy-111	I	Signalized	33.8	C	29.9	C
25	Jackson St & Ave 48	I	Signalized	32.2	C	32.3	C
26	Jackson St & Ave 50	I	4-Way Stop	41.9	E	41.1	E
27	Jackson St & Ave 52	CR	4-Way Stop	16.0	C	17.6	C
28	Jackson St & Ave 54	CR	4-Way Stop	11.4	B	11.7	B
29	I-10 EB Ramps & Washington St	C	Signalized	32.4	C	34.6	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.3	B	13.5	B



**Table V-11a Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Friday 3 - 4 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	16.0	C	15.8	C
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	15.0	B	18.6	C
33	I-10 EB Ramps & Monroe St	C	2-Way Stop	43.1	E	122.3	F
34	I-10 WB Ramps & Monroe St	C	2-Way Stop	172.1	F	220.5	F
35	I-10 EB Ramps & Jackson St	C	Signalized	18.8	B	17.9	B
36	I-10 WB Ramps & Jackson St	C	Signalized	8.9	A	8.0	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	15.0	B	14.3	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	11.8	B	12.7	B
39	Washington St & Fred Waring Dr	LQ	Signalized	35.4	D	35.1	D
40	Jefferson St & Fred Waring Dr	I	Signalized	28.1	C	26.9	C
41	Jefferson St & Ave 49	LQ	Signalized	20.5	C	20.0	B

Note:

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

**Table V-11b Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Saturday 2 - 3 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	37.2	D	33.8	C
2	Washington St & Hwy-111	LQ	Signalized	52.8	D	34.5	C
3	Washington St & Ave 48	LQ	Signalized	21.4	C	21.0	C
4	Washington St & Ave 50	LQ	Signalized	19.5	B	18.0	B
5	Washington St & Ave 52	LQ	Signalized	24.6	C	24.6	C
6	Jefferson St & Indio Blvd	I	Signalized	18.8	B	18.2	B
7	Jefferson St & Hwy-111	LQ	Signalized	31.0	C	30.0	C
8	Jefferson St & Ave 48	LQ	Signalized	31.6	C	30.2	C
9	Jefferson St & Ave 50	LQ	Signalized	31.9	C	29.6	C
10	Jefferson St & Ave 52	LQ	Roundabout	2.8	A	2.7	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	29.4	D	16.4	C
12	Madison St & Ave 48	I	Signalized	23.2	C	25.0	C
13	Madison St & Ave 50	I	4-Way Stop	13.6	B	10.9	B
14	Madison St & Ave 52	LQ	4-Way Stop	16.6	C	15.7	C
15	Madison St & Ave 54	LQ	4-Way Stop	23.7	C	11.6	B
16	Hjorth St & Ave 48	I	Signalized	13.2	B	7.7	A
17	Monroe St & Fred Waring Dr.	I	Signalized	23.1	C	22.6	C
18	Monroe St & Hwy-111	I	Signalized	33.2	C	32.2	C
19	Monroe St & Ave 48	I	Signalized	29.9	C	27.6	C
20	Monroe St & Ave 49	I	Signalized	7.6	A	9.9	A
21	Monroe St & Ave 50	I	Signalized	22.2	C	15.9	B
22	Monroe St & Ave 52	I	4-Way Stop	124.4	F	12.0	B
23	Monroe St & Ave 54	LQ	4-Way Stop	12.4	B	9.2	A
24	Jackson St & Hwy-111	I	Signalized	32.8	C	32.0	C
25	Jackson St & Ave 48	I	Signalized	29.6	C	29.4	C
26	Jackson St & Ave 50	I	4-Way Stop	19.9	C	14.4	B
27	Jackson St & Ave 52	CR	4-Way Stop	13.3	B	11.5	B
28	Jackson St & Ave 54	CR	4-Way Stop	13.2	B	8.8	A
29	I-10 EB Ramps & Washington St	C	Signalized	28.1	C	25.3	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	12.1	B	11.6	B

**Table V-11b Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Saturday 2 - 3 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	11.2	B	11.2	B
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	12.2	B	12.1	B
33	I-10 EB Ramps & Monroe St	C	2-Way Stop	24.4	C	23.5	C
34	I-10 WB Ramps & Monroe St	C	2-Way Stop	57.1	F	39.8	E
35	I-10 EB Ramps & Jackson St	C	Signalized	14.7	B	14.0	B
36	I-10 WB Ramps & Jackson St	C	Signalized	7.3	A	7.5	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	14.0	B	15.4	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	9.6	A	9.7	A
39	Washington St & Fred Waring Dr	LQ	Signalized	31.2	C	29.6	C
40	Jefferson St & Fred Waring Dr	I	Signalized	27.5	C	26.4	C
41	Jefferson St & Ave 49	LQ	Signalized	18.4	B	19.0	B

Note:

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

**Table V-11c Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Monday 8 - 9 AM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
1	Washington St & Country Club Dr.	PD	Signalized	39.6	D	38.4	D
2	Washington St & Hwy-111	LQ	Signalized	34.0	C	34.7	C
3	Washington St & Ave 48	LQ	Signalized	20.3	C	20.5	C
4	Washington St & Ave 50	LQ	Signalized	28.4	C	25.5	C
5	Washington St & Ave 52	LQ	Signalized	26.0	C	25.5	C
6	Jefferson St & Indio Blvd	I	Signalized	33.1	C	26.9	C
7	Jefferson St & Hwy-111	LQ	Signalized	30.1	C	30.2	C
8	Jefferson St & Ave 48	LQ	Signalized	33.5	C	31.2	C
9	Jefferson St & Ave 50	LQ	Signalized	43.1	D	39.2	D
10	Jefferson St & Ave 52	LQ	Roundabout	2.2	A	2.1	A
11	Jefferson St & Ave 54	LQ	4-Way Stop	19.0	C	13.4	B
12	Madison St & Ave 48	I	Signalized	21.7	C	23.6	C
13	Madison St & Ave 50	I	4-Way Stop	30.6	D	40.1	E
14	Madison St & Ave 52	LQ	4-Way Stop	50.1	F	24.8	C
15	Madison St & Ave 54	LQ	4-Way Stop	11.6	B	10.7	B
16	Hjorth St & Ave 48	I	Signalized	15.3	B	15.6	B
17	Monroe St & Fred Waring Dr.	I	Signalized	21.1	C	23.4	C
18	Monroe St & Hwy-111	I	Signalized	31.9	C	31.1	C
19	Monroe St & Ave 48	I	Signalized	29.7	C	29.0	C
20	Monroe St & Ave 49	I	Signalized	8.3	A	14.5	B
21	Monroe St & Ave 50	I	Signalized	30.7	C	23.9	C
22	Monroe St & Ave 52	I	4-Way Stop	15.8	C	10.5	B
23	Monroe St & Ave 54	LQ	4-Way Stop	9.8	A	8.9	A
24	Jackson St & Hwy-111	I	Signalized	44.6	D	30.8	C
25	Jackson St & Ave 48	I	Signalized	27.9	C	28.2	C
26	Jackson St & Ave 50	I	4-Way Stop	25.8	D	29.0	D
27	Jackson St & Ave 52	CR	4-Way Stop	10.8	B	11.2	B
28	Jackson St & Ave 54	CR	4-Way Stop	9.0	A	9.5	A
29	I-10 EB Ramps & Washington St	C	Signalized	21.9	C	22.4	C
30	I-10 WB Ramps & Varner Rd	C	Signalized	14.4	B	13.2	B

**Table V-11c Existing Conditions - Level of Service Comparison - 2012 Stagecoach Festival vs 2012 Coachella Festival  
Monday 8 - 9 AM**

No.	Intersection	Jurisdiction	Type of Traffic Control	2012 Coachella Festival		2012 Stagecoach Festival	
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	13.2	B	12.4	B
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	14.1	B	12.6	B
33	I-10 EB Ramps & Monroe St	C	2-Way Stop	34.0	D	26.6	D
34	I-10 WB Ramps & Monroe St	C	2-Way Stop	371.8	F	168.3	F
35	I-10 EB Ramps & Jackson St	C	Signalized	14.4	B	14.5	B
36	I-10 WB Ramps & Jackson St	C	Signalized	8.3	A	8.3	A
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	14.1	B	13.2	B
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.0	B	13.1	B
39	Washington St & Fred Waring Dr	LQ	Signalized	31.3	C	31.5	C
40	Jefferson St & Fred Waring Dr	I	Signalized	25.8	C	26.4	C
41	Jefferson St & Ave 49	LQ	Signalized	17.5	B	23.0	C

Note:

Jurisdiction: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

<i>Level of Service</i>	<i>2012 Coachella Festival</i>	<i>2012 Stagecoach Festival</i>
LOS A	5 intersections	4 intersections
LOS B	10 intersections	12 intersections
LOS C	18 intersections	19 intersections
LOS D	6 intersections	4 intersections
LOS E	0 intersections	1 intersections
LOS F	2 intersections	1 intersections

Traffic Queues – 2012 Stagecoach Festival

Traffic queues during the Stagecoach Festival generally occurred in the same locations, and were generally shorter or no longer than occurred during the Coachella Festivals. The following exceptions were noted.

**Inbound Traffic Queues**

Traffic queues were generally shorter on eastbound Avenue 50 and Avenue 52 than for Coachella, although slightly longer queues occurred in the southbound Jefferson Street left turn lanes to Avenue 50 (these were effectively managed by traffic control officers at the intersection).

Traffic queues on southbound Monroe Street were generally somewhat longer, with the maximum queue extending for short periods on the Friday to halfway between Avenue 48 and Dr. Carreon Boulevard (compared to north of Avenue 49 for the Coachella Festivals), and for short periods on Sunday to John Nobles Avenue compared to Dr. Carreon Boulevard for the Coachella Festivals.

**Outbound Traffic Queues**

The daily outbound traffic queues were similar but slightly shorter for the Stagecoach Festival compared to the Coachella Festivals.

The outbound traffic queues on Monday during camping load out were somewhat longer on Jefferson Street northbound than during the Coachella Festivals, particularly at Indio Boulevard where the northbound queue reached south to Fred Waring Drive for short periods of time.

## Existing Conditions With 2012 Stagecoach Festival – Freeways

### *Freeway Segments*

Existing traffic volumes on the freeway segments, and corresponding D/C ratios, for the 2012 Stagecoach Festival conditions are shown in Table V-12 for each of the analysis hours. These may be compared to the LOS conditions shown in Table II-5 for existing condition with no festival. While the D/C ratios are marginally higher for the Stagecoach Festival condition, the level of service in each of the three analysis hours is the same for all analysis locations between the two conditions, with two exceptions. During the Monday 8:00 am to 9:00 am hour at I-10 westbound, west of Washington Street, the level of service was LOS B for the no festival condition and LOS D with the festival, and at I-10 westbound, between Washington Street & Jefferson Street, where the level of service was LOS B for the no festival condition and LOS C with the festival.

### *Freeway Off-Ramps*

Existing traffic conditions on the freeway off-ramps for the 2012 Stagecoach Festival conditions are shown in Table V-13. These may be compared to the LOS conditions shown in Table II-6 for existing conditions with no festival. The off-ramp analysis shows that while queue lengths were generally longer with the Festival, vehicle queues did not exceed the ramp storage lengths at any of the off-ramp locations under the 2012 Stagecoach Festival conditions.

### *Freeway On-Ramps*

Existing traffic conditions on the freeway on-ramps for the 2012 Stagecoach Festival conditions are shown in Table V-14. These may be compared to the LOS conditions shown in Table II-7 for existing condition with no festival. The on-ramp analysis shows that while vehicle volumes were generally higher with the Festival, they did not exceed the on-ramp capacities at any of the on-ramp locations under the 2012 Stagecoach Festival conditions.

## **Proposed Project – 75,000 Person Capacity Stagecoach Festival**

The Proposed Project would increase the permitted capacity of a Stagecoach-type festival from 65,000 to 75,000 persons. The following analysis evaluated the potential impacts of the 75,000 person festival. The analysis follows the same methodology used for the evaluation of the Coachella Festival earlier in this chapter.

Traffic volumes and conditions were observed and analyzed for the 2012 Stagecoach Festival (see above), which provides the basis for evaluating traffic conditions for a 75,000 capacity

**Table V-12 Existing Conditions - Freeway Segment Level of Service - 2012 Stagecoach Festival**

No.	Location	Notes	DIR	No of Lanes	Existing - Friday 3-4 PM <sup>2</sup>			Existing - Saturday 2-3 PM <sup>2</sup>			Existing - Monday 8-9 AM <sup>2</sup>		
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS
1	I - 10 west of Washington Street	1	EB	3 G	4,524	0.754	D	4,422	0.737	D	3,884	0.647	C
			WB	3 G	3,764	0.627	C	3,020	0.503	C	4,454	0.742	D
2	I - 10 b/w Washington Street and Jefferson Street	1	EB	3 G	4,026	0.671	C	3,936	0.656	C	3,457	0.576	C
			WB	3 G	3,351	0.558	C	2,688	0.448	B	3,866	0.644	C
3	I - 10 b/w Jefferson Street and Monoe Street	1	EB	3 G	3,242	0.540	C	3,203	0.534	C	2,817	0.469	B
			WB	3 G	2,730	0.455	B	2,190	0.365	B	2,334	0.389	B
4	I - 10 b/w Monoe Street and Jackson Street	1	EB	3 G	2,936	0.489	B	2,911	0.485	B	2,648	0.441	B
			WB	3 G	2,482	0.414	B	1,991	0.332	B	1,963	0.327	B
5	I - 10 b/w Jackson Street and Golf Center Pkwy	1	EB	3 G	2,691	0.449	B	2,668	0.445	B	2,434	0.406	B
			WB	3 G	2,279	0.380	B	1,826	0.304	B	1,800	0.300	A
6	I - 10 east of Golf Center Pkwy	1	EB	3 G + 1 A	2,496	0.357	B	2,474	0.353	B	2,350	0.336	B
			WB	4 G	2,118	0.265	A	1,694	0.212	A	1,669	0.209	A

Notes:

G - General Purpose Lane

A - Auxilliary Lane

1. Freeway AADT from Caltrans 2011 AADT Traffic Volumes.

2. Peak hour and directional volumes obtained by using appropriate K & D factors from Caltrans' 2010 *Peak Hour Volume Data Report* .



**Table V-13 Existing Conditions - Freeway Off-Ramp Analysis - 2012 Stagecoach Festival**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Existing Conditions								
					Friday 3-4 PM			Saturday 2-3 PM			Monday 8-9 AM		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From I-10 West</u>													
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	283	176	No	185	110	No	207	154	No
		EB RT	2	1,025	843	814	No	523	418	No	494	440	No
		RAMP TOTAL	4	2,090	1,126	990	No	708	528	No	701	594	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	159	22	No	125	22	No	91	22	No
		EB TH <sup>1</sup>	1	705	933	0	No	603	0	No	498	0	No
		RAMP TOTAL	2	1,410	1,092	22	No	728	22	No	589	22	No
3 Monroe Street EB Off ramp	2-Way Stop	EB LT/TH	1	870	90	88	No	73	22	No	48	44	No
		EB RT	1	870	637	528	No	410	132	No	367	110	No
		RAMP TOTAL	2	1,740	727	616	No	483	154	No	415	154	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	360	352	No	237	220	No	219	220	No
		EB RT	1	775	238	198	No	124	110	No	150	132	No
		RAMP TOTAL	2	1,550	598	550	No	361	330	No	369	352	No
<u>From I-10 East</u>													
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	100	110	No	65	66	No	77	88	No
		WB RT	1	355	90	88	No	65	66	No	28	22	No
		RAMP TOTAL	2	710	190	198	No	130	132	No	105	110	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	44	44	No	40	44	No	38	44	No
		WB RT	1	740	211	0	No	184	0	No	105	0	No
		RAMP TOTAL	2	1,480	255	44	No	224	44	No	143	44	No
7 Monroe Street WB Off ramp	2-Way Stop	WB LT/TH	1	685	84	176	No	97	66	No	23	88	No
		WB RT	1	685	50	22	No	14	22	No	63	22	No
		RAMP TOTAL	2	1,370	134	198	No	111	88	No	86	110	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	185	88	No	125	22	No	108	22	No
		WB RT	1	503	467	88	No	275	44	No	358	44	No
		RAMP TOTAL	2	1,006	652	176	No	400	66	No	466	66	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.

**Table V-14 Existing Conditions - Freeway On-Ramp Analysis - 2012 Stagecoach Festival**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Existing Conditions						
			Friday 3-4 PM		Saturday 2-3 PM		Monday 8-9 AM		
			Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	Ramp Volume <sup>3</sup> (veh/hr)	Exceed Capacity	
<u>To I-10 West</u>									
1	Washington Street WB On ramp	1	900	441	No	440	No	655	No
2	Jefferson Street WB On ramp	1	900	130	No	71	No	140	No
3	Monroe Street WB On ramp	1	900	418	No	252	No	740	No
4	Jackson Street WB On ramp	1	900	396	No	316	No	411	No
<u>To I-10 East</u>									
5	Golf Center Pkwy EB On ramp	1	900	119	No	85	No	107	No
6	Jackson Street EB On ramp	1	900	192	No	205	No	141	No
7	Monroe Street EB On ramp	1	900	216	No	140	No	165	No
8	Jefferson Street EB On ramp	1	900	144	No	85	No	91	No

Notes:

1. Number of lanes on ramp.
2. Capacity for one lane on-ramp = 900 veh/hr/ln
3. Existing volumes from 2012 intersection counts unless otherwise noted.

festival. The background (non-event) traffic growth between 2012 and 2014 (identified in Chapter IV) was added to the 2012 Stagecoach Festival Conditions traffic data, and then the incremental growth from the 2012 Stagecoach Festival (with approximately 57,500 persons attendance) to the proposed 75,000 person capacity was added to determine the projected total traffic volumes for the Future With Project condition. These were then compared to the Future Without Project conditions to identify potential impacts due to the Project.

Site Characteristics – 75,000 Capacity (Stagecoach Configuration)

The Proposed Project description is based very largely on the 2012 Stagecoach Festival, as the majority of the site would continue to be operated largely as it was in the 2012 Festival. Proposed changes between the 2012 Stagecoach Festival and the Proposed Project regarding transportation would occur within the existing festival site area. The key changes with regard to transportation, which are defined as Project Design Features, would be as follows.

*Parking Capacity*

The principal changes would concern the parking supply. The existing and proposed parking supply is shown in Table V-15. The existing on-site parking supply of 22,660 spaces would be increased to approximately 24,260 spaces, and would be comprised by parking type as shown in Table V-15.

**Table V-15 Proposed Project Parking Supply  
75,000 Person Capacity Festival & Comparison to 2012 Festival**

<i>Parking Type</i>	<i>2012 Festival</i>	<i>75,000 Capacity Festival</i>
Recreational Vehicle Camping	2,500	2,500
Car Camping	750	750
Tent Camping	380	380
Companion Parking	3,000	3,000
Day Parking	10,970	12,470
Staff Parking	5,060	5,160
<i>Total</i>	<i>22,660</i>	<i>24,260</i>

The number of recreational vehicle camping, car camping, and tent camping spaces would remain the same as today. The following key changes would be made.

An additional 1,000 day parking spaces would be provided, in Lot 15. An additional 2,000 parking spaces would be added in Lot 1B. A total of 1,500 day parking spaces would be removed from Lot 1A – these are rarely used for this function as Lot 1A is used primarily for production vehicle parking and only occasionally for small amounts of overflow day parking, so this change would allow additional space for production and support vehicles. The net increase in the day parking supply would therefore be 1,500 spaces.

Staff parking would increase from 5,060 to 5,160 spaces, to reflect a projected 2% increase in staff needs.

### *Other Project Design Features*

Other project design features, addressing the shuttle operation, access/egress along Hjorth Street and Avenue 50 to the On-Site Shuttle Terminal, and improvements to the On-Site Taxi and Pick-Up/Drop-Off Lot, would be implemented in the same manner as described for the Coachella Festival earlier in this chapter.

### Project Transportation Characteristics

#### Trip Generation – Festival Attendees by Type and Mode of Arrival

The forecast of attendees by type and mode of arrival for the Proposed Project of a 75,000 person capacity festival was prepared in the same manner as for the Coachella Festival earlier in this chapter. This section therefore describes the estimated transportation characteristics of the Proposed Project and a comparison to the 2012 Festival to provide context. The increase in capacity to 75,000 persons represents about a 15% increase over the currently allowed capacity of 65,000 persons, and about a 30% increase over the approximately 57,500 attendance at the 2012 Festival. The impact analysis then compares the Proposed Project of a 75,000 person capacity festival to the no-event condition.

#### *Persons*

Based on the proposed site characteristics described above, the breakdown of festival attendees by type and by mode of arrival was estimated for the Proposed Project and compared to the 2012 conditions for informational purposes, and is shown in Table V-16. There would be an overall increase of 17,500 persons attending the festival.

As shown in Table V-16, the largest increase in arrival mode would be in use of the shuttle buses (51% of the total increase). The proportion of patrons using the shuttle would increase from 6% in 2012 to 17% with the Proposed Project. Even with the projected increase in shuttle ridership, the total ridership would still be well below that for the Coachella Festivals.

**Table V-16 Festival Attendees - Estimates by Type & Mode of Arrival  
Stagecoach - 75,000 Capacity Festival & Comparison to 2012 57,500 Attendance Festival**

Type	Future 75,000 Capacity			2012 Existing			Net Change		
	Vehicles	Persons	% of Total	Vehicles	Persons	% of Total	Vehicles Increase	Persons Increase	% Increase
RV Camping	2,500	9,975	13%	2,625	10,474	18%	-125	-499	-5%
Car Camping	723	1,916	3%	723	1,916	3%	0	0	0%
Tent Camping	285	755	1%	285	755	1%	0	0	0%
Sub-Total Camping	3,508	12,646	17%	3,633	13,145	23%	-125	-499	-4%
Companion Camping	3,315	7,989	11%	3,315	7,989	14%	0	0	0%
<b>Total - Camping</b>	<b>6,823</b>	<b>20,635</b>	<b>28%</b>	<b>6,948</b>	<b>21,134</b>	<b>37%</b>	<b>-125</b>	<b>-499</b>	<b>-2%</b>
Day Parking	10,406	29,345	39%	7,406	20,844	36%	3,000	8,461	41%
Shuttle	N/A	12,688	17%	N/A	3,585	6%	N/A	9,103	254%
Taxi/PUDO	1,930	5,480	7%	1,838	5,219	9%	92	261	5%
Walk/Bike	N/A	1,426	2%	N/A	1,360	2%	N/A	66	5%
<b>Total - Patron</b>		<b>69,576</b>	<b>93%</b>		<b>52,182</b>	<b>90%</b>		<b>17,394</b>	<b>33%</b>
Staff/Security	4,219	5,424	7%	4,136	5,318	9%	83	106	2%
<b>GRAND TOTAL</b>	<b>23,378</b>	<b>75,000</b>	<b>100%</b>	<b>20,328</b>	<b>57,500</b>	<b>100%</b>	<b>3,050</b>	<b>17,500</b>	<b>30%</b>

The projected level of ridership for Stagecoach would be achievable because the Applicant would operate the necessary level of shuttle service to accommodate those patrons, and would promote and encourage use of the shuttle by bundling shuttle tickets with event tickets and with hotel guest packages at the point of sale. The second largest increase would be in day parking (47% of the total increase). The proportion of patrons using day parking would increase slightly from 36% to 39%. The remainder of the increase in attendance (about 2% of the total increase) would occur by taxi/PUDO and walk/bike, and by staff arrivals. There would be a slight decrease in the number of camping vehicles, to match the proposed supply.

As also shown in Table V-16, the overall number of vehicle trips that would be generated by the Project would be approximately 23,378 vehicle trips, compared to approximately 20,328 vehicle trips for the 2012 Festival<sup>1</sup>, or about a 15% increase.

Table V-17 shows a comparison of mode of arrival statistics for the proposed 75,000 capacity event compared to those for the proposed 99,000 capacity event. As can be seen from the table, the number of camping vehicles, day parking vehicles, taxi/pick-up & drop-off, and staff vehicles would all be lower for the 75,000 capacity festival than the 99,000 capacity festival. Even with the large increase in shuttle riders projected for the 75,000 capacity festival over existing 2012 conditions, the total number of shuttle riders would remain well below the number of riders for the 99,000 capacity festival.

#### *Vehicle Trips During Analysis Hours*

The trip totals were converted to vehicle trip estimates for the three analysis hours. Table V-18 shows the estimated vehicle trips for each of the three analysis hours for the Stagecoach 2012 Festival. Table V-19 shows the estimated vehicle trips for a 75,000 capacity festival. For informational purposes, Table V-20 shows the number of additional vehicle trips that would occur with a 75,000 capacity festival compared to the trips that occurred for the Stagecoach 2012 Festival. These tables were prepared using the same methodology as used for the 99,000 capacity festival earlier in this chapter.

While the increase in attendance at the festival over 2012 conditions would be about 17,500 people, many people would arrive by shuttle (an estimated 9,100) and some by taxi/pick-up drop off. Those that arrive by car do not drive alone (with average vehicle occupancies of between 2.65 and 2.98 people per car, as identified in Chapter III.4 on page III-22). As the subsequent analysis shows, an additional 17,500 people would generate 3,050 additional vehicles, the vast majority of which (3,000 vehicles) would be associated with day parking. These additional vehicles would not all be on the roadway system at the same time, because their arrivals are spread out over a number of hours. The following analysis therefore

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<sup>1</sup>From estimates of mode breakdown for persons attending festival. Represents all camping arrivals, plus day arrivals for highest day. Actual daily vehicle arrivals (non-camping) for highest day estimated at 16,555 vehicles for Proposed Project and 13,380 vehicles for 2012 Festival.

**Table V-17 Stagecoach Type 75,000 Capacity Festival and Comparison to Coachella Type 99,000 Capacity Festival**

Parameter	Future Stagecoach 75,000 Person		Future Coachella 99,000 Person	
	Vehicle	Person	Vehicle	Person
RV Camping	2,500	9,975	0	0
Car Camping	723	1,916	10,619	28,140
Tent Camping	285	755	450	1,193
Sub-Total Camping	3,508	12,646	11,069	29,333
Companion Parking	3,315	7,989	1,021	2,236
<b>Total Camping</b>	<b>6,823</b>	<b>20,635</b>	<b>12,090</b>	<b>31,570</b>
Day Parking	10,406	29,345	11,452	34,082
Shuttle	N/A	12,688	N/A	17,745
Taxi / PUDO	1,930	5,480	2,262	6,426
Walk / Bike	N/A	1,426	N/A	1,632
<b>Total Patrons</b>	<b>12,336</b>	<b>69,576</b>	<b>13,714</b>	<b>91,455</b>
Staff / Security	4,219	5,424	4,943	7,545
<b>GRAND TOTAL</b>	<b>23,378</b>	<b>75,000</b>	<b>30,747</b>	<b>99,000</b>

**Table V-18 Vehicle Trips by Key Hour – 2012 Stagecoach Festival**

Type	Total Vehicles	Friday 3-4 pm		Saturday 2-3 pm		Monday 8-9 am	
		%	Total	%	Total	%	Total
Camping	6,948 <sup>1</sup>	1.2% <sup>3</sup>	83	0.12% <sup>3</sup>	8	25% <sup>4</sup>	1,737
Day Parking	7,406 <sup>2</sup>	16.6% <sup>3</sup>	1,229	15.4% <sup>3</sup>	1,140	0%	0
Shuttle	3,585 pers.	11.6% <sup>4</sup>	35	12.0% <sup>4</sup>	41	0%	0
Taxi/PUDO	1,838 <sup>2</sup>	16.6% <sup>3</sup>	610	15.4% <sup>3</sup>	567	0%	0
Staff/Security	4,136 <sup>2</sup>	5.0% <sup>5</sup>	414	5.0% <sup>4</sup>	413	1% <sup>5</sup>	83
<b>Total</b>	<b>20,328</b>		<b>2,371</b>		<b>2,169</b>		<b>1,820</b>

<sup>1</sup> Total for festival.

<sup>2</sup> Daily total – Saturday (Highest day of Festival.)

<sup>3</sup> Estimates from scan data.

<sup>4</sup> From count data.

<sup>5</sup> Estimates from Goldenvoice and The Mobility Group observations.

**Table V-19 Estimated Vehicle Trips by Key Hour – 75,000 Capacity Stagecoach Festival**

Type	Total Vehicles	Friday 3-4 pm		Saturday 2-3 pm		Monday 8-9 am	
		%	Total	%	Total	%	Total
Camping	6,823	1.2%	82	0.12%	8	25%	1,706
Day Parking	10,406	16.6%	1,727	15.4%	1,603	0%	0
Shuttle	12,688 pers.	11.6%	123	12.0%	145	0%	0
Taxi/PUDO	1,930	16.6%	640	15.4%	594	0%	0
Staff/Security	4,219	5.0%	422	5.0%	422	1%	84
<b>Total</b>	<b>23,378</b>		<b>2,994</b>		<b>2,772</b>		<b>1,790</b>



**Table V-20 Estimated Vehicle Trips by Key Hour – Increase from 2012 Stagecoach Festival to 75,000 Capacity Festival**

Type	Total Vehicles	Friday 3-4 pm				Saturday 2-3 pm				Monday 8-9 am			
		%	In	Out	Total	%	In	Out	Total	%	In	Out	Total
Camping	-125	1.2%	-2		-2	0.12%	0		0	25%		-31	-31
Day Parking	3,000	16.6%	498		498	15.4%	462		462	0%			0
Shuttle	9,103 pers.	11.6%	44	44	88	12.0%	52	52	104	0%			0
Taxi/PUDO	92	16.6%	15	15	30	15.4%	14	14	28	0%			0
Staff/Security	83	5.0%	4	4	8	5.0%	4	4	8	1%	1	1	2
<b>Total</b>	<b>3,050</b>		<b>559</b>	<b>63</b>	<b>622</b>		<b>532</b>	<b>70</b>	<b>602</b>		<b>1</b>	<b>-30</b>	<b>-29</b>

Note: All trips in one directions, except shuttle, taxi/PUDO, and staff security which are two directional.

identifies the proportion of the trips that would actually occur during the three peak analysis hours, as described below, and in Tables V-18 to V-20.

As shown in Table V-20, during the Friday 3:00 to 4:00 pm hour, there would be an increase of approximately 622 additional vehicle trips with the Proposed Project. During the Saturday 2:00 to 3:00 pm hour there would be an increase of approximately 602 additional vehicle trips, and during the Monday 8:00 to 9:00 am hour there would be a decrease of approximately 29 vehicle trips

The majority of the additional vehicle trips would be inbound trips to day parking. The additional trips by shuttle buses, to taxi/pick-up/drop-off, and staff trips would be comprised of both inbound and outbound trips. The slight decrease in trips during the Monday 8:00 to 9:00 am hour would be due to the slight decrease in camping numbers with the Proposed Project.

#### *Future With Project Traffic Volumes*

The future traffic volumes with the Proposed Project of a 75,000 capacity festival were obtained in the same way as previously described for the 99,000 capacity festival. The Future With Project traffic volumes projections were therefore obtained by (1) using the 2012 Festival conditions as a base, (2) adding the background growth in traffic on the roadway system between 2012 and 2014 described in Chapter IV, and (3) adding the projected growth in Festival traffic from a 57,500 attendance to a 75,000 capacity event as described above in this chapter, to obtain total future traffic with a 75,000 capacity festival.

### **Future With Project Traffic Conditions**

#### Significant Impact Thresholds

The same significant impact thresholds were used as previously identified in this chapter for the 99,000 capacity festival.

#### Future Conditions With Project – Intersections

The intersection level of service analysis for the Future With Project Conditions is summarized in Table V-21, which shows the calculated vehicle delay and associated level of service for each of the study intersections for each of the three analysis hours. The table also compares the level of service conditions to the Future Without Project (No Event). The intersection levels of service for both conditions are also shown in Figure V-7.

*Friday: 3:00 – 4:00 PM*

As shown in Table V-21 and Figure V-7a, most intersections would continue to operate at similar levels of service with the Proposed Project with the vast majority of intersections continuing to operate at LOS D or better. A total of 37 intersections would operate at LOS D or better, compared to 38 intersections in the Future Without Project condition. The number of intersections operating by each level service category would be as follows, including a comparison to the Future Without Project conditions:

<i>Level of Service</i>	<i>2014 Future Without Project</i>	<i>2014 Future With Project</i>
LOS A	4 intersections	3 intersections
LOS B	12 intersections	11 intersections
LOS C	19 intersections	13 intersections
LOS D	3 intersections	10 intersections
LOS E	1 intersections	0 intersections
LOS F	2 intersections	4 intersections

In the Future Without Project conditions, a total of three intersections would operate at worse than LOS D, as follows:

- |  |       |
|--|-------|
| 13. Madison Street & Avenue 50                     | LOS F |
| 26. Jackson Street & Avenue 50                     | LOS F |
| 31. I-10 Eastbound Freeway Ramps & Indio Boulevard | LOS E |

In the Future With Project conditions, a total of four intersections would operate at worse than LOS D, as follows:

- |  |       |
|--|-------|
| 11. Jefferson Street & Avenue 54                 | LOS F |
| 22. Monroe Street & Avenue 52                    | LOS F |
| 26. Jackson Street & Avenue 50                   | LOS F |
| 33. I-10 Eastbound Freeway Ramps & Monroe Street | LOS F |

According to the criteria for significant impacts adopted for this study, the Future With Project conditions would result in three significant impacts in this time period. These would be at:

- Intersection #11 - Jefferson Street & Avenue 54, where the level of service would increase from LOS B to LOS F. This impact would be caused primarily by diverted traffic using Avenue 54 and Jefferson Street, and would arise from heavy westbound right turn and southbound left turn volumes.
- Intersection #22 - Monroe Street & Avenue 52, where the level of service would increase from LOS B to LOS F. This would be caused by the additional festival traffic.
- Intersection #33 - I-10 Eastbound Freeway Ramps & Monroe Street, where the level of service would increase from LOS C to LOS F. This impact would be caused primarily by festival traffic exiting the freeway at Monroe Street.

At the other intersection where the level of service would be worse than LOS D, significant impacts would not occur, as the level of service at Intersection # 26 - Jackson Street & Avenue 50, would be LOS F both without and with the Project.

*Saturday: 2:00 – 3:00 PM*

As shown in Table V-21 and Figure V-7b, most intersections would continue to operate at similar levels of service with the Proposed Project with all intersections continuing to operate at LOS D or better. The number of intersections operating by each level service category would be as follows, including a comparison to the Future Without Project conditions:

<i>Level of Service</i>	<i>2014 Future Without Project</i>	<i>2014 Future With Project</i>
LOS A	6 intersections	6 intersections
LOS B	16 intersections	14 intersections
LOS C	18 intersections	19 intersections
LOS D	1 intersections	2 intersections
LOS E	0 intersections	0 intersections
LOS F	0 intersections	0 intersections

In the Future Without Project conditions, no intersections would operate at worse than LOS D.

In the Future With Project conditions, no intersections would operate at worse than LOS D.



**Table V-21 Future With Project Conditions - Intersection Level of Service - 75,000 Capacity Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM						Saturday 2-3 PM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
1	Washington St & Country Club Dr.	PD	Signalized	42.8	D	42.2	D	-0.6	No	35.3	D	35.0	D	-0.3	No
2	Washington St & Hwy-111	LQ	Signalized	35.4	D	37.5	D	2.1	No	33.1	C	32.7	C	-0.4	No
3	Washington St & Ave 48	LQ	Signalized	20.5	C	24.5	C	4.0	No	16.1	B	20.2	C	4.1	No
4	Washington St & Ave 50	LQ	Signalized	22.0	C	19.4	B	-2.6	No	20.2	C	18.1	B	-2.1	No
5	Washington St & Ave 52	LQ	Signalized	25.8	C	25.0	C	-0.8	No	26.5	C	24.6	C	-1.9	No
6	Jefferson St & Indio Blvd	I	Signalized	24.8	C	40.7	D	15.9	No	18.4	B	19.8	B	1.4	No
7	Jefferson St & Hwy-111	LQ	Signalized	31.9	C	34.3	C	2.4	No	30.1	C	31.2	C	1.1	No
8	Jefferson St & Ave 48	LQ	Signalized	32.5	C	36.2	D	3.7	No	30.6	C	31.0	C	0.4	No
9	Jefferson St & Ave 50	LQ	Signalized	33.7	C	32.8	C	-0.9	No	32.5	C	30.9	C	-1.6	No
10	Jefferson St & Ave 52	LQ	Roundabout	2.3	A	3.4	A	1.1	No	2.1	A	2.8	A	0.7	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.3	B	52.6	F	38.3	Yes	14.1	B	19.6	C	5.5	No
12	Madison St & Ave 48	I	Signalized	25.9	C	25.1	C	-0.8	No	25.3	C	25.3	C	0.0	No
13	Madison St & Ave 50	I	4-Way Stop	64.9	F	12.0	B	-52.9	No	22.6	C	12.2	B	-10.4	No
14	Madison St & Ave 52	LQ	4-Way Stop	16.8	C	32.8	D	16.0	No	12.4	B	15.5	C	3.1	No
15	Madison St & Ave 54	LQ	4-Way Stop	14.4	B	26.3	D	11.9	No	11.3	B	12.7	B	1.4	No
16	Hjorth St & Ave 48	I	Signalized	5.9	A	12.6	B	6.7	No	5.1	A	12.7	B	7.6	No
17	Monroe St & Fred Waring Dr.	I	Signalized	25.1	C	26.4	C	1.3	No	23.7	C	22.3	C	-1.4	No
18	Monroe St & Hwy-111	I	Signalized	34.0	C	37.9	D	3.9	No	32.5	C	33.1	C	0.6	No
19	Monroe St & Ave 48	I	Signalized	28.1	C	44.0	D	15.9	No	26.6	C	29.5	C	2.9	No
20	Monroe St & Ave 49	I	2-Way Stop <sup>1</sup>	5.0	A	6.5	A	1.5	No	4.0	A	9.1	A	5.1	No
21	Monroe St & Ave 50	I	Signalized	16.8	B	11.4	B	-5.4	No	15.0	B	11.6	B	-3.4	No

**Table V-21 Future With Project Conditions - Intersection Level of Service - 75,000 Capacity Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM						Saturday 2-3 PM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
22	Monroe St & Ave 52	I	4-Way Stop	12.9	B	157.0	F	144.1	Yes	10.1	B	14.8	B	4.7	No
23	Monroe St & Ave 54	LQ	4-Way Stop	10.6	B	11.9	B	1.3	No	8.7	A	9.5	A	0.8	No
24	Jackson St & Hwy-111	I	Signalized	33.4	C	30.4	C	-3.0	No	29.9	C	32.4	C	2.5	No
25	Jackson St & Ave 48	I	Signalized	27.8	C	32.7	C	4.9	No	27.0	C	30.1	C	3.1	No
26	Jackson St & Ave 50	I	4-Way Stop	53.1	F	62.2	F	9.1	No	18.0	C	17.4	C	-0.6	No
27	Jackson St & Ave 52	CR	4-Way Stop	13.7	B	20.7	C	7.0	No	10.5	B	12.1	B	1.6	No
28	Jackson St & Ave 54	CR	4-Way Stop	11.2	B	12.8	B	1.6	No	8.6	A	9.2	A	0.6	No
29	I-10 EB Ramps & Washington St	C	Signalized	33.7	C	38.6	D	4.9	No	26.4	C	26.3	C	-0.1	No
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.3	B	13.7	B	0.4	No	12.8	B	12.1	B	-0.7	No
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	41.0	E	17.7	C	-23.3	No	18.0	C	11.8	B	-6.2	No
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	19.8	C	21.7	C	1.9	No	12.6	B	12.8	B	0.2	No
33	I-10 EB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	27.9	C	136.1	F	108.2	Yes	17.4	B	41.8	D	24.4	No
34	I-10 WB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	10.3	B	10.9	B	0.6	No	10.1	B	10.3	B	0.2	No
35	I-10 EB Ramps & Jackson St	C	Signalized	24.7	C	19.4	B	-5.3	No	16.9	B	14.8	B	-2.1	No
36	I-10 WB Ramps & Jackson St	C	Signalized	9.0	A	8.6	A	-0.4	No	8.1	A	8.2	A	0.1	No
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	16.0	B	14.5	B	-1.5	No	15.2	B	14.9	B	-0.3	No
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.4	B	12.9	B	0.5	No	11.0	B	9.8	A	-1.2	No
39	Washington St & Fred Waring Dr	LQ	Signalized	35.5	D	37.1	D	1.6	No	30.7	C	29.8	C	-0.9	No
40	Jefferson St & Fred Waring Dr	I	Signalized	27.8	C	27.2	C	-0.6	No	27.1	C	26.3	C	-0.8	No
41	Jefferson St & Ave 49	LQ	Signalized	17.2	B	22.2	C	5.0	No	16.5	B	20.9	C	4.4	No

Note: 1. Intersection would be signalized in the Future Without Project conditions.

I - City of Indio; LQ - City of La Quinta; CR - County of Riverside;  
 PD - City of Palm Desert; C - Caltrans

**Table V-21 Future With Project Condition - Intersection Level of Service - 75,000 Capacity Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
1	Washington St & Country Club Dr.	PD	Signalized	37.5	D	38.8	D	1.3	No
2	Washington St & Hwy-111	LQ	Signalized	32.0	C	33.3	C	1.3	No
3	Washington St & Ave 48	LQ	Signalized	16.0	B	20.4	C	4.4	No
4	Washington St & Ave 50	LQ	Signalized	23.7	C	25.6	C	1.9	No
5	Washington St & Ave 52	LQ	Signalized	26.8	C	25.7	C	-1.1	No
6	Jefferson St & Indio Blvd	I	Signalized	20.0	C	28.8	C	8.8	No
7	Jefferson St & Hwy-111	LQ	Signalized	30.4	C	30.3	C	-0.1	No
8	Jefferson St & Ave 48	LQ	Signalized	30.5	C	31.5	C	1.0	No
9	Jefferson St & Ave 50	LQ	Signalized	31.4	C	40.4	D	9.0	No
10	Jefferson St & Ave 52	LQ	Roundabout	2.0	A	2.1	A	0.1	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	10.8	B	14.7	B	3.9	No
12	Madison St & Ave 48	I	Signalized	23.7	C	24.2	C	0.5	No
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	51.5	F	39.1	Yes
14	Madison St & Ave 52	LQ	4-Way Stop	11.6	B	28.4	D	16.8	No
15	Madison St & Ave 54	LQ	4-Way Stop	10.5	B	11.3	B	0.8	No
16	Hjorth St & Ave 48	I	Signalized	7.4	A	15.5	B	8.1	No
17	Monroe St & Fred Waring Dr.	I	Signalized	20.1	C	23.5	C	3.4	No
18	Monroe St & Hwy-111	I	Signalized	30.5	C	31.3	C	0.8	No
19	Monroe St & Ave 48	I	Signalized	25.2	C	28.9	C	3.7	No
20	Monroe St & Ave 49	I	2-Way Stop <sup>1</sup>	3.9	A	8.6	A	4.7	No
21	Monroe St & Ave 50	I	Signalized	14.8	B	16.9	B	2.1	No



**Table V-21 Future With Project Condition - Intersection Level of Service - 75,000 Capacity Festival**

12/14/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM					
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS		
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	10.6	B	0.1	No
23	Monroe St & Ave 54	LQ	4-Way Stop	8.9	A	9.2	A	0.3	No
24	Jackson St & Hwy-111	I	Signalized	31.1	C	31.1	C	0.0	No
25	Jackson St & Ave 48	I	Signalized	26.7	C	28.0	C	1.3	No
26	Jackson St & Ave 50	I	4-Way Stop	12.7	B	40.2	E	27.5	Yes
27	Jackson St & Ave 52	CR	4-Way Stop	9.9	A	11.7	B	1.8	No
28	Jackson St & Ave 54	CR	4-Way Stop	8.5	A	9.9	A	1.4	No
29	I-10 EB Ramps & Washington St	C	Signalized	23.5	C	22.8	C	-0.7	No
30	I-10 WB Ramps & Varner Rd	C	Signalized	13.2	B	14.0	B	0.8	No
31	I-10 EB Ramps & Jefferson/Indio	C	All-Way Stop	13.6	B	13.0	B	-0.6	No
32	I-10 WB Ramps & Jefferson St	C	2-Way Stop	11.1	B	13.1	B	2.0	No
33	I-10 EB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	17.4	B	40.7	D	23.3	No
34	I-10 WB Ramps & Monroe St	C	2-Way Stop <sup>1</sup>	11.1	B	21.8	C	10.7	No
35	I-10 EB Ramps & Jackson St	C	Signalized	14.4	B	14.8	B	0.4	No
36	I-10 WB Ramps & Jackson St	C	Signalized	8.4	A	8.4	A	0.0	No
37	I-10 EB Ramps & Golf Center Pkwy	C	Signalized	13.6	B	13.4	B	-0.2	No
38	I-10 WB Ramps & Golf Center Pkwy	C	Signalized	12.3	B	13.1	B	0.8	No
39	Washington St & Fred Waring Dr	LQ	Signalized	29.8	C	31.7	C	1.9	No
40	Jefferson St & Fred Waring Dr	I	Signalized	26.5	C	26.6	C	0.1	No
41	Jefferson St & Ave 49	LQ	Signalized	22.1	C	23.5	C	1.4	No

Note: 1. Intersection would be signalized in the Future Without Project conditions.

I - City of Indio; LQ - City of La Quinta; CR - County of Riverside;  
 PD - City of Palm Desert; C - Caltrans

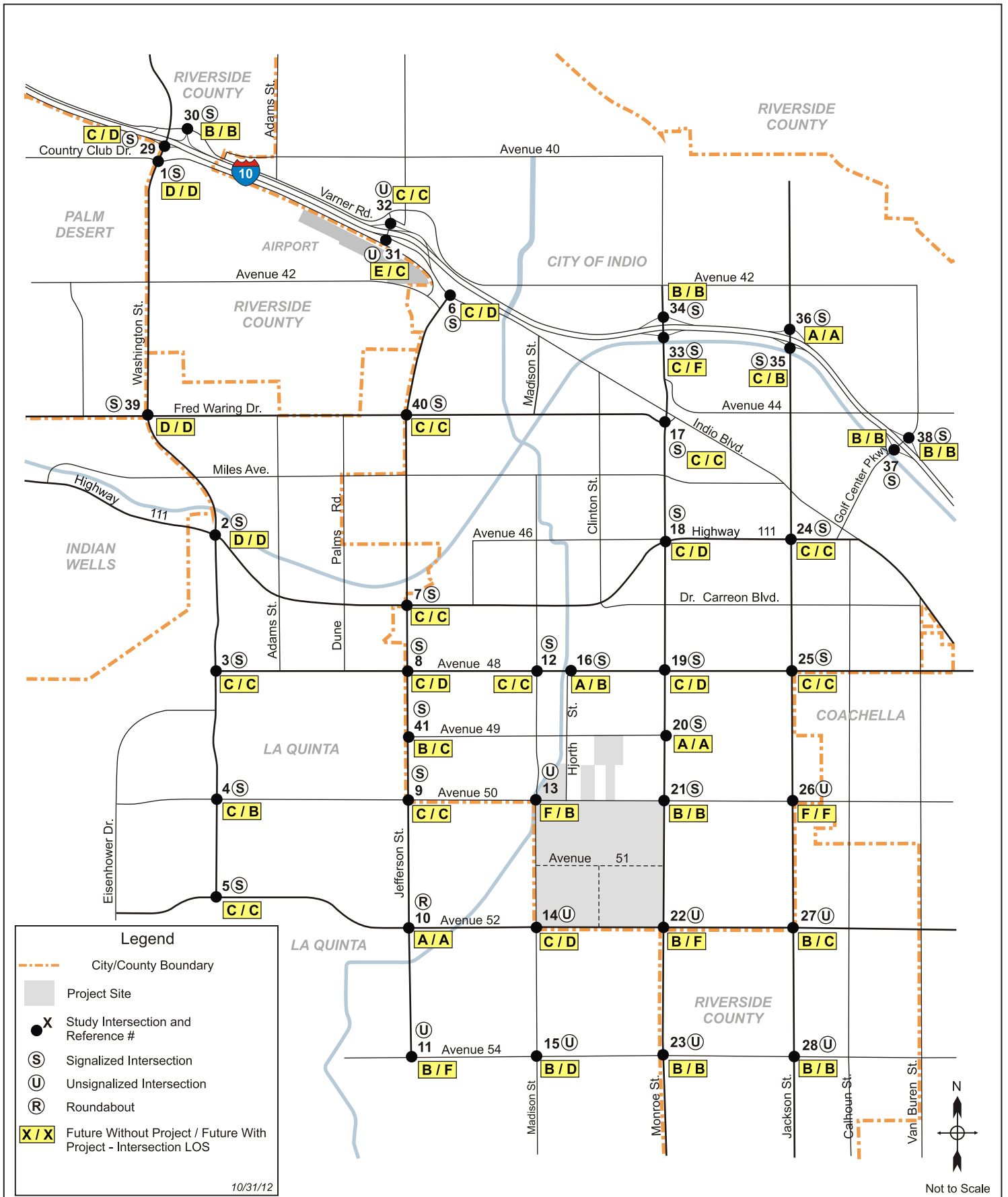


Figure V-7a  
 Future With Project - 75,000 Capacity Festival - Intersection Level of Service - Friday 3:00-4:00 PM

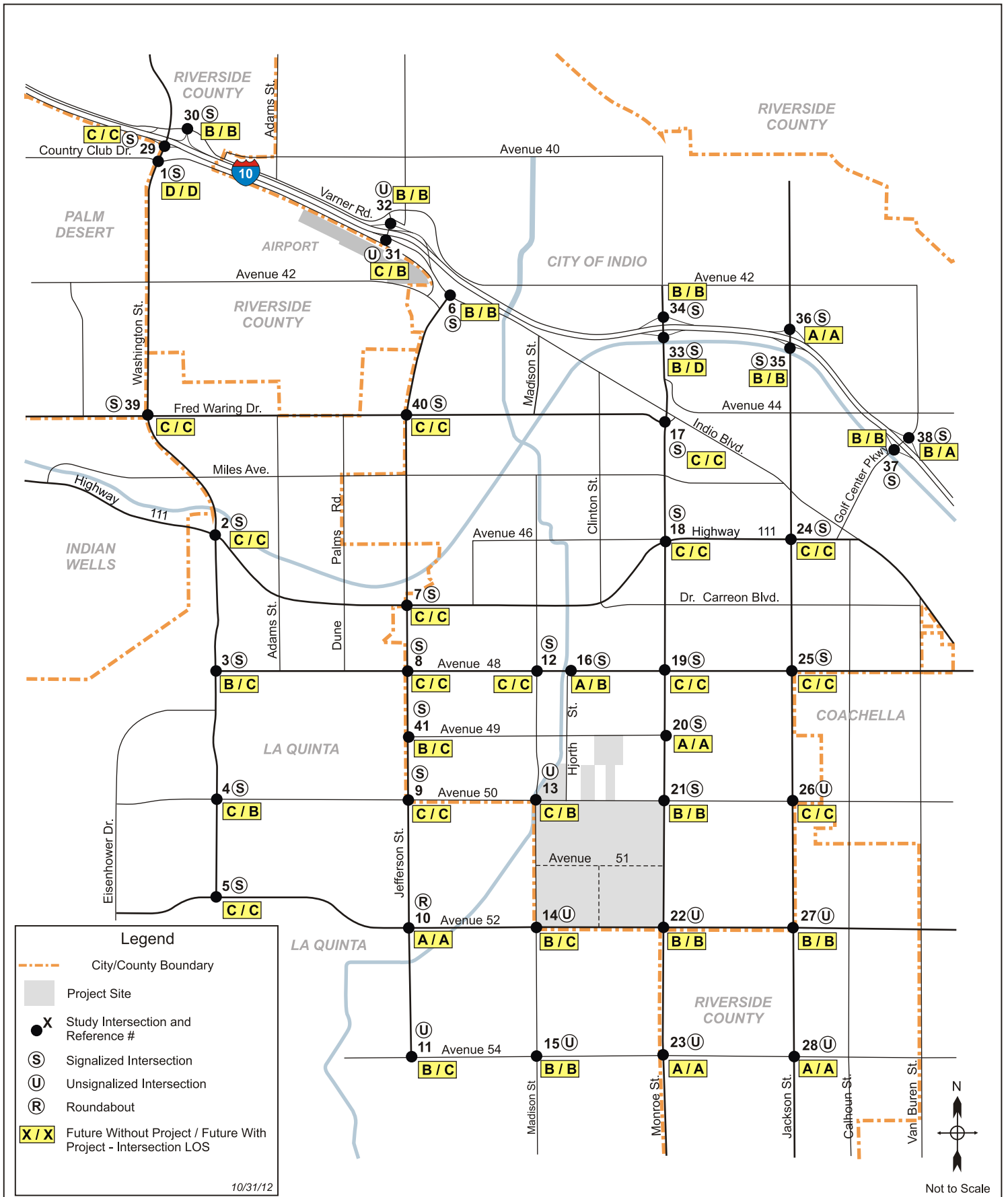
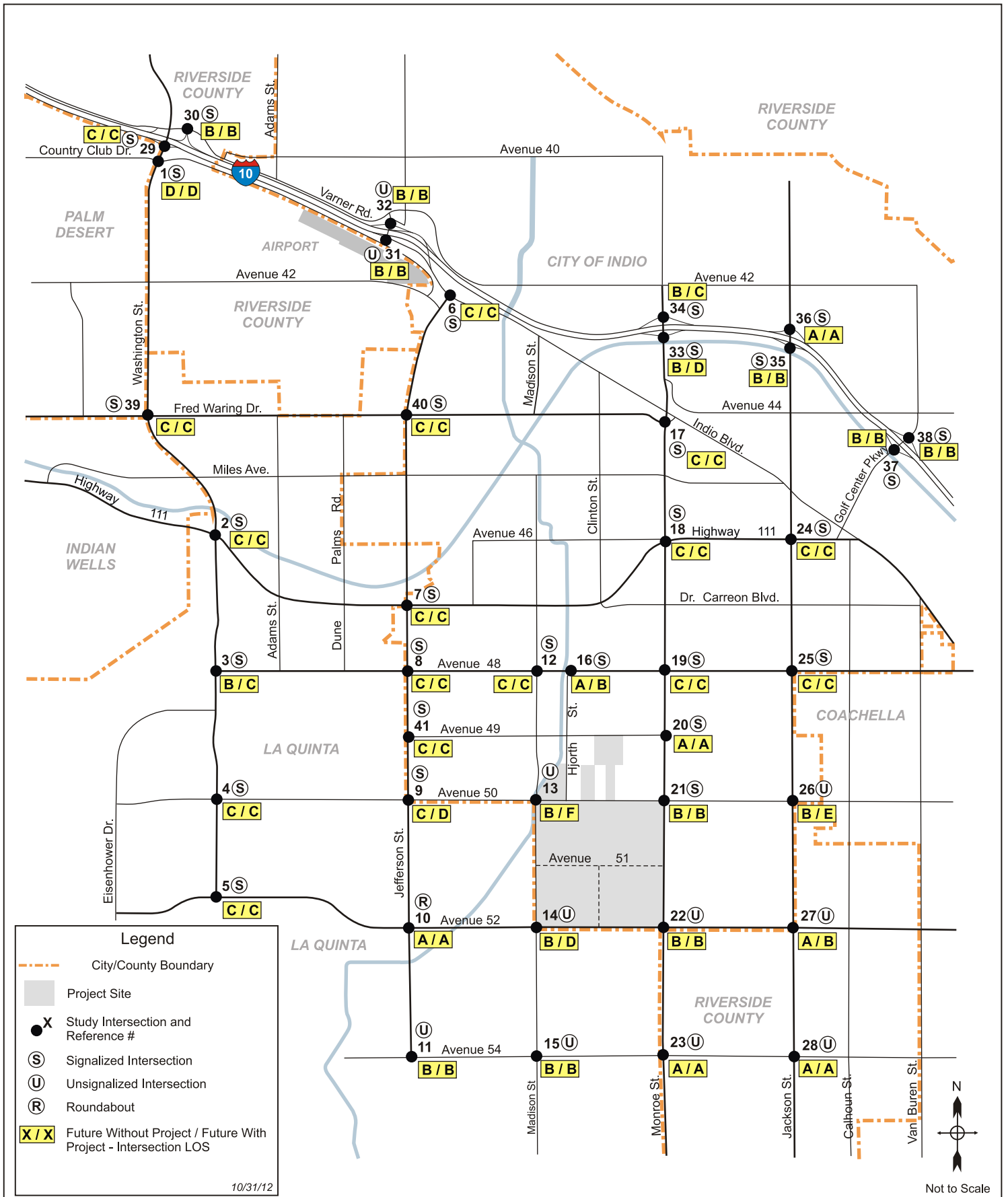


Figure V-7b  
 Future With Project Conditions- 75,000 Capacity Festival - Intersection Level of Service - Saturday 2:00-3:00 PM



FigureV-7c  
 Future With Project - 75,000 Capacity Festival - Intersection Level of Service - Monday 8:00-9:00 AM

- Intersection #26 – Jackson Street & Avenue 50, where the level of service would increase from LOS B to LOS E<sup>1</sup>.

One of these impacts would occur at intersections adjacent to the Project Site, at Madison Street & Avenue 50, and would be primarily due to festival camping traffic exiting the site.

One of the impacts would be along Jackson Street, at Jackson Street & Avenue 50, and would be primarily due to festival camping traffic leaving the project site.

### Potential Traffic Queue Impacts

The preceding section has identified that intersection level of service conditions would generally be similar or better, and that intersection impacts would be similar to but occur at fewer locations, for the 75,000 capacity festival than those identified for the 99,000 capacity festival.

The potential impacts from traffic queues for the 75,000 capacity festival would therefore be expected to be similar to or somewhat less than for those identified for the 99,000 capacity festival, and as described in Section V.3 earlier.

The exception could be on Monroe Street where the southbound queues on a Friday, Saturday and Sunday could reach back to Highway 111, so in addition to impacts identified for the 99,000 capacity event (see Section V.3 earlier), access/egress to/from properties along Monroe Street between Avenue 48 and Highway 111 could be temporarily significantly impacted for short periods of time.

## **Future Conditions With Project – 75,000 Capacity Festival – Freeways**

### Freeway Segments

#### *Future Traffic Volumes*

In order to evaluate potential impacts on the freeway system, traffic volumes were projected using the same methodology described for intersections earlier in this chapter including the trip generation and trip distribution parameters shown in Tables V-3, V-4 and V-5, and in Figure V-2 and V-3. The Future With Project traffic volumes on the freeway segments, and

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<sup>1</sup> Impact conclusion based on LOS D as the standard. However, as stated earlier in this section (page V-20), the City of Indio permits LOS E as the standard where it is unreasonable or infeasible, based on certain criteria, to achieve LOS D. See Chapter VI, Section VI.4 for a discussion regarding the impact conclusion for this intersection after consideration of the City's feasibility criteria.

**Table V-22a Future With Project Conditions - Freeway Segment Level of Service - 75,000 Capacity Festival - Friday 3-4 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Friday 3-4 PM			Future With Project Friday 3-4 PM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,685	0.781	D	4,992	0.832	D	0.051	No
		WB	3 G	6,000	3,953	0.659	C	3,976	0.663	C	0.004	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	4,186	0.698	C	4,451	0.742	D	0.044	No
		WB	3 G	6,000	3,532	0.589	C	3,540	0.590	C	0.001	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,449	0.575	C	3,554	0.592	C	0.017	No
		WB	3 G	6,000	2,889	0.481	B	2,894	0.482	B	0.001	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	3,136	0.523	C	3,136	0.523	C	0.000	No
		WB	3 G	6,000	2,631	0.438	B	2,631	0.438	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,896	0.483	B	2,896	0.483	B	0.000	No
		WB	3 G	6,000	2,444	0.407	B	2,451	0.408	B	0.001	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,670	0.381	B	2,670	0.381	B	0.000	No
		WB	4 G	8,000	2,257	0.282	A	2,272	0.284	A	0.002	No

Notes:  
 G - General Purpose Lane  
 A - Auxilliary Lane

**Table V-22b Future With Project Conditions - Freeway Segment Level of Service - 75,000 Capacity Festival - Saturday 2-3 PM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Saturday 2-3 PM			Future With Project Saturday 2-3 PM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,644	0.774	D	4,932	0.822	D	0.048	No
		WB	3 G	6,000	3,171	0.528	C	3,196	0.533	C	0.004	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	4,150	0.692	C	4,399	0.733	D	0.042	No
		WB	3 G	6,000	2,833	0.472	B	2,841	0.474	B	0.001	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,420	0.570	C	3,563	0.594	C	0.024	No
		WB	3 G	6,000	2,317	0.386	B	2,321	0.387	B	0.001	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	3,109	0.518	C	3,109	0.518	C	0.000	No
		WB	3 G	6,000	2,111	0.352	B	2,111	0.352	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,871	0.479	B	2,871	0.479	B	0.000	No
		WB	3 G	6,000	1,960	0.327	B	1,967	0.328	B	0.001	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,647	0.378	B	2,647	0.378	B	0.000	No
		WB	4 G	8,000	1,811	0.226	A	1,825	0.228	A	0.002	No

Notes:  
 G - General Purpose Lane  
 A - Auxilliary Lane

**Table V-22c Future With Project Conditions - Freeway Segment Level of Service - 75,000 Capacity Festival - Monday 8-9AM**

No.	Location	DIR	No of Lanes	Capacity (veh/hr)	Future Without Project Monday 8-9 AM			Future With Project Monday 8-9 AM			Increase in D/C	Significant Impact?
					Hourly Volume (veh/hr)	Demand/Capacity	LOS	Hourly Volume (veh/hr)	Demand/Capacity	LOS		
1	I - 10 west of Washington Street	EB	3 G	6,000	4,085	0.681	C	4,085	0.681	C	0.000	No
		WB	3 G	6,000	3,127	0.521	C	3,127	0.521	C	0.000	No
2	I - 10 b/w Washington Street and Jefferson Street	EB	3 G	6,000	3,650	0.608	C	3,650	0.608	C	0.000	No
		WB	3 G	6,000	2,794	0.466	B	2,794	0.466	B	0.000	No
3	I - 10 b/w Jefferson Street and Monroe Street	EB	3 G	6,000	3,008	0.501	C	3,008	0.501	C	0.000	No
		WB	3 G	6,000	2,285	0.381	B	2,285	0.381	B	0.000	No
4	I - 10 b/w Monroe Street and Jackson Street	EB	3 G	6,000	2,735	0.456	B	2,735	0.456	B	0.000	No
		WB	3 G	6,000	2,081	0.347	B	2,081	0.347	B	0.000	No
5	I - 10 b/w Jackson Street and Golf Center Pkwy	EB	3 G	6,000	2,526	0.421	B	2,526	0.421	B	0.000	No
		WB	3 G	6,000	1,933	0.322	B	1,933	0.322	B	0.000	No
6	I - 10 east of Golf Center Pkwy	EB	3 G + 1 A	7,000	2,329	0.333	B	2,329	0.333	B	0.000	No
		WB	4 G	8,000	1,786	0.223	A	1,786	0.223	A	0.000	No

Notes:  
 G - General Purpose Lane  
 A - Auxilliary Lane



corresponding D/C ratios, are shown in Table V-22 for each of the three analysis hours. A comparison is also shown to Future Without Project Conditions.

### *Significant Impact Thresholds*

The same significant impact thresholds were used as previously identified in this chapter for the 99,000 capacity festival.

#### *Friday: 3:00 – 4:00 PM*

As shown in Table V-22a the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS D or better, with most segments operating at LOS B or LOS C.

The level of service would exceed the Caltrans level of service target at one location, as follows:

- I-10 Eastbound between Washington Street & Jefferson Street, where the level of service would change from LOS C without the Project to LOS D with the Project.

For the I-10 Eastbound west of Washington Street freeway segment the level of service would be LOS D for both the Future Without Project and the Future With Project conditions. The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations.

While the level of service would exceed the Caltrans target at the above location, it would not constitute a significant impact due to the Project because the level of service would not exceed LOS D which is the criteria for significance established for this study.

#### *Saturday: 2:00 – 3:00 PM*

As shown in Table V-22b the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS D or better, with most segments operating at LOS B or LOS C.

The level of service would exceed the Caltrans level of service target at one location, as follows:

- I-10 Eastbound between Washington Street & Jefferson Street, where the level of service would change from LOS C without the Project to LOS D with the Project.

For the I-10 Eastbound west of Washington Street freeway segment the level of service would be LOS D for both the Future Without Project and the Future With Project conditions. The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations.

While the level of service would exceed the Caltrans target at the above location, it would not constitute a significant impact due to the Project because the level of service would not exceed LOS D which is the criteria for significance established for this study.

There would therefore be no significant freeway segment impacts during the Saturday 2:00 to 3:00 pm hour.

*Monday: 8:00 – 9:00 AM*

As shown in Table V-22c the Future With Project freeway segment level of service conditions would be very similar to the Future Without Project Conditions. All freeway segments would operate at LOS C or better, with most segments operating at LOS B or LOS C.

The level of service would not exceed Caltrans level of service targets at any location. The level of service would be LOS C or better and would remain the same as Future Without Project conditions at all other freeway locations. There would therefore be no significant freeway segment impacts.

### Freeway Off-Ramps

#### *Future Traffic Volumes*

The off-ramp analysis for Future With Project Conditions is summarized in Table V-23, which shows projected traffic volumes and vehicle queue lengths for both Future With Project and Future Without Project Conditions.

#### *Significant Impact Thresholds*

The same significant impact thresholds were used as previously identified in this chapter for the 99,000 capacity festival.

*Friday: 3:00 – 4:00 PM*

During this hour festival traffic would be travelling inbound to the festival. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due to both added festival traffic and changes in background non-event traffic. As shown

**Table V-23 Future With Project Conditions - 75,000 Capacity - Freeway Off-Ramp Analysis**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Friday 3-4 PM						Saturday 2-3 PM					
					Future Without Project Conditions			Future With Project Conditions			Future Without Project Conditions			Future With Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>																
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	296	198	No	291	176	No	230	154	No	191	110	No
		EB RT	2	1,025	804	770	No	912	924	No	632	484	No	586	462	No
		RAMP TOTAL	4	2,090	1,100	968	No	1,203	1,100	No	862	638	No	777	572	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	179	110	No	165	22	No	151	44	No	130	22	No
		EB TH <sup>1</sup>	1	705	788	110	No	1,126	0	No	575	44	No	730	0	No
		RAMP TOTAL	2	1,410	967	220	No	1,291	22	No	726	88	No	860	22	No
3 Monroe Street EB Off ramp <sup>2</sup>	2-Way Stop	EB LT/TH	1	870	103	88	No	100	66	No	88	66	No	83	66	No
		EB RT	1	870	335	462	No	752	1,518	Yes	302	330	No	561	726	No
		RAMP TOTAL	2	1,740	438	550	No	852	1,584	No	390	396	No	644	792	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	336	418	No	376	396	No	306	308	No	251	242	No
		EB RT	1	775	195	154	No	242	220	No	98	88	No	128	110	No
		RAMP TOTAL	2	1,550	531	572	No	618	616	No	404	396	No	379	352	No
<u>From East on I-10</u>																
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	101	110	No	110	110	No	52	44	No	72	88	No
		WB RT	1	355	106	110	No	100	88	No	89	88	No	73	88	No
		RAMP TOTAL	2	710	207	220	No	210	198	No	141	132	No	145	176	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	58	66	No	53	66	No	40	44	No	53	66	No
		WB RT	1	740	231	0	No	249	0	No	245	0	No	223	0	No
		RAMP TOTAL	2	1,480	289	66	No	302	66	No	285	44	No	276	66	No
7 Monroe Street WB Off ramp <sup>2</sup>	2-Way Stop	WB LT/TH	1	685	106	132	No	91	132	No	104	110	No	105	110	No
		WB RT	1	685	50	0	No	59	0	No	26	0	No	19	0	No
		RAMP TOTAL	2	1,370	156	132	No	150	132	No	130	110	No	124	110	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	193	88	No	202	110	No	164	44	No	139	22	No
		WB RT	1	503	509	110	No	501	110	No	330	44	No	298	44	No
		RAMP TOTAL	2	1,006	702	198	No	703	220	No	494	88	No	437	66	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.
2. Intersection would be signalized in Future Without Project conditions.

**Table V-23 Future With Project Conditions - 75,000 Capacity - Freeway Off-Ramp Analysis**

Off - Ramp # and Location	Type of Traffic Control	Movement	# of Lanes	Storage Length (feet)	Monday 8-9 AM					
					Future Without Project Conditions			Future With Project Conditions		
					Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length	Ramp Volume (veh/hr)	Queue Length (feet)	Exceed Storage Length
<u>From West on I-10</u>										
1 Washington Street EB Off ramp	Signalized	EB LT/TH	2	1,065	190	110	No	212	154	No
		EB RT	2	1,025	487	374	No	513	440	No
		RAMP TOTAL	4	2,090	677	484	No	725	594	No
2 Jefferson Street/Indio Boulevard EB Off ramp	All-Way Stop	EB LT	1	705	72	22	No	93	22	No
		EB TH <sup>1</sup>	1	705	513	22	No	517	0	No
		RAMP TOTAL	2	1,410	585	44	No	610	22	No
3 Monroe Street EB Off ramp <sup>2</sup>	2-Way Stop	EB LT/TH	1	870	55	44	No	54	44	No
		EB RT	1	870	339	330	No	379	572	No
		RAMP TOTAL	2	1,740	394	374	No	433	616	No
4 Jackson Street EB Off ramp	Signalized	EB LT/TH	1	775	205	198	No	228	242	No
		EB RT	1	775	135	110	No	154	154	No
		RAMP TOTAL	2	1,550	340	308	No	382	396	No
<u>From East on I-10</u>										
5 Golf Center Pkwy WB Off ramp	Signalized	WB LT/TH	1	355	47	44	No	78	88	No
		WB RT	1	355	44	44	No	32	44	No
		RAMP TOTAL	2	710	91	88	No	110	132	No
6 Jackson Street WB Off ramp	Signalized	WB LT/TH	1	740	34	44	No	38	44	No
		WB RT	1	740	121	0	No	124	0	No
		RAMP TOTAL	2	1,480	155	44	No	162	44	No
7 Monroe Street WB Off ramp <sup>2</sup>	2-Way Stop	WB LT/TH	1	685	67	88	No	28	44	No
		WB RT	1	685	35	0	No	68	0	No
		RAMP TOTAL	2	1,370	102	88	No	96	44	No
8 Jefferson Street WB Off ramp	2-Way Stop	WB LT/TH	1	503	121	22	No	119	22	No
		WB RT	1	503	270	22	No	373	44	No
		RAMP TOTAL	2	1,006	391	44	No	492	66	No

Note:

1. During festivals, traffic control officer directed traffic at intersection and eastbound through movement was not stopped.
2. Intersection would be signalized in Future Without Project conditions.

**Table V-24 Future With Project Conditions - 75,000 Capacity Festival - Freeway On-Ramps**

On - Ramp	# of Lanes <sup>1</sup>	Ramp Capacity <sup>2</sup>	Friday 3-4 PM				Saturday 2-3 PM				Monday 8-9 AM			
			Future Without Project Conditions		Future With Project Conditions		Future Without Project Conditions		Future With Project Conditions		Future Without Project Conditions		Future With Project Conditions	
			Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity	Ramp Volume (veh/hr)	Exceed Capacity
<u>To I-10 West</u>														
1 Washington Street WB On ramp	1	900	522	No	512	No	424	No	501	No	488	No	707	No
2 Jefferson Street WB On ramp	1	900	99	No	141	No	78	No	81	No	144	No	157	No
3 Monroe Street WB On ramp	1	900	417	No	454	No	306	No	279	No	494	No	778	No
4 Jackson Street WB On ramp	1	900	474	No	438	No	429	No	359	No	435	No	444	No
<u>To I-10 East</u>														
5 Golf Center Pkwy EB On ramp	1	900	162	No	130	No	111	No	92	No	97	No	113	No
6 Jackson Street EB On ramp	1	900	240	No	217	No	224	No	229	No	117	No	153	No
7 Monroe Street EB On ramp	1	900	219	No	230	No	179	No	152	No	169	No	176	No
8 Jefferson Street EB On ramp	1	900	155	No	153	No	114	No	91	No	103	No	96	No

Notes:

1. Number of lanes on ramp.
2. Capacity based on 900 veh/hr/ln.

in Table V-23, off-ramp traffic queue lengths would not exceed the overall ramp storage lengths at any of the off-ramp locations.

At the I-10 Eastbound Off-Ramp at Monroe Street, the eastbound right turn queue would exceed the storage length for this lane movement but would not exceed the storage length for the off-ramp as a whole. There would therefore be no significant impacts due to the Project.

*Saturday: 2:00 – 3:00 PM*

During this hour festival traffic would be travelling inbound to the festival. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due to both added festival traffic and changes in background non-event traffic. As shown in Table V-23, off-ramp queue lengths would not exceed the ramp storage lengths at any of the off-ramp locations.

At the I-10 Eastbound Off-Ramp at Monroe Street, the eastbound right turn queue would exceed the storage length for this lane movement. However, the queue would not exceed the storage length for the off-ramp as a whole, so would not back into the mainline freeway, and would not constitute a significant impact. There would therefore be no significant impacts due to the Project.

*Monday: 8:00 – 9:00 AM*

During this hour festival traffic would be travelling outbound from the festival during camping load out so would not use freeway off-ramps. Differences in traffic volumes between the Future Without Project and Future With Project conditions would be due primarily to changes in background non-event traffic. As shown in Table V-23, off-ramp queue lengths would not exceed the ramp storage lengths at any of the off-ramp locations. There would therefore be no significant impacts due to the Project.

### Freeway On-Ramps

#### *Future Traffic Volumes*

The on-ramp analysis for Future With Project Conditions is summarized in Table V-24, which shows projected traffic volumes and ramp capacities for both Future With Project and Future Without Project Conditions.

#### *Significant Impact Thresholds*

The same significant impact thresholds were used as previously identified in this chapter for the 99,000 capacity festival.

*Friday: 3:00 – 4:00 PM*

As shown in Table V-24, on ramp traffic volumes in the Future With Project condition would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

*Saturday: 2:00 – 3:00 PM*

As shown in Table V-24, on ramp traffic volumes in the Future With Project condition would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

*Monday: 8:00 – 9:00 AM*

As shown in Table V-24, on ramp traffic volumes would not exceed the ramp capacities at any of the on-ramp locations, and there would be no significant impacts due to the Project.

## **V.5 Events in the Fall**

As previously described, the Proposed Project would continue to allow music festival events to be held on the Project Site and would permit events on up to five weekends each year with up to three of these events allowed on consecutive weekends each spring and the remaining two events in the fall. The maximum allowed attendance, including all staff, would be 99,000 for three of the events, and 75,000 for two of the events. The three events in the spring would comprise two 99,000 person capacity events and one 75,000 person capacity event, and the two events in the fall would comprise one 99,000 person capacity event and one 75,000 person capacity event.

The preceding analysis has addressed both a 99,000 person event and a 75,000 person event in the spring when the existing festivals occur. In the fall, (September & October), background traffic volumes on the study area roadway system are generally lower, by about 5% to 10%, than in the spring (April<sup>1</sup>). The background traffic conditions in the fall are therefore no worse, and are generally slightly better (levels of service) than in the spring.

As the characteristics of the proposed festivals, would not be appreciably different in the fall than in the spring, it can be concluded that traffic conditions with the Proposed Project and the traffic impacts that would occur with the Proposed Project would be the same in the fall as in the spring. No further analysis is therefore necessary. The project design features, the mitigation program, and any other associated transportation improvements that have been identified for the festivals in the spring would also be applied to the festivals in the fall.

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<sup>1</sup> City of La Quinta Engineering Bulletin #06-13.

## **VI. Mitigation Measures**

### **VI.1 Introduction and Approach**

This Chapter of the report explores and identifies mitigation strategies to reduce significant transportation impacts identified in the earlier impact analyses for the Proposed Project, and describes a proposed transportation mitigation program. The mitigation measures proposed in this chapter are directed towards reducing and where possible eliminating the significant traffic impacts identified in Chapter V. These mitigations were developed in conjunction with the City of Indio staff.

The analysis of potential impacts from the Proposed Project was described in Chapter 5 which identified areas where the Proposed Project would cause significant transportation impacts for the peak traffic volume hours of the Friday 3:00 to 4:00 pm hour, the Saturday 2:00 to 3:00 pm hour, and the Monday 8:00 to 9:00 am hour.

As described in Chapter V, Section V.3, the thresholds that were applied in the impact analysis were those typically applied to normal weekday peak period conditions. The thresholds do not specifically address weekend hours and temporary special event conditions such as festivals that occur only a few times a year. Nevertheless they were applied in this study for purposes of preparing a conservative analysis.

Unlike many land use developments projects which function on a regular daily basis, the Proposed Project is a special event that occurs only a few times a year each over a three day period (five days including camping arrivals and departures). Traffic characteristics of the festivals are therefore temporary conditions with highly variable traffic loads, and the higher than normal peak traffic loads on the street system occur for only a few hours during the year. Traffic impacts are temporary, rather than occurring on a day-to-day basis with regular land use development projects.

As is typical for special events, transportation mitigations are thus more appropriately focused on operational measures that would address the short-term and temporary nature of impacts by managing and maximizing the capacity of the existing roadway infrastructure on a temporary basis during events, rather than on physical infrastructure improvements. Such physical improvements would not be necessary on a regular day-to-day basis to handle normal everyday traffic volumes, and would result in roadway infrastructure (widened roadways or new traffic signals) that would be unused and/or surplus to regular needs for most of the year when the special events do not occur, and in some cases, undesired by local residents as inappropriate.



In addition, because the Project would not contribute to a significant cumulative transportation impact, a fair share contribution towards the implementation of such permanent physical infrastructure improvements is not appropriate.

As discussed below, physical infrastructure improvements also generally would not be any more effective at mitigating the temporary impacts of the Project than temporary traffic management and control measures.

Accordingly, in consultation with the City of Indio Traffic Engineer and Community Development Department staff, it has been determined that mitigating the Project's temporary significant transportation impacts through permanent physical improvements would be infeasible based on a combination of social factors, a lack of greater effectiveness than traffic management measures in most cases, and cost relative to the temporary nature of the events.

It was also noted in Chapter V, Section V.3 that, the City of Indio considers LOS D to be the standard during peak hours, except that under certain conditions where LOS D is not reasonable or feasible LOS E is the standard. The criteria of significant impacts used in Chapter V was therefore (a) if the proposed Project caused the level of service to exceed LOS D, or (b) if the level of service without the Project already exceeded LOS D then if the Project caused a change from LOS E to LOS F, or (c) if the proposed Project caused the level of service to exceed LOS E where it was determined that LOS D was unreasonable or infeasible. The City considers the following factors in determining whether operation at LOS D is reasonable and feasible:

- Excessive right of way acquisition to attain LOS D;
- Unreasonable costs to attain LOS D;
- Impacts to other environmental resources to achieve LOS D, such as biological resources or cultural resources (e.g., historic properties); and
- Conflicts with other *City of Indio 2008 General Plan Update* policies, such as provisions for alternative transportation (e.g., public transit, pedestrian facilities and/or bicycle routes) or provisions for neighborhood preservation.

These factors were therefore considered in evaluating mitigation needs and measures.

## **VI.2 Overall Transportation Strategy**

The overall transportation strategy for the Proposed Project is therefore based on the Project's unique characteristics as a temporary special event that does not occur on a regular daily or weekly basis, but that only occurs a few times a year.

The mitigation program therefore focuses on implementing traffic management and operational measures.

The overall transportation strategy has the following key components:

1. Continue and enhance the existing traffic and transportation plans already in place for the existing festivals.
2. Combine these plans into a consolidated Transportation Management Plan for the festivals.
3. Enhance the Transportation Management Plan to address impacts identified in this study.

### **VI.3 Develop and Implement a Transportation Management Plan (TMP)**

The TMP will include all elements of the various traffic and parking plans that were implemented for the 2012 Festivals, including the Traffic Plan, Parking Plan, Shuttle Plan, and Neighborhood Resident Plan, into a consolidated operations management plan. Development and implementation of the Plan will continue to be coordinated between the Festival Operator (Applicant) and the City of Indio Police Department. The TMP measures will address significant impacts identified in this EIR, and also provide for the general management of traffic and pedestrian circulation, parking and localized circulation issues that may occur during the Festivals.

The TMP will be a dynamic plan, which will be refined and adjusted each year as necessary in response to actual traffic and parking conditions. However, due to the general success of the 2012 Plans it is anticipated that there would be no significant changes to the street closures or to the access/egress routes that were in place for the 2012 Festivals.

The TMP will include the following categories at a minimum:

Road Closures

Ingress and Egress Routes

Shuttle Bus and Taxi/Parent Drop-Off & Pick-Up Routes

Parking Supply, Operations and Access/Egress

Camping

Day Parking

Staff Parking

Traffic Signage

Temporary Traffic Control Procedures and Locations

- Temporary traffic lane reassignments (with traffic cones)
- Temporary traffic signal timing
- Deployment of traffic control personnel to direct traffic

Shuttle Operations Plan

Pedestrian Flow and Control Plan

Bicycle Flow and Control Plan

Neighborhood Resident Plan

Many of these categories were already in place for the 2012 Festivals and worked successfully. Key additions going forward will be the Pedestrian Flow and Control Plan and the Bicycle Flow and Control Plan, as well as other enhancements listed below.

Enhancements to the 2012 Plans that shall be included in the first TMP will include the following:

1. Implement Festival Plan Features as identified earlier in this study.

Enlarge and enhance the on-site Shuttle Lot.

Improve traffic control procedures along Hjorth Street between Avenue 50 & Avenue 49.

Enlarge and enhance the Taxi/Pick-Up & Drop-Off Lot, relocate and improve access/egress and on-site circulation.

2. Improve On-Site Transportation Access and Circulation Features

Develop and implement an improved on-site pedestrian control plan – with clear routes and wayfinding for control of pedestrians, to focus on including improved measures for pedestrian controls on roadways immediately adjacent to the festival site.

Use two on-site lanes simultaneously to load Day Parking Lots 14 and 15 at Clinton Street, to facilitate loading of these day parking lots.

3. Improve On-Site Parking Management and Site Access Traffic Control

Enhance staffing coordination and on-site control methods to provide improved and more effective parking access management.

4. Improve Off-Site Directional Signage

Develop improved coordinated off-site directional signage program for incoming vehicles, to better inform patrons of parking locations.

5. Temporary Intersection Configurations & Controls, and Street Closures

a) Implement temporary intersection lane configurations (with traffic cones and/or barricades).

b) Add off-site traffic control personnel.

c) Review existing post-event traffic control procedures at intersection of Monroe Street & Avenue 52, and modify temporary street closures south of the intersection as feasible to minimize impacts on residents of Rancho Santana.

In addition, the following measures shall be considered, as appropriate.

6. Enhance Traffic Control Procedures.

Use by the Cities of Indio and La Quinta of manual signal control devices at traffic signals, rather than flashing red signals and manual traffic direction.

Where manual traffic direction is necessary – all personnel should be encouraged to use reflective vests and light wands to maximize visibility.

Potential installation by the Cities of Indio and La Quinta of temporary traffic signal devices during events.

7. Implement Event Signal Timing Plans, as Necessary

This shall include the potential development and implementation of signal timing plans for post-event periods, for example along northbound Monroe Street to increase northbound green time for vehicles leaving festival site, and at other intersections as may be considered appropriate.

## 8. Meter Outbound Traffic Flows During Camping Loadout on Mondays

This includes metering the flow of camping traffic leaving the site on Monday mornings to reduce peak traffic volumes. This would, however, also increase the length of time it would take to empty the festival site of camping vehicles, so festival traffic would be on the roadways for a longer period of time.

The Transportation Management Plan, and the above measures, would be expected to lead to more efficient traffic circulation and to reduce the significant traffic impacts identified in the earlier analysis. However, because both the festival traffic and the methods that may be used in the TMP (including traffic control personnel), are both very dynamic, it is not possible to quantify the specific results of the TMP. Therefore, while it would provide more effective control of traffic flows and would reduce impacts, it cannot be concluded quantitatively that it would mitigate the impact to LOS D. In order to provide a conservative analysis for CEQA purposes, no quantitative credit for the TMP Plan has been taken in the analysis of mitigations<sup>1</sup>.

## VI.4 Description of Specific Mitigation Measures

This section describes additional specific mitigation measures that will be implemented, and for which quantitative analysis has been provided.

### Temporary Transportation Management and Control Measures

Various measures were identified, including the following:

- temporary lane reassignment at intersections (through traffic cones) to better allocate roadway capacity to peak demand movements
- temporary coning of right turn lanes to provide free right turn movements

These measures would address the peak demand traffic movements that occur during festival conditions. Temporary lane reassignments and temporary modifications to traffic signals would provide the additional temporary capacity for specific heavy turn movements (as are currently provided in some instances for the current festivals). The addition of traffic control personnel (TCP) would typically be necessary to supplement, manage, and enforce these

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<sup>1</sup> With the exception of Item 5.a - Implement Temporary Intersection Lane Configurations (with traffic cones and/or barricades), which is quantified in the following mitigation analysis.

measures and ensure their effectiveness, as well as being an independent measure to improve traffic flow and control.<sup>1</sup>

### Evaluation of Physical Improvement Measures

Physical improvement measures were evaluated at all impacted locations, which included permanent installation of additional turn and/or through traffic lanes – often involving street widenings, and new permanent traffic signals. These measures were generally no more effective than the temporary traffic management measures identified above (and therefore not necessary), and in many cases were determined to be infeasible because they involved extensive infrastructure improvements such as adding lanes and/or widening embankments or bridge structures, resulting in high costs relative to the temporary nature of the impacts and potential additional environmental impacts during construction, and so were not included.

One exception is the proposed widening of Avenue 52 between Monroe Street & Clinton Street. This widening would comprise adding asphalt road surface to provide one additional westbound lane (for a total of two lanes) between Monroe Street & Clinton Street. Relocation of utilities and provision of curb/gutter would not be necessary. This improvement is proposed because not only would it provide a mitigation solution that temporary measures could not achieve (to mitigate the impact at the intersection of Monroe Street & Avenue 52), but in combination with other factors would also substantially reduce the traffic queues that occur on southbound Monroe Street during the festivals (discussed in more detail later below).

### Effects of Mitigation Measures – 99,000 Capacity Coachella Festival

#### *Intersections*

The specific traffic management and control measures proposed to mitigate the significant transportation impacts are shown in Table VI-1, and illustrated in Figure VI-1. If a significant impact was identified at one location in two time periods, the same mitigation measures is proposed for each time period.

The effectiveness of these mitigation measures was analyzed, and the results are shown in Table VI-2, for the eight intersections significantly impacted by the Project.

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<sup>1</sup> Because both the festival traffic, and the methods that may be used by traffic control personnel, are both very dynamic, it is not possible to quantify the specific results of adding traffic control personnel. While the manual control of traffic would provide more effective control of traffic flows, their effect has not been quantified in the mitigation analysis.

Table VI-2a shows the effectiveness of the proposed mitigations for the Friday 3:00 to 4:00 pm hour. Two significant impacts were identified for this time period. As Table VI-2a shows, the recommended mitigation measures would fully mitigate these impacts. (The table also shows the resultant level of service during this time period for intersections where mitigation measures are proposed for other time periods – to ensure that no secondary impacts would be caused).

Table VI-2b shows the effectiveness of the proposed mitigations for the Saturday 2:00 to 3:00 pm hour. Two significant impacts were identified for this time period. As Table VI-2b shows, the recommended mitigation measures would fully mitigate these impacts.

Table VI-2c shows the effectiveness of the proposed mitigations for the Monday 8:00 to 9:00 am hour. Six significant impacts were identified for this time period. As Table VI-2c shows, the recommended mitigation measures would fully mitigate these impacts to LOS D or better at five locations.

At the intersection of Jackson Street & Avenue 50, the proposed measure of adding traffic control personnel would reduce the impact, but again would not necessarily fully mitigate the impact to LOS D.<sup>1</sup> The level of service would be LOS E. No other feasible mitigation measures were identified due to the lack of available right-of-way, since physical improvements would also involve implementing underground drainage improvements at the intersection, and due to the factors identified in Section VI.1 earlier in this chapter that it would involve unreasonable costs to attain LOS D for a temporary special event condition. As there would be no feasible physical mitigation measures available at this intersection, the City of Indio has determined that LOS E is an acceptable standard during temporary festival / special event conditions, according to the conditions listed earlier – i.e., that it would involve unreasonable costs to attain LOS D for a temporary special event condition. This would therefore not constitute a significant impact and no further mitigation would be necessary.

It is concluded from the above analysis, that there would be no remaining temporary unavoidable significant intersection traffic impacts due to the proposed Project<sup>2</sup>.

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<sup>1</sup> Because both the festival traffic, and the methods that may be used by traffic control personnel, are both very dynamic, it is not possible to quantify the specific results of adding traffic control personnel. While the manual control of traffic would provide more effective control of traffic flows and would reduce the impact, it cannot be concluded quantitatively that it would mitigate the impact to LOS D.

<sup>2</sup> The temporary mitigation measures at Madison Street & Avenue 50, and at Madison Street & Avenue 52 would require temporary prohibition of certain turn moves (as identified in Table VI-1) which would result in some traffic being diverted to alternate routes (with adequate advance signage to warn and inform motorists). Generally, the diverted flows would be in the range of 20 to 100 vehicles/hour, and an analysis indicated that no secondary significant traffic impacts would be caused by such diversions as a result of the primary mitigation measure (see Table A.VI-1 and Table A.VI-2 in Appendix A.VI).

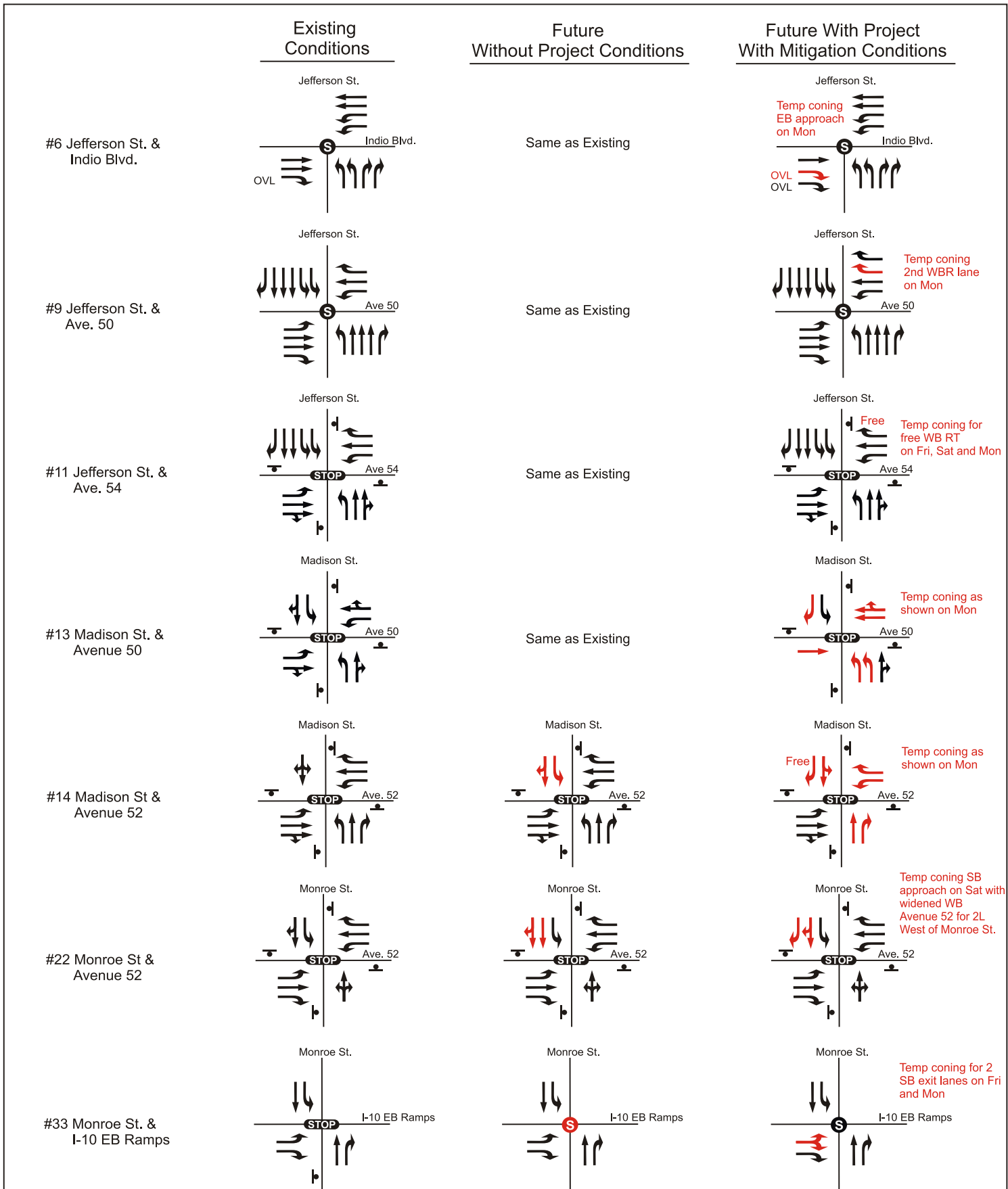
**Table VI-1 Description of Transportation Mitigation Measures  
99,000 Capacity Coachella Festival**

<i>Impact Location</i>	<i>Measure</i>
Friday 3:00 to 4:00 pm	
11. Jefferson Street & Avenue 54 (LQ)	Temporarily cone westbound right turn lane for free right turn. Add traffic control personnel (TCP).
33. I-10 EB Off-Ramp & Monroe Street (I, C)	Temporarily redesignate eastbound off-ramp to one shared left/right lane and one right lane, to allow two lanes for right turns. Temporarily cone the shadowed central roadway area on Monroe Street between EB ramps and south of bridge over flood channel for southbound lane, to provide two southbound lanes to accommodate turns from two right turn lanes. Add traffic control personnel (TCP).
Saturday 2:00 to 3:00 pm	
11. Jefferson Street & Avenue 54 (LQ)	Temporarily cone westbound right turn lane for free right turn. Add traffic control personnel (TCP). (Same measure as for Friday 3:00 to 4:00 pm.)
22. Monroe Street & Avenue 52 (I)	Temporarily cone southbound approach to allow second right turn lane. Add traffic control personnel (TCP). (Also widen Avenue 52 from Monroe Street to Clinton Street to provide two westbound lanes – permanent measure).
Monday 8:00 to 9:00 am	
6. Jefferson Street & Indio Boulevard (I)	Temporarily cone one eastbound through lane to allow a second eastbound right turn lane. Add traffic control personnel (TCP).
9. Jefferson Street & Avenue 50 (LQ)	Temporarily cone westbound approach to provide second westbound right turn lane. Add traffic control personnel (TCP).



<i>Impact Location</i>	<i>Measure</i>
13. Madison Street & Avenue 50 (I)	Temporarily cone northbound approach to provide two left turn lanes. Temporarily cone westbound lanes to provide two through lanes. Temporarily prohibit eastbound left, southbound thru and westbound left – as implemented at times for existing festivals). Add traffic control personnel (TCP).
14. Madison Street & Avenue 52 (LQ)	Temporarily prohibit northbound left and westbound through moves, to allow free southbound right turn. Add traffic control personnel (TCP).
26. Jackson Street & Avenue 50 (I)	Add traffic control personnel (TCP).
33. I-10 EB Off-Ramp & Monroe Street (I, C)	Temporarily redesignate eastbound off-ramp to one shared left/right lane and one right lane, to allow two lanes for right turns. Temporarily cone the shadowed central roadway on Monroe Street between EB ramps and south of bridge over flood channel for southbound lane, to provide two southbound lanes to accommodate turns from two right turn lanes. Add traffic control personnel (TCP). (Same measure as for Friday 3:00 to 4:00 pm.)

See also Figure VI-1



Note: Red indicates change to be implemented

11/20/12

Figure VI-1  
Intersection Configuration Changes for Temporary Traffic Control Mitigations

**Table VI-2a Future With Project Conditions With Mitigation - Intersection Level of Service - Friday 3 - 4 PM**

11/16/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
6	Jefferson St & Indio Blvd	I	Signalized	24.8	C	31.2	C	6.4	No				
9	Jefferson St & Ave 50	LQ	Signalized	33.7	C	33.9	C	0.2	No				
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.3	B	79.6	F	65.3	Yes	21.6	C	7.3	No
13	Madison St & Ave 50	I	4-Way Stop	64.9	F	15.5	C	-49.4	No				
14	Madison St & Ave 52	LQ	4-Way Stop	16.8	C	27.6	D	10.8	No				
22	Monroe St & Ave 52	I	4-Way Stop	12.9	B	23.7	C	10.8	No				
26	Jackson St & Ave 50	I	4-Way Stop	53.1	F	63.2	F	10.1	No				
33	I-10 EB Ramps & Monroe St	C	Signalized	27.9	C	71.4	E	43.5	Yes	29.8	C	1.9	No

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

**Table VI-2b Future With Project Conditions With Mitigation - Intersection Level of Service - Saturday 2 - 3 PM**

11/16/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Saturday 2-3 PM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
6	Jefferson St & Indio Blvd	I	Signalized	18.4	B	19.8	B	1.4	No				
9	Jefferson St & Ave 50	LQ	Signalized	32.5	C	32.7	C	0.2	No				
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.1	B	39.1	E	25.0	Yes	16.9	C	2.8	No
13	Madison St & Ave 50	I	4-Way Stop	22.6	C	17.2	C	-5.4	No				
14	Madison St & Ave 52	LQ	4-Way Stop	12.4	B	19.3	C	6.9	No				
22	Monroe St & Ave 52	I	4-Way Stop	10.1	B	161.3	F	151.2	Yes	24.7	C	14.6	No
26	Jackson St & Ave 50	I	4-Way Stop	18.0	C	26.5	D	8.5	No				
33	I-10 EB Ramps & Monroe St	C	Signalized	17.4	B	30.4	C	13.0	No				

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

**Table VI-2c Future With Project Conditions With Mitigation - Intersection Level of Service - Monday 8 - 9 AM**

11/16/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
6	Jefferson St & Indio Blvd	I	Signalized	20.0	C	62.6	E	42.6	Yes	37.5	D	17.5	No
9	Jefferson St & Ave 50	LQ	Signalized	31.4	C	89.3	F	57.9	Yes	37.7	D	6.3	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	10.8	B	22.4	C	11.6	No				
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	118.3	F	105.9	Yes	26.8	D	14.4	No
14	Madison St & Ave 52	LQ	4-Way Stop	11.5	B	133.4	F	121.9	Yes	13.1	B	1.6	No
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	16.3	C	5.8	No				
26	Jackson St & Ave 50	I	4-Way Stop	12.7	B	36.2	E	23.5	Yes	36.2	E	23.5	No <sup>1</sup>
33	I-10 EB Ramps & Monroe St	C	Signalized	17.4	B	60.9	E	43.5	Yes	38.4	D	21.0	No

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

1. No reasonable/feasible mitigation, so LOS E accepted by City of Indio under temporary event conditions.

The temporary measures at Jefferson Street & Avenue 54, Jefferson Street & Avenue 50, and at Madison Street & Avenue 52 would require the concurrence of the City of La Quinta. If this were not forthcoming, and if alternate equally effective measures were not agreed upon between the City of La Quinta and Indio, then unavoidable significant impacts would remain at these three locations.

The temporary measures at the I-10 EB off-ramp & Monroe Street would require the concurrence of Caltrans. If this were not forthcoming, and if an alternative equally effective measure were not agreed upon between the City of Indio and Caltrans, then an unavoidable significant impact would remain at this location.

### *Traffic Queues*

The analysis identified that potentially significant impacts could occur to residents who live in locations where alternate routes are not available.

These include along Monroe Street between Avenue 48 & Avenue 52, including the La Quinta Ridge Mobile Home Park with driveway on Monroe Street just north of Avenue 52, and along Avenue 50 between Monroe Street & Madison Street. While the increases in inconvenience from traffic queues compared to the 2012 Festival is expected to be nominal — as demonstrated in the evaluation described above — they would be potentially significant with the proposed Project compared to the Future Without Project Conditions. It should be noted that the Festival Operators and the City of Indio provide advance notice and information on streets likely to be affected by the festival so that residents can plan ahead to minimize impacts.

Due to the locations of these residences, there are no feasible mitigations to eliminate these impacts. The proposed mitigation is that the Festival Applicant will continue to work with these residents to minimize these impacts through design and implementation of effective TMP measures such as advance information, traffic control officers, and allowing residents to access/egress their homes with minimal inconvenience. These measures would reduce the impacts but may not fully mitigate them, so these impacts would remain as temporary unavoidable significant impacts.

The principle traffic queues during the festival occur during the inbound period on Friday, Saturday and Sunday as day patrons access the day parking lots. These queues generally occur on westbound Avenue 52 from Clinton Street to Monroe Street, and on southbound Monroe Street from Avenue 52 north to as far as Dr. Carreon Boulevard at peak times. The improvement project to be implemented by the City of Indio by 2014, which will widen Monroe Street from two through lanes to four through lanes between Avenue 49 and Avenue 52, will provide increased roadway capacity and will result in shorter queues. The Applicant's commitment to improving access to day parking lots off of Avenue 52 by loading these lots with two inbound lanes on Clinton Street simultaneously would also help shorten

these queues. The proposed mitigation measure (see above) of widening westbound Avenue 52 between Monroe Street & Clinton Street would provide for a second westbound lane. This would enable full advantage to be taken of both the City's widening of Monroe Street and the Applicant's improved loading of the parking lots at Clinton Street – by providing two southbound lanes for inbound traffic all the way on Monroe Street from north of Highway 111 down to Avenue 52, west on Avenue 52, and into the Project site at Clinton Street (compared to the single lane today south of Avenue 49). This would greatly reduce the queue lengths, at the times during which the queues occurred, particularly on Monroe Street where it is estimated that the maximum queue length would typically not extend further north than Avenue 50.

There are a number of locations where residential developments have only one point of access. Residents accessing these developments could at times be temporarily substantially inconvenienced by festival traffic queues, so in these cases the impacts of the festival traffic queues would be potentially significant. These include The La Quinta Polo Estates, with driveway on Avenue 50 west of Madison Street, and La Cantera with driveway on Avenue 52 between Madison Street and Jefferson Street. The analysis also identified that residents of the La Quinta Polo Estates south of the Coachella Canal could be significantly impacted by traffic queues.

Due to the locations of these residential areas, there are no feasible mitigations to eliminate these impacts. The proposed mitigation is that the Festival Applicant will continue to work with these residents to minimize these impacts through design and implementation of effective TMP measures such as advance information, traffic control officers, and allowing residents to access/egress their homes with minimal inconvenience. These measures would reduce the impacts but may not fully mitigate them, so these impacts would remain as temporary unavoidable significant impacts.

#### Effect of Mitigation Measures – 75,000 Capacity Stagecoach Festival

##### *Intersections*

The same analysis of potential mitigation measures as described above for the Coachella 99,000 capacity festival impacts was conducted for the 75,000 Stagecoach festival impacts. The specific traffic management and control measures proposed to mitigate the significant transportation impacts for the 75,000 Capacity Stagecoach Festival are shown in Table VI-3 and in Figure VI-2. If a significant impact was identified at one location in two time periods, the same mitigation measure is proposed for each time period.

The effectiveness of these mitigation measures was analyzed, and the results are shown in Table VI-4, for the five intersections significantly impacted by the Project.

Table VI-4a shows the effectiveness of the proposed mitigations for the Friday 3:00 to 4:00 pm hour. Three significant impacts were identified for this time period. As Table VI-4a shows, the recommended mitigation measures would fully mitigate two of these impacts – at the intersections of Jefferson Street & Avenue 54 and Monroe Street & Avenue 52. At the intersection of the I-10 Eastbound Ramps & Monroe Street, the mitigation measure would reduce the impact (and improve the level of service to LOS E), but would not fully mitigate the impact to LOS D.

No other feasible mitigation measures were identified due to the fact that physical improvements would involve substantial earthworks and additional structures, and due to the factors identified in Section VI.1 earlier in this chapter that it would involve unreasonable costs to attain LOS D for a temporary special event condition. As there would be no feasible physical mitigation measures available at this intersection, the City of Indio has determined that LOS E is an acceptable standard during temporary festival / special event conditions, according to the conditions listed earlier – i.e., that it would involve unreasonable costs to attain LOS D for a temporary special event condition. This would therefore not constitute a significant impact and no further mitigation would be necessary.

There would thus be no remaining unavoidable significant impacts during this time period.

There were no significant impacts identified for the Saturday 2:00 to 3:00 pm hour, so no mitigation measures are necessary, as shown in Table VI-4b.

Table VI-4c shows the effectiveness of the proposed mitigations for the Monday 8:00 to 9:00 am hour. Two significant impacts were identified for this time period. As Table VI-4c shows, the recommended mitigation measures would fully mitigate one of these impacts (at Madison Street & Avenue 50) to LOS D or better. At the intersection of Jackson Street & Avenue 50, the proposed measure of adding traffic control personnel<sup>1</sup> would reduce the impact, but again would not necessarily fully mitigate the impact to LOS D.<sup>2</sup> (See earlier discussion in this chapter for the 99,000 capacity Coachella Festival). The level of service would be LOS E. As there would be no feasible physical mitigation measures available at this intersection, the City of Indio has determined that LOS E is an acceptable standard during temporary festival / special event conditions, according to the conditions listed earlier – i.e., that it would involve unreasonable costs to attain LOS D for a temporary special event condition. This would therefore not constitute a significant impact and no further mitigation would be necessary.

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<sup>1</sup> No other feasible mitigation measures were identified due either to the lack of available right-of-way or the factors identified in Section VI.1 earlier in this chapter.

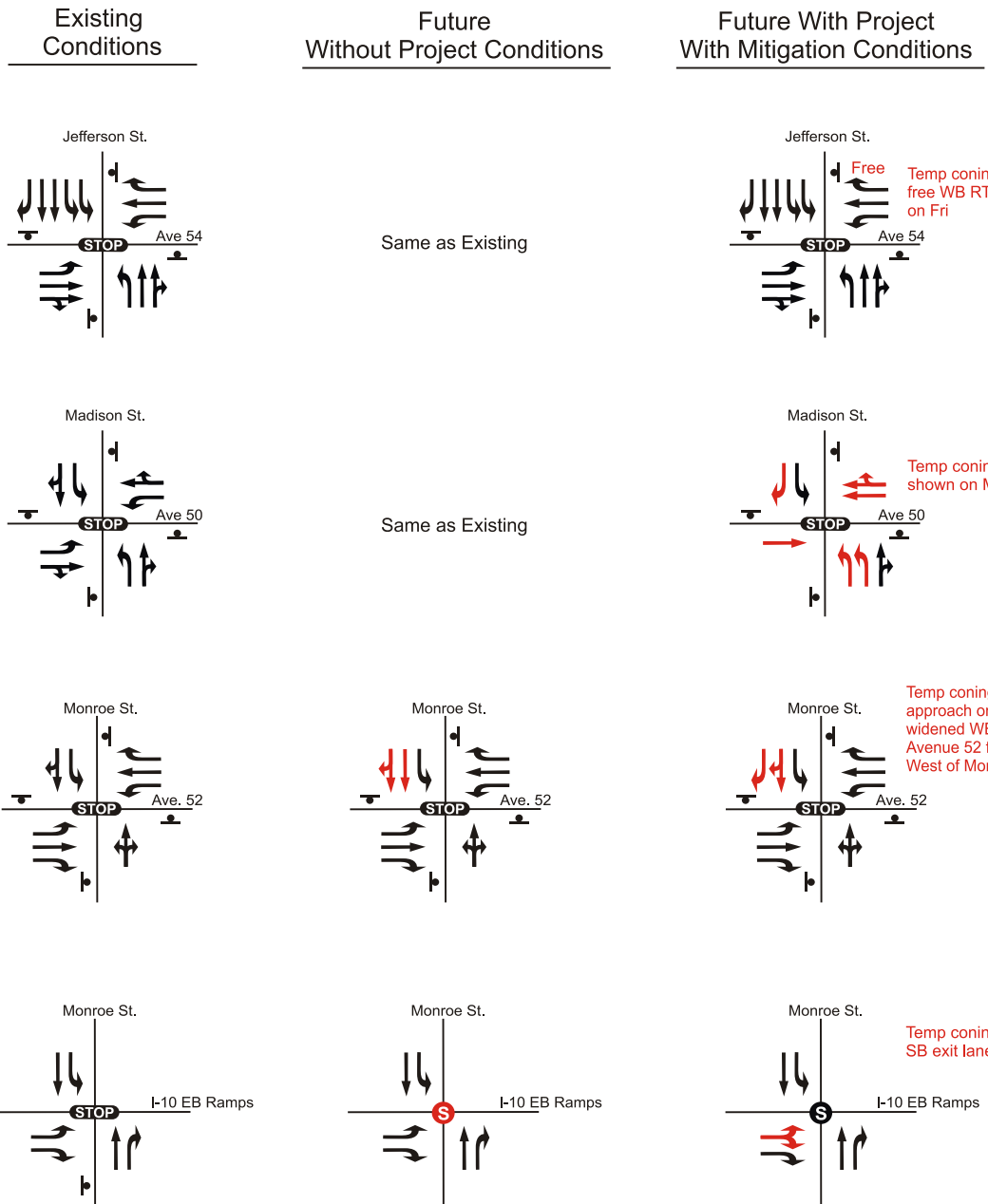
<sup>2</sup> Because both the festival traffic, and the methods that may be used by traffic control personnel, are both very dynamic, it is not possible to quantify the specific results of adding traffic control personnel. While the manual control of traffic would provide more effective control of traffic flows and would reduce the impact, it cannot be concluded quantitatively that it would mitigate the impact to LOS D.



**Table VI-3 Description of Transportation Mitigation Measures  
75,000 Capacity Stagecoach Festival**

<i>Impact Location</i>	<i>Measure</i>
Friday 3:00 to 4:00 pm	
11. Jefferson Street & Avenue 54 (LQ)	Temporarily cone westbound right turn lane for free right turn. Add traffic control personnel (TCP).
22. Monroe Street & Avenue 52 (I)	Temporarily cone southbound approach to allow second right turn lane. Add traffic control personnel (TCP). (Also widen Avenue 52 from Monroe Street to Clinton Street to provide two westbound lanes – permanent measure).
33. I-10 EB Off-Ramp & Monroe Street (I, C)	Temporarily redesignate eastbound off-ramp to one shared left/right lane and one right lane, to allow two lanes for right turns. Temporarily cone the shadowed central roadway on Monroe Street between EB ramps and south of bridge over flood channel for southbound lane, to provide two southbound lanes to accommodate turns from two right turn lanes. Add traffic control personnel (TCP).
Monday 8:00 to 9:00 am	
13. Madison Street & Avenue 50 (I)	Temporarily cone northbound approach to provide two left turn lanes. Temporarily cone westbound lanes to provide two through lanes. Temporarily prohibit eastbound left, southbound thru and westbound left – as implemented at times for existing festivals). Add traffic control personnel (TCP).
26. Jackson Street & Avenue 50 (I)	Add traffic control personnel (TCP).

Note: All measures same as for Coachella 99,000 Capacity Festival (see Table VI-1).



Note: Red indicates change to be implemented

11/21/12

Figure VI-2  
 Intersection Configuration Changes for Temporary Traffic Control Mitigations for 75,000 Capacity Stagecoach Festival

**Table VI-4a Future With Project Conditions With Mitigation - Intersection Level of Service - 75,000 Capacity Festival - Friday 3 - 4 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	Friday 3-4 PM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.3	B	52.6	F	38.3	Yes	19.2	C	4.9	No
13	Madison St & Ave 50	I	4-Way Stop	64.9	F	12.0	B	-52.9	No				
22	Monroe St & Ave 52	I	4-Way Stop	12.9	B	157.0	F	144.1	Yes	31.1	D	18.2	No
26	Jackson St & Ave 50	I	4-Way Stop	53.1	F	62.2	F	9.1	No				
33	I-10 EB Ramps & Monroe St	C	Signalized	27.9	C	136.1	F	108.2	Yes	56.9	E	29.0	No <sup>1</sup>

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

1. No reasonable/feasible mitigation to LOS D, so LOS E accepted by City of Indio under temporary event conditions.

**Table VI-4b Future With Project Conditions With Mitigation - Intersection Level of Service - 75,000 Capacity Festival - Saturday 2 - 3 PM**

No.	Intersection	Jurisdiction	Type of Traffic Control	Saturday 2-3 PM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
11	Jefferson St & Ave 54	LQ	4-Way Stop	14.1	B	19.6	C	5.5	No				
13	Madison St & Ave 50	I	4-Way Stop	22.6	C	12.2	B	-10.4	No				
22	Monroe St & Ave 52	I	4-Way Stop	10.1	B	14.8	B	4.7	No				
26	Jackson St & Ave 50	I	4-Way Stop	18.0	C	17.4	C	-0.6	No				
33	I-10 EB Ramps & Monroe St	C	Signalized	17.4	B	41.8	D	24.4	No				

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

**Table VI-4C Future With Project Conditions With Mitigation - Intersection Level of Service - 75,000 Capacity Festival - Monday 8 - 9 AM**

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
11	Jefferson St & Ave 54	LQ	4-Way Stop	10.8	B	14.7	B	3.9	No				
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	51.5	F	39.1	Yes	17.8	C	5.4	No
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	10.6	B	0.1	No				
26	Jackson St & Ave 50	I	4-Way Stop	12.7	B	40.2	E	27.5	Yes	40.2	E	27.5	No <sup>1</sup>
33	I-10 EB Ramps & Monroe St	C	Signalized	17.4	B	40.7	D	23.3	No				

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

1. No reasonable/feasible mitigation, so LOS E accepted by City of Indio under temporary event conditions.

There would therefore be no remaining significant impacts after mitigation during this time period<sup>1</sup>.

The temporary measure at Jefferson Street & Avenue 54 would require the concurrence of the City of La Quinta. If this were not forthcoming, and if alternate equally effective measures were not agreed upon between the City of La Quinta and Indio, then unavoidable significant impacts would remain at this one location.

The temporary measure at the I-10 EB off-ramp & Monroe Street would require the concurrence of Caltrans. If this were not forthcoming, and if an alternative equally effective measure were not agreed upon between the City of Indio and Caltrans, then an unavoidable significant impact would remain at this location.

### *Traffic Queues*

The analysis in Chapter V (Section V.4) identified that potential traffic queue impacts would be similar to or somewhat less than analyzed for the 99,000 capacity Coachella Festival, so the mitigation analysis described earlier in this chapter would also apply to the 75,000 capacity Stagecoach Festival. The earlier analysis did identify an exception that during Stagecoach the inbound queues on Monroe Street could extend at certain times to Highway 111, and that access/egress to/from properties along Monroe Street between Avenue 48 and Highway 111 could be temporarily impacted for short periods of time. The mitigation measures, discussed earlier, of adding one westbound lane to Avenue 52 between Monroe Street & Clinton Street would be similarly beneficial to reducing traffic queues during the Stagecoach Festival as during the Coachella Festival, and it is estimated that the maximum queue length would typically not extend further north than Avenue 49.

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<sup>1</sup> The temporary mitigation measure at Madison Street & Avenue 50 would require temporary prohibition of certain turn moves (as identified in Table VI-1) which would result in some traffic being diverted to alternate routes (with adequate advance signage to warn and inform motorists). Generally the diverted flows would be in the range of 50 to 150 vehicles/hour, and an analysis indicated that no secondary significant traffic impacts would be caused by such diversions as a result of the primary mitigation measure (see Table A.VI-2 in Appendix A.VI).

**Appendix A.II**

**Supporting Information  
Chapter II – Existing Conditions**

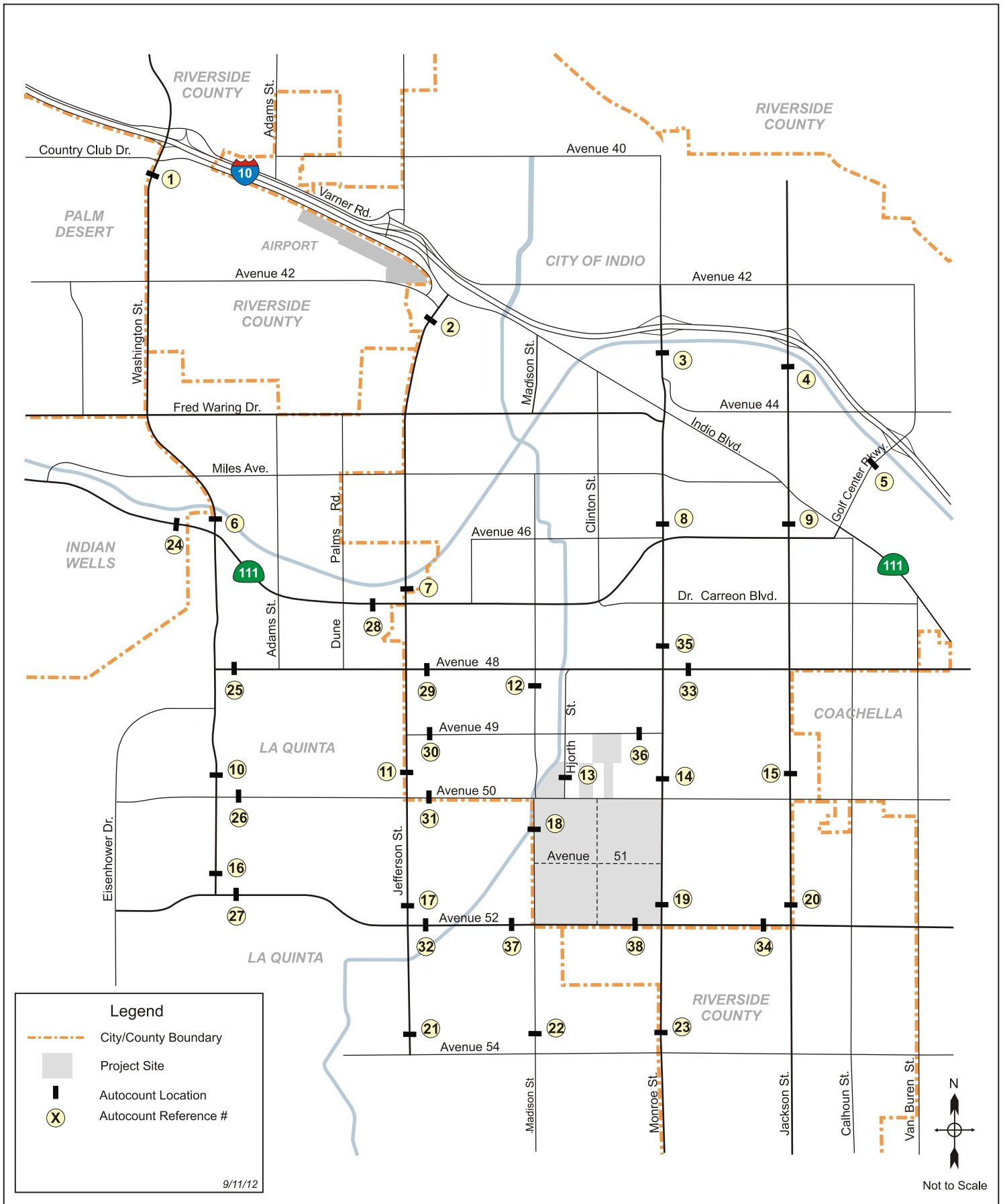


Figure A.II-1  
Roadway Segment Count Locations



**Table A.II-1 Intersection Jurisdiction and Traffic Control**

Intersection	City Location (by Intersection Quadrant)					Traffic Control			
	City of Indio	City of La Quinta	City of Palm Desert	City of Indian Wells	City of Coachella	County of Riverside	Caltrans	Type of Traffic Control	City with Controlling Jurisdiction
1. Washington St & Country Club			NW, SW			NE, SE		Signalized	PD
2. Washington St & Highway 111		ALL						Signalized	LQ
3. Washington St & Ave 48		ALL						Signalized	LQ
4. Washington St & Ave 50		ALL						Signalized	LQ
5. Washington St & Ave 52		ALL						Signalized	LQ
6. Jefferson St & Indio Blvd	ALL							Signalized	I
7. Jefferson St & Highway 111	NE, SE, SW	NW						Signalized	LQ
8. Jefferson St & Ave 48	NE, SE	NW, SW						Signalized	LQ
9. Jefferson St & Ave 50	NE	NW, SE, SW						Signalized	LQ
10. Jefferson St & Ave 52		ALL						Roundabout	LQ
11. Jefferson St & Ave 54		ALL						Unsignalized	LQ
12. Madison St & Ave 48	ALL							Signalized	I
13. Madison St & Ave 50	NW, NE, SE	SW						Unsignalized	I
14. Madison St & Ave 52	NE	NW, SE, SW						Unsignalized	LQ
15. Madison St & Ave 54		ALL						Unsignalized	LQ
16. Hjorth St & Ave 48	ALL							Signalized	I
17. Monroe St & Fred Waring Dr	ALL							Signalized	I
18. Monroe St & Highway 111	ALL							Signalized	I
19. Monroe St & Ave 48	ALL							Signalized	I
20. Monroe St & Ave 49	ALL							Unsignalized	I
21. Monroe St & Ave 50	ALL							Signalized	I
22. Monroe St & Ave 52	NE, NW	SW				SE		Unsignalized	I
23. Monroe St & Ave 54		NW, SW				NE, SE		Unsignalized	LQ
24. Jackson St & Highway 111	ALL							Signalized	I
25. Jackson St & Ave 48	NE, NW, SW				SE			Signalized	I
26. Jackson St & Ave 50	NE, NW, SW					SE		Unsignalized	I
27. Jackson St & Ave 52	NW					NE, SE, SW		Unsignalized	CoR
28. Jackson St & Ave 54						ALL		Unsignalized	CoR
29. Washington St & I-10 EB							ALL	Signalized	CAL
30. I-10 WB Ramps & Vamer Rd							ALL	Signalized	CAL
31. Indio Blvd & I-10 EB Ramps							ALL	Unsignalized	CAL
32. Jefferson St & I-10 WB Ramps							ALL	Unsignalized	CAL
33. Monroe St & I-10 EB Ramps							ALL	Unsignalized	CAL
34. Monroe St & I-10 WB Ramps							ALL	Unsignalized	CAL
35. Jackson St & I-10 EB Ramps							ALL	Signalized	CAL

**Table A.II-1 Intersection Jurisdiction and Traffic Control**

Intersection	City Location (by Intersection Quadrant)						Traffic Control		
	City of Indio	City of La Quinta	City of Palm Desert	City of Indian Wells	City of Coachella	County of Riverside	Caltrans	Type of Traffic Control	City with Controlling Jurisdiction
36. Jackson Rd & I-10 WB Ramps							ALL	Signalized	CAL
37. Golf Center Pkwy & I-10 EB							ALL	Signalized	CAL
38. Golf Center Pkwy & I-10 WB							ALL	Signalized	CAL
39. Washington St & Fred Waring		NE, SE	NW	SW				Signalized	LQ
40. Jefferson St & Fred Waring Dr	NE, SE	NW, SW						Signalized	I
41. Jefferson St & Avenue 49	NE, SE	NW, SW						Signalized	LQ

**Note:**

Denotes agency assigned jurisdiction for intersection analysis.

- NE - North East Quadrant
- NW - North West Quadrant
- SE - South East Quadrant
- SW - South West Quadrant

- I - City of Indio
- LQ - City of La Quinta
- PD - City of Palm Desert
- CoR - County of Riverside
- CAL - Caltrans

No. of Intersections by	
<u>Traffic Signal Jurisdiction:</u>	<u>Single Jurisdiction</u>
City of Indio	14
City of La Quinta	14
City of Palm Desert	1
City of Indian Wells	0
City of Coachella	0
County of Riverside	2
Caltrans	10
Total	41

**Appendix A.IV**

**Supporting Information**  
**Chapter IV – Future Without Project Conditions**

**Table A.IV-1 Future Without Project - Intersection Approach Annual Growth Estimation**

X - From City of Indio GP

X - From La Quinta GP

No.	Intersection	Existing ADT				Future ADT				# of Years				Annual Growth %			
		NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
1	Washington St & Country Club Dr.	24,000	26,000	16,000	10,000	59,000	54,000	58,000	44,000	43	43	43	43	2.1%	1.7%	3.0%	3.5%
2	Washington St & HWY-111	36,700	23,000	34,000	29,700	58,000	58,000	81,000	53,500	25	43	43	25	1.8%	2.2%	2.0%	2.4%
3	Washington St & Ave 48	33,500	36,700	N/A	12,900	58,300	58,000	0	16,900	25	25	25	25	2.2%	1.8%	0.0%	1.1%
4	Washington St & Ave 50	23,400	27,100	12,000	9,700	36,200	41,400	24,000	16,100	25	25	43	25	1.8%	1.7%	1.6%	2.0%
5	Washington St & Ave 52	1,430	23,400	16,100	13,500	1,430	36,200	16,100	31,800	23	25	25	25	0.0%	1.8%	0.0%	3.5%
6	Jefferson St & Indio Blvd	27,000	N/A	36,000	28,000	60,000	N/A	79,000	55,000	43	43	43	43	1.9%	0.0%	1.8%	1.6%
7	Jefferson St & HWY-111	27,000	27,100	38,000	34,000	64,000	48,100	50,700	75,000	43	25	25	43	2.0%	2.3%	1.2%	1.9%
8	Jefferson St & Ave 48	28,000	25,000	18,400	11,000	77,000	62,000	32,800	23,000	43	43	25	43	2.4%	2.1%	2.3%	1.7%
9	Jefferson St & Ave 50	16,200	22,000	9,700	1,000	35,100	70,000	16,100	24,000	25	43	25	43	3.1%	2.7%	2.0%	7.7%
10	Jefferson St & Ave 52	12,400	16,200	13,500	10,300	31,500	35,100	31,800	28,900	25	25	25	25	3.8%	3.1%	3.5%	4.2%
11	Jefferson St & Ave 54	7,420	12,400	490	8,400	7,420	31,500	490	29,400	23	25	23	25	0.0%	3.8%	0.0%	5.1%
12	Madison St & Ave 48	1,000	2,000	13,000	13,000	43,000	29,000	26,000	24,000	43	43	43	43	9.1%	6.4%	1.6%	1.4%
13	Madison St & Ave 50	2,000	1,350	1,000	3,000	31,000	42,000	22,000	16,000	43	38	43	43	6.6%	9.5%	7.5%	4.0%
14	Madison St & Ave 52	3,000	5,700	10,300	9,000	30,000	34,200	28,900	33,000	43	25	25	43	5.5%	7.4%	4.2%	3.1%
15	Madison St & Ave 54	9,200	3,550	8,400	5,570	47,500	47,500	29,400	29,400	25	23	25	23	6.8%	11.9%	5.1%	7.5%
16	Hjorth St & Ave 48	6,940	N/A	13,000	13,000	10,129	N/A	23,000	23,000	38	43	43	43	1.0%	0.0%	1.3%	1.3%
17	Monroe St & Fred Waring Dr.	15,000	18,000	24,000	4,710	37,000	39,000	42,000	7,694	43	43	43	38	2.1%	1.8%	1.3%	1.3%
18	Monroe St & HWY-111	7,000	16,000	21,000	16,000	25,000	30,000	46,000	54,000	43	43	43	43	3.0%	1.5%	1.8%	2.9%
19	Monroe St & Ave 48	3,000	7,000	13,000	15,000	31,000	28,000	23,000	24,000	43	43	43	43	5.6%	3.3%	1.3%	1.1%
20	Monroe St & Ave 49	4,000	4,000	1,000	N/A	35,000	31,000	9,000	N/A	43	43	43	43	5.2%	4.9%	5.2%	0.0%
21	Monroe St & Ave 50	2,000	4,000	3,000	2,000	31,000	34,000	16,000	20,000	43	43	43	43	6.6%	5.1%	4.0%	5.5%
22	Monroe St & Ave 52	2,000	2,000	9,000	10,000	36,000	29,000	32,000	30,000	43	43	43	43	7.0%	6.4%	3.0%	2.6%
23	Monroe St & Ave 54	2,500	3,100	8,400	8,400	34,400	32,700	29,400	29,400	25	25	25	25	11.1%	9.9%	5.1%	5.1%
24	Jackson St & HWY-111	11,000	25,000	18,000	23,000	24,000	45,000	47,000	26,000	43	43	43	43	1.8%	1.4%	2.3%	0.3%
25	Jackson St & Ave 48	4,000	5,000	12,000	14,000	32,000	22,000	42,000	33,000	43	43	43	43	5.0%	3.5%	3.0%	2.0%
26	Jackson St & Ave 50	3,000	2,000	3,000	2,000	28,000	31,000	21,000	23,000	43	43	43	43	5.3%	6.6%	4.6%	5.8%
27	Jackson St & Ave 52	2,000	2,000	9,000	9,000	29,000	27,000	31,000	29,000	43	43	43	43	6.4%	6.2%	2.9%	2.8%
28	Jackson St & Ave 54	3,300	3,300	4,180	3,420	28,500	28,500	14,290	11,213	25	25	43	43	9.0%	9.0%	2.9%	2.8%
29	I-10 EB Ramps & Washington St	25,000	26,000	11,000	5,000	57,000	54,000	24,000	16,000	43	43	43	43	1.9%	1.7%	1.8%	2.7%
30	I-10 WB Ramps & Varner Rd	1,000	300	18,000	11,000	5,000	1,800	28,000	33,000	43	28	28	43	3.8%	6.6%	1.6%	2.6%
31	I-10 EB Ramps & Jefferson St	0	9,000	12,000	17,000	0	32,000	27,000	79,000	43	43	43	43	0.0%	3.0%	1.9%	3.6%
32	I-10 WB Ramps & Jefferson St	9,000	9,000	2,000	1,000	32,000	32,000	26,000	5,000	43	43	43	43	3.0%	3.0%	6.1%	3.8%
33	I-10 EB Ramps & Monroe St	17,000	12,500	5,000	1,000	41,000	39,500	15,000	5,000	43	43	43	43	2.1%	2.7%	2.6%	3.8%

**Table A.IV-1 Future Without Project - Intersection Approach Annual Growth Estimation**

X - From City of Indio GP

X - From La Quinta GP

No.	Intersection	Existing ADT				Future ADT				# of Years				Annual Growth %			
		NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach	NB Approach	SB Approach	EB Approach	WB Approach
34	I-10 WB Ramps & Monroe St	12,500	7,900	3,000	1,000	39,500	38,000	18,000	11,000	43	43	43	43	2.7%	3.7%	4.3%	5.7%
35	I-10 EB Ramps & Jackson St	17,000	11,500	8,000	1,000	42,000	52,000	11,000	20,000	43	43	43	43	2.1%	3.6%	0.7%	7.2%
36	I-10 WB Ramps & Jackson Rd	11,500	6,000	5,000	1,000	52,000	62,000	14,000	18,000	43	43	43	43	3.6%	5.6%	2.4%	7.0%
37	I-10 EB Ramps & Glof Center Pkwy	22,000	12,000	30,000	36,000	57,000	33,000	142,000	157,000	43	43	43	43	2.2%	2.4%	3.7%	3.5%
38	I-10 WB Ramps & Glof Center Pkwy	12,000	2,000	27,000	35,000	33,000	9,000	133,000	154,000	43	43	43	43	2.4%	3.6%	3.8%	3.5%
39	Washington St & Fred Waring Dr	40,600	37,400	41,000	24,500	64,200	58,200	83,000	52,900	25	25	43	25	1.8%	1.8%	1.7%	3.1%
40	Jefferson St & Fred Waring Dr	29,000	27,000	24,500	29,000	58,000	58,000	52,900	53,000	43	43	25	43	1.6%	1.8%	3.1%	1.4%
41	Jefferson St & Ave 49	22,000	22,000	770	1,000	70,000	77,000	770	10,000	43	43	38	43	2.7%	3.0%	0.0%	5.5%

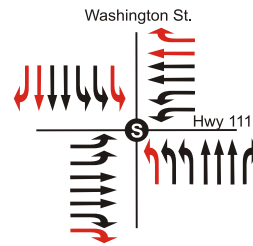
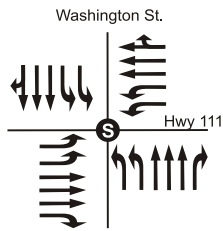
**Surface Street Summary**

	Total Average Growth	4.0%	4.0%	2.6%	3.0%
	City of Indio Average Growth	4.0%	3.6%	2.6%	2.7%
	City of La Quinta Growth	4.0%	5.0%	2.4%	3.8%
	Washington Corridor Average Growth	1.6%	1.8%		
	Jefferson Corridor Average Growth	2.2%	2.4%		
	Madison Corridor Average Growth	7.0%	8.8%		
	Monroe Corridor Average Growth	5.8%	4.7%		
	Jackson Corridor Average Growth	5.5%	5.3%		
	Fred Waring Average Growth			2.0%	1.9%
	HWY-111 Average Growth			1.8%	1.8%
	Ave 48 Average Growth			1.6%	1.5%
	Ave 50 Average Growth			3.9%	5.0%
	Ave 52 Average Growth			2.7%	3.2%
	Ave 54 Average Growth			3.3%	5.1%

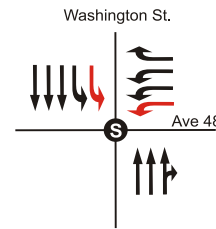
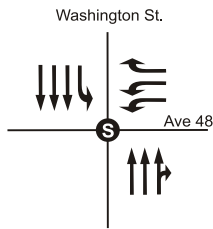
Existing Conditions

Future Without Project Conditions

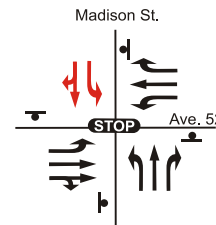
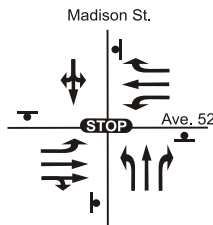
#2 Washington St. & Highway 111



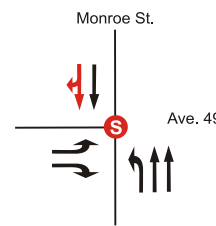
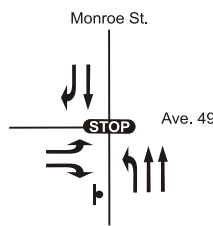
#3 Washington St. & Avenue 48



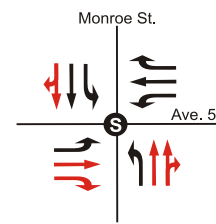
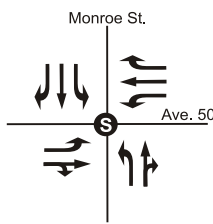
#14 Madison St & Avenue 52



#20 Monroe St & Avenue 49



#21 Monroe St & Avenue 50



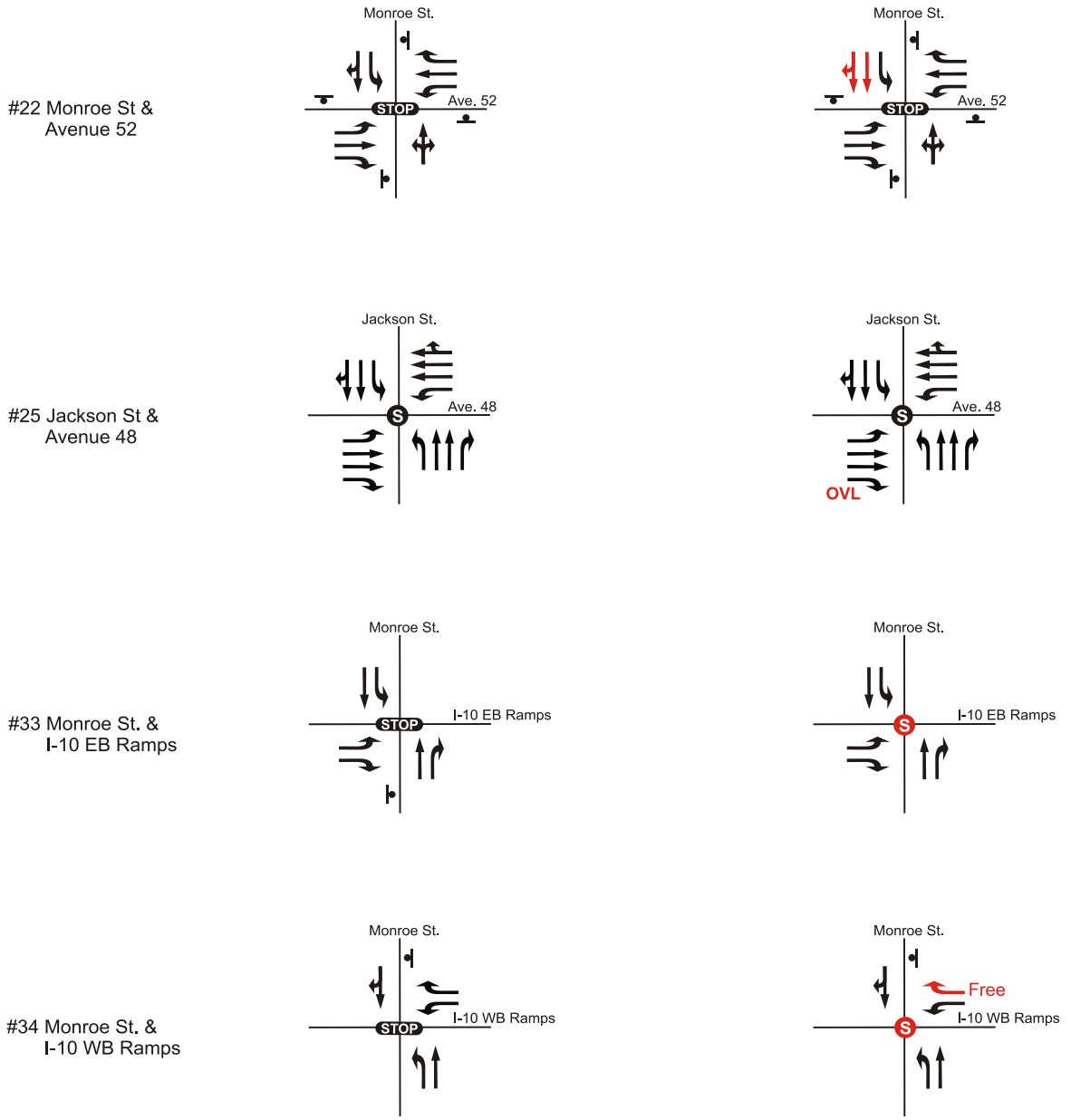
Note: Red indicates change to be implemented

10/29/12

Figure A.IV-1  
Intersection Configuration Changes from 2012 to 2014

Existing Conditions

Future Without Project Conditions



Note: Red indicates change to be implemented

10/29/12

Figure A.IV-1 cont.  
Intersection Configuration Changes from 2012 to 2014

**Appendix A.V**

**Supporting Information**  
**Chapter V – Future With Project Conditions**



**Table A.V.4-1 Jefferson Street Traffic Volumes  
Comparison of Coachella & Stagecoach  
Monday 8:00 – 9:00 am Hour  
PCE Adjusted Volumes**

Segment	Traffic Volume During Coachella Festival Northbound	Traffic Volume During Stagecoach Festival Northbound
Indio Boulevard to Fred Waring Drive	1,396	1,375
Fred Waring Drive to Highway 111	1,762	1,604
Highway 111 to Avenue 48	1,980	1,566
Avenue 48 to Avenue 49	2,045	1,760
Avenue 49 to Avenue 50	1,920	1,586
Avenue 50 to Avenue 52	1,303	1,027
Avenue 52 to Avenue 54	699	561

**Appendix A.VI**

**Supporting Information  
Chapter VI – Mitigation Measures**

**Table A.VI-1 Future With Project With Mitigation Conditions - Intersection Level of Service**

11/27/2012

**Secondary Impact Analysis for Mitigation at Madison & Ave 50 and Madison & Ave 52 (Monday 8-9 AM)**

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions <sup>1</sup>		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
10	Jefferson St & Ave 52	LQ	Roundabout	2.0	A	2.3	A	0.3	No	2.5	A	0.5	No
11	Jefferson St & Ave 54	LQ	4-Way Stop	10.8	B	22.4	C	11.6	No	15.1	C	4.3	No <sup>2</sup>
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	118.3	F	105.9	Yes	26.8	D	14.4	No
14	Madison St & Ave 52	LQ	4-Way Stop	11.5	B	133.4	F	121.9	Yes	13.1	B	1.6	No
15	Madison St & Ave 54	LQ	4-Way Stop	10.5	B	12.5	B	2.0	No	14.7	B	4.2	No
21	Monroe St & Ave 50	I	Signalized	14.8	B	15.5	B	0.7	No	15.7	B	0.9	No
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	16.3	C	5.8	No	17.4	C	6.9	No
23	Monroe St & Ave 54	LQ	4-Way Stop	8.9	A	10.1	B	1.2	No	10.5	B	1.6	No

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

1. Includes all mitigation measures in Table VI-1.

2. Mitigation measure in Table VI-1 also applied for Monday 8-9 AM to mitigate secondary impact.

**Table A.VI-2 Future With Project With Mitigation Conditions - Intersection Level of Service - 75,000 Capacity Festival  
Secondary Impact Analysis for Mitigation at Madison & Ave 50 (Monday 8-9 AM)**

11/27/2012

No.	Intersection	Jurisdiction	Type of Traffic Control	Monday 8-9 AM									
				Future Without Project Conditions		Future With Project Conditions		Delay Increase (sec/veh)	Significant Impact	Future With Project With Mitigation Conditions <sup>1</sup>		Delay Increase (sec/veh)	Significant Impact
				Delay (sec/veh)	LOS	Delay (sec/veh)	LOS			Delay (sec/veh)	LOS		
13	Madison St & Ave 50	I	4-Way Stop	12.4	B	51.5	F	39.1	Yes	17.8	C	5.4	No
14	Madison St & Ave 52	LQ	4-Way Stop	11.6	B	28.4	D	16.8	No	32.5	D	20.9	No
21	Monroe St & Ave 50	I	Signalized	14.8	B	16.9	B	2.1	No	16.7	B	1.9	No
22	Monroe St & Ave 52	I	4-Way Stop	10.5	B	10.6	B	0.1	No	11.6	B	1.1	No

Note: I - City of Indio; LQ - City of La Quinta; CR - County of Riverside; PD - City of Palm Desert; C - Caltrans

1. Includes all mitigation measures in Table VI-2.