

---

**TRAFFIC IMPACT ANALYSIS  
CALEXICO POWER CENTER**  
City of Calexico, California

Prepared for:  
**Charles Company**  
9034 W. Sunset Boulevard  
West Hollywood, CA 90069

Prepared by:  
 **INFRASTRUCTURE  
ENGINEERS**  
1815 E. Heim Ave., Ste. 100  
Orange, CA 92865  
Tel.: (714) 940-0100  
Fax: (714) 940-0700

**March 18, 2014**  
Ref: 6066.46



03/18/2014  
Date

Stephen D. Hilton T.E.  
Senior Traffic Engineer  
TR 2422





## Table of Contents

Table of Contents.....	1
Executive Summary .....	3
Introduction .....	6
Project Description.....	6
Project Location.....	6
Project Access.....	7
Figure 1 Vicinity Map.....	8
Figure 2 Aerial Photograph .....	9
Figure 3 Site Plan.....	10
Existing Conditions .....	11
Existing Street Network .....	11
Existing Traffic Volumes.....	11
Table 1 Existing ADT Volumes.....	12
Figure 4 Existing Intersection Conditions .....	13
Figure 5 Existing Peak Hour Volumes.....	14
Analysis Scenarios.....	15
Study Area .....	15
Analysis Methodology .....	17
Signalized Intersections .....	17
Table 2 Level of Service Thresholds for Signalized Intersections .....	17
Unsignalized Intersections .....	17
Table 3 Level of Service Thresholds for Unsignalized Intersections .....	18
Intersecting Lane Vehicles .....	18
Table 4 Intersection Lane Vehicle Capacities .....	18
Street Segments.....	19
Table 5 City of Calexico Standard Street Classification .....	19
Significance Criteria .....	20
Direct Impacts .....	20
Cumulative Impacts.....	20
2013 Existing Operations.....	20
Peak Hour Intersection Operations .....	20
Intersecting Lane Vehicles (ILV) Operations .....	20
Daily Street Segment Operations .....	20
Table 6 Existing Intersection Operations.....	21
Table 7 Signalized Intersection Operations ILV Methodology.....	22
Table 8 Existing Street Segment Operations .....	23
Project Trips.....	23
Trip Generation .....	23
Trip Distribution / Assignment .....	24
Table 9 SANDAG Trip Generation Rates.....	24
Table 10 Generated Trip Ends .....	25
Figure 6 Trip Distribution .....	26
Figure 7 Trip Assignment of Phase I.....	27
Figure 8 Trip Assignment of Phases I & II.....	28
Figure 9 2014 Ambient + Phase I Traffic Volume.....	29
Figure 10 2015 Ambient + Phases I & II Traffic Volume .....	30

City of Calexico  
 Power Center TIA



Pedestrian Traffic .....	31
Cumulative Projects .....	32
Description of Cumulative Projects .....	32
Table 11 Cumulative Project Trip Generation .....	32
Cumulative Project Conditions .....	35
Figure 11 2015 Ambient + Cumulative Projects + Phases I & II Traffic Volume .....	36
Near-Term Operations .....	37
2014 Ambient + Phase I .....	37
2015 Ambient + Phases I & II .....	37
2015 Ambient + Cumulative Projects + Phases I & II .....	38
2015 Ambient + Cumulative Projects + Phases I & II + Mitigation .....	39
Table 12 Near-Term Intersection Operations .....	40
Table 13 Near-Term Signalized Intersection Operations ILV Methodology .....	41
Table 14 Near-Term Daily Street Segment Operations .....	42
Table 15 Near-Term Mitigations .....	43
Table 16 Near-Term Mitigated Intersection Operations .....	44
Table 17 Near-Term Mitigated Signalized Intersection Operations - ILV Methodology .....	45
Table 18 Near-Term Mitigated Daily Street Segment Operations .....	46
Long-Term Operations .....	47
2035 Ambient + Cumulative Projects .....	47
2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) .....	48
Table 19 Long-Term Intersection Operation .....	49
Table 20 Long-Term Signalized Intersection Operations ILV Methodology .....	50
Table 21 Long-Term Daily Street Segment Operation .....	51
2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation .....	52
Table 22 Long-Term Mitigations .....	52
Table 23 Long-Term Mitigated Intersection Operations .....	53
Table 24 Long-Term Mitigated Signalized Intersection Operations ILV Methodology .....	54
Site Access .....	55
Phase I .....	55
Phase II .....	55
Table 25 Level of Service of Access .....	56
Significance of Impacts and Mitigation Measures .....	57
Table 26 Summary of Impact Types, Mitigation Measures and Fair Share Percentages .....	57
Conclusions .....	58
Appendix A Traffic Counts .....	A
Appendix B SANDAG Traffic Generation Rates .....	B
Appendix C 2013 Existing Worksheets .....	C
Appendix D 2014 Ambient + Phase I Worksheets .....	D
Appendix E 2015 Ambient + Phases I & II Worksheets .....	E
Appendix F 2015 Ambient + Cumulative Projects + Phases I & II Worksheets .....	F
Appendix G 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation Worksheets .....	G
Appendix H 2035 Ambient + Cumulative Projects Worksheets .....	H
Appendix I 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) Worksheets .....	I
Appendix J 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation Worksheets .....	J
Appendix K Marketing & POE Studies .....	K
Appendix L Signal Warrant Worksheets .....	L





## Executive Summary

This traffic impact study presents the findings and conclusions relative to our analysis of traffic impacts which would be associated with the proposed Calexico Power Center project. This traffic impact analysis has evaluated the potential impacts associated with 17 key intersections, five (5) proposed access points to the project site and 22 street segments.

### 1. 2013 Existing

- All of the key intersections currently operate at Level of Services 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 intersections (LOS F/E – AM/PM, respectively).
- All of the intersections at SR-86, SR-98 or SR-111 are currently 'Under Capacity' based on the Intersecting Lane Vehicles (ILV) methodology.
- All of the key street segments currently operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS E).

### 2. 2014 Ambient + Phase I

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM) and the Cesar Chavez Boulevard and Grant Street (LOS D – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); and SR-111 between SR-98 and Grant Street (LOS F).

### 3. 2015 Ambient + Phases I & II

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS E/F – AM/PM, respectively) and the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS E – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); and SR-111 between SR-98 and Grant Street (LOS F).

### 4. 2015 Ambient + Cumulative Projects + Phases I & II

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak

City of Calexico  
Power Center TIA



hours except the Dogwood Road and SR-86 (LOS D – PM), the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS F – AM/PM), the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS F – PM), the SR-111 and McCabe Road (LOS D – PM), the SR-111 and Jasper Road (LOS F – PM), the SR-111 and Cole Road (LOS D – PM) and the SR-111 and SR-98 (LOS E – PM) intersections.

- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the SR-111 and Jasper Road intersection during the PM peak hours.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); Cesar Chavez Boulevard between Grant Street and 2<sup>nd</sup> Street (LOS E); and SR-111 between SR-98 and Grant Street (LOS F).

**5. 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation**

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F) due to right-of-way restrictions.

**6. 2035 Ambient + Cumulative Projects**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours except the Dogwood Road and SR-86 (LOS E – PM), the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS F – AM/PM), the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS F – PM), the SR-111 and McCabe Road (LOS E – PM), the SR-111 and Jasper Road (LOS F – PM) and the SR-111 and SR-98 (LOS E – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the two (2) SR-111 intersections at McCabe Road and Jasper Road.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F).

**7. 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated)**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours except the Rockwood Avenue and 2<sup>nd</sup> Street intersection (LOS F – PM).
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the three (3) SR-111 intersections at McCabe Road, SR-86, and Jasper Road.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F).



**8. 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours.
- All of the intersections at SR-86, SR-98 or SR-111 are 'Under Capacity' or 'Near Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F) due to right-of-way restrictions.

The SR-111 segment between SR-98 and Grant Street currently operates at LOS E and is forecast to operate LOS F under all other scenarios. To mitigate the impact on the segment, widening to a six lane highway is needed. However, the right-of-way is not available due to existing structures. Therefore, it is not feasible to mitigate the impact on the SR-111 segment between SR-98 and Grant Street.

The 2<sup>nd</sup> Street segment between Cesar Chavez Boulevard and SR-111 is forecast to operate at LOS F under all the near-term scenarios. To mitigate the impact on the segment, widening to a six (6) lane divided highway is needed. However, its right-of-way is not available due to existing structures. Therefore, a modified six (6) lane divided highway is recommended to mitigate the impact on the 2<sup>nd</sup> Street segment between SR-98 and Grant Street.

With the recommended mitigations, the proposed Calexico Power Center project is not expected to result in any significant adverse traffic impacts at the key intersections and street segments.



## Introduction

The proposed development of Calexico Power Center is located on the south of 2<sup>nd</sup> Street between All American Channel and Cesar Chavez Boulevard in the City of Calexico. This project proposes to build a total leasable area of 1,069,400 square feet of commercial/retail uses.

The purpose of this study is to assess the potential impacts to the local circulation system as a result of the proposed project.

The traffic impact analysis includes the following:

- Project Description
- Existing Conditions
- Analysis Scenarios
- Study Area
- Analysis Methodology
- Significance Criteria
- 2013 Existing Operations
- Project Trips
- Cumulative Projects
- Near-Term Operations
- Long-Term Operations
- Site Access
- Significance of Impacts and Mitigation Measures
- Conclusions

## Project Description

### Project Location

The project site abuts the Mexican border near the southwestern portion of the City of Calexico which is located about 230 miles southeast of Los Angeles, 120 miles east of San Diego, 260 miles west of Phoenix, and adjacent to the City of Mexicali, Baja California, Mexico. The City is approximately nine (9) square miles with population of approximately 38,000 people.

The site is bounded by the All American Channel to the west, Calexico International Airport to the north, Animal Shelter Drive to the east and the U.S./Mexico border to the south. The site is currently vacant.

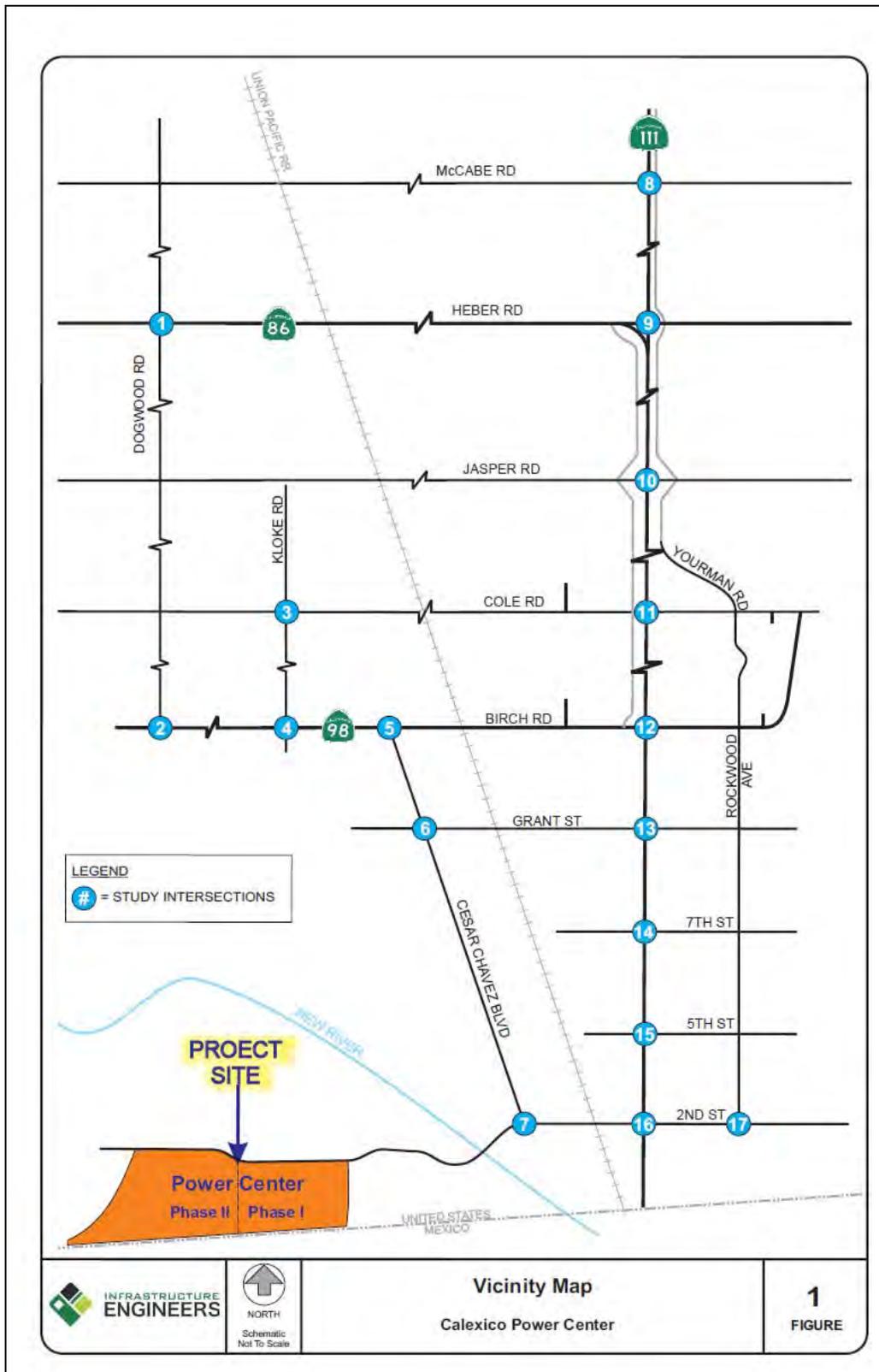
Figure 1 shows the project vicinity map, and Figure 2 presents the aerial photograph.

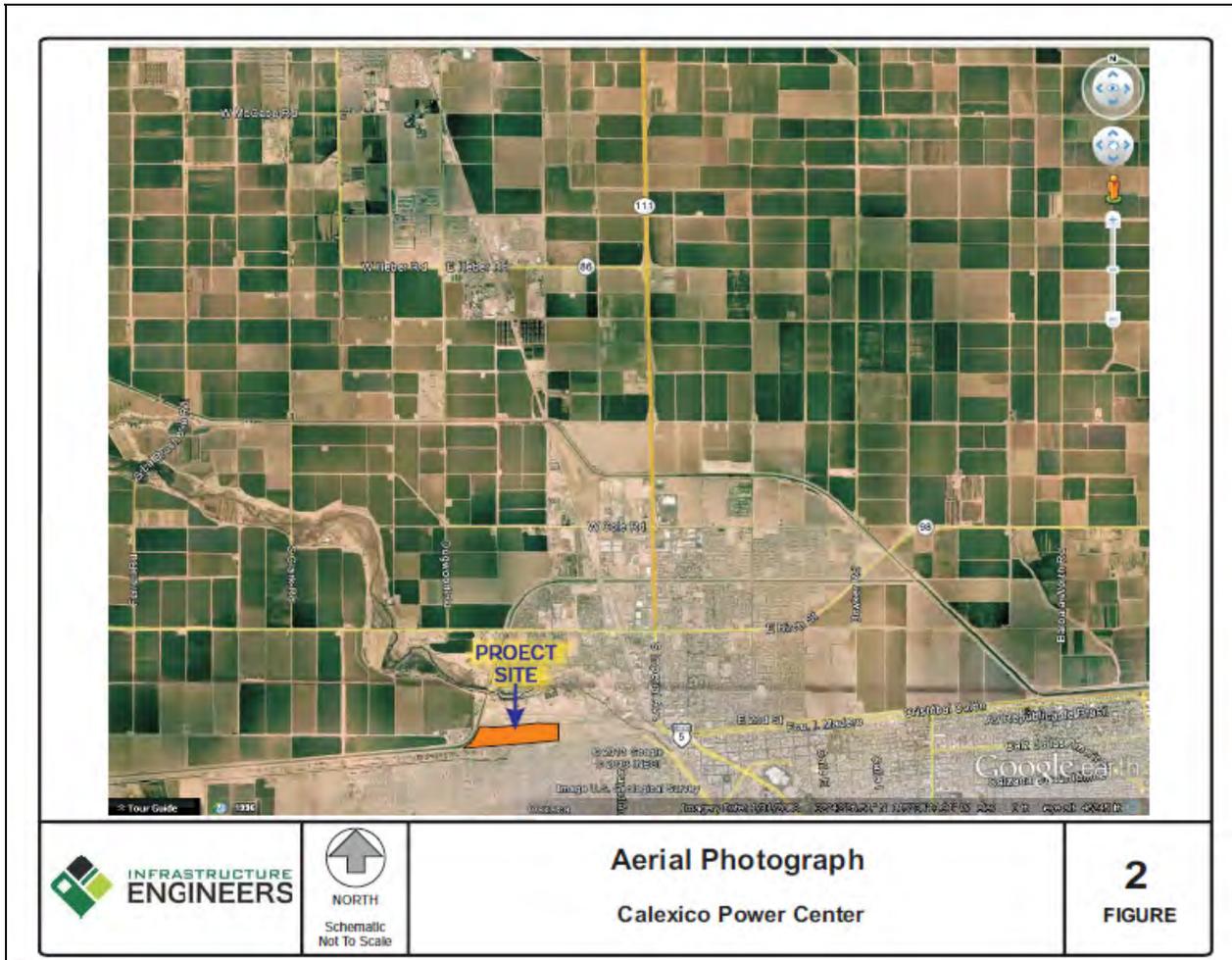


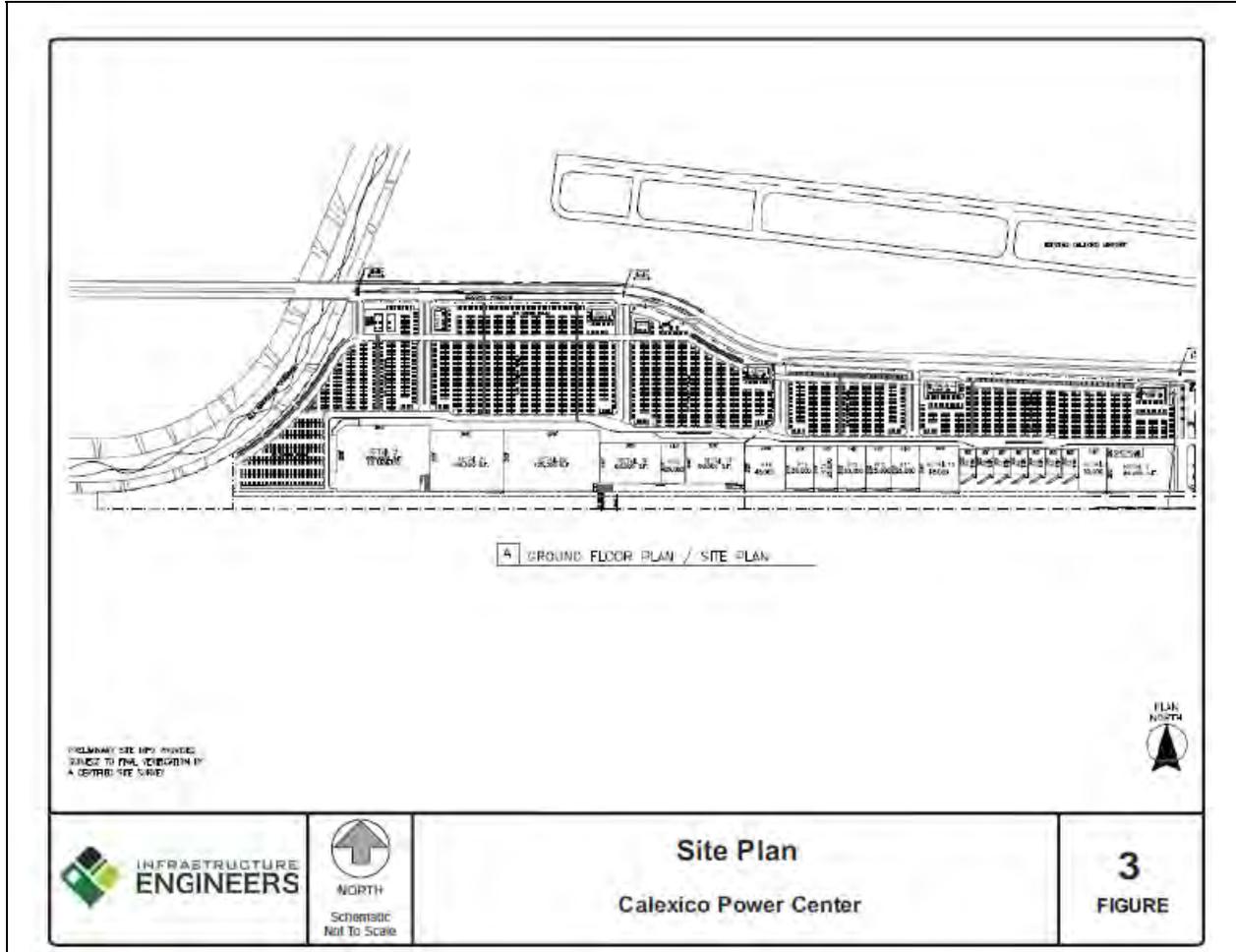
### Project Access

The site would provide five (5) accesses along the realigned 2<sup>nd</sup> Street. The first, third and fifth accesses from the east would be unsignalized, while the second and fourth would be signalized. The traffic signal warrant worksheets are provided in Appendix L.

Figure 3 depicts the conceptual site plan for the project.









## Existing Conditions

The key roadways in the project study area are described below. Figure 4 illustrates the existing geometric conditions and traffic control types.

### Existing Street Network

Dogwood Road is a north-south roadway located along the western edge of the City's Sphere of Influence. It connects from SR-98 north to Brawley. Dogwood Road is currently a two-lane undivided road in the vicinity of Calexico.

Kloke Road is a two-lane undivided roadway that connects Jasper Road with Grant Street. This road is a north-south roadway on the western side of the City.

Cesar Chavez Boulevard is a four-lane undivided roadway that parallels the Union Pacific Railroad tracks. This roadway runs northwest from 2<sup>nd</sup> Street to SR-98. The terminus of Cesar Chavez Boulevard at 2<sup>nd</sup> Street is proposed to be converted into a point of entry between Calexico and Mexicali. Due to this location, Cesar Chavez Boulevard is proposed to serve as a primary or an additional entrance roadway to/from Mexico through the proposed Calexico West Border Station.

Scaroni Road/Imperial Avenue West is a north-south two-lane undivided collector. This roadway connects SR-86 to SR-98 and runs parallel to SR-111. Scaroni Road becomes Imperial Avenue West on south of Camacho Road.

State Route 111/Imperial Avenue is a north-south four-lane divided highway. It serves as a primary north-south arterial in the City of Calexico. SR-111 is a main access point for the U.S./Mexico border.

McCabe Road is an east-west three or four-lane undivided roadway on west of SR-111. On east of SR-111, this roadway is a two-lane undivided roadway.

State Route 86/Heber Road is classified as a State Highway and is an east-west facility within the project area. Currently, SR-86 is a two-lane undivided roadway.

Jasper Road is an east-west roadway that forms the northern City limit of Calexico. Jasper Road is currently a two-lane undivided roadway.

State Route 98/Birch Street is an east-west roadway. West of Ollie Avenue SR-98 is a two-lane undivided roadway. East of Ollie Avenue this roadway becomes a four-lane divided roadway.

Cole Road is a two-lane undivided roadway from west of the City limits to Enterprise Boulevard. East of Enterprise Boulevard it transitions into a four-lane divided roadway in vicinity of the study area.

2<sup>nd</sup> Street is an east-west cross town roadway located on the southern edge of the City. West of Cesar Chavez Boulevard 2<sup>nd</sup> Street is a two-lane undivided secondary roadway. Between Cesar Chavez Boulevard and SR-111 this street becomes a four-lane undivided major roadway. East of SR-111 this road transitions into a two-lane undivided secondary roadway.

### Existing Traffic Volumes

Infrastructure Engineers (IE) commissioned 24-hour average daily traffic (ADT) counts for study area segments and AM/PM peak hour turn movement counts for study area intersections in May

City of Calexico  
 Power Center TIA



2013 while school was in session. The peak hour counts were conducted between the hours of 7:00 – 9:00 AM and 4:00 – 6:00 PM.

Table 1 is a summary of existing average daily traffic volumes (ADTs) and Figure 5 depicts the existing AM and PM peak hour traffic volumes.

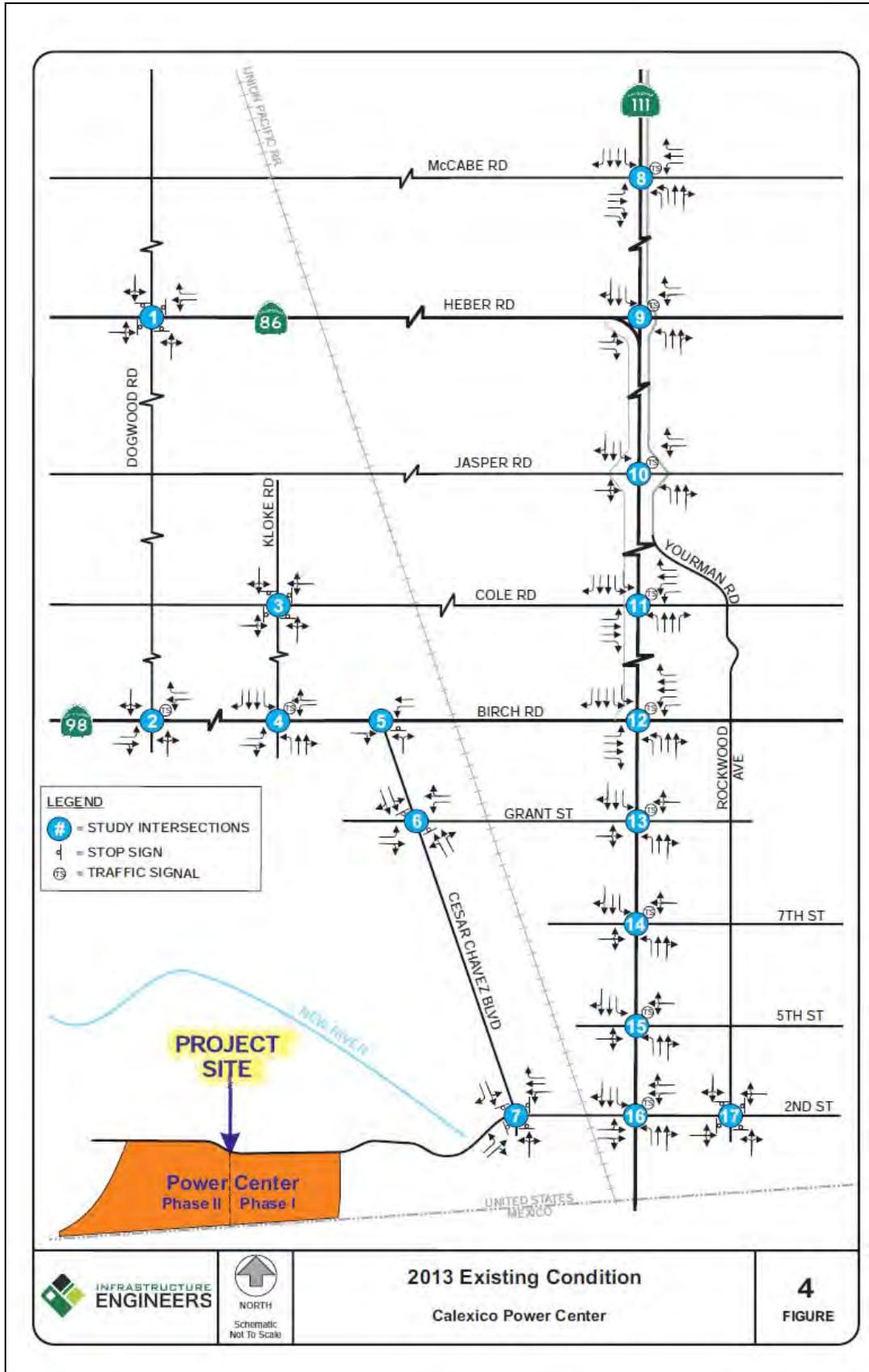
**Table 1  
 Existing ADT Volumes**

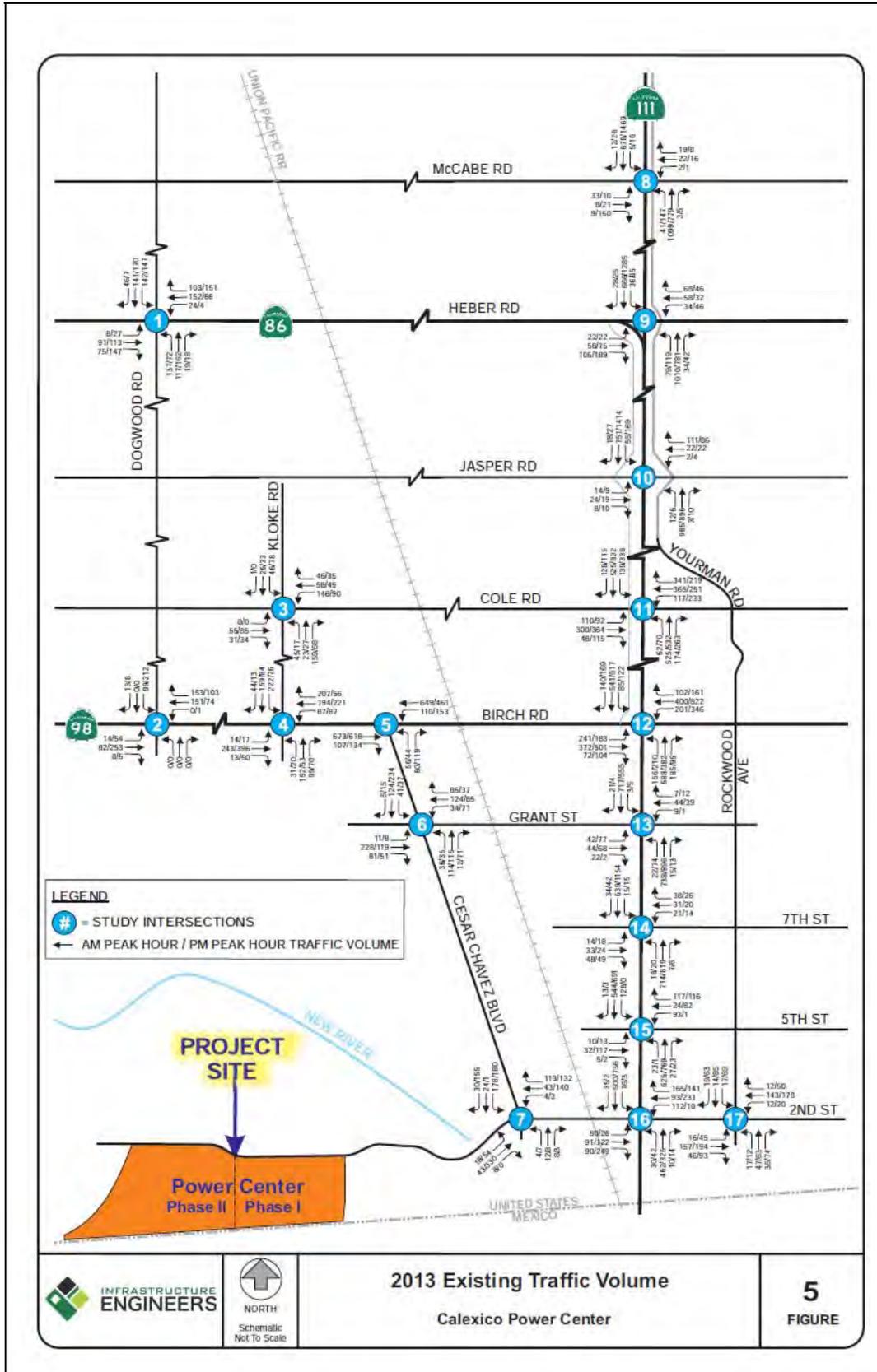
Street Segment		Existing Geometry	Capacity <sup>(1)</sup>	ADT
2nd Street	West of Cesar Chavez Boulevard	2U Secondary	17,500	2,178
	Cesar Chavez Boulevard to SR-111	4U Major	25,000	7,388
	SR-111 to Bowker Road	3U Secondary <sup>(2)</sup>	21,250	2,637
Cesar Chavez Boulevard	SR-98 to Grant Street	4U Major	25,000	4,693
	Grant Street to 2nd Street	4U Major	25,000	6,230
West Imperial Avenue	SR-98 to Camacho Road	2U Collector	16,200	4,690
Scaroni Road	Camacho Road to Cole Road	2U Collector	16,200	1,297
SR-98	Dogwood Road to Kloke Road	2U Secondary	17,500	8,584
	Kloke Road to SR-111	4D Primary	37,500	13,709
	SR-111 to Andrade Avenue	4D Primary	37,500	19,668
	Andrade Avenue to Bowker Road	2U Secondary	17,500	8,898
	Bowker Road to Barbara Worth Road	2U Secondary	17,500	11,248
	Barbara Worth Road to SR-7	3U Secondary	21,250	11,018
Jasper Road	Dogwood Road to Scaroni Road	2U Secondary	17,500	725
	Scaroni Road to SR-111	2U Secondary	17,500	1,345
	SR-111 to Youman Road	2U Secondary	17,500	3,958
	Youman Road to Bowker Road	2U Secondary	17,500	405
Cole Road	Kloke Road to SR-111	4D Primary	37,500	7,945
	Rockwood Avenue to Bowker Road	4D Primary	37,500	6,213
SR-111	Jasper Road to Cole Road	4D Highway	56,300	31,431
	Cole Road to SR-98	4D Highway	56,300	30,459
	SR 98 to Grant Street/8th Street	4D Primary	37,500	35,900

Note:

<sup>(1)</sup> : Capacities are based on the City of Calexico 2007 General Plan - Circulation Element, Table C-D.

<sup>(2)</sup> : 3-Lane Undivided Secondary Roadway Capacity is an average capacity of 2-Lane Undivided Secondary Roadway and 4-Lane Undivided Major Roadway Capacities.







## Analysis Scenarios

For the purpose of this traffic study, the proposed project was analyzed in two phases. The traffic analysis assesses the key intersections and street segments in the project area. The study area intersections and segments were analyzed for the following scenarios to determine the potential impacts to the street network:

- 2013 Existing
- 2014 Ambient + Phase I
- 2015 Ambient + Phases I & II
- 2015 Ambient + Cumulative Projects + Phases I & II
- 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation
- 2035 Ambient + Cumulative Projects
- 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated)
- 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation

## Study Area

Based on the anticipated distribution of the project traffic and recommendations made by the City of Calexico staff, the specific study area includes the following intersections and street segments:

### *Unsignalized Intersections*

- Dogwood Road / SR-86 (Heber Road)
- Kloke Road / Cole Road
- Cesar Chavez Boulevard / SR-98 (Birch Street)
- Cesar Chavez Boulevard / 2<sup>nd</sup> Street
- Rockwood Street / 2<sup>nd</sup> Street

### *Signalized Intersections*

- Dogwood Road / SR-98 (Birch Street)
- Kloke Road / SR-98 (Birch Street)
- Cesar Chavez Boulevard / Grant Street
- SR-111 / McCabe Road
- SR-111 / SR-86 (Heber Road)
- SR-111 / Jasper Road
- SR-111 / Cole Street
- SR-111 / SR-98 (Birch Street)
- SR-111 / Grant Street (8<sup>th</sup> Street)

City of Calexico  
Power Center TIA



- SR-111 / 7<sup>th</sup> Street
- SR-111 / 5<sup>th</sup> Street
- SR-111 / 2<sup>nd</sup> Street

*Street Segments*

Second Street

- West of Cesar Chavez Boulevard
- SR-111 to Bowker Road

Cesar Chavez Boulevard

- SR-98 to Grant Street
- Grant Street to 2<sup>nd</sup> Street

West Imperial Avenue

- SR-98 to Camacho Road

Scaroni Road

- Camacho Road to Cole Road

State Route 98

- Dogwood to Kloke Road
- Kloke Road to SR-111
- SR-111 to Andrade Avenue
- Andrade Avenue to Bowker Road
- Bowker Road to Barbara Worth Road
- Barbara Worth Road to SR-7

Jasper Road

- Dogwood Road to Scaroni Road
- Scaroni Road to SR-111
- SR-111 to Yourman Road
- Yourman Road to Bowker Road

Cole Road

- Kloke Road to SR-111
- Rockwood Avenue to Bowker Road

State Route 111

- Jasper Road to Cole Road
- Cole Road to SR-98
- SR-98 to Grant Street/8<sup>th</sup> Street



### Analysis Methodology

Level of service (LOS) is the term used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized, unsignalized intersections and roadway segments as described below.

The city of Calexico accepts LOS C on roadway segments and at intersections. It should be noted that the City of Calexico will accept LOS D at roadway segments if the intersections along the segment operate at LOS D or better during the peak hour. The County of Imperial accepts LOS C at roadway segments and intersections.

### Signalized Intersections

Signalized intersections were analyzed for the weekday AM and PM peak hour conditions. Average vehicle delay was determined using the methodology found in Chapter 16 of the 2000 Highway Capacity Manual (HCM), using the Traffix (version 7.9) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection level of service. Table 2 summarizes the delay thresholds for signalized intersections.

**Table 2  
 Level of Service Thresholds for Signalized Intersections**

Average Control Delay Per Vehicle (seconds/vehicle)			Level of Service (LOS)
0.0	≤	10.0	A
10.1	to	20.0	B
20.1	to	35.0	C
35.1	to	55.0	D
55.1	to	80.0	E
	≥	80.0	F

### Unsignalized Intersections

Unsignalized intersections were analyzed for the weekday AM and PM peak hour conditions. The vehicle delay and levels of service were determined based upon the procedures found in Chapter 17 of the 2000 Highway Capacity Manual (HCM), using the Traffix (version 7.9) computer software. The left-turn minor street delay or minor street approach was reported for the unsignalized intersections. Table 3 summarizes the delay thresholds for unsignalized intersections.



**Table 3  
 Level of Service Thresholds for Unsignalized Intersections**

Average Control Delay Per Vehicle (seconds/vehicle)			Level of Service (LOS)
0.0	≤	10.0	A
10.1	to	15.0	B
15.1	to	25.0	C
25.1	to	35.0	D
35.1	to	50.0	E
	≥	50.1	F

**Intersecting Lane Vehicles**

Caltrans requires that State-owned intersections be analyzed using Intersecting Lane Vehicles (ILV) methodology as described in the Department Highway Design Manual. The ILV methodology is based on the concept that the capacity of intersecting lanes of traffic is 1,500 vehicles per hour. For the typical local street interchange there is usually a critical intersection impact is considered significant using the ILV methodology if the project traffic issues the intersection to operate "over capacity." Table 4 summarizes the delay thresholds for ILV capacities.

**Table 4  
 Intersection Lane Vehicle Capacities**

UNDER (ILV/hr < 1200)	NEAR (ILV/hr 1200 - 1500)	OVER (ILV > 1500)
Denotes stable flow with slight but acceptable delay. Occasional signal loading may develop. Free mid-block operations.	Denotes unstable flow with considerable delay. Some vehicles to pass through the intersection. Continuous backup occurs at some approaches.	Denotes stop and go operation with severe delay and heavy congestion. <sup>a</sup> Traffic volume is limited by maximum discharge rates of each phase. Continuous backup is varying degrees occurs on all approaches. Where downstream capacity is restrictive, mainline congestion can impede orderly discharge through the intersection.

<sup>a</sup> The amount of congestion depends on how much the ILV/hr value exceeds 1500. Observed flow rates will normally not exceed 1500 ILV/hr and the excess will be delayed in a queue.



**Street Segments**

Street segment analysis is based upon the comparison of average daily traffic volumes with the City of Calexico Classification Level of Service and ADT Table. This table is shown below and provides level of service estimates based on traffic volumes and roadway characteristics.

**Table 5  
 City of Calexico Standard Street Classification**

Roadway Classification	Roadway Width (feet)	Section	Right-of-Way (feet)	Maximum Capacity*
8-Lane Freeway	-	8F	-	< 140,000
6-Lane Freeway	-	6F	-	< 105,000
6-Lane Expressway	-	6E	-	< 90,000
Highway	-	4D	80 - 148	< 56,300
Highway 111	160	6D	200	< 60,000
Primary	80	4D	100 - 126	< 37,500
Major	60	4U	80 - 126	< 25,000
Secondary	50	2U	70 - 75	< 17,500
2-Lane Divided	50	2D	70 - 75	< 17,500
Collector	40	2U	60	< 16,200
Local	40	2U	60	< 12,500

\* These roadway capacities are approximate figures only, and are used at the General Plan level. They are affected by such factors as intersections (numbers & configuration), degree of access control, roadway grades, design geometrics (horizontal & vertical alignment standards), sight distance, level of truck and bus traffic, and level of pedestrian and bicycle traffic. Average daily traffic (ADT) is used in this model application as a long range planning tool to assist in determining roadway highway classification (number of thru lanes) needed to meet traffic demand.

NOTE: Since the City of Calexico does not provide capacities for Levels of Service A through D, Infrastructure Engineers based these levels of service volume to capacity ratios found in the City of Calexico General Plan Circulation Element Table C-A Level of Service Standards. Appendix B contains the Level of service Standards Table C-A.

SOURCE: Table C-D: Maximum Capacity by Roadway Classification, City of Calexico General Plan Circulation Element, February 2007.



## Significance Criteria

### Direct Impacts

The City of Calexico's goal is that intersections and roadway segments operate at LOS C or better. In general, a location operating at LOS C or better under existing conditions that degrades to a LOS D or worse due to project traffic is considered a significant direct impact. The only exception is that an LOS D operating segment is not considered significant if the intersections along the segment operate at LOS D or better during peak periods.

### Cumulative Impacts

A cumulative impact is calculated when an intersection or segment level of service is already operating below City standards and the project increases the delay by more than 2 seconds or the v/c ratio by more than 0.02. Also, if project and cumulative project traffic together cause an intersection or segment to operate below City standards and project traffic only increases the intersection delay by more than 2 seconds or the roadway segment v/c ratio by more than 0.02, a cumulative impact would be calculated. Under the long-term scenarios, significant impacts are considered cumulative and LOS D is considered acceptable.

## 2013 Existing Operations

The following is an analysis of existing operations for the key intersections and street segments.

### Peak Hour Intersection Operations

Table 6 shows that under existing conditions. All of the study intersections are calculated to currently operate at LOS C or better under the City's jurisdiction and at LOS D or better under Caltrans' jurisdiction except the following:

- Cesar Chavez Boulevard / SR-98 – LOS F/E during the AM/PM peak hours, respectively

### Intersecting Lane Vehicles (ILV) Operations

ILV analysis was conducted for the study intersections under 2013 existing conditions. As shown in Table 7, all study intersections are calculated to currently operate at under capacity for both the AM and PM peak hours.

Appendix C contains level of service and ILV analysis worksheets of 2013 Existing Operations.

### Daily Street Segment Operations

Table 8 shows that under existing conditions all of the study area street segments are calculated to currently operate at LOS C or better on a daily basis with the following exceptions:

- SR-111 between SR-98 and Grant Street – LOS E



**Table 6  
 Existing Intersection Operations**

#	Intersection	Control Type	Peak Hour	2013 Existing	
				LOS	V/C (Delay)
1	Dogwood Rd & SR-98 (Heber Rd)	Stop/Signal	AM	B	0.540
			PM	B	0.555
2	Dogwood Rd & SR-98	Signal	AM	B	0.204
			PM	C	0.337
3	Kloke Rd & Cole Rd	Stop	AM	A	0.343
			PM	A	0.225
4	Kloke Rd & SR-98	Signal	AM	C	0.502
			PM	C	0.431
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	F	(81.6)
			PM	E	(38.7)
6	Cesar Chavez Blvd & Grant St	Stop/Signal	AM	C	(19.20)
			PM	C	(21.20)
7	Cesar Chavez Blvd & 2nd St	Stop/Signal	AM	A	0.321
			PM	B	0.558
8	SR-111 & McCabe Rd	Signal	AM	A	0.392
			PM	B	0.582
9	SR-111 & SR-98 (Heber Rd) <sup>(1)</sup>	Signal	AM	B	0.480
			PM	C	0.609
10	SR-111 & Jasper Rd	Signal	AM	B	0.436
			PM	B	0.538
11	SR-111 & Cole Rd	Signal	AM	C	0.573
			PM	C	0.563
12	SR-111 & SR-98*	Signal	AM	D	0.618
			PM	D	0.671
13	SR-111 & Grant St	Signal	AM	B	0.399
			PM	B	0.468
14	SR-111 & 7th St	Signal	AM	B	0.341
			PM	A	0.515
15	SR-111 & 5th St	Signal	AM	C	0.524
			PM	B	0.430
16	SR-111 & 2nd St	Signal	AM	C	0.408
			PM	C	0.508
17	Rockwood Ave & 2nd St	Stop	AM	A	0.273
			PM	B	0.498

Note:  
<sup>(1)</sup>: Intersection under Caltrans' Jurisdiction



**Table 7**  
**Signalized Intersection Operations ILV Methodology**

#	Intersection	Control Type	Peak Hour	2013 Existing	
				ILV	Status
2	Dogwood Rd & SR-98	Signal	AM	277	UNDER
			PM	479	UNDER
4	Kloke Rd & SR-98	Signal	AM	783	UNDER
			PM	671	UNDER
8	SR-111 & McCabe Rd	Signal	AM	611	UNDER
			PM	835	UNDER
9	SR-111 & SR-88 (Heber Rd)	Signal	AM	650	UNDER
			PM	865	UNDER
10	SR-111 & Jasper Rd	Signal	AM	585	UNDER
			PM	780	UNDER
11	SR-111 & Cole Rd	Signal	AM	808	UNDER
			PM	829	UNDER
12	SR-111 & SR-98	Signal	AM	871	UNDER
			PM	958	UNDER
13	SR-111 & Grant St	Signal	AM	499	UNDER
			PM	607	UNDER
14	SR-111 & 7th St	Signal	AM	471	UNDER
			PM	709	UNDER
15	SR-111 & 5th St	Signal	AM	688	UNDER
			PM	565	UNDER
16	SR-111 & 2nd St	Signal	AM	497	UNDER
			PM	610	UNDER



**Table 8  
Existing Street Segment Operations**

Street Segment		Existing Geometry	Capacity <sup>(1)</sup>	ADT	LOS	V/C
2nd Street	West of Cesar Chavez Boulevard	2U Secondary	17,500	2,178	A	0.12
	Cesar Chavez Boulevard to SR-111	4U Major	25,000	7,386	A	0.30
	SR-111 to Bowker Road	3U Secondary <sup>(2)</sup>	21,250	2,637	A	0.12
Cesar Chavez Boulevard	SR-98 to Grant Street	4U Major	25,000	4,693	A	0.19
	Grant Street to 2nd Street	4U Major	25,000	6,230	A	0.25
West Imperial Avenue	SR-98 to Camacho Road	2U Collector	16,200	4,690	A	0.29
Scaroni Road	Camacho Road to Cole Road	2U Collector	16,200	1,297	A	0.08
SR-98	Dogwood Road to Kloke Road	2U Secondary	17,500	8,564	A	0.49
	Kloke Road to SR-111	4D Primary	37,500	13,709	A	0.37
	SR-111 to Andrade Avenue	4D Primary	37,500	19,668	A	0.52
	Andrade Avenue to Bowker Road	2U Secondary	17,500	8,896	A	0.51
	Bowker Road to Barbara Worth Road	2U Secondary	17,500	11,248	B	0.64
	Barbara Worth Road to SR-7	3U Secondary	21,250	11,016	A	0.52
Jasper Road	Dogwood Road to Scaroni Road	2U Secondary	17,500	725	A	0.04
	Scaroni Road to SR-111	2U Secondary	17,500	1,345	A	0.08
	SR-111 to Youman Road	2U Secondary	17,500	3,958	A	0.23
	Youman Road to Bowker Road	2U Secondary	17,500	405	A	0.02
Cole Road	Kloke Road to SR-111	4D Primary	37,500	7,945	A	0.21
	Rockwood Avenue to Bowker Road	4D Primary	37,500	6,213	A	0.17
SR-111	Jasper Road to Cole Road	4D Highway	56,300	31,431	A	0.56
	Cole Road to SR-98	4D Highway	56,300	30,459	A	0.54
	SR 98 to Grant Street/8th Street	4D Primary	37,500	35,900	E	0.96

Note:  
<sup>(1)</sup> : Capacities are based on the City of Calexico 2007 General Plan - Circulation Element, Table C-D  
<sup>(2)</sup> : 3-Lane Undivided Secondary Roadway Capacity is an average capacity of 2-Lane Undivided Secondary Roadway and 4-Lane Undivided Major Roadway Capacities.

### Project Trips

The Calexico Power Center project is a commercial/retail development. It is expected that many of the trips will be due to trips not new to the street system, but instead captured from trips already on the system. These trips are termed "pass-by" and "diverted link" trips.

### Trip Generation

The project trip generation was determined using the following steps:

1. San Diego Association of Governments (SANDAG) trip generation rates taken from the (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002, were used for the project land uses.
2. Total project trips were calculated using the SANDAG rates to obtain the total trips generated by the project site.

City of Calexico  
 Power Center TIA



3. As previously mentioned, a portion of commercial/retail trips are not new to the street system, but are captured from trips already on the street system. These trips are termed "Pass-by" and "diverted link" trips and are assumed to be already on the roadways for another purpose. Based on SANDAG data, about 55% of trips for this type of retail development are considered pass-by/diverted link trips.
4. Primary trips account for the pass-by/diverted link trips assumed to be on the street system. The primary trips are calculated by subtracting the pass-by/diverted link trips from the total project trips.

Based on the total trip generation calculations, the Phases I and II of Calexico Power Center is calculated to generate approximately 22,224 ADT with 1,106 total trips during the AM peak hour (627 inbound / 479 outbound) and 1,852 total trips during the PM peak hour (926 inbound / 926 outbound). Phase I is calculated to generate approximately 10,065 ADT with 520 trips during the AM peak hour (288 inbound / 232 outbound) and 800 trips during the PM peak hour (400 inbound / 400 outbound). Phase II is calculated to generate 12,159 ADT with 586 trips during the AM peak hour (339 inbound / 247 outbound) and 1,052 trips during the PM peak hour (526 inbound / 526 outbound).

The project trip generation rates are presented in Table 9, and generated trip ends for each project phase and the overall total is summarized in Table 10.

**Trip Distribution / Assignment**

The project traffic was distributed and assigned to the street system based on the project's proximity to the U.S./Mexico border crossing and state highways and arterials, the location of commercial and employment opportunities, and the location of residential areas.

Based on the anticipated amount of clientele that would come from the City of Mexicali and the experience with the Imperial Valley Mall, 60% of the trips are assumed to be departing to and arriving from the City of Mexicali. This percentage has been confirmed by the City of Calexico.

Figure 6 depicts the regional trip distribution, Figure 7 illustrates the project traffic volume assignment for Phase I of Power Center, Figure 8 shows the project traffic volume assignment for Phases I and II of Power Center, Figure 9 provides the 2014 Ambient + Phase I traffic volumes, and Figure 10 presents the 2015 Ambient + Phases I and II traffic volumes.

**Table 9  
 SANDAG Trip Generation Rates**

Phase	Land Use	Size	Units	Daily Rate	AM Peak Hour			PM Peak Hour				
					Split	In	Out	Total	Split	In	Out	Total
Phase I	Fast Food Drive-Thru - Pad A	7.20	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Fast Food Drive-Thru - Pad B	8.00	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Fast Food Drive-Thru - Pad C	5.70	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Factory Outlet Center**	385.30	kcf	40.00	70:30	2.1%	0.9%	3%	50:50	4.5%	4.5%	9%
Phase II	Fast Food Drive-Thru - Pad D	3.50	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Fast Food Drive-Thru - Pad E	5.70	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Fast Food Drive-Thru - Pad F	5.50	kcf	650.00	50:50	3.5%	3.5%	7%	50:50	3.5%	3.5%	7%
	Gas Station with Food Mart and Fully Automated Carwash	18.00	vtb*	155.00	50:50	4.0%	4.0%	8%	50:50	4.5%	4.5%	9%
	Factory Outlet Center	639.60	kcf	40.00	70:30	2.1%	0.9%	3%	50:50	4.5%	4.5%	9%

Source: SANDAG "Not Go" Brief Guide of Vehicular Traffic Generation Rates.  
 Note:  
 \*: vtb = vehicle fueling space  
 \*\*: Factory Outlet Center includes 5,000-square foot shops.



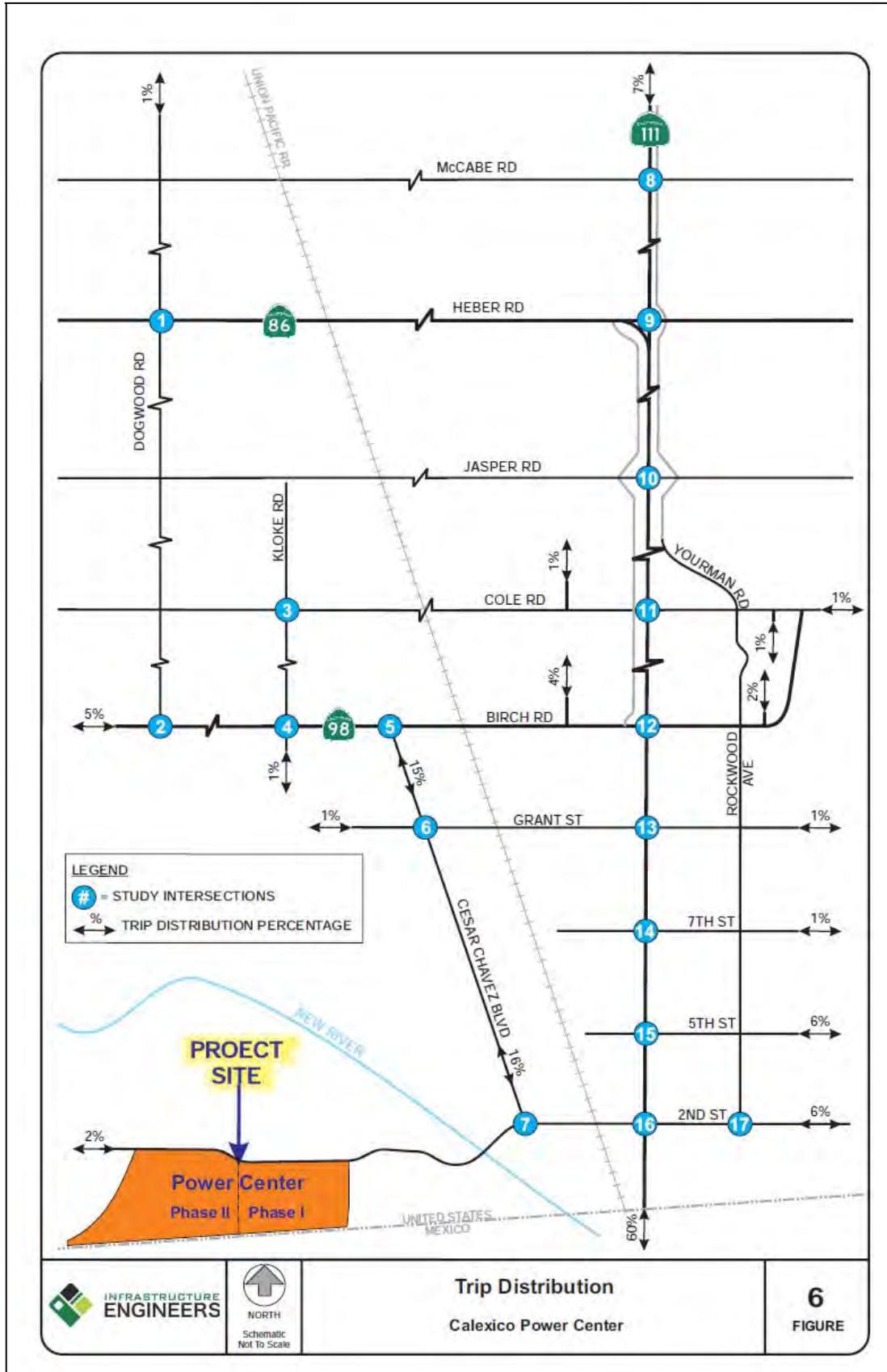


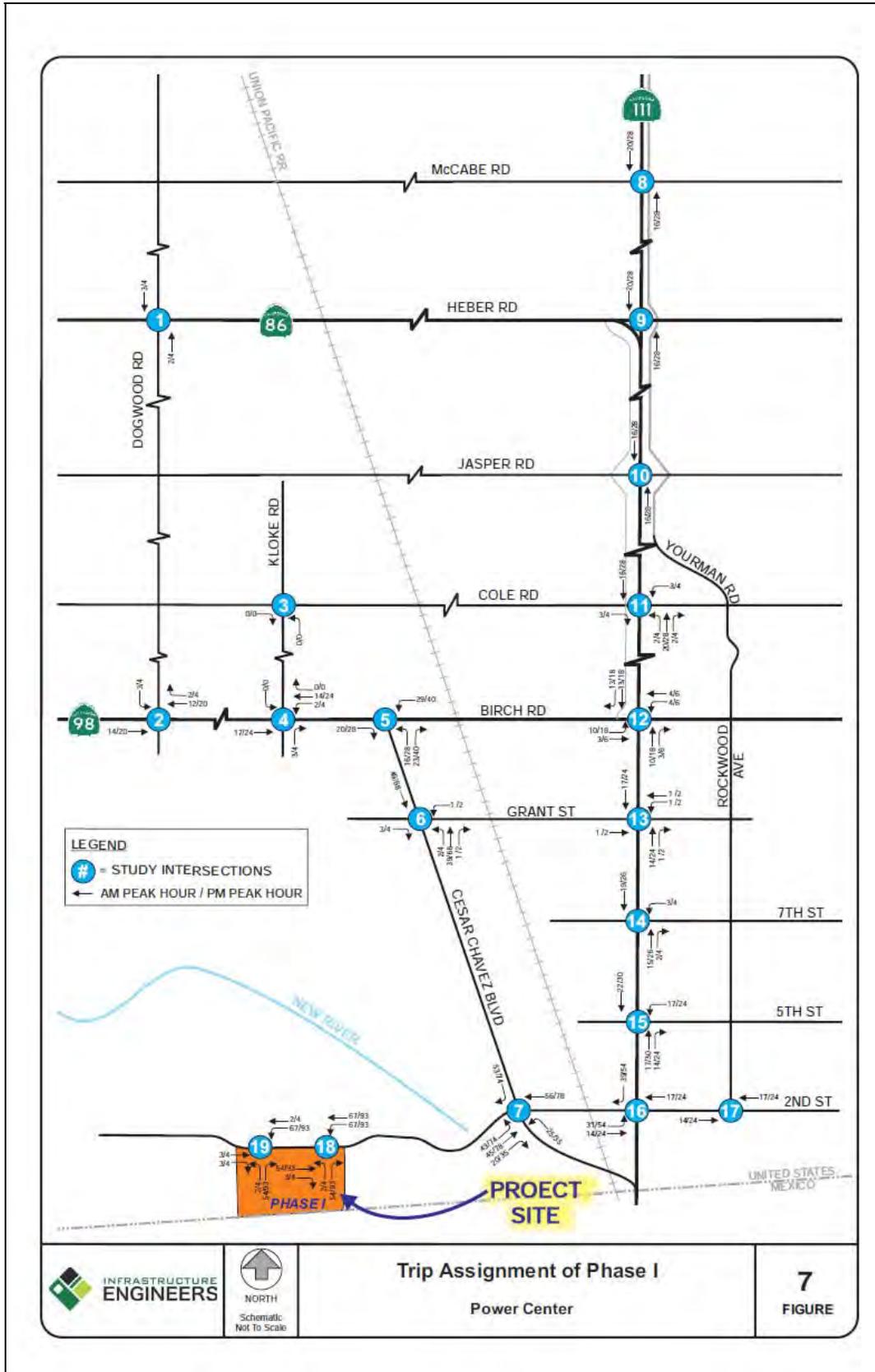
Table 10  
 Generated Trip Ends

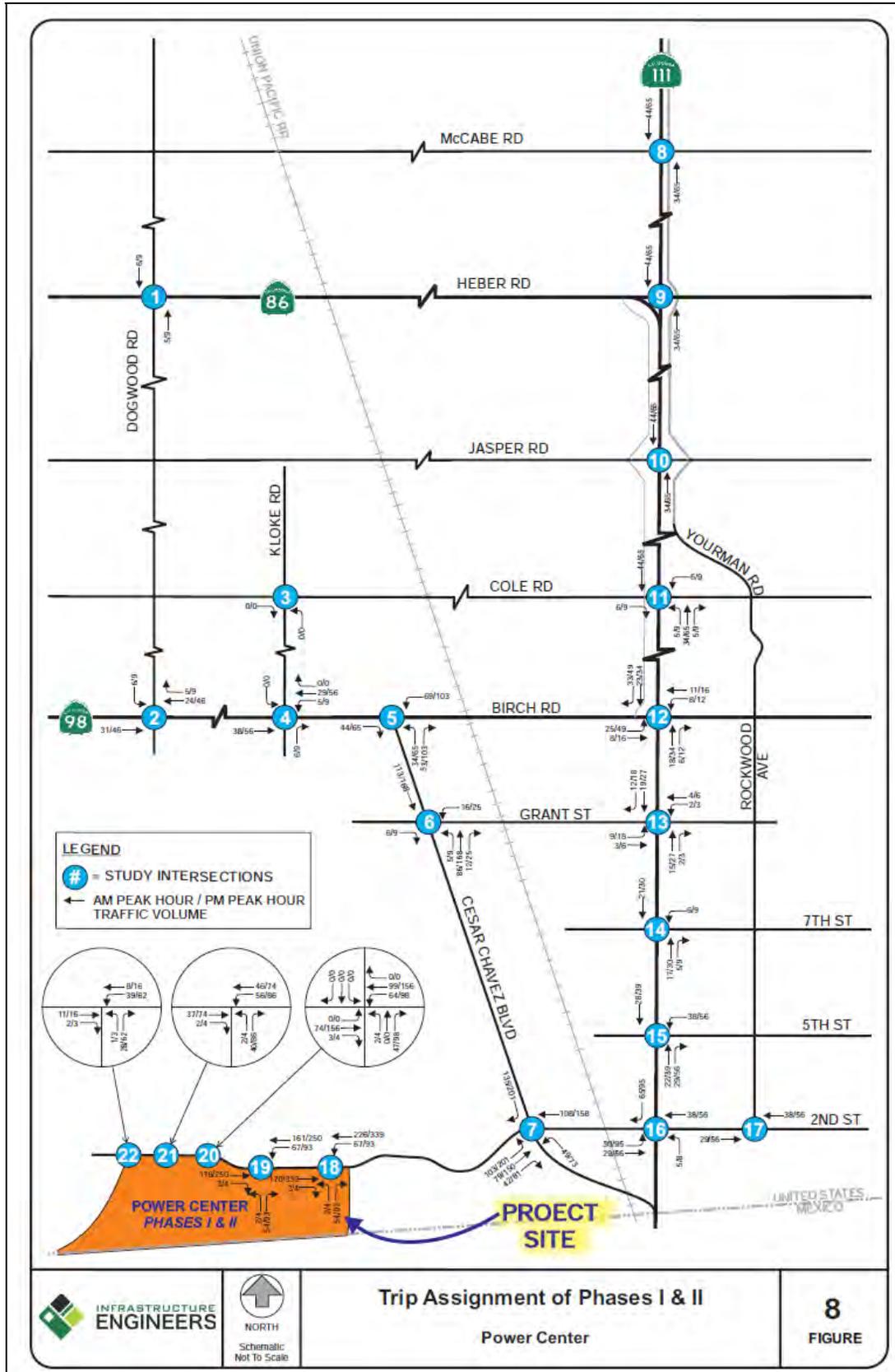
Phase	Land Use	Size	Units	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Phase I	Fast Food Drive-Thru - Pad A	7.20	kaf	4,680	164	164	328	164	164	328
	Fast Food Drive-Thru - Pad B	8.00	kaf	5,200	182	182	364	182	182	364
	Fast Food Drive-Thru - Pad C	5.70	kaf	3,705	130	130	260	130	130	260
	Sub-Total (Fast Food)			13,585	476	476	952	476	476	952
	Less Diverted Trips	37%		5,037	176	176	352	176	176	352
	Less Pass-By Trips	12%		1,630	57	57	114	57	57	114
	Less Internal Capture	11%		1,484	52	52	104	52	52	104
	Less Adjusted Fast Food Trips			8,151	285	285	570	285	285	570
	Net Total (Fast Food)			5,434	191	191	382	191	191	382
	Factory Outlet Center **	385.90	kaf	15,436	324	139	463	695	695	1,390
Less Diverted Trips	40%		6,175	129	56	185	278	278	556	
Less Pass-By Trips	15%		2,315	49	21	70	104	104	208	
Less Internal Capture	15%		2,315	49	21	70	104	104	208	
Less Adjusted Commercial Trips			10,805	227	98	325	486	486	972	
Net Total (Outlet Center)			4,631	97	41	138	209	209	418	
TOTAL Trip Ends - Phase I				10,066	288	232	620	400	400	800
Phase II	Fast Food Drive-Thru - Pad D	3.50	kaf	2,275	80	80	160	80	80	160
	Fast Food Drive-Thru - Pad E	5.70	kaf	3,705	130	130	260	130	130	260
	Fast Food Drive-Thru - Pad F	5.50	kaf	3,575	125	125	250	125	125	250
	Sub-Total (Fast Food)			9,555	335	335	670	335	335	670
	Less Diverted Trips	37%		3,535	124	124	248	124	124	248
	Less Pass-By Trips	12%		1,147	40	40	80	40	40	80
	Less Internal Capture	11%		1,051	37	37	74	37	37	74
	Less Adjusted Fast Food Trips			5,733	201	201	402	201	201	402
	Net Total (Fast Food)			3,822	134	134	268	134	134	268
	Gas Station with Food Mart and Fully Automated Carwash	18.00	vb*	2,790	112	112	224	126	126	252
	Less Diverted Trips	51%		1,823	57	57	114	64	64	128
	Less Pass-By Trips	0%		0	0	0	0	0	0	0
	Less Internal Capture	11%		307	12	12	24	14	14	28
	Less Adjusted Fast Food Trips			2,130	69	69	138	76	76	156
	Net Total (Gas Station)			660	43	43	86	48	48	96
Factory Outlet Center	639.80	kaf	25,592	538	231	769	1,151	1,151	2,302	
Less Diverted Trips	40%		10,237	215	92	307	461	461	922	
Less Pass-By Trips	15%		3,839	81	35	115	173	173	346	
Less Internal Capture	15%		3,839	81	35	115	173	173	346	
Less Adjusted Commercial Trips			17,915	377	162	537	807	807	1,614	
Net Total (Outlet Center)			7,677	161	69	232	344	344	688	
TOTAL Trip Ends - Phase II				12,168	338	247	686	628	628	1,062
TOTAL Trip Ends - Phases I & II				22,234	627	479	1,106	928	928	1,862

Sources: Trip Generation Rates, Diverted and Pass-By Trips:  
 SANDAG "(Not So) Brief Guide of Vehicular Traffic Generation Rates."  
 Internal Capture:  
 Urban Land Institute (ULI) "Shared Parking" Second Edition, 2005

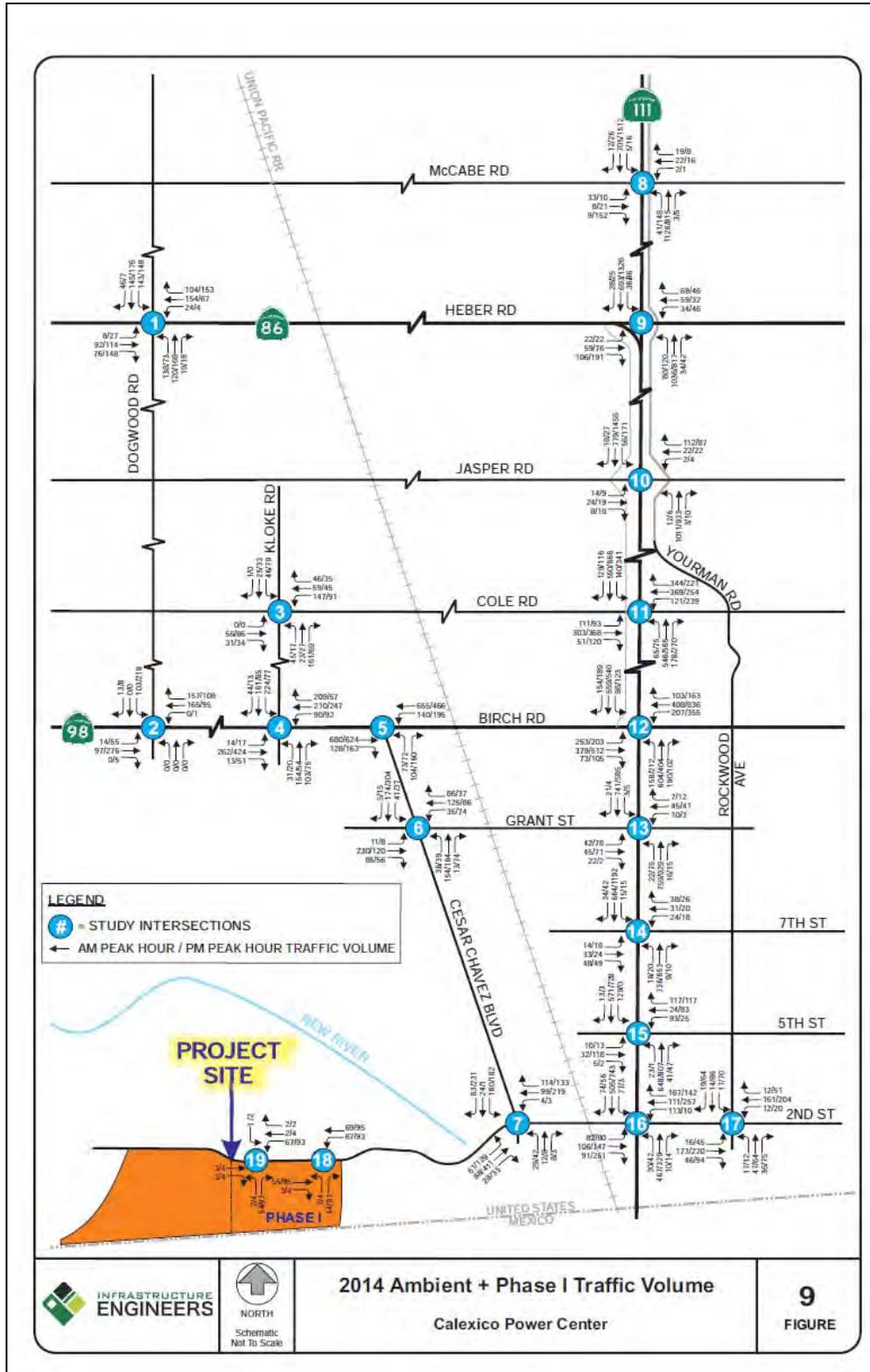
Note:  
 \*: vb = vehicle fueling space  
 \*\*: Factory Outlet Center includes 9,000-square foot shops.



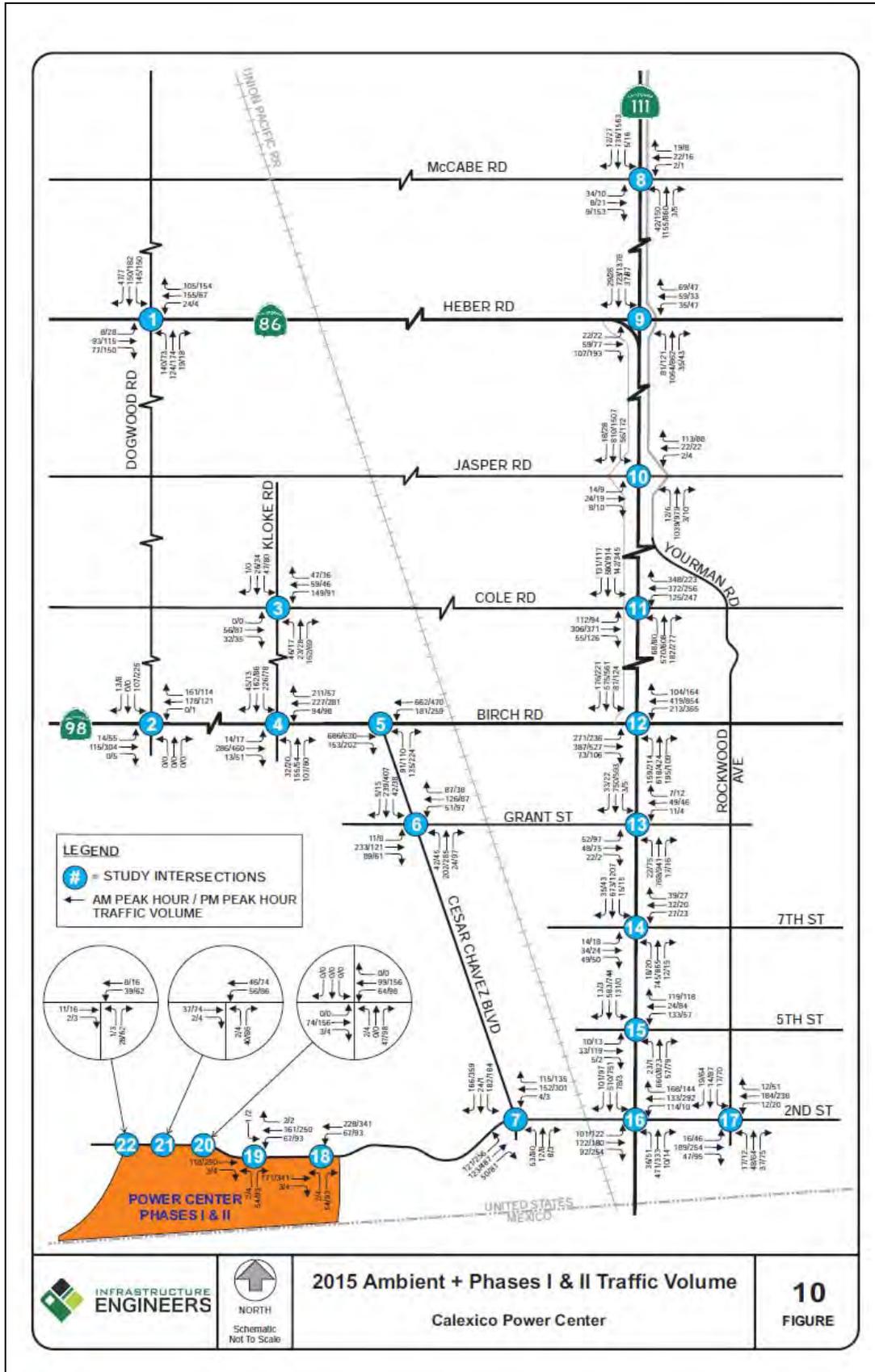




Gran Plaza Phase 2 Power Center  
 City of Calexico Draft Environmental Impact Report • SCH # 2014061070



Gran Plaza Phase 2 Power Center  
 City of Calexico Draft Environmental Impact Report • SCH # 2014061070





**Pedestrian Traffic**

Past border crossing studies have documented that approximately 40 percent of crossings from Mexico to the U.S. are pedestrians and the remaining 60 percent are by vehicle. One such study titled "Calexico Port of Entry to Immediately Process I-94 Permits for Mexican Holiday Travelers" cited 23,000-27,000 vehicles and 18,000 pedestrians daily. The following table summarizes the report's findings.

Calexico Port of Entry				
Entries	Vehicles	Vehicle Percentage	Pedestrians	Pedestrian Percentage
41,000	23,000	56.1%	18,000	43.9%
45,000	27,000	60.0%	18,000	40.0%
Averages				
43,000	25,000	58.1%	18,000	41.9%

Additional assumptions relative to support the findings of pedestrian traffic from Mexico are listed below.

1. Due to Power Center being located close to the POE, many of the shopping vehicle trips are unnecessary as shoppers can easily walk across the border to Power Center.
2. Normally driving into the US through the POE takes significantly more time than walking across. Therefore, the time savings will prompt shoppers to give up their car to walk across.
3. High fuel prices and the easy access option of walking to Power Center will prompt shoppers to walk across the border and save gas costs.
4. The new shoppers coming from Mexico will be comprised mostly of pedestrians due to the convenience and close proximity to the border.
5. Of the existing pedestrian shoppers crossing the border, the majority of them will be attracted to Power Center due its location and wide variety of shops.
6. Also Power Center intends to provide shuttle service from downtown to Power Center and back to the crossing in downtown which will promote even a higher percentage of patrons walking across the border.
7. The new POE is close to Power Center which will make it even easier to access Power Center on foot.
8. Traffic volume in vicinity of the POE on 2<sup>nd</sup> and Cesar Chavez will also encourage patrons to walk rather than drive.
9. Many of the pedestrians who shop at Gran Plaza can access the Power Center very easily which creates inter-project/shared destination.



## Cumulative Projects

### Description of Cumulative Projects

There are other planned projects in the areas in the project vicinity, which will add traffic to the roadways surrounding the project site. Based on the review of other potential projects within the area, and research at the City of Calexico, County of Imperial, and Caltrans, it was determined that sixteen (16) future cumulative development projects will potentially add traffic to the study area. Detailed below is the trip generation calculated for these cumulative projects, which either have applications submitted, are approved, or under construction.

**Table 11  
Cumulative Project Trip Generation**

Cumulative Project	Land Use	Size	Units	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Airport Expansion	General Aviation	48	ft <sup>2</sup>	32	8	2	8	7	7	14
Calexico Gran Plaza	Fast Food Drive-Thru	20	ksf	13,000	465	465	910	465	465	910
	Less Diverted Trips	37%		4,811	169	169	338	169	169	338
	Less Pass-By Trips	12%		1,560	55	55	110	55	55	110
	Less Internal Capture	11%		1,430	50	50	100	51	51	102
	<b>Net-Total (Community Shopping Center)</b>			<b>5,199</b>	<b>181</b>	<b>181</b>	<b>362</b>	<b>180</b>	<b>180</b>	<b>362</b>
	Gas Station with Food Mart and Fully Automated Carwash - Pad V	20	vtc	3,100	124	124	248	140	140	280
	Less Diverted Trips	51%		1,581	63	63	126	71	71	142
	Less Pass-By Trips	0%		0	0	0	0	0	0	0
	Less Internal Capture	11%		341	14	14	28	15	15	30
	<b>Net-Total (Gas Station)</b>			<b>1,178</b>	<b>47</b>	<b>47</b>	<b>94</b>	<b>54</b>	<b>54</b>	<b>108</b>
Factory Outlet Center	Factory Outlet Center	461	ksf	18,442	387	166	553	830	830	1,658
	Less Diverted Trips	40%		7,377	155	67	222	332	332	664
	Less Pass-By Trips	15%		2,761	58	25	83	125	125	250
	Less Internal Capture	15%		2,767	58	25	83	125	125	250
	<b>Net-Total (Calexico Gran Plaza)</b>			<b>5,531</b>	<b>116</b>	<b>48</b>	<b>165</b>	<b>248</b>	<b>248</b>	<b>494</b>
<b>Total (Calexico Gran Plaza)</b>				<b>11,908</b>	<b>344</b>	<b>277</b>	<b>621</b>	<b>482</b>	<b>482</b>	<b>964</b>
Calexico Mega Park	Community Shopping Center	452.61	ksf	36,209	869	579	1,448	1,629	1,629	3,258
	Less Diverted Trips	31%		11,225	289	180	449	505	505	1,010
	Less Pass-By Trips	22%		7,966	191	127	319	358	358	717
	Less Internal Capture	15%		5,431	130	87	217	244	244	488
	<b>Net-Total (Community Shopping Center)</b>			<b>11,587</b>	<b>279</b>	<b>185</b>	<b>463</b>	<b>521</b>	<b>521</b>	<b>1,042</b>
	Regional Shopping Center	44.7	Acres	22,350	626	268	894	1,118	1,118	2,236
	Less Diverted Trips	35%		7,823	219	94	313	391	391	782
	Less Pass-By Trips	11%		2,459	69	30	98	123	123	246
	Less Internal Capture	15%		3,353	94	40	134	168	168	336
	<b>Net-Total (Regional Shopping Center)</b>			<b>8,717</b>	<b>244</b>	<b>105</b>	<b>349</b>	<b>436</b>	<b>436</b>	<b>873</b>
<b>Total (Calexico Mega Park)</b>				<b>20,303</b>	<b>522</b>	<b>290</b>	<b>812</b>	<b>957</b>	<b>957</b>	<b>1,915</b>
Calexico West Border Station Expansion	Border Station	5	Lanes	2,804	114	68	182	188	78	266
County Center III	Public Facility and Institutional Uses	various	various							
Edreilla	Single-Family Residential	371	DU	3,710	89	208	297	260	111	371
	Multi-Family Attached Residential	400	DU	3,200	51	205	256	234	98	330
	<b>Sub-Total (Residential)</b>	<b>771</b>		<b>6,910</b>	<b>140</b>	<b>413</b>	<b>553</b>	<b>494</b>	<b>209</b>	<b>691</b>
	Less Diverted Trips	11%		760	15	45	61	53	23	76
	Less Pass-By Trips	3%		207	4	12	17	15	6	21
	Less Internal Capture	0%		0	0	0	0	0	0	0
	<b>Net-Total (Residential)</b>			<b>5,943</b>	<b>121</b>	<b>355</b>	<b>475</b>	<b>416</b>	<b>178</b>	<b>534</b>
	School Site	12.94	Acres	1,165	224	149	373	42	63	105
	Less Diverted Trips	25%		291	56	37	93	10	16	26
	Less Pass-By Trips	10%		116	22	15	37	4	6	10
Less Internal Capture	0%		0	0	0	0	0	0	0	
<b>Net-Total (School Site)</b>			<b>757</b>	<b>145</b>	<b>91</b>	<b>242</b>	<b>21</b>	<b>41</b>	<b>88</b>	
Park	5.3	Acres	265	17	17	34	12	12	24	
Less Diverted Trips	28%		74	5	5	10	3	3	7	
Less Pass-By Trips	6%		16	1	1	2	1	1	2	
Less Internal Capture	0%		0	0	0	0	0	0	0	
<b>Net-Total (Park)</b>			<b>175</b>	<b>11</b>	<b>11</b>	<b>23</b>	<b>8</b>	<b>8</b>	<b>16</b>	
<b>Total (Edreilla)</b>				<b>6,874</b>	<b>277</b>	<b>463</b>	<b>740</b>	<b>451</b>	<b>227</b>	<b>678</b>



Table 11  
 Cumulative Project Trip Generation (Continued)

Cumulative Project	Land Use	Size	Units	Daily	AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	
Hallwood / Calexico Phase III & Casino	Casino, Hotel, Retail, Office, and Restaurants <sup>(1)</sup>	232 Acres		74,968	2,798	1,124	3,922	3,200	3,911	7,111	
	Less Diverted Trips <sup>(1)</sup>	35%		26,235	979	383	1,373	1,120	1,369	2,489	
	Less Pass-By Trips <sup>(1)</sup>	11%		8,245	308	124	431	352	430	782	
	Less Internal Capture	15%		11,244	420	169	588	480	587	1,067	
<b>Total (Hallwood / Calexico Phase III &amp; Casino)</b>				<b>29,234</b>	<b>1,051</b>	<b>438</b>	<b>1,530</b>	<b>1,348</b>	<b>1,526</b>	<b>2,773</b>	
Imperial Center	Convenience Market with a Filling Station, Hotel with Restaurant, Shopping Center, Plaza, Auction Court Information, Exhibit and Auction Center	various	various	26,370	433	310	743	1,175	1,251	2,426	
La Jolla Palms	Single-Family Residential	500 DU		5,000	120	280	400	350	150	500	
	Less Diverted Trips	11%		550	13	31	44	39	17	55	
	Less Pass-By Trips	3%		150	4	8	12	11	5	15	
	Less Internal Capture	0%		0	0	0	0	0	0	0	
	<b>Net-Total (Single-Family Residential)</b>				<b>4,300</b>	<b>103</b>	<b>241</b>	<b>344</b>	<b>301</b>	<b>128</b>	<b>430</b>
	Commercial <sup>(2)</sup>	22 Acres		8,140	195	130	325	407	407	814	
Less Diverted Trips	40%		3,256	78	52	130	163	163	326		
Less Pass-By Trips	15%		1,221	29	20	49	61	61	122		
Less Internal Capture	15%		1,221	29	20	49	61	61	122		
<b>Net-Total (Commercial)</b>				<b>2,442</b>	<b>69</b>	<b>38</b>	<b>98</b>	<b>125</b>	<b>122</b>	<b>244</b>	
<b>Total (La Jolla Palms)</b>				<b>6,742</b>	<b>162</b>	<b>280</b>	<b>442</b>	<b>423</b>	<b>251</b>	<b>674</b>	
Las Palmas	Single-Family Residential	500 DU		5,000	144	338	480	420	180	600	
	Mobile Home Park	73.0 Acres		2,920	70	164	234	193	128	321	
	Senior Complex	115 DU		460	9	14	23	19	13	32	
	<b>Sub-Total (Residential)</b>				<b>9,380</b>	<b>223</b>	<b>513</b>	<b>737</b>	<b>632</b>	<b>321</b>	<b>953</b>
	Less Diverted Trips	11%		1,032	25	59	81	70	35	109	
Less Pass-By Trips	3%		281	7	15	22	19	10	29		
Less Internal Capture	0%		0	0	0	0	0	0	0		
<b>Total (Las Palmas)</b>				<b>8,067</b>	<b>192</b>	<b>441</b>	<b>633</b>	<b>544</b>	<b>276</b>	<b>820</b>	
MoCabe Rancho I	Single-Family Residential	300 DU		3,000	72	168	240	210	90	300	
	Condominiums	127 DU		1,270	20	81	101	89	38	127	
	<b>Sub-Total (Residential)</b>				<b>4,270</b>	<b>92</b>	<b>249</b>	<b>341</b>	<b>299</b>	<b>128</b>	<b>427</b>
	Less Diverted Trips	11%		470	10	27	38	33	14	47	
	Less Pass-By Trips	3%		128	3	7	10	9	4	13	
Less Internal Capture	0%		0	0	0	0	0	0	0		
<b>Total (MoCabe Rancho I)</b>				<b>3,612</b>	<b>79</b>	<b>219</b>	<b>295</b>	<b>251</b>	<b>110</b>	<b>367</b>	
MoCabe Rancho II	Single-Family Residential	1582 DU		15,820	380	886	1,266	1,107	475	1,582	
	Apartment	718 DU		4,308	69	276	345	271	116	387	
	<b>Sub-Total (Residential)</b>				<b>20,128</b>	<b>448</b>	<b>1,162</b>	<b>1,610</b>	<b>1,378</b>	<b>591</b>	<b>1,969</b>
	Less Diverted Trips	11%		2,214	49	128	173	152	65	217	
	Less Pass-By Trips	3%		604	13	35	48	41	18	59	
Less Internal Capture	0%		0	0	0	0	0	0	0		
<b>Total (MoCabe Rancho II)</b>				<b>17,310</b>	<b>386</b>	<b>999</b>	<b>1,385</b>	<b>1,185</b>	<b>508</b>	<b>1,693</b>	
Palazzo	Single-Family Residential	182 DU		1,820	44	102	146	127	55	182	
	Multi-Family Residential	934 DU		7,472	120	478	598	523	224	747	
	<b>Sub-Total (Residential)</b>				<b>9,292</b>	<b>163</b>	<b>580</b>	<b>743</b>	<b>650</b>	<b>279</b>	<b>929</b>
	Less Diverted Trips	11%		1,022	18	64	82	72	31	102	
	Less Pass-By Trips	3%		279	5	17	22	20	8	28	
	Less Internal Capture	0%		0	0	0	0	0	0	0	
	<b>Net-Total (Residential)</b>				<b>7,991</b>	<b>140</b>	<b>499</b>	<b>639</b>	<b>559</b>	<b>240</b>	<b>799</b>
	Mixed-Use Commercial Village	6.4 Acres		2,560	46	31	77	115	115	230	
	Less Diverted Trips <sup>(1)</sup>	40%		1,024	18	12	31	46	46	92	
	Less Pass-By Trips <sup>(1)</sup>	15%		384	7	5	12	17	17	35	
Less Internal Capture	15%		384	7	5	12	17	17	35		
<b>Net-Total (Mixed-Use Commercial Village)</b>				<b>768</b>	<b>14</b>	<b>8</b>	<b>23</b>	<b>35</b>	<b>35</b>	<b>69</b>	
Regional Park	21.62 Acres		432	26	28	56	19	19	39		
Less Diverted Trips	28%		121	8	8	16	5	5	11		
Less Pass-By Trips	6%		26	2	2	3	1	1	2		
Less Internal Capture	0%		0	0	0	0	0	0	0		
<b>Net-Total (Regional Park)</b>				<b>285</b>	<b>15</b>	<b>15</b>	<b>31</b>	<b>13</b>	<b>13</b>	<b>26</b>	
<b>Total (Palazzo)</b>				<b>9,045</b>	<b>173</b>	<b>527</b>	<b>699</b>	<b>607</b>	<b>287</b>	<b>894</b>	



**Table 11  
 Cumulative Project Trip Generation (Continued)**

Cumulative Project	Land Use	Size	Units	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Remington Condominiums	Condominiums	272	DU	2,176	35	139	174	152	65	218
	Less Diverted Trips <sup>(1)</sup>	11%		239	4	19	19	17	7	24
	Less Pass-By Trips <sup>(2)</sup>	3%		65	1	4	5	5	2	7
	Less Internal Capture	0%		0	0	0	0	0	0	0
<b>Total (Remington Condominiums)</b>				<b>1,871</b>	<b>30</b>	<b>120</b>	<b>150</b>	<b>131</b>	<b>56</b>	<b>187</b>
River View Condominiums	Condominiums	272	DU	2,176	35	139	174	152	65	218
	Less Diverted Trips <sup>(1)</sup>	11%		239	4	19	19	17	7	24
	Less Pass-By Trips <sup>(2)</sup>	3%		65	1	4	5	5	2	7
	Less Internal Capture	0%		0	0	0	0	0	0	0
<b>Net-Total (Condominiums)</b>				<b>1,871</b>	<b>30</b>	<b>120</b>	<b>150</b>	<b>131</b>	<b>56</b>	<b>187</b>
Commercial Lots <sup>(3)</sup>	Commercial Lots <sup>(3)</sup>	63.30	ksf	2,744	74	45	119	76	97	173
	Less Diverted Trips <sup>(1)</sup>	40%		1,098	30	18	48	30	38	68
	Less Pass-By Trips <sup>(2)</sup>	15%		412	11	7	18	11	15	28
	Less Internal Capture	15%		412	11	7	18	11	15	28
<b>Net-Total (Commercial Lots)</b>				<b>823</b>	<b>22</b>	<b>13</b>	<b>36</b>	<b>23</b>	<b>29</b>	<b>50</b>
<b>Total (River View Condominiums)</b>				<b>2,695</b>	<b>52</b>	<b>133</b>	<b>185</b>	<b>154</b>	<b>85</b>	<b>239</b>
Venezia	Single-Family Residential	249	DU	2,490	60	139	199	174	75	249
	Less Diverted Trips <sup>(1)</sup>	11%		274	7	19	22	19	8	27
	Less Pass-By Trips <sup>(2)</sup>	3%		75	2	4	6	5	2	7
	Less Internal Capture	0%		0	0	0	0	0	0	0
<b>Net-Total (Commercial Lots)</b>				<b>2,141</b>	<b>51</b>	<b>120</b>	<b>171</b>	<b>150</b>	<b>64</b>	<b>214</b>
Commercial/Retail	Commercial/Retail	12.67	Acres	1,014	24	16	41	51	51	101
	Less Diverted Trips <sup>(1)</sup>	40%		406	10	6	16	20	20	41
	Less Pass-By Trips <sup>(2)</sup>	15%		152	4	2	6	8	8	15
	Less Internal Capture	15%		152	4	2	6	8	8	15
<b>Net-Total (Commercial Lots)</b>				<b>304</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>15</b>	<b>30</b>	
Park	Park	0.81	Acres	41	3	3	5	2	2	4
	Less Diverted Trips <sup>(1)</sup>	25%		11	1	1	1	1	1	1
	Less Pass-By Trips <sup>(2)</sup>	5%		2	0	0	0	0	0	0
	Less Internal Capture	0%		0	0	0	0	0	0	0
<b>Net-Total (Commercial Lots)</b>				<b>29</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>Total (Venezia)</b>				<b>2,472</b>	<b>60</b>	<b>127</b>	<b>187</b>	<b>166</b>	<b>81</b>	<b>247</b>
<b>Grand Total</b>				<b>145,459</b>	<b>3,821</b>	<b>4,690</b>	<b>8,611</b>	<b>7,975</b>	<b>5,183</b>	<b>14,158</b>

Source: SANDAG "Not So" Brief Guide of Vehicular Traffic Generation Rates."

Note:  
 \* : Estimated based on Calexico Land Port Of Entry (LPDE) Border Station Expansion Traffic Impact Study by KOA (March 2009)  
 \*\* : Estimated based on Traffic Impact Analysis - Calexico Gran Plaza by Linscott Law & Greenspan, Engineers (May 26, 2010)  
 \*\*\* : Project traffic volume at the McCabe Rd and Imperial Ave Intersection is directly applied based on County Center II Expansion Draft Program EIR (May 2010).  
 \*\*\*\*: Flights per Day  
 (1) : Regional Shopping Center Diverted/Pass-By Rates are adopted.  
 (2) : Commercial Shops Diverted/Pass-By Rates are adopted



### Cumulative Project Conditions

2015 Ambient + Cumulative Projects conditions represent the appropriate Year 2015 conditions. To obtain Year 2015 traffic volumes, the traffic generated from the approved/pending projects in the project area that were assumed to be on the road network by the Year 2015 were added onto the existing traffic volumes. The traffic generated from the approved/pending projects was estimated using the cumulative traffic volumes of Linscott, Law & Greenspan's Calexico Gran Plaza Traffic Impact Study, which is based on the *CALTRANS Forecast Year 2025 Calex GP + Model*.

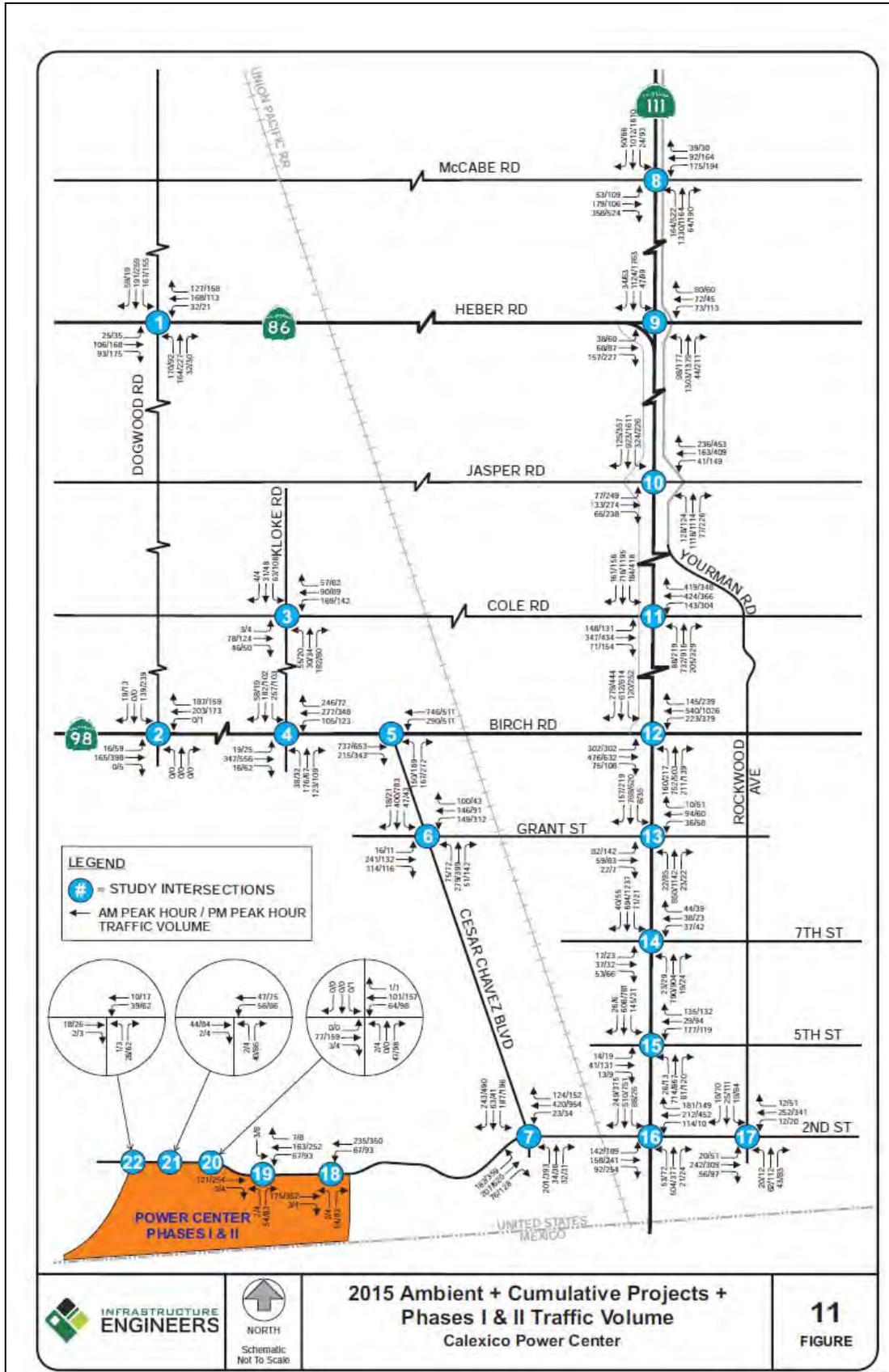
### Calexico West Border Station Expansion

Currently, the main facility serving the Calexico/Mexicali border crossing is at the intersection of SR-111 and 2<sup>nd</sup> Street. The Calexico West Border Expansion proposes to reopen the location at the intersection of Second Street and Cesar Chavez Boulevard, west of Imperial Highway (SR-111). This is due to the facility being outdated and operationally inefficient to support the growing number of patrons utilizing the border crossing. Under the 2015 Ambient + Cumulative Projects + Phases I & II scenario of this analysis, Scenario A of the Calexico West Border Station Expansion traffic study, completed by Katz, Okitsu & Associates in May 2003, has been assumed to be completed. It is assumed that pedestrian and bus traffic will continue to use the existing border crossing, while the remaining vehicle traffic will be re-routed to the West Border Station at Cesar Chavez Boulevard and 2<sup>nd</sup> Street.

Under Scenario A of the Calexico West Border Station Expansion traffic study, southbound vehicles are assumed to enter the border crossing from the intersection of Cesar Chavez Boulevard and Second Street, while northbound vehicles would be allowed to exit the border crossing both at the intersection of Cesar Chavez Boulevard and Second Street, as well as at the intersection of SR-111 and 2<sup>nd</sup> Street.

Figure 11 presents traffic volumes of 2015 Ambient + Cumulative Projects + Phases I & II scenario.

Gran Plaza Phase 2 Power Center  
 City of Calexico Draft Environmental Impact Report • SCH # 2014061070





## Near-Term Operations

### 2014 Ambient + Phase I

The following is an analysis of 2014 Ambient + Phase I Scenario for the study area intersections and street segments.

#### *Peak Hour Intersection Operations*

Table 12 shows that under the 2014 Ambient + Phase I Scenario all of the study intersections are calculated to currently operate at LOS C or better under the City's jurisdiction and at LOS D or better under Caltrans' jurisdiction with the following exception:

- Cesar Chavez Boulevard / SR-98 – LOS F during both the AM and PM peak hours
- Cesar Chavez Boulevard / Grant Street – LOS D during the PM peak hour

#### *Intersecting Lane Vehicles (ILV) Operations*

ILV analysis was conducted for the study intersections under the 2014 Ambient + Phase I Scenario. As shown in Table 13, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours.

Appendix D contains 2014 Ambient + Phase I intersection level of service and ILV analysis worksheets.

#### *Daily Street Segment Operations*

Table 14 shows that under the 2014 Ambient + Phase I Scenario. All of the study area street segments are calculated to operate at LOS C or better on a daily basis with the following exceptions:

- 2<sup>nd</sup> Street west of Cesar Chavez Boulevard – LOS F
- 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 – LOS F
- SR-111 between SR-98 and Grant Street – LOS F

### 2015 Ambient + Phases I & II

The following is an analysis of 2015 Ambient + Phases I & II Scenario for the study area intersections and street segments.

#### *Peak Hour Intersection Operations*

Table 12 shows that under the 2015 Ambient + Phases I & II Scenario all of the study intersections are calculated to operate at LOS C or better under the City's jurisdiction and at LOS D or better under Caltrans' jurisdiction except the following:

- Cesar Chavez Boulevard / SR-98 – LOS F during both the AM and PM peak hours
- Cesar Chavez Boulevard / Grant Street – LOS E and F during the AM and PM peak hour, respectively
- Cesar Chavez Boulevard / 2<sup>nd</sup> Street – LOS E during the PM peak hour



#### *Intersecting Lane Vehicles (ILV) Operations*

ILV analysis was conducted for the study intersections under the 2015 Ambient + Phases I & II Scenario. As shown in Table 13, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours.

Appendix E contains 2015 Ambient + Phases I & II intersection level of service and ILV analysis worksheets.

#### *Daily Street Segment Operations*

Table 14 shows that under the 2015 Ambient + Phases I & II Scenario. All of the study area street segments are calculated to currently operate at LOS C or better on a daily basis with the following exceptions:

- 2<sup>nd</sup> Street west of Cesar Chavez Boulevard – LOS F
- 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 – LOS F
- SR-111 between SR-98 and Grant Street/8<sup>th</sup> Street – LOS F

#### **2015 Ambient + Cumulative Projects + Phases I & II**

The following is an analysis of 2015 Ambient + Cumulative Projects + Phases I & II Scenario for the study area intersections and street segments.

#### *Peak Hour Intersection Operations*

Table 12 shows that under the 2015 Ambient + Cumulative Projects + Phases I & II Scenario. All of the study intersections are calculated to operate at LOS C or better under the City's jurisdiction and at LOS D or better under Caltrans' jurisdiction except the following:

- Dogwood Road / SR-86 – LOS D during the PM peak hour
- Cesar Chavez Boulevard / SR-98 – LOS F during both the AM and PM peak hours
- Cesar Chavez Boulevard / Grant Street – LOS F during both the AM and PM peak hours
- Cesar Chavez Boulevard / 2<sup>nd</sup> Street – LOS F during the PM peak hour
- SR-111 / McCabe Road – LOS D during the PM peak hour
- SR-111 / Jasper Road – LOS F during the PM peak hour
- SR-111 / Cole Road – LOS D during the PM peak hour
- SR-111 / SR-98 – LOS E during the PM peak hour

#### *Intersecting Lane Vehicles (ILV) Operations*

ILV analysis was conducted for the study intersections under the 2015 Ambient + Cumulative Projects + Phases I & II Scenario. As shown in Table 13, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours except the following:

- SR-111 / Jasper Road – Over Capacity during the PM peak hour

City of Calexico  
Power Center TIA



Appendix F contains 2015 Ambient + Cumulative Projects + Phases I & II intersection level of service and ILV analysis worksheets.

**Daily Street Segment Operations**

Table 14 shows that under the 2015 Ambient + Cumulative Projects + Phases I & II Scenario. All of the study area street segments are calculated to operate at LOS C or better on a daily basis with the following exceptions:

- 2<sup>nd</sup> Street west of Cesar Chavez Boulevard – LOS F
- 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 – LOS F
- Cesar Chavez Boulevard between Grant Street and 2<sup>nd</sup> Street – LOS E
- SR-111 between SR-98 and Grant Street/8<sup>th</sup> Street – LOS F

**2015 Ambient + Cumulative Projects + Phases I & II + Mitigation**

The following is an analysis of 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation Scenario for the study area intersections and street segments. Table 15 presents near-term mitigations for Cumulative Projects and for Power Center Phases I & II.

**Peak Hour Intersection Operations**

Table 16 shows that under 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation Scenario. All of the study intersections are calculated to operate at LOS C or better operate at LOS C or better under the City's jurisdiction and at LOS D or better under the Caltrans' jurisdiction.

**Intersecting Lane Vehicles (ILV) Operations**

ILV analysis was conducted for the study intersections under 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation Scenario. As shown in Table 17, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours.

Appendix G contains 2015 Ambient + Cumulative Projects + Phases I & II + Mitigated intersection level of service and ILV analysis worksheets.

**Daily Street Segment Operations**

Table 18 shows that under the 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation Scenario. All of the study area street segments are calculated to operate at LOS C or better on a daily basis with the following exception:

- SR-111 between SR-98 and Grant Street/8<sup>th</sup> Street – LOS F

The SR-111 segment between SR-98 and Grant Street currently operates at LOS E and is forecast to operate LOS F under all of the near-term scenarios. To mitigate the impact on the segment, widening to a six lane highway is recommended. However, its right-of-way is not available due to existing structures. Therefore, it is not feasible to mitigate the impact on the SR-111 segment between SR-98 and Grant Street.

City of Calexico  
 Power Center TIA



Table 12  
 Near-Term Intersection Operations

#	Intersection	Control Type	Peak Hour	2013 Existing			2014 Ambient			2014 Ambient + Phase 1			Type of Impact	2015 Ambient			2015 Ambient + Phases 1 & 2			Type of Impact	2015 Ambient + Cumulative			Type of Impact						
				LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay		LOS	V/C	Delay	LOS	V/C	Delay		LOS	V/C	Delay		LOS	V/C	Delay			
1	Dogwood Rd & SR-96 (Heber Rd)	Stop/Signal	AM	B	0.542	0.014	B	0.542	0.014	B	0.594	0.014	None	B	0.597	0.017	None	B	0.597	0.017	None	B	0.597	0.017	None	Δ	0.005	0.000	None	
2	Dogwood Rd & SR-96	Signal	AM	B	0.204	0.000	B	0.200	0.000	B	0.210	0.000	None	B	0.200	0.000	None	B	0.200	0.000	None	B	0.200	0.000	None	Δ	0.260	0.000	None	
3	Rock Rd & Cole Rd	Stop	AM	A	0.340	0.000	A	0.340	0.000	A	0.340	0.000	None	A	0.350	0.000	None	A	0.350	0.000	None	A	0.350	0.000	None	Δ	0.480	0.000	None	
4	Rock Rd & SR-96	Signal	AM	C	0.820	0.000	C	0.820	0.000	C	0.820	0.000	None	C	0.810	0.000	None	C	0.810	0.000	None	C	0.810	0.000	None	Δ	0.600	0.000	None	
5	Gearhart Blvd & SR-96	Stop/Signal	AM	F	2.010	0.000	F	2.010	0.000	F	2.010	0.000	Cumulative	F	2.010	0.000	Cumulative	F	2.010	0.000	Cumulative	F	2.010	0.000	Cumulative	Δ	0.940	0.000	Cumulative	
6	Gearhart Blvd & Grand St	Stop/Signal	AM	C	1.020	0.000	C	1.020	0.000	C	1.020	0.000	None	C	1.020	0.000	None	C	1.020	0.000	None	C	1.020	0.000	None	Δ	0.940	0.000	None	
7	Gearhart Blvd & 2nd St	Stop/Signal	AM	A	0.320	0.000	A	0.320	0.000	A	0.320	0.000	None	A	0.320	0.000	None	A	0.320	0.000	None	A	0.320	0.000	None	Δ	0.600	0.000	None	
8	SR-111 & McCook Rd	Signal	AM	A	0.300	0.000	A	0.300	0.000	A	0.300	0.000	None	A	0.300	0.000	None	A	0.300	0.000	None	A	0.300	0.000	None	Δ	0.714	0.011	None	
9	SR-111 & SR-96 (Heber Rd) (1)	Signal	AM	B	0.480	0.000	B	0.480	0.000	B	0.480	0.000	None	B	0.480	0.000	None	B	0.480	0.000	None	B	0.480	0.000	None	Δ	0.804	0.000	None	
10	SR-111 & Jackie Rd	Signal	AM	B	0.400	0.000	B	0.400	0.000	B	0.400	0.000	None	B	0.400	0.000	None	B	0.400	0.000	None	B	0.400	0.000	None	Δ	0.804	0.000	None	
11	SR-111 & Cole Rd	Signal	AM	C	0.920	0.000	C	0.920	0.000	C	0.920	0.000	None	C	0.920	0.000	None	C	0.920	0.000	None	C	0.920	0.000	None	Δ	0.740	0.000	None	
12	SR-111 & SR-96	Signal	AM	D	0.620	0.000	D	0.620	0.000	D	0.620	0.000	None	D	0.620	0.000	None	D	0.620	0.000	None	D	0.620	0.000	None	Δ	0.940	0.000	Cumulative	
13	SR-111 & Grand St	Signal	AM	B	0.390	0.000	B	0.390	0.000	B	0.390	0.000	None	B	0.390	0.000	None	B	0.390	0.000	None	B	0.390	0.000	None	Δ	0.580	0.000	None	
14	SR-111 & 7th St	Signal	AM	A	0.310	0.000	A	0.310	0.000	A	0.310	0.000	None	A	0.310	0.000	None	A	0.310	0.000	None	A	0.310	0.000	None	Δ	0.590	0.011	None	
15	SR-111 & 9th St	Signal	AM	C	0.520	0.000	C	0.520	0.000	C	0.520	0.000	None	C	0.520	0.000	None	C	0.520	0.000	None	C	0.520	0.000	None	Δ	0.677	0.000	None	
16	SR-111 & 2nd St	Signal	AM	C	0.400	0.000	C	0.400	0.000	C	0.400	0.000	None	C	0.400	0.000	None	C	0.400	0.000	None	C	0.400	0.000	None	Δ	0.560	0.000	None	
17	Hollywood Ave & 2nd St	Stop	AM	A	0.270	0.000	A	0.270	0.000	A	0.270	0.000	None	A	0.270	0.000	None	A	0.270	0.000	None	A	0.270	0.000	None	Δ	0.420	0.000	None	
18	Access #1 & 2nd St	Stop	AM	-	-	-	A	0.190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	Access #2 & 2nd St	Signal	AM	-	-	-	B	0.100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	Access #3 & 2nd St	Stop	AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Access #4 & 2nd St	Signal	AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Access #5 & 2nd St	Stop	AM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note:  
 (1) Intersection Under California Jurisdiction  
 Δ = increased in V/C or Delay  
 Cum = Cumulative Impact



Table 13  
 Near-Term Signalized Intersection Operations ILV Methodology

#	Intersection	Control Type	Peak Hour	2013 Existing		2014 Ambient		2014 Ambient + Phase I		2015 Ambient		2015 Ambient + Phases I & II		2015 Ambient + Cumulative + Phases I & II	
				ILV	Status	ILV	Status	ILV	Status	ILV	Status	ILV	Status	ILV	Status
2	Dogwood Rd & SR-98	Signal	AM	277	UNDER	280	UNDER	286	UNDER	282	UNDER	312	UNDER	377	UNDER
			PM	479	UNDER	484	UNDER	508	UNDER	488	UNDER	543	UNDER	656	UNDER
4	Kloke Rd & SR-98	Signal	AM	763	UNDER	770	UNDER	786	UNDER	777	UNDER	809	UNDER	949	UNDER
			PM	671	UNDER	679	UNDER	709	UNDER	685	UNDER	754	UNDER	932	UNDER
8	SR-111 & McCabe Rd	Signal	AM	611	UNDER	617	UNDER	625	UNDER	623	UNDER	640	UNDER	1,075	UNDER
			PM	835	UNDER	842	UNDER	856	UNDER	850	UNDER	883	UNDER	1,402	NEAR
9	SR-111 & SR-98 (Heber Rd)	Signal	AM	650	UNDER	656	UNDER	664	UNDER	664	UNDER	681	UNDER	862	UNDER
			PM	895	UNDER	904	UNDER	918	UNDER	914	UNDER	946	UNDER	1,310	NEAR
10	SR-111 & Jasper Rd	Signal	AM	585	UNDER	591	UNDER	599	UNDER	596	UNDER	613	UNDER	1,162	UNDER
			PM	760	UNDER	767	UNDER	781	UNDER	774	UNDER	807	UNDER	1,769	OVER
11	SR-111 & Cole Rd	Signal	AM	806	UNDER	815	UNDER	823	UNDER	823	UNDER	842	UNDER	1,030	UNDER
			PM	829	UNDER	838	UNDER	856	UNDER	846	UNDER	887	UNDER	1,314	NEAR
12	SR-111 & SR-98	Signal	AM	871	UNDER	879	UNDER	897	UNDER	889	UNDER	932	UNDER	1,114	UNDER
			PM	958	UNDER	967	UNDER	997	UNDER	977	UNDER	1,051	UNDER	1,262	NEAR
13	SR-111 & Grant St	Signal	AM	499	UNDER	503	UNDER	512	UNDER	509	UNDER	536	UNDER	648	UNDER
			PM	607	UNDER	613	UNDER	628	UNDER	619	UNDER	658	UNDER	849	UNDER
14	SR-111 & 7th St	Signal	AM	471	UNDER	474	UNDER	483	UNDER	480	UNDER	492	UNDER	595	UNDER
			PM	709	UNDER	715	UNDER	728	UNDER	722	UNDER	737	UNDER	796	UNDER
15	SR-111 & 5th St	Signal	AM	688	UNDER	694	UNDER	727	UNDER	702	UNDER	766	UNDER	884	UNDER
			PM	595	UNDER	601	UNDER	652	UNDER	607	UNDER	710	UNDER	870	UNDER
16	SR-111 & 2nd St	Signal	AM	497	UNDER	503	UNDER	516	UNDER	508	UNDER	550	UNDER	687	UNDER
			PM	610	UNDER	615	UNDER	681	UNDER	623	UNDER	753	UNDER	977	UNDER

Gran Plaza Phase 2 Power Center  
City of Calexico Draft Environmental Impact Report • SCH # 2014061070

**Table 14  
Near-Term Street Segment Operations**

Street Segment	Capacity <sup>(1)</sup>	2013 Existing			2014 Ambient + Phase I			V/C $\Delta$ <sup>(2)</sup>	Impact Type	2015 Ambient + Phases I & II			V/C $\Delta$ <sup>(2)</sup>	Impact Type	2015 Ambient + Cumulative <sup>(3)</sup> + Phases I & II			
		ADT Volume	LOS	V/C	ADT Volume	LOS	V/C			ADT Volume	LOS	V/C			ADT Volume	LOS	V/C	
2nd Street	West of Cesar Chavez Boulevard	17,500	2,178	A	0.12	23,259	F	1.33	1.206	Direct	44,807	F	2.56	2.436	Direct	45,772	F	2.62
	Cesar Chavez Boulevard to SR-111	25,000	7,386	A	0.30	25,498	F	1.02	0.724	Direct	40,559	F	1.62	1.327	Direct	36,994	F	1.48
	SR-111 to Bowker Road <sup>(2)</sup>	21,250	2,637	A	0.12	4,209	A	0.20	0.074	None	5,564	A	0.26	0.138	None	7,421	A	0.35
Cesar Chavez Boulevard	SR-98 to Grant Street	17,500	4,693	A	0.27	8,087	A	0.46	0.194	None	11,014	B	0.63	0.361	None	14,628	D	0.84
	Grant Street to 2nd Street	17,500	6,230	A	0.36	11,957	B	0.68	0.327	None	16,892	E	0.97	0.609	Direct	22,717	F	1.30
West Imperial Avenue	SR-98 to Camacho Road	16,200	4,690	A	0.29	4,737	A	0.29	0.003	None	4,784	A	0.30	0.006	None	5,429	A	0.34
Scaroni Road	Camacho Road to Cole Road	16,200	1,297	A	0.08	1,310	A	0.08	0.001	None	1,323	A	0.08	0.002	None	1,942	A	0.12
SR-98	Dogwood Road to Kioke Road	17,500	8,584	A	0.49	9,957	A	0.57	0.078	None	11,151	B	0.64	0.147	None	12,469	C	0.71
	Kioke Road to SR-111	37,500	13,709	A	0.37	15,906	A	0.42	0.059	None	17,815	A	0.48	0.109	None	19,403	A	0.52
	SR-111 to Andrade Avenue	37,500	19,668	A	0.52	20,508	A	0.55	0.022	None	21,259	A	0.57	0.042	None	22,772	B	0.61
	Andrade Avenue to Bowker Road	17,500	8,898	A	0.51	9,116	A	0.52	0.012	None	9,315	A	0.53	0.024	None	9,983	A	0.57
	Bowker Road to Barbara Worth Road	17,500	11,248	B	0.64	11,618	B	0.66	0.021	None	11,952	B	0.68	0.040	None	12,900	C	0.73
	Barbara Worth Road to SR-7	21,250	11,016	A	0.52	11,384	A	0.54	0.017	None	11,715	A	0.55	0.033	None	12,592	A	0.59
Jasper Road	Dogwood Road to Scaroni Road	17,500	725	A	0.04	732	A	0.04	0.000	None	740	A	0.04	0.001	None	2,975	A	0.17
	Scaroni Road to SR-111	17,500	1,345	A	0.08	1,358	A	0.08	0.001	None	1,372	A	0.08	0.002	None	4,316	A	0.25
	SR-111 to Yourman Road	17,500	3,958	A	0.23	3,998	A	0.23	0.002	None	4,037	A	0.23	0.005	None	8,577	A	0.49
Cole Road	Yourman Road to Bowker Road	17,500	405	A	0.02	409	A	0.02	0.000	None	413	A	0.02	0.000	None	4,667	A	0.27
	Kioke Road to SR-111	37,500	7,945	A	0.21	8,282	A	0.22	0.009	None	8,593	A	0.23	0.017	None	10,094	A	0.27
SR-111	Rockwood Avenue to Bowker Road	37,500	6,213	A	0.17	6,533	A	0.17	0.009	None	6,816	A	0.18	0.016	None	6,958	A	0.19
	Jasper Road to Cole Road	56,300	31,431	A	0.56	33,548	A	0.60	0.038	None	35,413	B	0.63	0.071	None	37,540	B	0.67
	Cole Road to SR-98	56,300	30,459	A	0.54	33,210	A	0.59	0.049	None	35,619	B	0.63	0.092	None	37,884	B	0.67
	SR-98 to Grant Street	37,500	35,900	E	0.96	39,091	F	1.04	0.085	Cumulative <sup>(3)</sup>	41,887	F	1.12	0.160	Cumulative <sup>(3)</sup>	41,736	F	1.11

Note:  
<sup>(1)</sup> : Capacities are based on the City of Calexico 2007 General Plan - Circulation Element, Table C-D  
<sup>(2)</sup> : SR-111 to Bowker Road is a 3-Lane Undivided Secondary Roadway whose capacity is assumed an average capacity of 2-Lane Undivided Secondary Roadway and 4-Lane Undivided Major Roadway Capacities.  
<sup>(3)</sup> :  $\Delta$  denotes an increase of the Volume to Capacity ratio due to the project.  
<sup>(4)</sup> : Cumulative scenario includes the Calexico Land Port of Entry (LPOE) Border Station Expansion.  
<sup>(5)</sup> : Cumulative Impact



Table 15  
 Near-Term Mitigations

Intersection/ # Segment	2015 Ambient + Cumulative (Mitigated) + Improvements <sup>(1)</sup>	2015 Ambient + Cumulative + Phases I & II + Mitigation
1 Dogwood Rd & Heber Rd (SR 96)	From Gran Plaza EIR - Signalization	-
5 Cesar Chavez Blvd & SR-96	From SR-96 Roadway Widening Project by Caltrans - Signalization; and - Widen to NB two left-turn, one right-turn; EB two through and one right-turn; and WB two through and two right-turn	-
6 Cesar Chavez Blvd & Grant St	From Cesar Chavez Blvd Widening Project by the City - Signalization	-
7 Cesar Chavez Blvd & 2nd St	From Calexico Land Port of Entry Boarder Station Expansion as the following: - Widen to convert NB one left-turn, two through, and one right-turn lanes; - Widen to convert SB two left-turn, two through, and one right-turn lanes; - Widen to convert EB one left-turn, two through, and one right-turn lanes; and - Widen to convert WB two left-turn, two through and one right-turn lanes.  From Gran Plaza EIR - Signalization - Widen to add NB second left-turn lane.	Widen EB and WB with third through lane each with signal modification; and Add SB right-turn signal overlap
8 SR-111 & McCabe Rd	-	Widen to convert WB to two left-turn, one through, and one right-turn lane(s) with signal modification; Add EB right-turn signal overlap
10 SR-111 & Jasper Rd	-	Widen to convert NB one left-turn, two through and one right-turn lane(s); SB one left-turn, two through and one right-turn lane(s); EB two left-turn, one through and one right-turn lane(s); and WB two left-turn, one through and two right-turn lane(s) with signal modifications
11 SR-111 & Cole Rd	-	Widen to add WB second through lane with signal modification; and Add WB right-turn signal overlap
12 SR-111 & SR-96	-	Add SB right-turn signal overlap
2nd St West of Cesar Chavez Blvd	From Gran Plaza - Widen to four (4) lane divided with restriping	Widen to six (6) lane divided with restriping
2nd St Cesar Chavez Blvd to SR-111	-	Widen to six (6) lane divided with restriping
Cesar Chavez Blvd SR-96 to Grant St	From Cesar Chavez Blvd Widening Project by the City of Calexico - Widen to four (4) lane divided with restriping	-
Cesar Chavez Blvd Grant St to 2nd St	From Cesar Chavez Blvd Widening Project by the City of Calexico - Widen to four (4) lane divided with restriping	-
Note: <sup>(1)</sup> including Caltrans' Signalization and Widening Projects, Port Entry Expansion Project, and Gran Plaza Mitigations		



**Table 16**  
**Near-Term Mitigated Intersection Operations**

#	Intersection	Control Type	Peak Hour	2015 Ambient + Cumulative + Phases I & II		2015 Ambient + Cumulative + Phases I & II + Mitigation	
				LOS	V/C (Delay)	LOS	V/C (Delay)
1	Dogwood Rd & SR-96 (Heber Rd)	Stop/Signal	AM	C	0.768	B	0.512
			PM	D	0.879	C	0.625
2	Dogwood Rd & SR-98	Signal	AM	B	0.268	B	0.268
			PM	C	0.450	C	0.450
3	Kioke Rd & Cole Rd	Stop	AM	B	0.459	B	0.459
			PM	B	0.439	B	0.439
4	Kioke Rd & SR-98	Signal	AM	C	0.624	C	0.624
			PM	C	0.605	C	0.605
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	F	(OVRFL)	B	0.438
			PM	F	(OVRFL)	C	0.591
6	Cesar Chavez Blvd & Grant St	Stop/Signal	AM	F	(OVRFL)	B	0.401
			PM	F	(OVRFL)	C	0.645
7	Cesar Chavez Blvd & 2nd St	Stop/Signal	AM	C	0.662	C	0.372
			PM	F	2.054	C	0.773
8	SR-111 & McCabe Rd	Signal	AM	C	0.725	C	0.688
			PM	D	1.029	C	0.880
9	SR-111 & SR-96 (Heber Rd) (1)	Signal	AM	B	0.617	B	0.617
			PM	C	0.924	C	0.924
10	SR-111 & Jasper Rd	Signal	AM	C	0.837	C	0.730
			PM	F	1.778	C	0.967
11	SR-111 & Cole Rd	Signal	AM	C	0.740	C	0.725
			PM	D	0.943	C	0.919
12	SR-111 & SR-98*	Signal	AM	D	0.789	C	0.846
			PM	E	0.994	D	0.955
13	SR-111 & Grant St	Signal	AM	C	0.568	C	0.568
			PM	C	0.726	C	0.726
14	SR-111 & 7th St	Signal	AM	B	0.436	B	0.436
			PM	B	0.580	B	0.580
15	SR-111 & 5th St	Signal	AM	C	0.697	C	0.697
			PM	C	0.677	C	0.677
16	SR-111 & 2nd St	Signal	AM	C	0.582	C	0.582
			PM	C	0.899	C	0.899
17	Rockwood Ave & 2nd St	Stop	AM	B	0.426	B	0.426
			PM	C	0.820	C	0.820
18	Access #1 & 2nd St	Stop	AM	A	(8.9)	A	(8.9)
			PM	A	(9.6)	A	(9.6)
19	Access #2 & 2nd St	Signal	AM	C	0.107	C	0.107
			PM	C	0.179	C	0.179
20	Access #3 & 2nd St	Stop	AM	A	(9.0)	A	(9.0)
			PM	C	(15.5)	C	(15.5)
21	Access #4 & 2nd St	Signal	AM	C	0.072	C	0.072
			PM	C	0.131	C	0.131
22	Access #5 & 2nd St	Stop	AM	A	(8.5)	A	(8.5)
			PM	A	(8.6)	A	(8.6)

Note:

(1): Intersection under Caltrans' Jurisdiction



**Table 17**  
**Near-Term Mitigated Signalized Intersection Operations - ILV Methodology**

#	Intersection	Control Type	Peak Hour	2015 Ambient + Cumulative + Phases I & II		2015 Ambient + Cumulative + Phases I & II + Mitigation	
				ILV	Status	ILV	Status
1	Dogwood Rd & SR-96 (Heber Rd)	Signal	AM	-	-	649	UNDER
			PM	-	-	797	UNDER
2	Dogwood Rd & SR-98	Signal	AM	377	UNDER	377	UNDER
			PM	656	UNDER	656	UNDER
4	Kloke Rd & SR-98	Signal	AM	949	UNDER	949	UNDER
			PM	932	UNDER	932	UNDER
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	-	-	589	UNDER
			PM	-	-	751	UNDER
8	SR-111 & McCabe Rd	Signal	AM	1,075	UNDER	988	UNDER
			PM	1,402	NEAR	1,339	NEAR
9	SR-111 & SR-96 (Heber Rd)	Signal	AM	862	UNDER	862	UNDER
			PM	1,310	NEAR	1,310	NEAR
10	SR-111 & Jasper Rd	Signal	AM	1,162	UNDER	1,085	UNDER
			PM	1,769	OVER	1,464	NEAR
11	SR-111 & Cole Rd	Signal	AM	1,030	UNDER	905	UNDER
			PM	1,314	NEAR	1,186	UNDER
12	SR-111 & SR-98	Signal	AM	1,114	UNDER	1,114	UNDER
			PM	1,262	NEAR	1,262	NEAR
13	SR-111 & Grant St	Signal	AM	648	UNDER	648	UNDER
			PM	849	UNDER	849	UNDER
14	SR-111 & 7th St	Signal	AM	595	UNDER	595	UNDER
			PM	796	UNDER	796	UNDER
15	SR-111 & 5th St	Signal	AM	884	UNDER	884	UNDER
			PM	870	UNDER	870	UNDER
16	SR-111 & 2nd St	Signal	AM	687	UNDER	687	UNDER
			PM	977	UNDER	977	UNDER



**Table 18**  
**Near-Term Mitigated Daily Street Segment Operations**

Street Segment	Capacity <sup>(1)</sup>	2015 Ambient + Cumulative <sup>(2)</sup> + Phases I & II			2015 Ambient + Cumulative <sup>(2)</sup> + Phases I & II + Mitigation				
		ADT Volume	LOS	V/C	Capacity	ADT Volume	LOS	V/C	
2nd Street	West of Cesar Chavez Boulevard	17,500	45,772	F	2.62	60,000	45,772	C	0.76
	Cesar Chavez Boulevard to SR-111	25,000	36,994	F	1.48	60,000	36,994	B	0.62
	SR-111 to Bowker Road <sup>(2)</sup>	21,250	7,421	A	0.35	25,000	7,421	A	0.30
Cesar Chavez Boulevard	SR-98 to Grant Street	25,000	14,628	A	0.59	37,500	14,628	A	0.39
	Grant Street to 2nd Street	25,000	22,717	E	0.91	37,500	22,717	B	0.61
West Imperial Avenue	SR-98 to Camacho Road	16,200	5,429	A	0.34	16,200	5,429	A	0.34
Scaroni Road	Camacho Road to Cole Road	16,200	1,942	A	0.12	16,200	1,942	A	0.12
SR-98	Dogwood Road to Kloke Road	17,500	12,469	C	0.71	58,300	12,469	A	0.22
	Kloke Road to SR-111	37,500	19,403	A	0.52	58,300	19,403	A	0.34
	SR-111 to Andrade Avenue	37,500	22,772	B	0.61	58,300	22,772	A	0.40
	Andrade Avenue to Bowker Road	17,500	9,983	A	0.57	58,300	9,983	A	0.18
	Bowker Road to Barbara Worth Road	17,500	12,800	C	0.73	60,000	12,800	A	0.21
	Barbara Worth Road to SR-7	21,250	12,592	A	0.59	60,000	12,592	A	0.21
Jasper Road	Dogwood Road to Scaroni Road	17,500	2,975	A	0.17	90,000	2,975	A	0.03
	Scaroni Road to SR-111	17,500	4,316	A	0.25	90,000	4,316	A	0.05
	SR-111 to Yourman Road	17,500	8,577	A	0.49	90,000	8,577	A	0.10
	Yourman Road to Bowker Road	17,500	4,667	A	0.27	90,000	4,667	A	0.05
Cole Road	Kloke Road to SR-111	37,500	10,094	A	0.27	37,500	10,094	A	0.27
	Rockwood Avenue to Bowker Road	37,500	6,958	A	0.19	37,500	6,958	A	0.19
SR-111	Jasper Road to Cole Road	58,300	37,540	B	0.67	90,000	37,540	A	0.42
	Cole Road to SR-98	58,300	37,884	B	0.67	60,000	37,884	B	0.63
	SR-98 to Grant Street	37,500	41,736	F	1.11	37,500	41,736	F	1.11

Note:

<sup>(1)</sup> : Capacities are based on the City of Calexico 2007 General Plan - Circulation Element, Table C-D

<sup>(2)</sup> : SR-111 to Bowker Road is a 3-Lane Undivided Secondary Roadway whose capacity is assumed an average capacity of 2-Lane Undivided Secondary Roadway and 4-Lane Undivided Major Roadway Capacities.

<sup>(3)</sup> : Cumulative scenario includes the Calexico Land Port of Entry (LPOE) Border Station Expansion.



## Long-Term Operations

### 2035 Ambient + Cumulative Projects

The following is an analysis of 2035 Ambient + Cumulative Projects Scenario for the study area intersections and street segments. As aforementioned in Significant Criteria, under the long-term scenarios, significant impacts are considered cumulative and LOS D is considered acceptable.

#### *Peak Hour Intersection Operations*

Table 19 shows that under the 2035 Ambient + Cumulative Projects Scenario. All of the study intersections are calculated to operate at LOS D or better except the following:

- Dogwood Road / Heber Road (SR-86) – LOS E and F during the AM and PM peak hours, respectively
- SR-111 / McCabe Road – LOS E during the PM peak hour
- SR-111 / Jasper Road – LOS F during the PM peak hour
- SR-111 / Cole Road – LOS E during the PM peak hour
- SR-111 / SR-98 – LOS E during the PM peak hour

#### *Intersecting Lane Vehicles (ILV) Operations*

ILV analysis was conducted for the study intersections under the 2035 Ambient + Cumulative Projects + Phases I & II Scenario. As shown in Table 20, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours except the following:

- SR-111 / McCabe Road – Over Capacity during the PM peak hour
- SR-111 / Jasper Road – Over Capacity during the PM peak hour

Appendix H contains 2035 Ambient + Cumulative Projects intersection level of service and ILV analysis worksheets.

#### *Daily Street Segment Operations*

Table 21 shows that under the 2035 Ambient + Cumulative Projects Scenario. All of the study area street segments are calculated to currently operate at LOS D or better on a daily basis with the following exception:

- SR-111 between SR-98 and Grant Street – LOS F



### 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated)

The following is an analysis of 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) Scenario for the study area intersections and street segments.

#### *Peak Hour Intersection Operations*

Table 19 shows that under the 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) Scenario. All of the study intersections are calculated to currently operate at LOS D or better except the following:

- Rockwood Avenue / 2<sup>nd</sup> Street – LOS F during the PM peak hour

#### *Intersecting Lane Vehicles (ILV) Operations*

ILV analysis was conducted for the study intersections under the 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) Scenario. As shown in Table 20, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours except the following:

- SR-111 / McCabe Road – Over Capacity during the PM peak hour
- SR-111 / SR-86 – Over Capacity during the PM peak hour
- SR-111 / Jasper Road – Over Capacity during the PM peak hour

Appendix I contains 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) intersection level of service and ILV analysis worksheets.

#### *Daily Street Segment Operations*

Table 21 shows that under the 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated) Scenario. All of the study area street segments are calculated to currently operate at LOS D or better on a daily basis with the following exceptions:

- SR-111 between SR-98 and Grant Street – LOS F



Table 19  
 Long-Term Intersection Operation

#	Intersection	Control Type	Peak Hour	2035 Ambient + Cumulative		2035 Ambient + Cumulative + Phases I & II (Near Term Mitigated)	
				LOS	V/C (Delay)	LOS	V/C (Delay)
1	Dogwood Rd & SR-86 (Heber Rd)	Stop/Signal	AM	E	0.968	C	0.608
			PM	F	1.106	C	0.738
2	Dogwood Rd & SR-98	Signal	AM	B	0.302	B	0.310
			PM	C	0.483	C	0.518
3	Kloke Rd & Cole Rd	Stop	AM	B	0.557	B	0.557
			PM	B	0.508	B	0.508
4	Kloke Rd & SR-98	Signal	AM	C	0.704	C	0.724
			PM	C	0.645	C	0.691
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	B	0.402	B	0.498
			PM	B	0.458	C	0.636
6	Cesar Chavez Blvd & Grant St	Stop/Signal	AM	B	0.396	B	0.461
			PM	C	0.593	C	0.716
7	Cesar Chavez Blvd & 2nd St	Stop/Signal	AM	C	0.372	C	0.390
			PM	D	0.899	C	0.805
8	SR-111 & McCabe Rd	Signal	AM	C	0.766	C	0.761
			PM	E	1.124	D	0.966
9	SR-111 & SR-86 (Heber Rd) <sup>(1)</sup>	Signal	AM	B	0.706	C	0.718
			PM	D	1.039	D	1.063
10	SR-111 & Jasper Rd	Signal	AM	D	0.948	C	0.809
			PM	F	1.977	D	1.068
11	SR-111 & Cole Rd	Signal	AM	D	0.852	C	0.848
			PM	E	1.029	D	1.041
12	SR-111 & SR-98*	Signal	AM	D	0.883	C	0.894
			PM	E	1.039	D	1.015
13	SR-111 & Grant St	Signal	AM	C	0.623	C	0.648
			PM	C	0.785	C	0.820
14	SR-111 & 7th St	Signal	AM	B	0.490	B	0.505
			PM	B	0.673	B	0.686
15	SR-111 & 5th St	Signal	AM	C	0.745	C	0.804
			PM	C	0.663	C	0.771
16	SR-111 & 2nd St	Signal	AM	C	0.620	C	0.681
			PM	C	0.840	D	1.025
17	Rockwood Ave & 2nd St	Stop	AM	B	0.456	B	0.502
			PM	D	0.895	F	1.042
18	Access #1 & 2nd St	Stop	AM	-	-	A	(8.9)
			PM	-	-	A	(9.6)
19	Access #2 & 2nd St	Signal	AM	-	-	C	0.107
			PM	-	-	C	0.179
20	Access #3 & 2nd St	Stop	AM	-	-	A	(9.0)
			PM	-	-	C	(15.5)
21	Access #4 & 2nd St	Signal	AM	-	-	C	0.072
			PM	-	-	C	0.131
22	Access #5 & 2nd St	Stop	AM	-	-	A	(8.5)
			PM	-	-	A	(8.6)

Note:

<sup>(1)</sup>: Intersection under Caltrans' Jurisdiction



**Table 20**  
**Long-Term Signalized Intersection Operations ILV Methodology**

#	Intersection	Control Type	Peak Hour	2035 Ambient + Cumulative		2035 Ambient + Cumulative + Phases I & II (Near Term Mitigated)	
				ILV	Status	ILV	Status
1	Dogwood Rd & SR-98 (Heber Rd)	Signal	AM	745	UNDER	751	UNDER
			PM	908	UNDER	915	UNDER
2	Dogwood Rd & SR-98	Signal	AM	403	UNDER	433	UNDER
			PM	698	UNDER	753	UNDER
4	Kloke Rd & SR-98	Signal	AM	1,071	UNDER	1,103	UNDER
			PM	996	UNDER	1,068	UNDER
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	622	UNDER	673	UNDER
			PM	683	UNDER	836	UNDER
8	SR-111 & McCabe Rd	Signal	AM	1,172	UNDER	1,102	UNDER
			PM	1,547	OVER	1,507	OVER
9	SR-111 & SR-98 (Heber Rd)	Signal	AM	974	UNDER	991	UNDER
			PM	1,480	NEAR	1,512	OVER
10	SR-111 & Jasper Rd	Signal	AM	1,263	NEAR	1,201	NEAR
			PM	1,889	OVER	1,612	OVER
11	SR-111 & Cole Rd	Signal	AM	1,175	UNDER	1,082	UNDER
			PM	1,437	NEAR	1,343	NEAR
12	SR-111 & SR-98	Signal	AM	1,246	NEAR	1,288	NEAR
			PM	1,360	NEAR	1,442	NEAR
13	SR-111 & Grant St	Signal	AM	722	UNDER	749	UNDER
			PM	931	UNDER	970	UNDER
14	SR-111 & 7th St	Signal	AM	671	UNDER	688	UNDER
			PM	924	UNDER	939	UNDER
15	SR-111 & 5th St	Signal	AM	958	UNDER	1,021	UNDER
			PM	886	UNDER	989	UNDER
16	SR-111 & 2nd St	Signal	AM	726	UNDER	783	UNDER
			PM	977	UNDER	1,099	UNDER



Table 21  
 Long-Term Daily Street Segment Operation

Street Segment	Future Classification <sup>(1)</sup>	Capacity <sup>(1)</sup>	2035 Ambient + Cumulative Projects <sup>(3)</sup>			2035 Ambient + Cumulative Projects + Phases I & II			V/C <sup>(4)</sup>	Impact Type
			ADT Volume	LOS	V/C	ADT Volume	LOS	V/C		
2nd Street	West of Cesar Chavez Boulevard	60,000	23,752	A	0.40	45,531	C	0.76	0.363	None
	Cesar Chavez Boulevard to SR-111	60,000	21,056	A	0.35	37,946	B	0.63	0.405	None
	SR-111 to Bowker Road <sup>(2)</sup>	25,000	6,615	A	0.26	7,949	A	0.32	0.159	None
Cesar Chavez Boulevard	SR-98 to Grant Street	37,500	12,678	A	0.34	15,567	A	0.42	0.202	None
	Grant Street to 2nd Street	37,500	15,073	A	0.51	23,963	B	0.64	0.297	None
West Imperial Avenue	SR-98 to Camacho Road	15,200	6,367	A	0.39	6,367	A	0.39	0.290	None
Scaroni Road	Camacho Road to Cole Road	15,200	2,201	A	0.14	2,201	A	0.14	0.080	None
SR-98	Dogwood Road to Kioke Road	55,300	13,075	A	0.23	14,195	A	0.25	0.172	None
	Kioke Road to SR-111	55,300	20,367	A	0.36	22,145	A	0.39	0.275	None
	SR-111 to Andrade Avenue	55,300	26,150	A	0.46	26,706	A	0.47	0.353	None
	Andrade Avenue to Bowker Road	55,300	11,651	A	0.21	11,763	A	0.21	0.160	None
	Bowker Road to Barbara Worth Road	60,000	14,827	A	0.25	15,050	A	0.25	0.191	None
	Barbara Worth Road to SR-7	60,000	14,573	A	0.24	14,795	A	0.25	0.187	None
Jasper Road	Dogwood Road to Scaroni Road	90,000	3,120	A	0.03	3,120	A	0.03	0.008	None
	Scaroni Road to SR-111	90,000	4,585	A	0.05	4,585	A	0.05	0.015	None
	SR-111 to Youman Road	90,000	9,368	A	0.10	9,368	A	0.10	0.044	None
	Youman Road to Bowker Road	90,000	4,748	A	0.05	4,748	A	0.05	0.005	None
Cole Road	Kioke Road to SR-111	37,500	11,461	A	0.31	11,683	A	0.31	0.218	None
	Rockwood Avenue to Bowker Road	37,500	7,978	A	0.21	8,201	A	0.22	0.172	None
SR-111	Jasper Road to Cole Road	90,000	42,271	A	0.47	43,827	A	0.49	0.367	None
	Cole Road to SR-98	60,000	41,864	B	0.70	43,976	C	0.73	0.543	None
	SR 98 to Grant Street/5th Street	37,500	46,471	F	1.24	48,916	F	1.30	1.023	Cumulative

Note:

<sup>(1)</sup> : Future Classifications and Capacities based on City of Calexico Recommended Plan Circulation Element Roadway Classification and Grand Plaza Mitigation.

<sup>(2)</sup> : SR-111 to Bowker Road is a 3-Lane Undivided Secondary Roadway whose capacity is assumed an average capacity of 2-Lane Undivided Secondary Roadway and 4-Lane Undivided Major Roadway Capacities.

<sup>(3)</sup> : Cumulative scenario includes the Calexico Land Port of Entry (LPOE) Border Station Expansion.

<sup>(4)</sup> : Δ denotes an increase of the Volume to Capacity ratio due to the project.

<sup>(5)</sup> : Cumulative Impact



**2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation**

The following is an analysis of 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation Scenario for the study area intersections and street segments. Table 22 presents long-term mitigations for Cumulative Projects and for Power Center Phases I & II.

**Table 22  
Long-Term Mitigations**

#	Intersection/ Segment	2035 Ambient + Cumulative + Phases I & II (Mitigated) + Long Term Mitigation
8	SR-111 & McCabe Rd	Convert WB with two (2) left-turn, one (1) through and one (1) through and right-turn shared lane(s)
9	SR-111 & Heber Rd (SR-88)	Widen EB with second right-turn lane
10	SR-111 & Jasper Rd	Widen WB with second through lane
17	Rockwood Ave & 2nd St	Signalization

**Peak Hour Intersection Operations**

Table 23 shows that under 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation Scenario. All of the study intersections are calculated to operate at LOS D or better.

**Intersecting Lane Vehicles (ILV) Operations**

ILV analysis was conducted for the study intersections under 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation Scenario. As shown in Table 24, all study intersections are calculated to operate at under capacity for both the AM and PM peak hours.

Appendix J contains 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation intersection level of service and ILV analysis worksheets.

**Daily Street Segment Operations**

Under the 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation Scenario, all of the study area street segments are forecast to operate at LOS D or better on a daily basis except the SR-111 segment between SR-98 and Grant Street (LOS F). The SR-111 segment between SR-98 and Grant Street currently operates at LOS E and is forecast to operate LOS F under all of the long-term scenarios. To mitigate the impact on the segment, widening to a six lane highway is recommended. However, its right-of-way is not available due to existing structures. Therefore, it is not feasible to mitigate the impact on the SR-111 segment between SR-98 and Grant Street.



**Table 23**  
**Long-Term Mitigated Intersection Operations**

#	Intersection	Control Type	Peak Hour	2035 Ambient + Cumulative + Phases I & II (Near Term Mitigated)		2035 Ambient + Cumulative + Phases I & II (Mitigated) + Long Term Mitigation	
				LOS	V/C (Delay)	LOS	V/C (Delay)
1	Dogwood Rd & SR-86 (Heber Rd)	Stop/Signal	AM	C	0.608	C	0.608
			PM	C	0.738	C	0.738
2	Dogwood Rd & SR-98	Signal	AM	B	0.310	B	0.310
			PM	C	0.518	C	0.518
3	Kloke Rd & Cole Rd	Stop	AM	B	0.557	B	0.557
			PM	B	0.508	B	0.508
4	Kloke Rd & SR-98	Signal	AM	C	0.724	C	0.724
			PM	C	0.691	C	0.691
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	B	0.498	B	0.498
			PM	C	0.636	C	0.636
6	Cesar Chavez Blvd & Grant St	Stop/Signal	AM	B	0.461	B	0.461
			PM	C	0.716	C	0.716
7	Cesar Chavez Blvd & 2nd St	Stop/Signal	AM	C	0.390	C	0.390
			PM	C	0.805	C	0.805
8	SR-111 & McCabe Rd	Signal	AM	C	0.761	C	0.706
			PM	D	0.966	C	0.931
9	SR-111 & SR-86 (Heber Rd) (1)	Signal	AM	C	0.718	B	0.718
			PM	D	1.063	D	1.063
10	SR-111 & Jasper Rd	Signal	AM	C	0.809	C	0.812
			PM	D	1.068	D	1.008
11	SR-111 & Cole Rd	Signal	AM	C	0.848	C	0.848
			PM	D	1.041	D	1.041
12	SR-111 & SR-98*	Signal	AM	C	0.894	C	0.894
			PM	D	1.015	D	1.015
13	SR-111 & Grant St	Signal	AM	C	0.648	C	0.648
			PM	C	0.820	C	0.820
14	SR-111 & 7th St	Signal	AM	B	0.505	B	0.505
			PM	B	0.686	B	0.686
15	SR-111 & 5th St	Signal	AM	C	0.804	C	0.804
			PM	C	0.771	C	0.771
16	SR-111 & 2nd St	Signal	AM	C	0.681	C	0.681
			PM	D	1.025	D	1.025
17	Rockwood Ave & 2nd St	Stop	AM	B	0.502	B	0.310
			PM	F	1.042	B	0.487
18	Access #1 & 2nd St	Stop	AM	A	(8.9)	A	(8.9)
			PM	A	(9.6)	A	(9.6)
19	Access #2 & 2nd St	Signal	AM	C	0.107	C	0.107
			PM	C	0.179	C	0.179
20	Access #3 & 2nd St	Stop	AM	A	(9.0)	A	(9.0)
			PM	C	(15.5)	C	(15.5)
21	Access #4 & 2nd St	Signal	AM	C	0.072	C	0.072
			PM	C	0.131	C	0.131
22	Access #5 & 2nd St	Stop	AM	A	(8.5)	A	(8.5)
			PM	A	(8.6)	A	(8.6)

Note:  
 (1): Intersection under Caltrans' Jurisdiction



**Table 24**  
**Long-Term Mitigated Signalized Intersection Operations ILV Methodology**

#	Intersection	Control Type	Peak Hour	2035 Ambient + Cumulative + Phases I & II (Near Term Mitigated)		2035 Ambient + Cumulative + Phases I & II (Mitigated) + Long Term Mitigation	
				ILV	Status	ILV	Status
1	Dogwood Rd & SR-98 (Heber Rd)	Signal	AM	751	UNDER	751	UNDER
			PM	915	UNDER	915	UNDER
2	Dogwood Rd & SR-98	Signal	AM	433	UNDER	433	UNDER
			PM	753	UNDER	753	UNDER
4	Kloke Rd & SR-98	Signal	AM	1,103	UNDER	1,103	UNDER
			PM	1,088	UNDER	1,088	UNDER
5	Cesar Chavez Blvd & SR-98	Stop/Signal	AM	873	UNDER	873	UNDER
			PM	838	UNDER	838	UNDER
8	SR-111 & McCabe Rd	Signal	AM	1,102	UNDER	1,102	UNDER
			PM	1,507	OVER	1,482	NEAR
9	SR-111 & SR-98 (Heber Rd)	Signal	AM	991	UNDER	991	UNDER
			PM	1,512	OVER	1,488	NEAR
10	SR-111 & Jasper Rd	Signal	AM	1,201	NEAR	1,152	UNDER
			PM	1,812	OVER	1,425	NEAR
11	SR-111 & Cole Rd	Signal	AM	1,082	UNDER	1,082	UNDER
			PM	1,343	NEAR	1,343	NEAR
12	SR-111 & SR-98	Signal	AM	1,288	NEAR	1,288	NEAR
			PM	1,442	NEAR	1,442	NEAR
13	SR-111 & Grant St	Signal	AM	749	UNDER	749	UNDER
			PM	970	UNDER	970	UNDER
14	SR-111 & 7th St	Signal	AM	888	UNDER	888	UNDER
			PM	939	UNDER	939	UNDER
15	SR-111 & 5th St	Signal	AM	1,021	UNDER	1,021	UNDER
			PM	989	UNDER	989	UNDER
16	SR-111 & 2nd St	Signal	AM	783	UNDER	783	UNDER
			PM	1,099	UNDER	1,099	UNDER



## Site Access

Access to the Calexico Power Center project site will be via five (5) driveways all located along 2<sup>nd</sup> Street. Access #1 is the most eastern driveway and Access #5 is the most western. Among them, Accesses #2 and #3 will be aligned with proposed accesses of the future expansion of Calexico International Airport located on north side of 2<sup>nd</sup> Street. Based on a review of expected traffic volumes at each access point, the following geometry is recommended to facilitate adequate operations at each driveway.

Table 25 provides the LOS of the accesses under the recommended conditions. All the accesses are forecast to operate LOS C or better during both the AM and PM peak hours under all of the scenarios.

### Phase I

#### Access #1

Place the project driveway under stop-control and provide the following lane geometry:

- Northbound: Provide one (1) right-turn lane and one (1) left-turn lane
- Eastbound: Provide two (2) through lanes and one (1) through and right-turn shared lane
- Westbound: Provide three (3) through lanes and one (1) left-turn pocket lane

#### Access #2

Install a traffic signal and provide the following lane geometry:

- Northbound: Provide one (1) right-turn lane and one (1) through and left-turn shared lane
- Southbound: Assumed to provide one (1) or two (2) lanes from the Calexico International Airport
- Eastbound: Provide two (2) through lanes and one (1) through and right-turn shared lane
- Westbound: Provide three (3) through lanes and one (1) left-turn pocket lane

### Phase II

#### Access #3

Place the project driveway under stop-control and provide the following lane geometry:

- Northbound: Provide one (1) right-turn lane and one (1) through and left-turn shared lane
- Southbound: Assumed to provide one (1) lane for all turning movements from the Calexico International Airport
- Eastbound: Provide two (2) through lanes and one (1) through and right-turn shared lane
- Westbound: Provide three (3) through lanes and one (1) left-turn pocket lane

#### Access #4

Install a traffic signal and provide the following lane geometry:

- Northbound: Provide one (1) right-turn lane and one (1) left-turn lane



### Significance of Impacts and Mitigation Measures

Table 26 presents the calculated significant impacts for the proposed project based on the established Significance Criteria along with recommendations for mitigation measures at the impact locations and fair share percentage of mitigation measures.

**Table 26**  
**Summary of Impact Types, Mitigation Measures and Fair Share Percentages**

Future Term	#	Intersection/ Segment	Impact Type	Mitigation Measures <sup>(1)</sup>	Mitigated LOS		Fair Share (%)
					AM	PM	
Near-Term	7	Cesar Chavez Blvd & 2nd St	Direct	Widen EB and WB with third through lane each with signal modification; and Add SB right-turn signal overlap	C	C	Direct
	8	SR-111 & McCabe Rd	Cumulative	Widen to convert WB to two left-turn, one through, and one right-turn lane(s) with signal modification; Add EB right-turn signal overlap	C	C	4.96%
	10	SR-111 & Jasper Rd	Cumulative	Widen to convert NB one left-turn, two through and one right-turn lane(s); SB one left-turn, two through and one right-turn lane(s); EB two left-turn, one through and one right-turn lane(s); and WB two left-turn, one through and two right-turn lane(s) with signal modifications	C	C	4.80%
	11	SR-111 & Cole Rd	Cumulative	Widen to add WB second through lane with signal modification; and Add WB right-turn signal overlap	C	C	11.23%
	12	SR-111 & SR-98	Cumulative	Add SB right-turn signal overlap	C	D <sup>(2)</sup>	18.94%
		2nd St West of Cesar Chavez Blvd	Direct	Widen to six (6) lane divided with restriping	C		Direct
		2nd St Cesar Chavez Blvd to SR-111	Direct	Widen to six (6) lane divided with restriping	B		Direct
		SR-111 SR-98 to Grant St	Cumulative	Not Feasible to Mitigate <sup>(3)</sup>	N/A		N/A
Long-Term	8	SR-111 & McCabe Rd	Cumulative	Convert WB with two (2) left-turn, one (1) through and one (1) through and right-turn shared lane(s) <sup>(4)</sup>	C	C	6.21%
	9	SR-111 & Heber Rd (SR-96)	Cumulative	Widen EB with second right-turn lane <sup>(4)</sup>	B	D <sup>(2)</sup>	6.78%
	10	SR-111 & Jasper Rd	Cumulative	Widen WB with second through lane <sup>(4)</sup>	C	D	4.80%
	17	Rockwood Ave & 2nd St	Cumulative	Signalization	B	B	29.71%
		SR-111 SR-98 to Grant St	Cumulative	Not Feasible to Mitigate <sup>(3)</sup>	N/A		

**Note:**  
<sup>(1)</sup>: Power Center Related Mitigation Measures Only  
<sup>(2)</sup>: LOS D is acceptable under the Caltrans jurisdiction or as of long-term impacts.  
<sup>(3)</sup>: In order to mitigate the significant impact, SR-111 would need to be widened to six lane highway standards. However, right-of-way is not available for due to existing structures. Therefore, it is not considered feasible to mitigate the impact on SR-111.  
<sup>(4)</sup>: Mitigations to improve ILV.



## Conclusions

This traffic impact study presents the findings and conclusions relative to our analysis of traffic impacts which would be associated with the proposed Calexico Power Center project. This traffic impact analysis has evaluated the potential impacts associated with 17 key intersections, five (5) proposed access points to the project site and 22 street segments.

### 1. 2013 Existing

- All of the key intersections currently operate at Level of Services 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 intersections (LOS F/E – AM/PM, respectively).
- All of the intersections at SR-86, SR-98 or SR-111 are currently 'Under Capacity' based on the Intersecting Lane Vehicles (ILV) methodology.
- All of the key street segments currently operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS E).

### 2. 2014 Ambient + Phase I

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM) and the Cesar Chavez Boulevard and Grant Street (LOS D – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); and SR-111 between SR-98 and Grant Street (LOS F).

### 3. 2015 Ambient + Phases I & II

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS E/F – AM/PM, respectively) and the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS E – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); and SR-111 between SR-98 and Grant Street (LOS F).

### 4. 2015 Ambient + Cumulative Projects + Phases I & II

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours except the Dogwood Road and SR-86 (LOS D – PM), the Cesar Chavez



Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS F – AM/PM), the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS F – PM), the SR-111 and McCabe Road (LOS D – PM), the SR-111 and Jasper Road (LOS F – PM), the SR-111 and Cole Road (LOS D – PM) and the SR-111 and SR-98 (LOS E – PM) intersections.

- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the SR-111 and Jasper Road intersection during the PM peak hours.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except 2<sup>nd</sup> Street west of Cesar Chavez Boulevard (LOS F); 2<sup>nd</sup> Street between Cesar Chavez Boulevard and SR-111 (LOS F); Cesar Chavez Boulevard between Grant Street and 2<sup>nd</sup> Street (LOS E); and SR-111 between SR-98 and Grant Street (LOS F).

**5. 2015 Ambient + Cumulative Projects + Phases I & II + Mitigation**

- All of the key intersections are forecast to operate at Level of Service 'C' and 'D' under the City's and Caltrans' Jurisdictions, respectively, or better during the AM and PM peak hours.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F) due to right-of-way restrictions.

**6. 2035 Ambient + Cumulative Projects**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours except the Dogwood Road and SR-86 (LOS E – PM), the Cesar Chavez Boulevard and SR-98 (LOS F – AM/PM), the Cesar Chavez Boulevard and Grant Street (LOS F – AM/PM), the Cesar Chavez Boulevard and 2<sup>nd</sup> Street (LOS F – PM), the SR-111 and McCabe Road (LOS E – PM), the SR-111 and Jasper Road (LOS F – PM) and the SR-111 and SR-98 (LOS E – PM) intersections.
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the two (2) SR-111 intersections at McCabe Road and Jasper Road.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F).

**7. 2035 Ambient + Cumulative Projects + Phases I & II (Near Term Mitigated)**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours except the Rockwood Avenue and 2<sup>nd</sup> Street intersection (LOS F – PM).
- All of the intersections at SR-86, SR-98 or SR-111 are forecast to be 'Under Capacity' or 'Near Capacity' based on the ILV methodology except the three (3) SR-111 intersections at McCabe Road, SR-86, and Jasper Road.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F).



**8. 2035 Ambient + Cumulative Projects + Phases I & II (Mitigated) + Long Term Mitigation**

- All of the key intersections are forecast to operate at Level of Service 'D' or better during the AM and PM peak hours.
- All of the intersections at SR-86, SR-98 or SR-111 are 'Under Capacity' or 'Near Capacity' based on the ILV methodology.
- All of the key street segments are forecast to operate at Level of Service 'C' or better except SR-111 between SR-98 and Grant Street (LOS F) due to right-of-way restrictions.

The SR-111 segment between SR-98 and Grant Street currently operates at LOS E and is forecast to operate LOS F under all other scenarios. To mitigate the impact on the segment, widening to a six lane highway is needed. However, the right-of-way is not available due to existing structures. Therefore, it is not feasible to mitigate the impact on the SR-111 segment between SR-98 and Grant Street.

The 2<sup>nd</sup> Street segment between Cesar Chavez Boulevard and SR-111 is forecast to operate at LOS F under all the near-term scenarios. To mitigate the impact on the segment, widening to a six (6) lane divided highway is needed. However, its right-of-way is not available due to existing structures. Therefore, a modified six (6) lane divided highway is recommended to mitigate the impact on the 2<sup>nd</sup> Street segment between SR-98 and Grant Street.

With the recommended mitigations, the proposed Calexico Power Center project is not expected to result in any significant adverse traffic impacts at the key intersections and street segments.