



## NOTICE OF WORK SESSION

In accordance with § 38-431.01 of the Arizona Revised Statutes of the State of Arizona, notice is hereby given to the Members of City Council and to the general public that the Mayor and Council of the City of San Luis, Arizona, will hold a Work Session meeting at 6:15 p.m., Wednesday, March 1, 2023. The Work Session will take place at the City Council Chambers, located at 1090 E. Union Street, San Luis, Arizona, 85349. The public is invited to attend the open meeting.

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the City of San Luis does not discriminate on the basis of disability in the admission of or access to, or treatment of employment in its programs, activities, or services. For information regarding rights and provisions of the ADA or Section 504, or to request reasonable accommodations for participation in City programs, activities or services contact: ADA/Section 504 Coordinator, City of San Luis Human Resources Department, 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Notice is hereby given that pursuant to A.R.S. § 1-602.A.9, subject to certain specified statutory exceptions, parents have a right to consent before the State or any of its political subdivisions make a video or audio recording of a minor child. Meetings of the City Council are audio and/or video recorded, and, as a result, proceedings in which children are present may be subject to such recordings. Parents in order to exercise their rights may either file written consent with the City Clerk to such recordings, or take personal action to ensure that their child or children are not present when a recording may be made. If a child is present at the time a recording is made, the City will assume that the rights afforded parents pursuant to A.R.S. § 1-602.A.9 have been waived.

THIS NOTICE IS GIVEN BY:

/s/ Sonia Cornelio, City Clerk

## AVISO DE SESION DE TRABAJO

De acuerdo con los Estatutos del Estado de Arizona A.R.S. § 38-431.01, se le informa a los miembros del Cabildo y al público en general que el Alcalde y el Cabildo, tendrán una Sesión de Trabajo a las 6:15 p.m., el día Miércoles, 1ro de Marzo del 2023. La junta se llevará a cabo en la Sala del Cabildo, ubicada en el 1090 E. Union Street, San Luis, Arizona, 85349. El público está invitado a la junta.

De acuerdo con el Acta de Americanos con Discapacidades y la Sección 504 del Acta de Rehabilitación del 1973, la Ciudad de San Luis, Arizona no discrimina por causa de discapacidad la admisión y acceso a sus programas, actividades, servicios o en el trato en cuanto a empleo. Para más información referente a derechos y provisiones del Acta de Americanos con Discapacidades o Sección 504, o para solicitar adaptaciones que sean razonables para la participación en programas, actividades o servicios de la Ciudad, contactar al: Coordinador del Acta de Americanos con Discapacidades/Sección 504, Departamento de Recursos Humanos de la Ciudad de San Luis, Arizona, ubicado en el 1090 E. Union Street, San Luis, Arizona, 85349; (928) 341-8520.

Por medio de este aviso y de acuerdo con los Estatutos del Estado de Arizona A.R.S § 1-602.A.9, sujeto a ciertas excepciones reglamentarias, los padres de familia tienen el derecho de dar el consentimiento ante el Estado o cualquiera de sus subdivisiones políticas para hacer una grabación de audio o video de su hijo menor de edad. Las juntas del Cabildo se graban en audio y/o video y como resultado, el hecho de que haya menores presentes puede ser sujeto a que sean grabados. Para que los padres de familia puedan ejercer sus derechos pueden dar el consentimiento por escrito con la Secretaria de la Ciudad a tal grabación, o tomar acción personal para asegurarse que su hijo menor no esté presente cuando la grabación se lleve a cabo. Si un menor de edad está presente en el momento de la grabación, la Ciudad asumirá que los padres de familia están cediendo los derechos sobre una posible grabación de acuerdo con los Estatutos del Estado de Arizona A.R.S. § 1-602.A.9.

ESTE AVISO ES DADO POR:

/f/ Sonia Cornelio, Actuaría de la Ciudad



**AGENDA**  
**Work Session**  
**San Luis City Council**  
**San Luis Council Chambers**  
**1090 E. Union Street**  
**San Luis, AZ 85349**  
**March 1, 2023**  
**6:15 p.m.**

**PLEASE TAKE NOTICE THAT MEMBERS OF THE CITY COUNCIL WILL ATTEND EITHER IN PERSON, TELEPHONE, OR VIDEO CONFERENCE COMMUNICATION. THE MAYOR OR ACTING MAYOR FOR THIS MEETING MAY CHANGE THE ORDER OF THE ITEMS; IF AUTHORIZED BY LAW AND BY A MAJORITY VOTE OF A QUORUM OF CITY COUNCIL MEMBERS PRESENT, AN EXECUTIVE SESSION WILL BE HELD IMMEDIATELY FOLLOWING THE VOTE IN ACCORDANCE WITH A.R.S. § 38-431.03(A) AND THE MEETING WILL BE TEMPORARILY RECESSED WHILE THE CITY COUNCIL RETIRES TO EXECUTIVE SESSION WHICH WILL NOT BE OPEN TO THE PUBLIC.**

**TENGA EN CUENTA QUE LOS MIEMBROS DEL CABILDO DE LA CIUDAD ASISTIRÁN EN PERSONA, TELÉFONO O COMUNICACIÓN POR VIDEO CONFERENCIA. LA ALCALDESA O ALCALDE INTERINO DE ESTA REUNIÓN PUEDE CAMBIAR EL ORDEN DE LOS TEMAS; SI ESTÁ AUTORIZADO POR LA LEY Y POR MAYORÍA DE VOTOS DE UN QUÓRUM DE MIEMBROS DEL CABILDO PRESENTES, SE LLEVARÁ A CABO UNA SESIÓN EJECUTIVA INMEDIATAMENTE DESPUÉS DE LA VOTACIÓN DE ACUERDO CON LOS ESTATUTOS DEL ESTADO DE ARIZONA A.R.S. § 38-431.03 (A) Y LA REUNIÓN SERÁ TEMPORALMENTE RECESADA MIENTRAS EL CABILDO DE LA CIUDAD SE RETIRE A UNA SESIÓN EJECUTIVA QUE NO ESTARÁ ABIERTA AL PÚBLICO.**

- 1. CALL TO ORDER/ROLL CALL**
- 2. ITEMS FOR DISCUSSION ONLY:**
  - 2. A. Presentation by Kimley Horn Inc. on the San Luis POE Impact Study. (Jenny Torres, Assistant City Manager and Chris Joannes, Project Manager)**
  - 2. B. Discussion and possible directions to staff on any and all matters regarding parking in alleys and the San Luis City Code § 10.15.235. (Miguel Alvarez, Interim Police Chief)**
- 3. ADJOURNMENT**

**IN THE EVENT A MAJORITY OF THE COUNCIL IS NOT PRESENT, AN INFORMAL WORK SESSION MAY BE HELD.**



## AGENDA ITEM REVIEW FORM

### Work Session

2. A.

**Meeting Date:** 03/01/2023

**Department Head:** Jenny Torres, Assistant City Manager, Administration

**Submitted By:** Jenny Torres, Assistant City Manager, Administration

**Action Requested:** Discussion Item - No Action to be Taken

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### ITEM:

Presentation by Kimley Horn Inc. on the San Luis POE Impact Study. **(Jenny Torres, Assistant City Manager and Chris Joannes, Project Manager)**

### SUMMARY:

The City of San Luis initiated the San Luis Port of Entry (POE) Impact Study to understand the impact on its downtown area stemming from the reconstruction and expansion of the San Luis I POE. On October 13, 2021, and through an amendment approved by council on January 1, 2022, the City of San Luis awarded a contract to Kimley Horn Inc. for the development of an origin/destination, parking and circulation study in the amount of \$208,605.00. Through an intergovernmental agreement between the City of San Luis and the Yuma Metropolitan Planning Organization (YMPO), the City received \$75,000.00 from the Arizona Department of Transportation (ADOT) and \$35,000.00 from YMPO as contribution to the development of the study. Kimley Horn process included understanding the current situation, analyzing the data gathered and recommending implementation options. Kimley Horn will present the results of the study.

### RECOMMENDATION / SUGGESTED MOTION:

**Discussion and possible directions to staff only, non-action item.**

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### Fiscal Impact

**IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:** NO

**CITY/STATE/FEDERAL FUNDS:** N/A

**TOTAL:** N/A

**BUDGETED AMOUNT:** N/A

**AVAILABLE AMOUNT TO TRANSFER:** N/A

**ACCT NAME & GL#/REMAINING BALANCE BEFORE PURCHASE:** N/A

**FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):**

No fiscal impact.

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### Attachments

SL POE Impact Study

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# SAN LUIS POE IMPACT STUDY

DECEMBER 2022

Kimley»Horn



# SAN LUIS POE IMPACT STUDY

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## LIST OF ACRONYMS

ADT.....	Average Daily Traffic
AM.....	Morning
GSA.....	General Services Administration
HAWK.....	High-Intensity Activated Crosswalk
HCM.....	Highway Capacity Manual
I-8.....	Interstate 8
LPR.....	License Plate Recognition
LOS.....	Level of Service
RPP.....	Residential Parking Permit
OD.....	Origin-Destination
PM.....	Afternoon
POE.....	Port of Entry
SR.....	State Route
TMC.....	Turning Movement Count



# INTRODUCTION



## INTRODUCTION

The City of San Luis (City) initiated the San Luis Port of Entry (POE) Impact Study to understand the impact on its downtown area stemming from the reconstruction and expansion of the San Luis I POE. The United States General Services Administration (GSA) will be investing \$300 million in the San Luis I POE to double the number of processing lanes, from eight to 16, for those traveling from Mexico into the United States. Simultaneously, Mexico is reconstructing and expanding the POE for those traveling from the United States into Mexico.

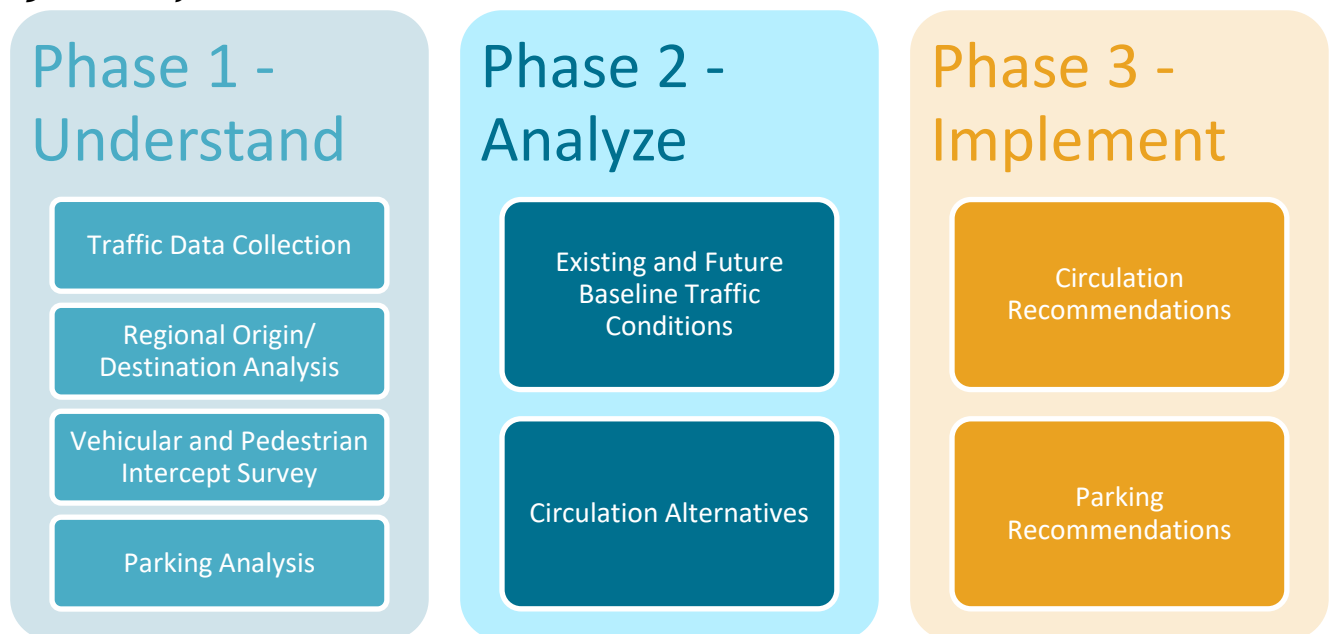
To respond to the large investment in expanding the San Luis I POE, the City has a desire to understand the localized transportation impacts to Downtown San Luis as well as a more holistic view on the impact the POE has on the greater Yuma region. Goals of the study include:

- Quantify the impacts on drivers and pedestrians of the POE expansion on the downtown transportation network and develop solutions to accommodate increased traffic levels.
- Understand where those entering the United States through the POE go after crossing.
- Learn travel characteristics and the economic impact of those crossing through the POE.
- Develop recommendations for addressing parking needs and deficiencies in Downtown San Luis.

## STUDY PROCESS

The study process is broken into three primary phases: **Understand**, **Analyze**, and **Implement**. **Figure 1** shows the tasks included in each phase.

**Figure 1. Study Process**



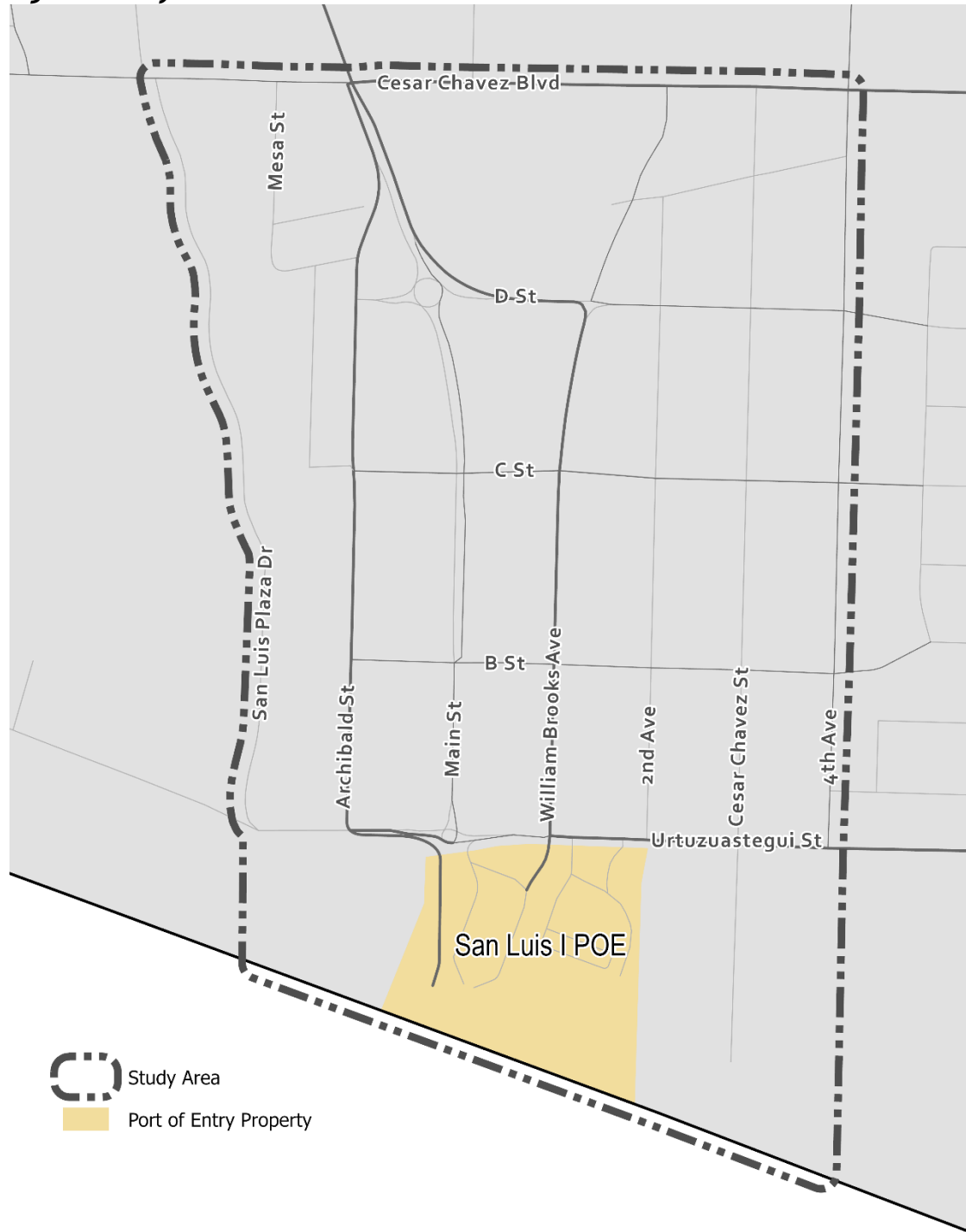


# SAN LUIS POE IMPACT STUDY

## STUDY AREA

The primary study area encompasses Downtown San Luis and is bounded by Cesar Chavez Boulevard on the north, 4<sup>th</sup> Avenue on the east, the United States/Mexico border on the south, and San Luis Plaza Drive on the west as shown in **Figure 2**.

**Figure 2. Study Area**





# PHASE 1 UNDERSTAND



## PHASE 1 - UNDERSTAND

The first phase of the POE Impact Study collected a comprehensive set of observed data from which alternatives for circulation and parking could be developed. This data collection effort was organized into four groups:

- Traffic data collection
- Regional origin-destination (OD) analysis
- Vehicular and pedestrian intercept survey
- Parking analysis

### TRAFFIC DATA COLLECTION

Comprehensive quantification of vehicular and pedestrian volumes throughout the downtown study area is the primary basis from which alternatives, transportation modeling, and measures of effectiveness were drawn. Multi-day vehicle classification counts, intersection turning movement counts (TMCs), and travel time data were used to collect necessary data. **Figure 3** shows the locations of the classification counts and TMCs.

### VEHICULAR CLASSIFICATION AND VOLUMES

Nine multi-day vehicle classification counts were collected within the downtown study area twice (once in late January 2022 and once in early February 2022) to understand:

- Which day of the week (Friday through Sunday) has the highest traffic volumes for the entire study area
- Peak hours throughout the day to inform the traffic simulation model times
- Differences in traffic volumes between the peak of harvest season in late January and when the TMCs were collected in early February to provide a factor to be applied to TMCs for the simulation model
- Vehicle classification splits (cars, trucks, buses, and bikes) on various study area roadways

A summary table of the average daily traffic (ADT) counts is provided in **Table 1**. The raw classification count sheets are provided in **Appendix A**. The analysis showed that traffic volumes are higher on Fridays and Mondays. Based on the traffic volumes and consultation with City staff, it was determined that Monday would be the day modeled in the traffic simulation model.



# SAN LUIS POE IMPACT STUDY

Figure 3. Classification Count and TMC Locations





# SAN LUIS POE IMPACT STUDY

**Table 1. January ADTs (Friday through Monday)**

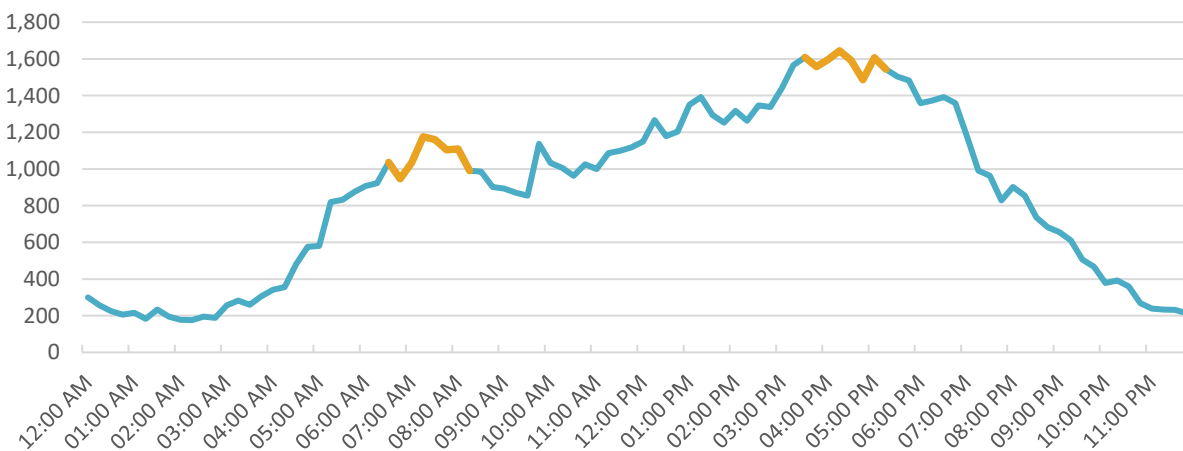
LOCATION	FRI ADT	SAT ADT	SUN ADT	MON ADT
1. Archibald St (B St to C St)	6,719	8,828	4,149	6,762
2. Main St (B St to C St)	10,526	9,690	7,228	9,140
3. William Brooks Ave (B St to C St)	8,509	8,013	7,308	8,714
4. 2nd Ave (B St to C St)	2,637	1,637	1,051	2,063
5. Cesar Chavez St (B St to C St)	894	620	400	806
6. 4th Ave (B St to C St)	2,990	1,736	1,329	2,447
7. Cesar Chavez Blvd (US 95 to William Brooks Ave)	12,508	9,874	7,890	12,653
8. Urtuzuastegui St (William Brooks Ave to 2nd Ave)	10,031	8,386	6,727	10,659
9. D St (Main St to William Brooks Ave)	9,925	8,550	6,888	8,881
<b>Total</b>	<b>64,739</b>	<b>57,334</b>	<b>42,970</b>	<b>62,125</b>
Change from late January to early February	-1.1%	-2.8%	+3.1%	-4.4%

After selecting Monday for the simulation model, the peak times needed to be identified to guide which hours to model. **Figure 4** shows 15-minute sums of all nine classification count location volumes. Based on the 15-minute traffic volumes, two two-hour periods were chosen to model in the traffic simulation model:

- Morning peak: 6:30 am – 8:30 am
- Evening peak: 3:30 pm – 5:30 am

TMCs from these peak times were used for the traffic simulation model. The raw TMC sheets are provided in **Appendix B**.

**Figure 4. Monday 15-Minute Traffic Volume**



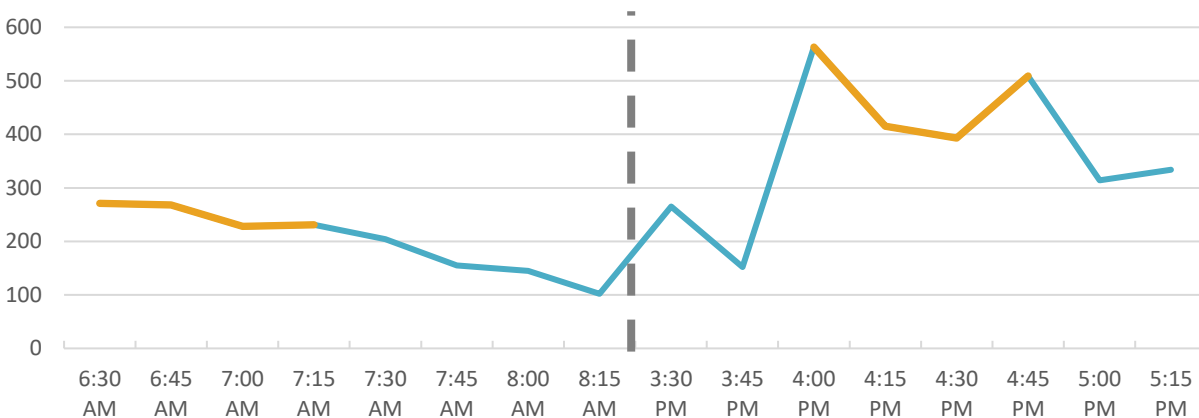


# SAN LUIS POE IMPACT STUDY

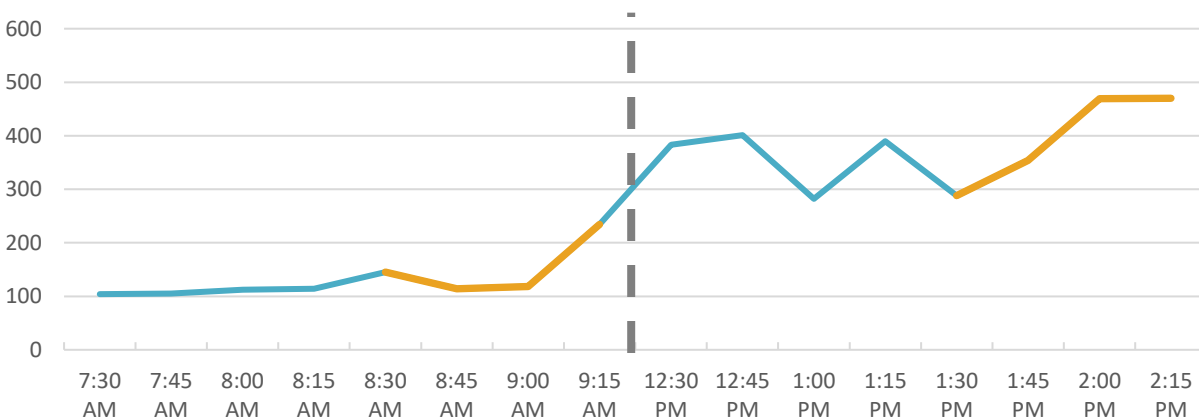
## PEDESTRIAN COUNTS

Pedestrian volume counts were collected via TMCs at the 29 study area intersections. TMCs were collected on a Monday and a Saturday, over the AM and PM peak periods identified during collection of vehicular classification and volumes. The pedestrian counts near the POE (at Main Street/Urtuzuastegui Street and William Brooks Avenue/Urtuzuastegui Street) are shown in **Figure 5** and **Figure 6** for Monday and Saturday, respectively.

**Figure 5. Monday Pedestrian Counts**



**Figure 6. Saturday Pedestrian Counts**



Pedestrian volumes were generally lower on Saturday, reaching a maximum of 470 pedestrians in a 15-minute interval, 93 pedestrians fewer than Monday's peak. The peak hours for pedestrian traffic near the POE are:

- **Monday**
  - AM Peak Hour: 6:30 AM to 7:30 PM – 998 pedestrians
  - PM Peak Hour: 4:00 PM to 4:45 PM – 1,880 pedestrians
- **Saturday**
  - AM Peak Hour: 8:30 AM to 9:30 AM – 611 pedestrians
  - PM Peak Hour: 1:30 PM to 2:30 PM – 1,581 pedestrians



# SAN LUIS POE IMPACT STUDY

## VEHICLE TRAVEL TIMES

Kimley-Horn’s proprietary Traction Travel™ software was used to obtain vehicular travel times for various routes in the study area which were used to calibrate the traffic simulation model. Traction Travel™ uses anonymized cell phone location data to obtain travel times for vehicles following pre-defined routes. Nine POE ingress and egress routes were defined to get travel times through the study area as shown in **Figure 7** and listed below:

- **POE Ingress Routes**

- US 95 (Main Street) north to the southbound POE
- Cesar Chavez Boulevard east to the southbound POE
- Cesar Chavez Boulevard west to the southbound POE

- **POE Egress Routes**

- The northbound POE to US 95 (Main Street) north
- The northbound POE to 4th Avenue north (via William Brooks Avenue)
- The northbound POE to 4th Avenue north (via Urtuzuastegui Street)
- The northbound POE to Cesar Chavez Boulevard east (via William Brooks Avenue)
- The northbound POE to Cesar Chavez Boulevard east (via 4th Avenue)
- The northbound POE to U Street east

Travel time data was obtained over the course of four weekends (Friday through Monday) in January and February 2022. Results are shown in **Table 2**. The results include the base (uncongested) travel time, maximum observed travel time, and AM and PM target travel times that were used in the traffic simulation model.

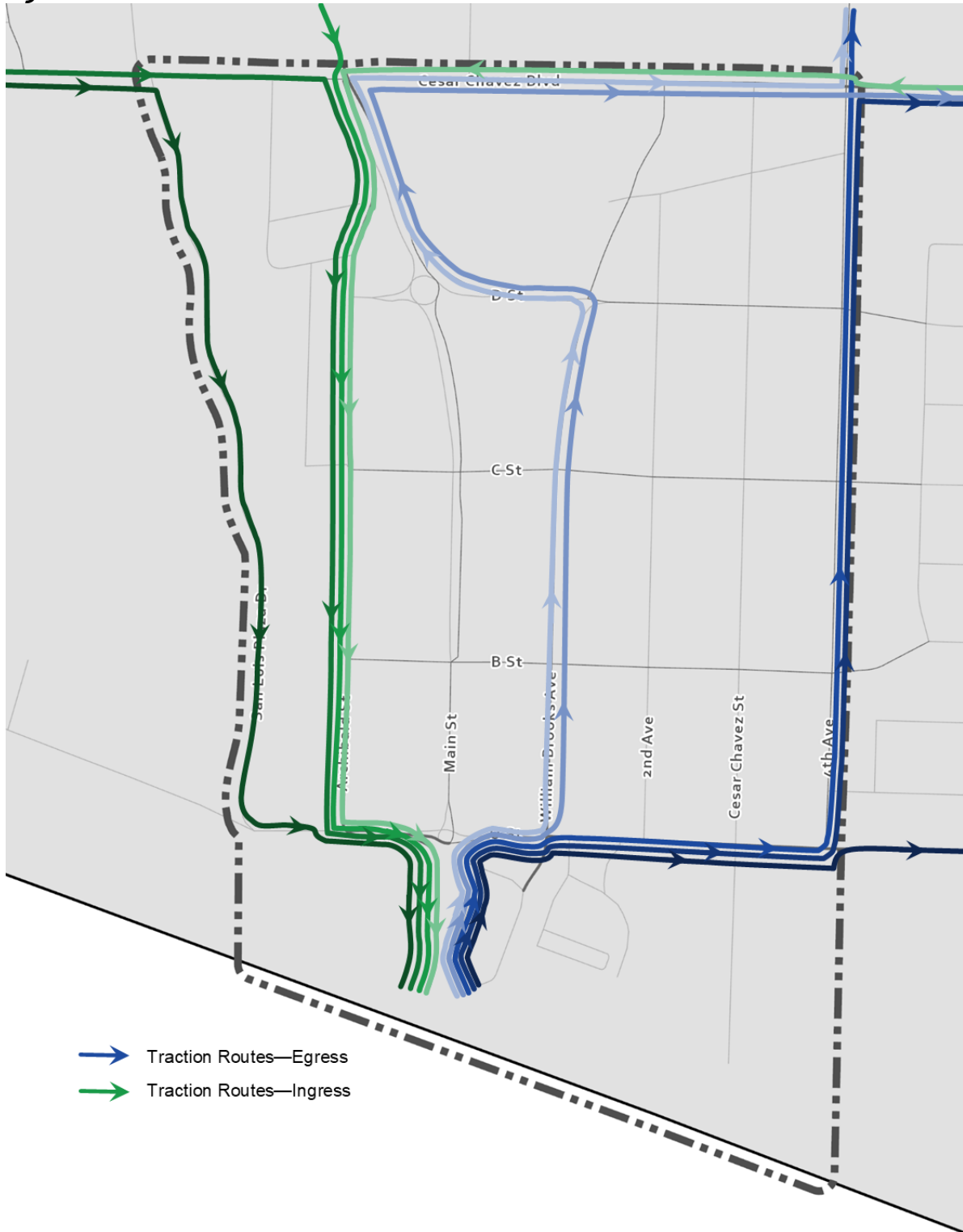
**Table 2. Traction Travel™ Travel Time Results (in minutes)**

LOCATION	BASE TIME	MAX TIME	AM MODEL TIME	PM MODEL TIME
US 95 (Main St) north to POE	2:36	20:12 (Fri 7:00pm)	2:59	6:14
Cesar Chavez Blvd east to POE	3:51	20:15 (Fri 7:00pm)	4:21	7:37
Cesar Chavez Blvd west to POE	3:15	19:31 (Fri 7:00pm)	3:35	6:50
POE to US 95 (Main St) north	2:24	4:14 (Fri 4:00pm)	3:00	3:29
POE to 4th Ave north (via William Brooks Ave)	3:31	5:39 (Fri 4:00pm)	4:17	4:46
POE to 4th Ave north (via Urtuzuastegui St)	3:00	3:53 (Fri 12:45pm)	3:23	3:42
POE to Cesar Chavez Blvd east (via William Brooks Ave)	3:28	5:37 (Fri 4:00pm)	4:15	4:44
POE to Cesar Chavez Blvd east (via 4th Ave)	2:46	3:40 (Fri 12:45pm)	3:09	3:29
POE to Urtuzuastegui St east	1:03	1:46 (Fri 12:45pm)	1:20	1:36



# SAN LUIS POE IMPACT STUDY

Figure 7. Travel Time Routes





# SAN LUIS POE IMPACT STUDY

## REGIONAL ORIGIN-DESTINATION ANALYSIS

A regional OD analysis to and from the San Luis I POE was conducted to understand where people travel after crossing from Mexico into the United States. The OD analysis was conducted using Wi-Fi/Bluetooth receivers placed at strategic locations which pick up signals from cell phones in passing vehicles. Capturing these signals at multiple locations allows for tracing trips from the POE. Receivers were placed at several locations around the Yuma region to identify:

- The percentage of trips that stay in San Luis after crossing
- The percentage of trips that leave San Luis but stay in the greater Yuma area
- The percentage of trips that leave the Yuma region after crossing into the United States

OD data was collected for a Monday and a Saturday to understand differences between weekday and weekend travel. Wi-Fi/Bluetooth receivers were placed at seven locations around the region to understand regional travel patterns:

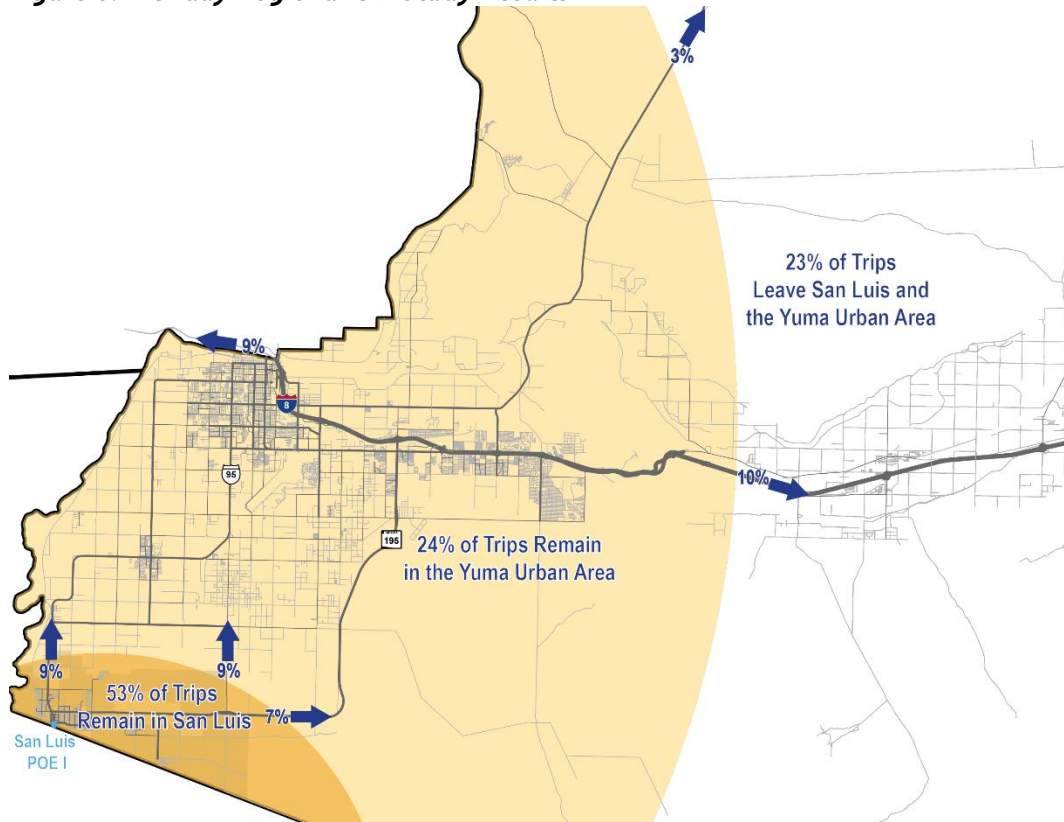
- Inbound travel lanes at the San Luis I POE
- Northbound on US 95, north of County 22<sup>nd</sup> St
- Northbound on Avenue B, north of State Route (SR) 195
- Eastbound on SR 195, east of Avenue B
- Westbound on Interstate 8 (I-8), west of 4<sup>th</sup> Avenue in Winterhaven, CA
- Northbound on US 95, north of the General Motors Proving Ground
- Eastbound on I-8, east of Foothills Boulevard

**Figure 8** shows the captured Monday travel patterns and **Figure 9** shows the captured Saturday travel patterns. The Monday OD results showed that most trips were remaining in San Luis, at 53%. Of the observed trips, approximately 23% leave the Yuma urban area entirely. Of the observed travel patterns observed on Saturday, 52% of trips remained in San Luis, while only 19% left the greater Yuma urban area entirely. More vehicles stayed in the Yuma region on the Saturday than on Monday.

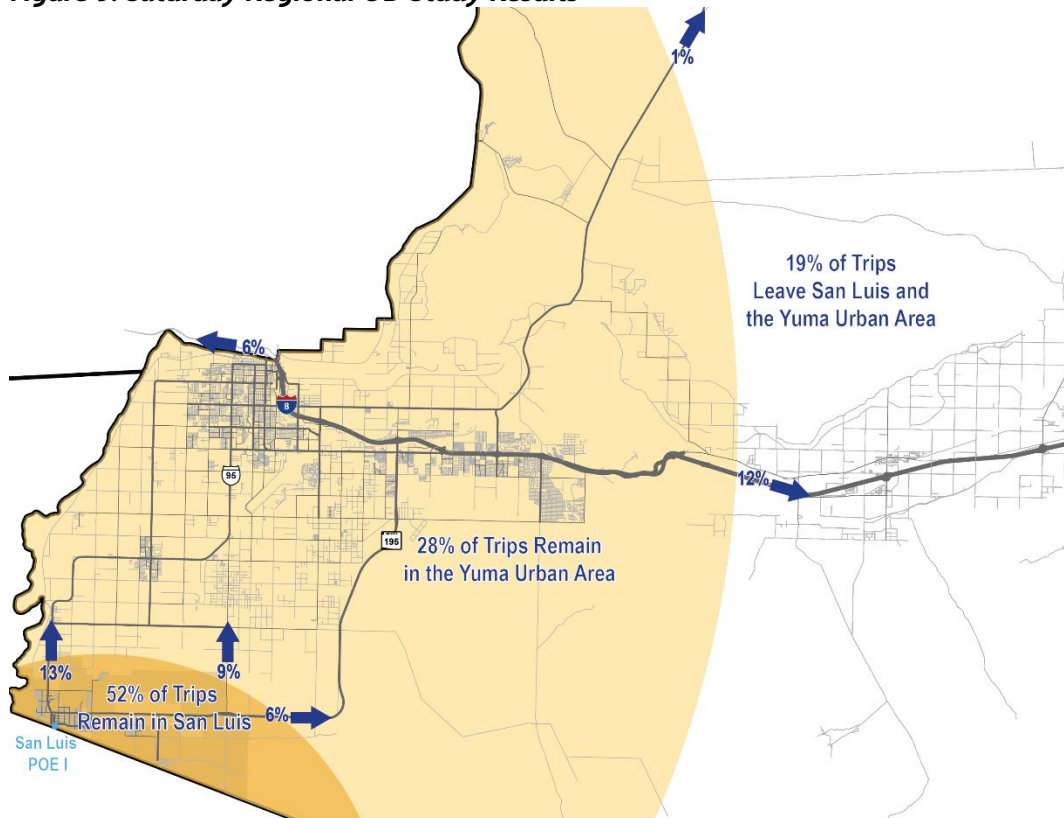


# SAN LUIS POE IMPACT STUDY

**Figure 8. Monday Regional OD Study Results**



**Figure 9. Saturday Regional OD Study Results**





# SAN LUIS POE IMPACT STUDY

## VEHICULAR AND PEDESTRIAN INTERCEPT SURVEY

A survey was conducted of people crossing from Mexico into the United States to get a deeper understanding of how and why the San Luis I POE is used. This survey helped identify trends related to trip purpose, duration of trips, frequency of travel, anticipated spending levels in the United States, and modes of travel used in San Luis. The survey was conducted in both English and Spanish on the Mexican side of the border while drivers and pedestrians were waiting to cross into the United States.

Project team members administered the survey from January 21<sup>st</sup> to January 25<sup>th</sup>, 2022, from 7:00 AM to 12:00 PM and 2:00 PM to 5:00 PM. Survey administrators conducted an interview survey and an accompanying observational survey based on visible characteristics. The interview survey questions and response options are provided in **Table 3** and the observational survey questions are provided in **Table 4**.

**Table 3. Interview Survey Questions**

QUESTION	POTENTIAL ANSWERS
Are you a Mexican National or a US Citizen?	a. Mexican National b. U.S. Citizen
Where are you going today?	a. San Luis Only b. Yuma c. Outside of Yuma
What is the primary purpose for your trip today?	a. Shopping b. School c. Family/Social Visit d. Tourism/Vacation e. Work/Business f. Medical/Health Reasons g. Air Travel h. Other
How long will you be staying in the US on this trip?	Number of hours or days of trip
Which answer best describes how frequently you cross the border?	a. 5+ times per week b. 2-4 times per week c. 1 time per week d. 1-2 times per month e. Less than 1 time per month f. First time crossing
How much money do you expect to spend in the US on this trip?	Any dollar amount
On the amount you mentioned, approximately how much will you spend on the following:	a. Restaurants b. Shopping c. Groceries
What transportation service are you planning to use for your trip today	a. Automobile b. Motorcycle c. Taxi d. Bus e. Walk f. Bicycle g. Greyhound



# SAN LUIS POE IMPACT STUDY

**Table 4. Observational Survey Questions**

PROMPT	POTENTIAL RESPONSES
Survey type	a. Vehicle b. Pedestrian
Language used for survey	a. Spanish b. English
Gender of participant	a. Male b. Female
Traveler type	a. Pedestrian – Regular b. Pedestrian – Ready Lane c. Pedestrian – Senti d. Car – Regular e. Car – Ready Lane f. Car – Senti
Vehicle type (if applicable)	a. Car – Hatchback/Coupe/Sedan b. SUV – Compact/Crossover c. SUV – Large d. Light Truck e. Heavy Duty Truck f. Mini Van g. Commercial Van h. Recreational Vehicle/Motor Home i. Other
License Plate	a. Sonora b. Baja California c. Other Mexican d. Arizona e. California f. Other U.S.
Number of adults	1 – 5+ adults
Number of children	1 – 5+ children
Day surveyed	a. Monday b. Friday c. Saturday d. Sunday
Time of survey	Time between 7:00 AM to 12:00 PM and 2:00 PM to 5:00 PM
Time to complete survey	a. 3 minutes b. 4 minutes c. 5 minutes d. 6 minutes e. 7+ minutes

A total of **929 surveys** were collected, with the largest number of surveys conducted on Saturday. Of the collected surveys, 56% were pedestrian surveys and 44% were vehicle surveys. The results of the interview and observational surveys are summarized on the following pages.



# SAN LUIS POE IMPACT STUDY

## The typical survey was...



Answered by a Mexican national



A license plate from Arizona (77%) of those driving a vehicle



Performed in Spanish



A solo traveler (74%) or had a companion (22%)



Mostly answered by pedestrians (57%)



Adults only (87%)



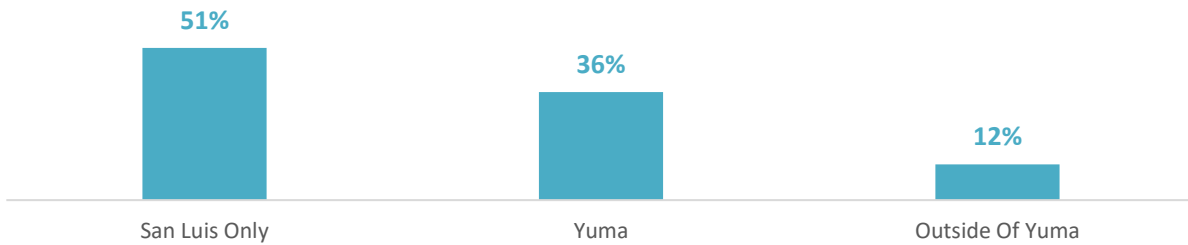
Either a Sedan (15%) or light truck (9%)



Under 3 minutes (99%)

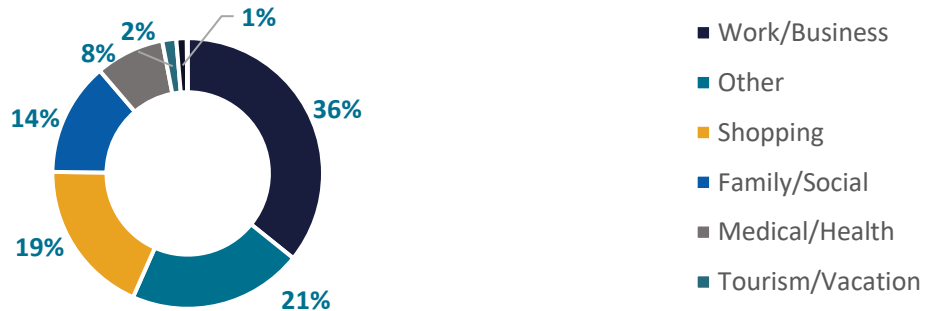
**Trip Destination.** Survey respondents were most commonly traveling to San Luis only, at 51%. Travel from the border to areas outside of the greater Yuma only accounted for 12% of respondents. **Figure 10** shows the percentage of respondents by destination.

**Figure 10. Responses by Destination Location**



**Trip Purpose.** Respondents were most commonly crossing the border for business or shopping. Of respondents that answered “Other”, the majority were traveling to their home. No respondents reported that they were crossing the border for air travel. School and tourism also accounted for less than three percent of all trip purposes. **Figure 11** shows the breakdown by trip purpose. Most respondents reported that their trip was anticipated to be less than one day; only 2% of respondents reported that they would be staying for over 1 week.

**Figure 11. Responses by Trip Purpose**



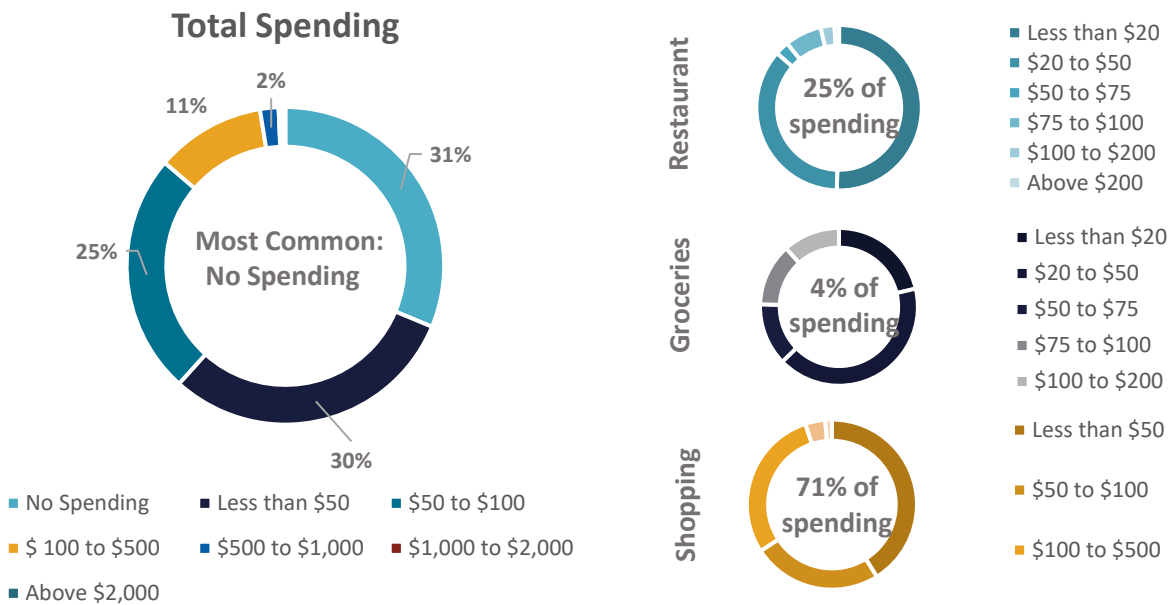


# SAN LUIS POE IMPACT STUDY

**Trip Spending.** Respondents reported the approximate amount they anticipated spending while on their trip overall, as well as in specific economic generating categories: restaurants, groceries, and shopping. **Figure 12** shows the total spending and spending by category reported by respondents. Many respondents anticipated spending no money at all, at 31%. Most respondents that did intend to spend less than \$100.

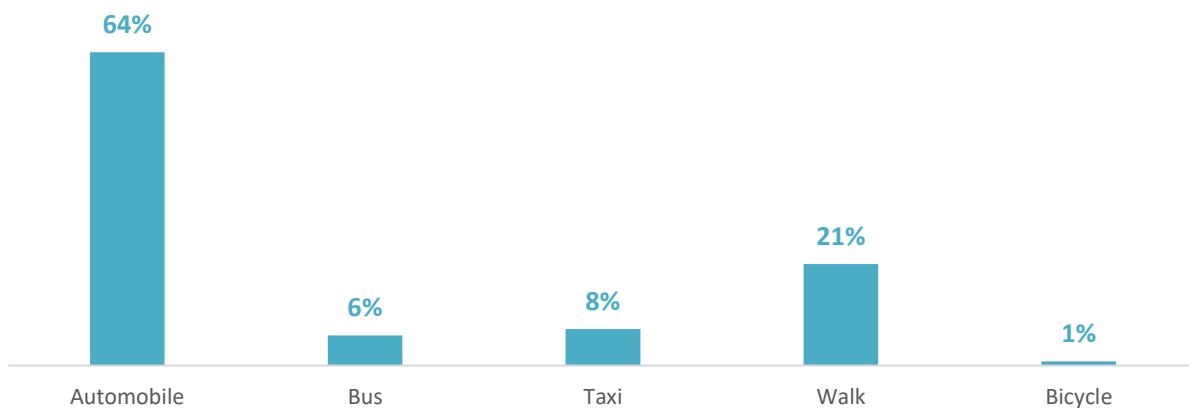
Most spending was planned for shopping, accounting for 71% of the reported spending, with groceries being the smallest, at 4%. For all three spending categories, most respondents anticipated spending less than \$50 on each.

**Figure 12. Responses by Anticipated Spending**



**Method of Transportation.** Most respondents reported they would be using their personal vehicle, as shown in **Figure 13**. Bicycling was least common, with only 1% of respondents planning to bike to a destination on their trip.

**Figure 13. Responses by Mode of Travel during Trip**





# SAN LUIS POE IMPACT STUDY

## PARKING DATA COLLECTION

Parking conditions within Downtown San Luis are significantly impacted by traffic generated by the San Luis I POE. Existing parking conditions were analyzed to identify potential actions the City can consider to better manage and limit the negative impacts parking in the downtown area. To best identify recommendations for parking management, the existing demand in the downtown area was identified by collecting occupancy data through drone footage and interviews with major agricultural employers.

## PARKING INVENTORY AND OCCUPANCY

Parking inventory and occupancy was collected via drone footage. A drone with a high-quality camera was flown over the downtown area five times, from 8:00 AM to 5:00 PM on January 10<sup>th</sup>, 2022, to create tiled imagery of the downtown area. From this aerial imagery, the total number of parking spaces along with occupied spaces on- and off-street could be counted. There are a total of 4,822 parking spaces within the study area as shown in **Table 5**.

**Table 5. Parking Inventory by Type**

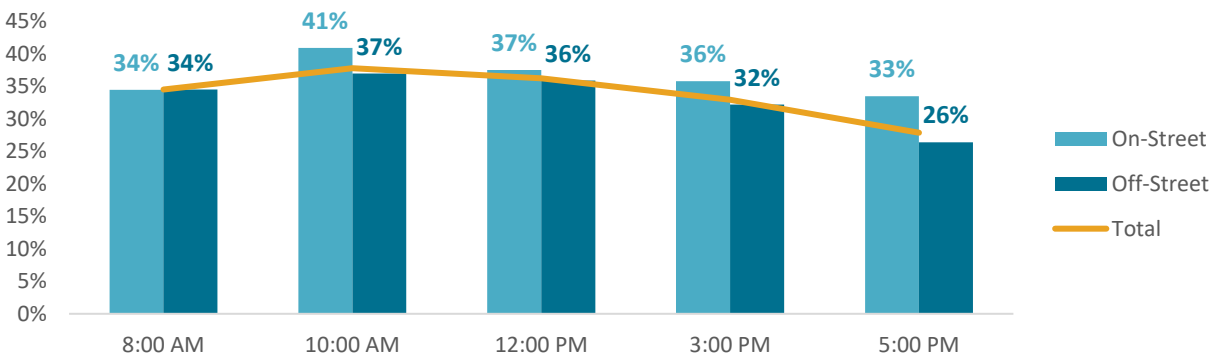
PARKING TYPE	INVENTORY
On-Street	993 spaces
Off-Street	3,829 spaces
<b>Total</b>	<b>4,822 spaces</b>

Parking demand was collected over a 9-hour period through drone footage. Occupied spaces were recorded to determine peak occupancy and occupancy trends throughout a typical Monday during peak agricultural season. Parking demand was collected at the following times:

- 8:00 AM
- 10:00 AM
- 12:00 PM
- 3:00 PM
- 5:00 PM

Of the observed times, peak occupancy for the study area was reached at 10:00 AM. On-street occupancy was observed to be higher in all collected times compared to off-street parking. Parking occupancy was lowest in the afternoon, reaching a minimum of 28% occupied at 5:00 PM. Parking utilization by time of day is shown in **Figure 14**.

**Figure 14. Parking Occupancy by Time of Day**

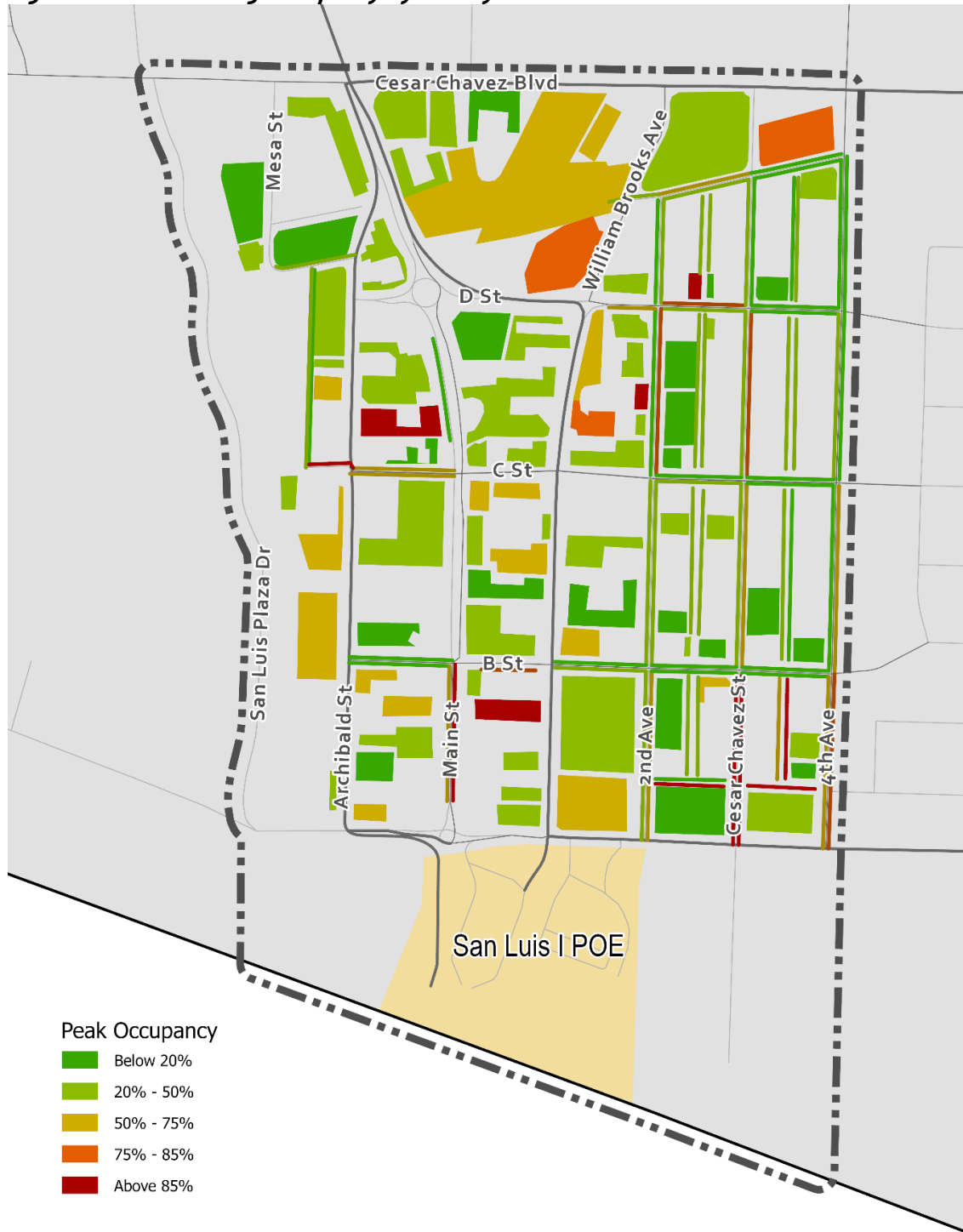




# SAN LUIS POE IMPACT STUDY

Parking occupancy was observed by facility for the peak observed time of 10:00 AM. Most off-street facilities are significantly underutilized, with many parking lots below 50% occupancy under peak conditions. Although on-street facilities are typically underutilized to the northern half of the study area, on-street parking becomes overutilized near the POE. Parking occupancy by facility is shown in **Figure 15**. Detailed parking occupancy data is provided in **Appendix D**.

**Figure 15. Peak Parking Occupancy by Facility**





# SAN LUIS POE IMPACT STUDY

## AGRICULTURAL EMPLOYER INTERVIEWS

The San Luis I POE serves as the gateway for Mexican farm workers who serve as the primary employment base for agricultural operations throughout Yuma County. Workers often drive across the border, then park in Downtown San Luis and board shuttle buses to agricultural operations north of San Luis. To better understand the circulation and parking patterns of agricultural company shuttles and employees, five agricultural employers were contacted to discuss their employee pick-up and drop-off procedures. Three of the five agricultural employers responded to requests for interviews:

- Riverside AG Works LLC
- Bravo Harvesting
- Hilltown Packing

The agricultural companies were asked a series of questions from a questionnaire. The questions included are shown in **Table 6**.

**Table 6. Agricultural Company Questionnaire**

QUESTION	PROVIDED ANSWERS
How many buses do you run on a typical day during harvest season to shuttle workers from downtown San Luis to fields?	<ul style="list-style-type: none"> <li>▪ 8</li> <li>▪ 12</li> <li>▪ 30-40</li> </ul>
At what time(s) do your buses come to pick employees up in the morning?	<ul style="list-style-type: none"> <li>▪ 4:00 AM – 5:00 AM</li> <li>▪ 5:00 AM – 6:00 AM</li> <li>▪ 11:00 AM</li> </ul>
Approximately how many employees do you pick up on each bus?	<ul style="list-style-type: none"> <li>▪ 20</li> <li>▪ 25-30</li> <li>▪ 48</li> </ul>
Where do you currently pick-up and drop-off workers in downtown San Luis?	<ul style="list-style-type: none"> <li>▪ Renting a parking lot at Urtuzuastegui Street and Cesar Chavez St</li> <li>▪ Location varies, pick up can be at Circle K or at parking lots</li> <li>▪ Have a yard at 4th Ave and Urtuzuastegui St, across from Century Link</li> </ul>
Where do you park your buses when they are not in use?	<ul style="list-style-type: none"> <li>▪ Vehicles stay at the field</li> <li>▪ Vehicles have a yard for when not in use</li> </ul>
At what time(s) do you drop-off workers in downtown San Luis in the afternoon?	<ul style="list-style-type: none"> <li>▪ 1:00 PM – 4:00 PM</li> <li>▪ 4:30 PM</li> <li>▪ 5:00 PM – 6:00 PM</li> </ul>
What improvements to circulation and parking would you like to see to improve operations and circulation from your perspective, such as consolidated pick-up/drop-off locations, remote parking locations, etc?	<ul style="list-style-type: none"> <li>▪ Pick-up is very close to the centralized area. If it were not as close, there would be less issues with traffic</li> <li>▪ Implementing designated parking for workers</li> </ul>
Is there anything else you would like to share to help us understand the nature of your practices and how they are not efficient?	<ul style="list-style-type: none"> <li>▪ Allows portable restrooms to be driven through San Luis. When picking up employees in San Luis, they have to go back to Yuma to pick up portable restrooms, making an extra trip</li> </ul>



# SAN LUIS POE IMPACT STUDY

The results from the questionnaire are summarized below:



**Time of Employee Pick-Up:**

4:00 AM – 6:00 AM, 11:00 AM

**Time of Employee Drop-Off:**

1:00 PM – 6:00 PM



**Number of Buses per Day:** 8 to 12, 40

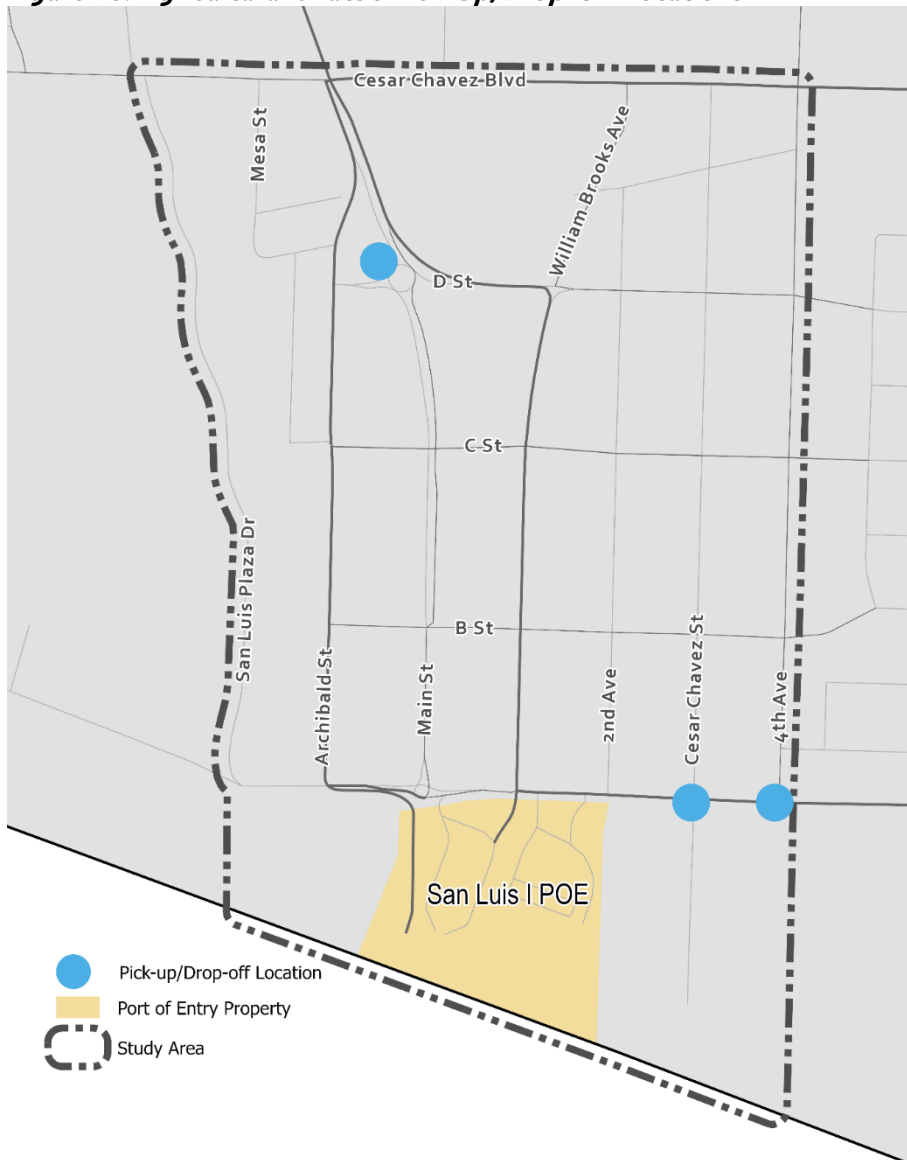


**Number of Employees per Bus:** 20 to 50



**Bus Drop-Off and Pick-Up Locations** are shown in **Figure 16**.

**Figure 16. Agricultural Shuttle Pick-Up/Drop-Off Locations**

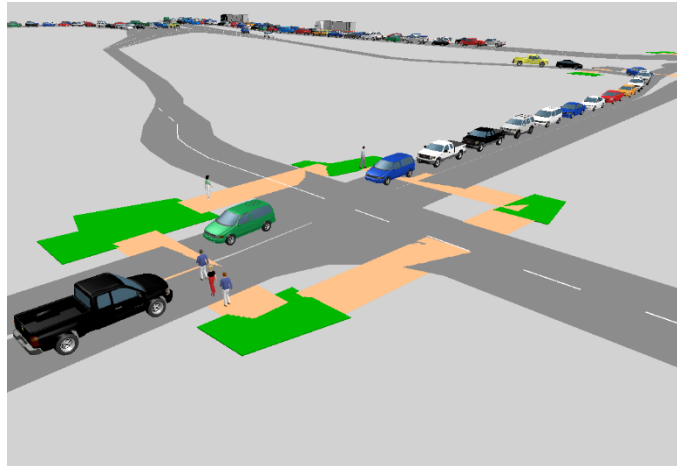




# PHASE 2 ANALYZE

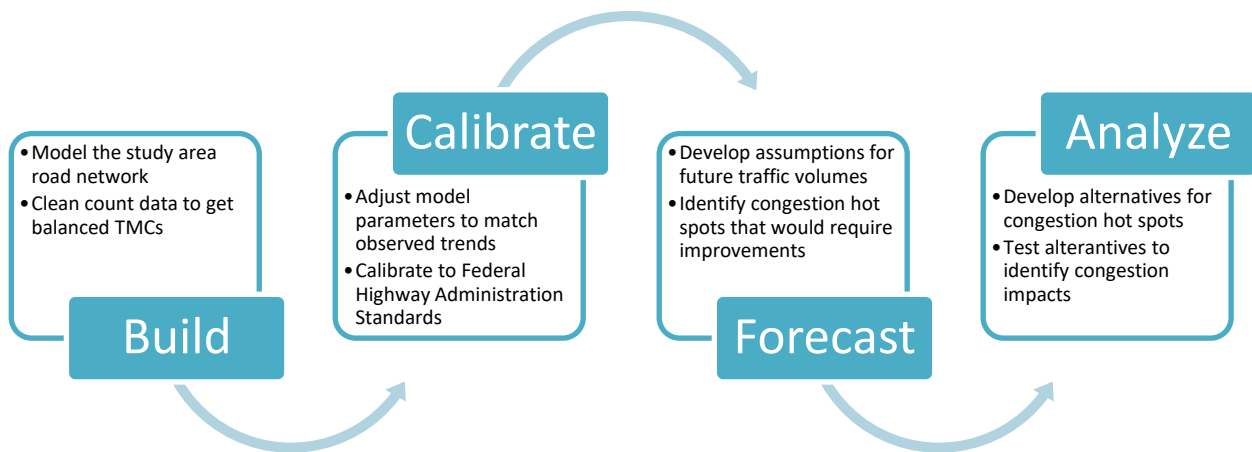
## PHASE 2 – ANALYZE

A PTV Vissim traffic simulation model was built to analyze current and anticipated future traffic conditions in the study area as well as perform an alternatives analysis of potential improvements. This model simulates each vehicle and pedestrian counted as part of Phase 1 of the project to quantify congestion and test alternatives. An example screenshot of the model is shown in the image to the right. The simulation modeling is a multi-step process as shown in **Figure 17**. In addition to the current-year model, two horizon years were modeled to evaluate short- and long-term transportation system needs in the study area:



- **Opening Year** simulates the year that the expanded San Luis I POE opens
- **20-Year** simulates 20 years after the Opening Year

**Figure 17. Traffic Simulation Modeling Process**



To determine traffic performance for existing and future traffic conditions, a traffic operations analysis was conducted using the *Highway Capacity Manual (HCM)*. Level of Service (LOS) quantifies the operating conditions at intersections, ranging from A (very little delay) to F (long delays and congestion). The minimum acceptable LOS for an intersection approach is LOS E for rural areas. **Table 7** shows the threshold for each LOS for signalized and unsignalized intersections.



# SAN LUIS POE IMPACT STUDY

**Table 7. LOS Definitions**

LEVEL OF SERVICE	SIGNALIZED INTERSECTION AVERAGE TOTAL DELAY (SEC/VEH)	UNSIGNALIZED INTERSECTION AVERAGE TOTAL DELAY (SEC/VEH)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

## CURRENT YEAR MODEL

The current year model showed that intersections operate at LOS D or better in both the morning (AM) and afternoon (PM) peak hours. The resulting AM and PM peak hour LOS for signalized are shown in **Figure 18** and **Figure 19**, respectively. Although all intersections operate with acceptable LOS in existing conditions, there are specific approaches that operate poorly:

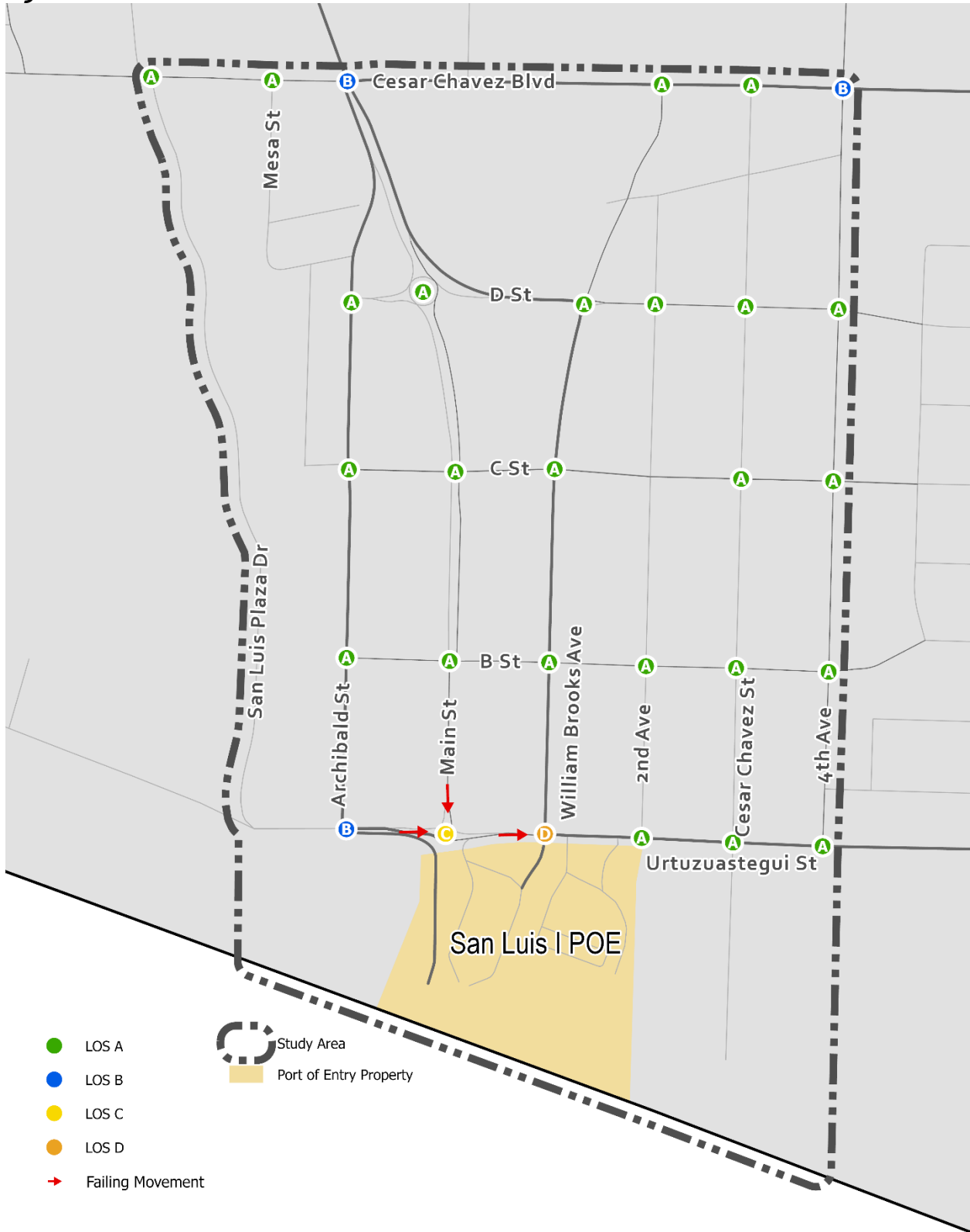
- The southbound approach operates at an LOS F during the AM peak hour and LOS E in PM peak hour
- The eastbound approach operates at an LOS E during AM peak hour and LOS F in the PM peak hour
- William Brooks and Urtuzuastegui Street:
  - The eastbound approach operates at an LOS F in both the AM and PM peak hour
  - The westbound approach operates at an LOS E in the PM peak hour

Detailed Current Year Model LOS and queue results are provided in **Appendix E**.



# SAN LUIS POE IMPACT STUDY

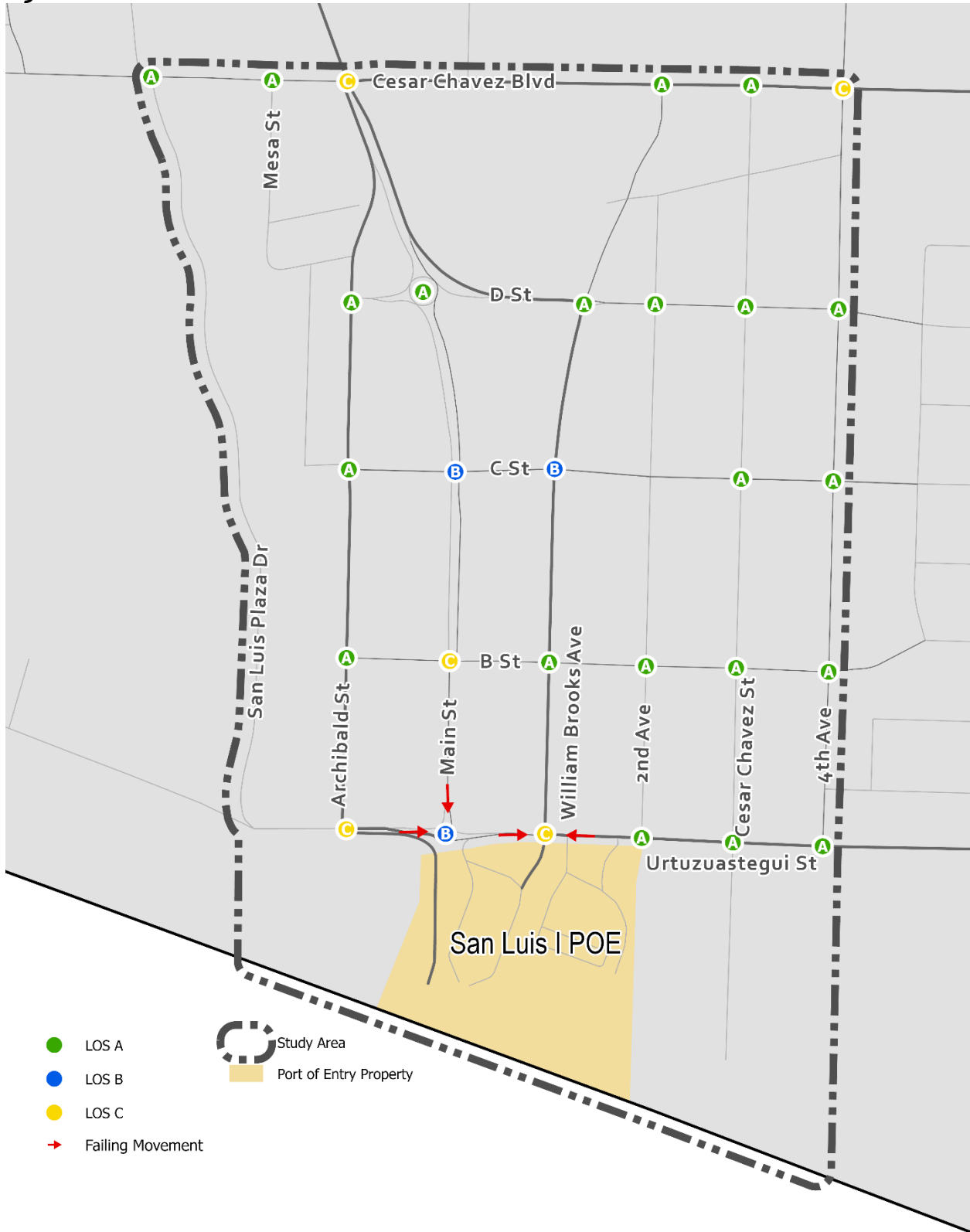
Figure 18. Current Year Model AM LOS





# SAN LUIS POE IMPACT STUDY

Figure 19. Current Year Model PM LOS





# SAN LUIS POE IMPACT STUDY

## OPENING YEAR MODEL

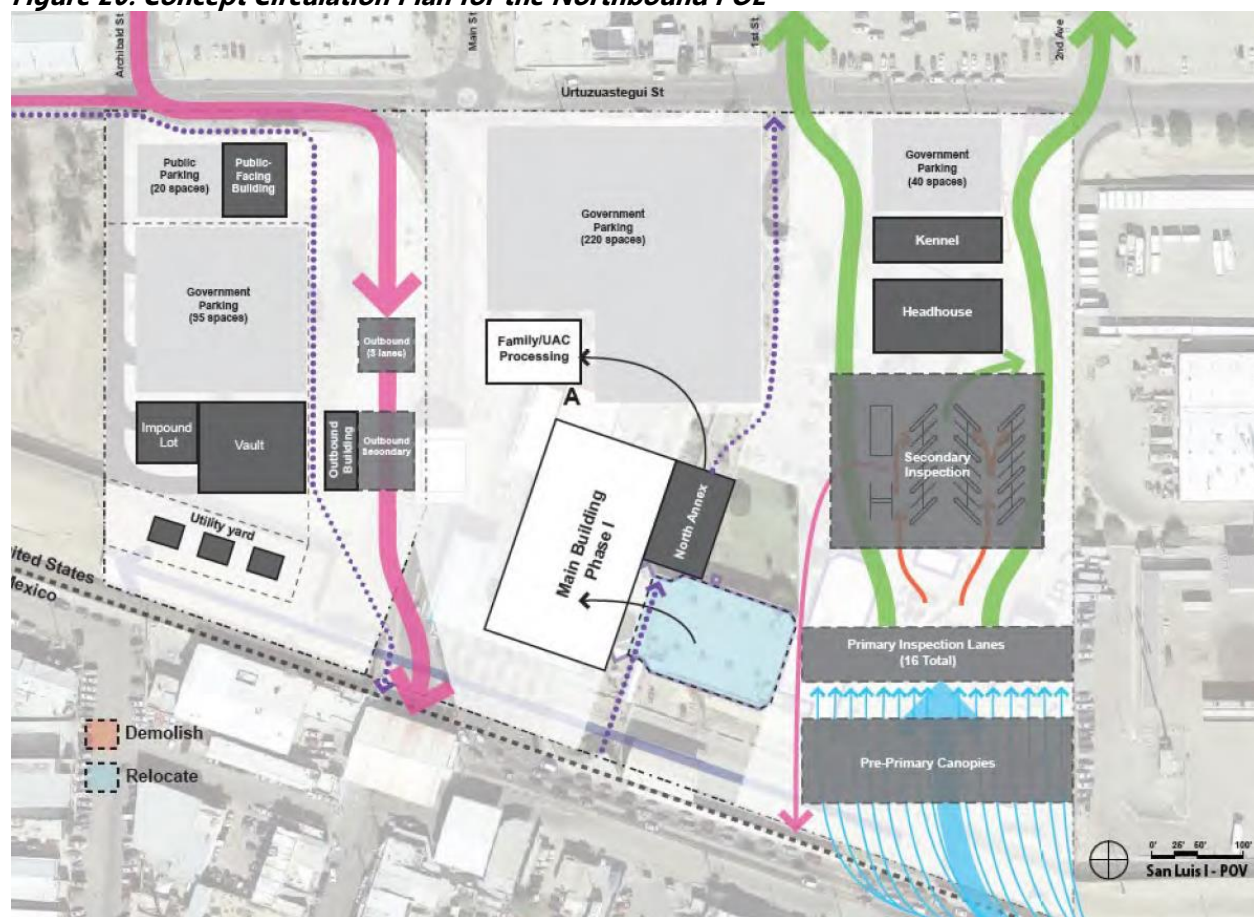
The Opening Year Model simulates Downtown San Luis right after the expanded northbound and southbound POEs are fully operational.

## ASSUMED NETWORK CHANGES

Several changes to the downtown transportation network were added to the simulation model to reflect assumed conditions during the POE opening year. These network changes are:

- **Expanded Northbound POE.** Based on preliminary circulation concept provided to the City by GSA, shown in **Figure 20**, the number of inbound check lanes will be doubled from eight to 16 lanes and access into Downtown San Luis will be modified. The current primary exit from the POE located just east of Main Street will be closed, the current secondary exit at William Brooks Avenue will become the primary exit, and a new secondary exit will be constructed at 2<sup>nd</sup> Avenue. Additionally, pedestrians will now exit the Northbound POE west of William Brooks Avenue to reduce vehicle-pedestrian conflicts.

**Figure 20. Concept Circulation Plan for the Northbound POE**



Source: Final Environmental Impact Statement for Expansion and Modernization of the San Luis I Land Port of Entry



# SAN LUIS POE IMPACT STUDY

- **Expanded Southbound POE.** In conjunction with the expansion of the Northbound POE by GSA, the Mexican government is also pursuing reconfiguration and expansion of the Southbound POE. At the conceptual level, the plan is to double the number of southbound check lanes and realign southbound traffic to the Archibald Street alignment and move southbound pedestrian traffic to the east of the southbound travel lanes to reduce vehicle-pedestrian conflicts. A preliminary concept of the Southbound POE is shown in **Figure 21**.

**Figure 21. Concept Circulation Plan for the Southbound POE**



Source: City of San Luis Rio Colorado

- **Cesar Chavez Boulevard Multimodal Improvements Project.** The City of San Luis received \$33 million from the State of Arizona to widen and improve five miles of Cesar Chavez Boulevard between San Luis Plaza Drive and Avenue E. While the final design process may change some elements of the project, the improvements included in a 2014 conceptual design for the project were included in the traffic simulation model, including:
  - One additional travel lane in each direction
  - A roundabout at San Luis Plaza Drive/Escondido Street
  - A center median that prohibits left turns from side street Mesa Street, William Brooks Avenue, and Cesar Chavez Street
  - A traffic signal at 4<sup>th</sup> Avenue

## ASSUMED TRAFFIC VOLUME GROWTH

As both the Northbound and Southbound POEs are expanded, it is anticipated that more people will travel through the San Luis I POE during peak periods as a result of the reduction in wait times from the additional capacity. To account for this increased peak period demand, traffic volumes



# SAN LUIS POE IMPACT STUDY

to and from the POE were increased by 20% in the Opening Year. All other traffic volumes in the traffic simulation model were left at the same levels as the Current Year Model.

## OPENING YEAR TRAFFIC PERFORMANCE

**Figure 22** and **Figure 23** provide the LOS for the study area intersections during the AM and PM Monday peak hour conditions, respectively. All movements in the AM peak conditions operate at an acceptable LOS in the Opening Year Model. The following movements are notable results that are approaching or at failing conditions in the PM peak hour for the Opening Year Model:

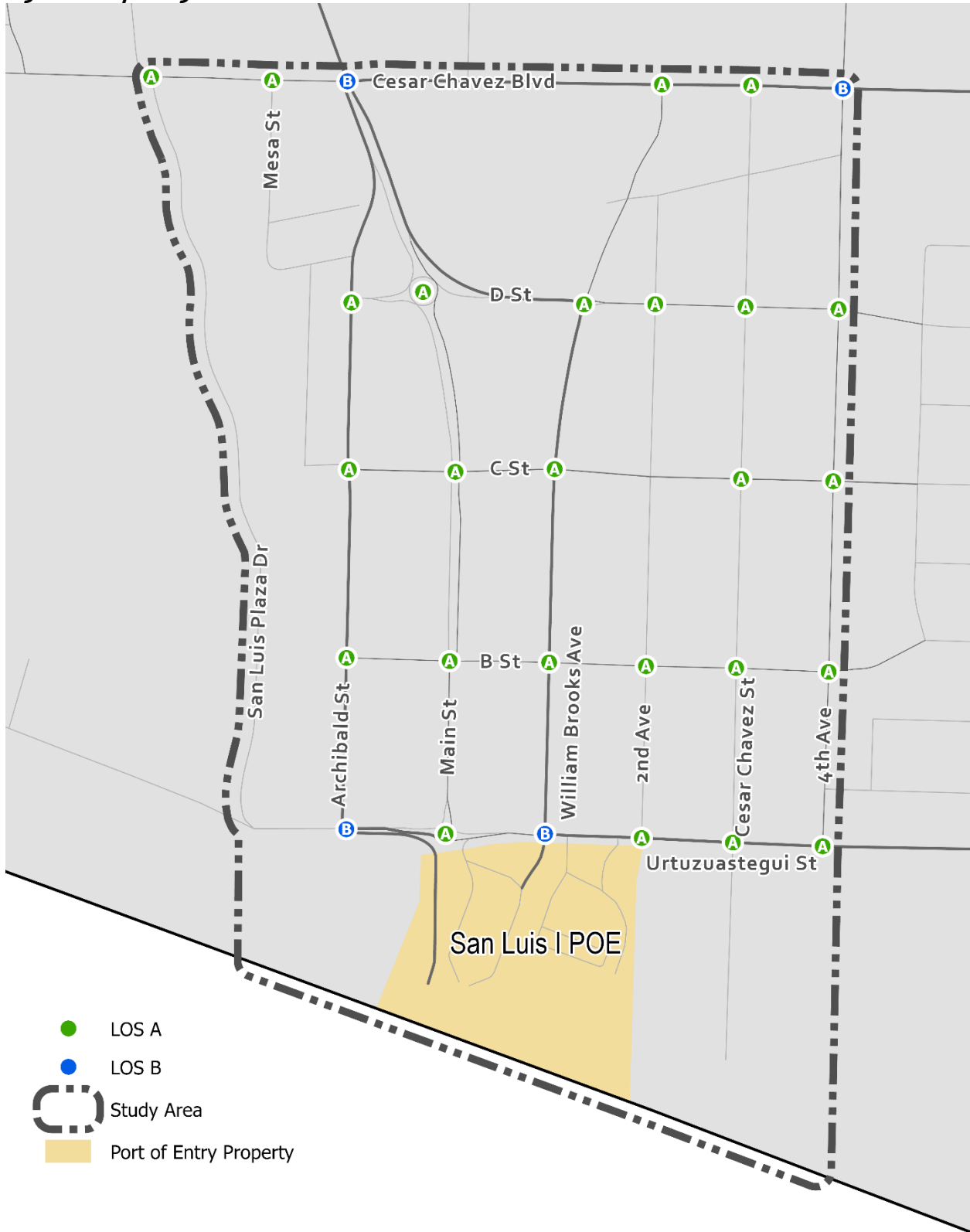
- **William Brooks Avenue and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - All northbound movements are operating at a **LOS F**
  - The westbound through and right turn movements operate at a **LOS F**
- **2<sup>nd</sup> Avenue and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - The northbound through movement operates at a **LOS F**
  - The southbound through movement operates at **LOS D**
  - All westbound movements operate at a **LOS F**
- **Cesar Chavez Street and Urtuzuastegui Street**
  - The westbound through and right-turn movements operates at a **LOS F**
  - The westbound left movement operates at a **LOS E**
- **4<sup>th</sup> Avenue and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - The southbound left-turn movement operates at a **LOS E** and the southbound right-turn movement operates at a **LOS F**
  - The westbound approach operates at a **LOS F** for all movements
- **Main Street and B Street**
  - The westbound left-turn and right-turn movements operate at a **LOS E**
- **US 95 and Cesar Chavez Boulevard**
  - The southbound left-turn movement operates at a **LOS D**
  - The westbound left-turn movement operates at a **LOS F**

Detailed Opening Year Model LOS and queue results are provided in **Appendix E**.



# SAN LUIS POE IMPACT STUDY

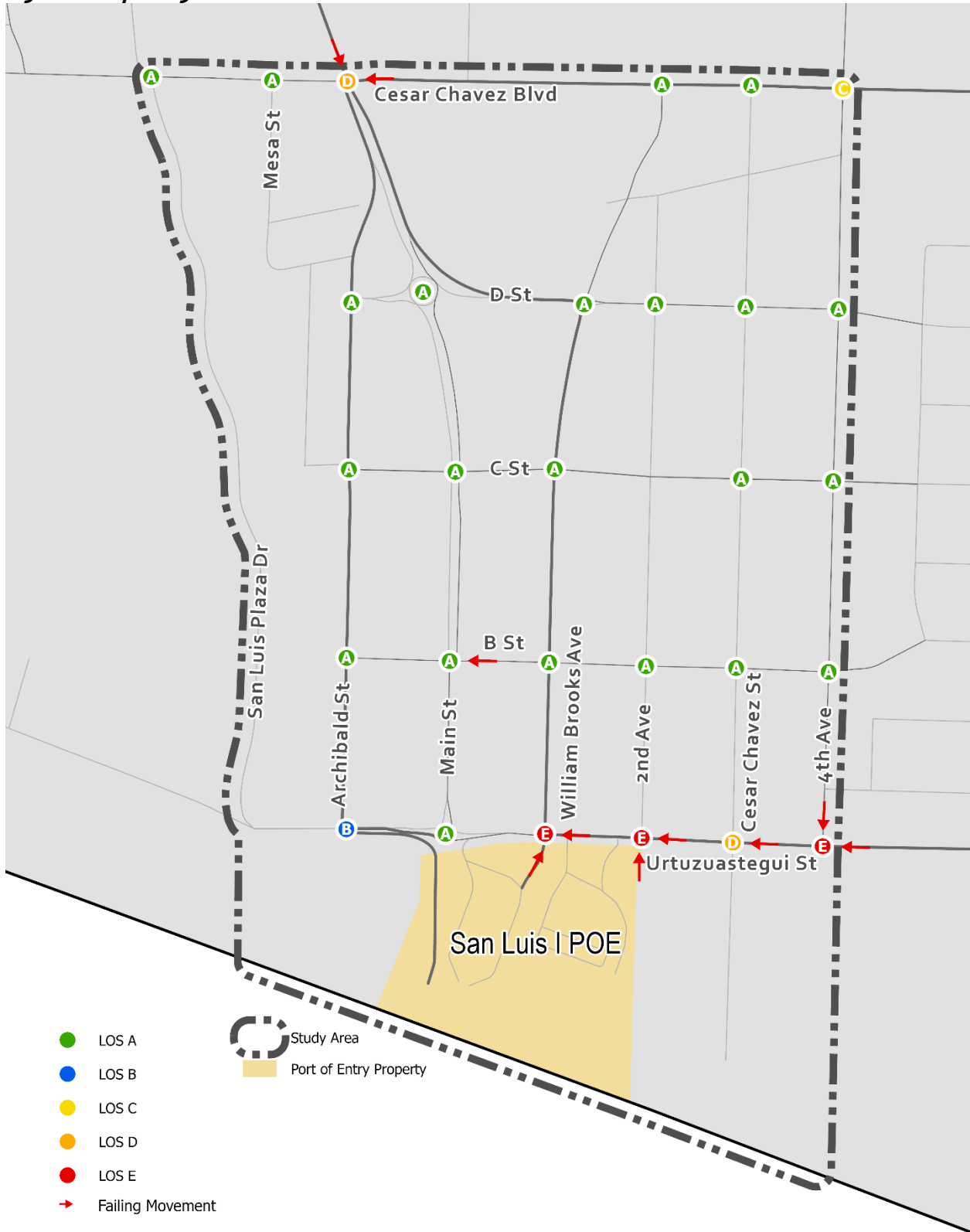
Figure 22. Opening Year Model AM LOS





# SAN LUIS POE IMPACT STUDY

Figure 23. Opening Year Model PM LOS





# SAN LUIS POE IMPACT STUDY

## 20-YEAR MODEL

The 20-Year Model simulates Downtown San Luis 20 years after the Opening Year (the year the expanded northbound and southbound POEs are fully operational). All network changes in the Opening Year Model were carried forward to the 20-Year Model.

## ASSUMED TRAFFIC VOLUME GROWTH

Based on historical growth in traffic volumes observed in San Luis in recent years, a 2% annual growth rate was assumed to grow traffic volumes from the Opening Year Model to the 20-Year Model. All TMCs in the model were grown by the same 2% annual growth rate.

## 20-YEAR TRAFFIC PERFORMANCE

**Figure 24** and **Figure 25** provide the LOS for the study area intersections during the AM and PM Monday peak hour conditions, respectively. The following movements are notable results that are approaching or at failing conditions in the AM peak hour for the 20-Year Model:

- **William Brooks Avenue and Urtuzuastegui Street**
  - The northbound left movement operates at a **LOS E**
  - The westbound approach operates at a **LOS E** in all movements
- **US 95 and Cesar Chavez Boulevard**
  - The eastbound left movement operates at a **LOS E**
  - The westbound left movement operates at a **LOS D**
- **4<sup>th</sup> Avenue and Cesar Chavez Boulevard**
  - The northbound approach operates at a **LOS D** for all movements

The following movements are notable results that are approaching or at failing conditions in the PM peak hour for the 20-Year Model:

- **William Brooks and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - The northbound approach operates at a **LOS E** for all movements
  - The eastbound through movement operates at **LOS E**
  - The westbound approach operates at **LOS F** for all movements
- **2<sup>nd</sup> Avenue and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - The northbound through movement operates at a **LOS E** and the northbound right-turn movement operates at **LOS D**
  - The southbound right movement operates at a **LOS E**
  - The westbound approach operates at a **LOS F** for all movements



# SAN LUIS POE IMPACT STUDY

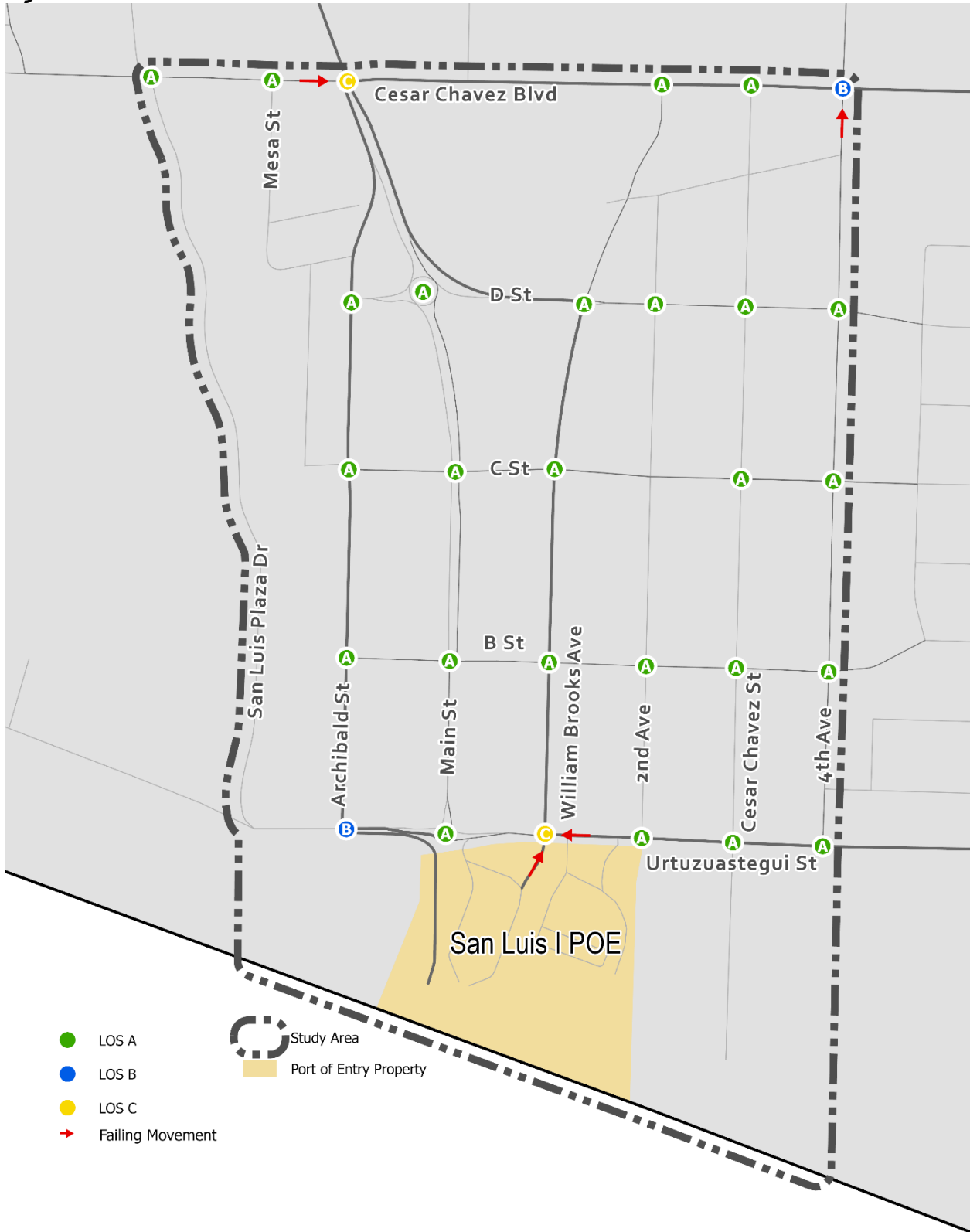
- **Cesar Chavez Street and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS E**
  - The northbound approach operates at a **LOS E** for all movements
  - The westbound approach operates at a **LOS F** for all movements
- **4<sup>th</sup> Avenue and Urtuzuastegui Street**
  - The overall intersection operates at a **LOS F**
  - The southbound approach operates at a **LOS F** for all movements
  - The westbound approach operates at a **LOS F** for all movements
- **Main Street and B Street**
  - The westbound left and through movements operate at a **LOS E**
- **Main Street and C Street**
  - The eastbound left and through movements operate at a **LOS E**
- **San Luis Plaza Drive/Escondido Street and Cesar Chavez Boulevard**
  - The northbound approach operates at a **LOS F** for all movements
  - The southbound approach operates at a **LOS E** for all movements
- **Cesar Chavez Boulevard and Main Street**
  - The southbound left and through movements operate at a **LOS E**
  - The eastbound left-turn movement operates at a **LOS F**
  - The westbound left-turn movement operates at a **LOS F**
- **4<sup>th</sup> Avenue and Cesar Chavez Boulevard**
  - The northbound left-turn movement operates at a **LOS E**
  - The southbound approach operates at a **LOS E** for all movements
- **Cesar Chavez Boulevard and Mesa Street**
  - The northbound right-turn movement operates at a **LOS F**
  - The eastbound through movement operates at a **LOS E**

Detailed 20-Year Model LOS and queue results are provided in **Appendix E**.



# SAN LUIS POE IMPACT STUDY

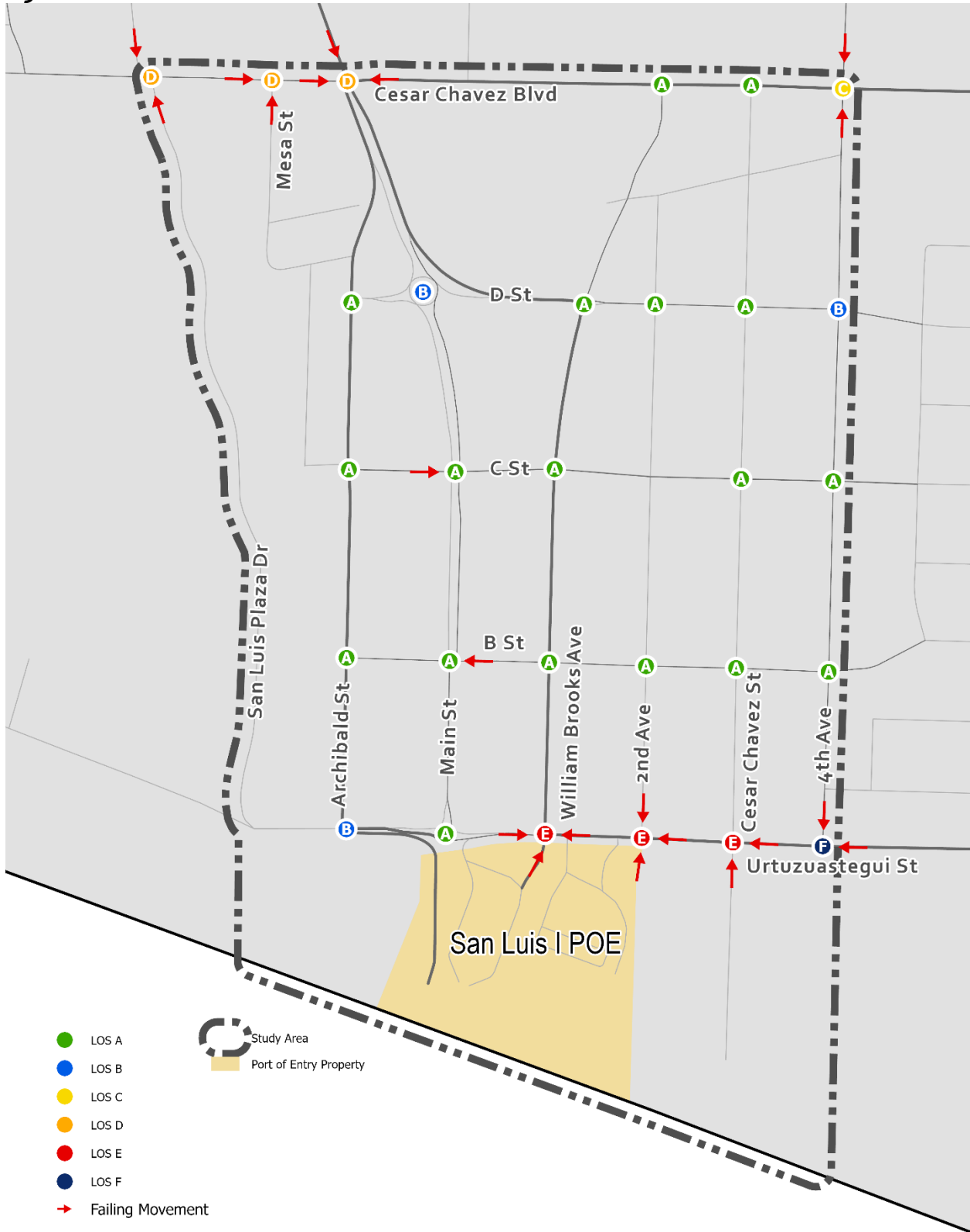
Figure 24. 20-Year Model AM LOS





# SAN LUIS POE IMPACT STUDY

Figure 25. 20-Year Model PM LOS





## CIRCULATION ALTERNATIVES

Based on the results from the Opening Year and 20-Year Models, five areas of constraint were identified. While congestion was identified at more than these five locations in the models, solving the congestion issues at these five locations will address the cascading congestion impacts at nearby intersections. The primary areas of constraint are:

- William Brooks Avenue and Urtuzuastegui Street
- Main Street and B Street
- Cesar Chavez Boulevard and Main Street
- Cesar Chavez Boulevard and 4<sup>th</sup> Avenue
- Cesar Chavez Boulevard and Mesa Street

A series of circulation alternative concepts were developed for each constrained intersection. Each concept was assessed in the Opening Year and 20-Year Models to determine which concepts best solve the anticipated congestion issues while also maintaining multimodal safety and supporting downtown's character and businesses. Detailed circulation alternative LOS and queue results for the Opening Year and 20-Year Models are provided in **Appendix E**.

## WILLIAM BROOKS AVENUE AND URTUZUASTEGUI STREET

Two concepts were developed for the intersection of William Brooks Avenue and Urtuzuastegui Street to address congestion and pedestrian-vehicle conflict issues:

- **Concept 1 – Signalize Intersection.** The installation of a traffic signal at the main exit for the POE was analyzed as a mitigation measure to improve intersection operations. The intersection would operate with permitted left-turn phasing on all approaches and the existing lane configuration. **PLANNING LEVEL COST: \$600,000**
- **Concept 2 – Pedestrian Overpass/Underpass.** Operations at William Brooks Avenue and Urtuzuastegui Street are significantly impacted by the interaction between pedestrian and vehicular traffic. A pedestrian overpass on the west leg of the intersection provides a grade-separated pathway that eliminates this pedestrian and vehicle interaction. This concept improves the safety and accessibility for pedestrians while also improving LOS and delay for vehicles. The intersection would continue to operate with stop-control on all approaches. **PLANNING LEVEL COST: \$1,500,000**

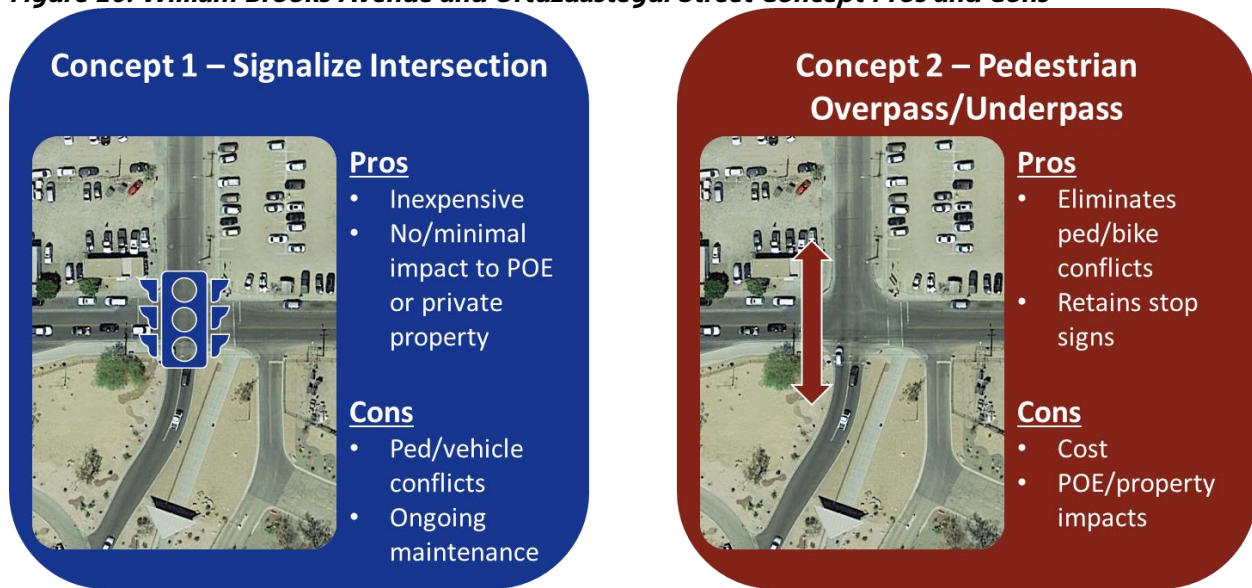
Pros and cons for these two concepts are shown in **Figure 26**. Pros for Concept 1 include that it is relatively inexpensive compared to Concept 2 and there is little or no impact to the POE or other private properties adjacent to the intersection. Cons for Concept 1 include that it does not physically protect pedestrians from vehicular traffic and that traffic signals require ongoing monitoring and maintenance.

Pros for Concept 2 include that it eliminates pedestrian and vehicular conflicts and retains the existing stop control at the intersection. Cons for Concept 2 include that it is significantly more expensive than a traffic signal and there could be substantial impacts to adjacent properties through the taking of right-of-way.



# SAN LUIS POE IMPACT STUDY

**Figure 26. William Brooks Avenue and Urtuzuastegui Street Concept Pros and Cons**



Using the Opening Year and 20-Year Models, these concepts were modeled to quantify the congestion impacts. The LOS and vehicle delay results for the overall intersection are shown in **Table 8**. Impacts to failing movements in the Opening Year and 20-Year Models were reviewed for each concept and the results are shown in **Table 9**.

**Table 8. William Brooks Avenue and Urtuzuastegui Street Overall Intersection Results**

MODEL	BASELINE		CONCEPT 1		CONCEPT 2	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Opening Year	B (14.7 sec)	E (70.8 sec)	B (17.8 sec)	B (19.2 sec)	A (7.8 sec)	B (11.3 sec)
20-Year	C (25.0 sec)	E (61.2 sec)	B (15.5 sec)	C (26.5 sec)	A (9.0 sec)	B (11.3 sec)

**Table 9. William Brooks Avenue and Urtuzuastegui Street Failing Movements Results**

MOVEMENT	BASELINE		CONCEPT 1		CONCEPT 2	
	OPENING YEAR	20-YEAR	OPENING YEAR	20-YEAR	OPENING YEAR	20-YEAR
<b>NBL</b>	F (70.2 sec)	E (49.9 sec)	A (9.9 sec)	B (14.2 sec)	B (11.5 sec)	B (11.5 sec)
<b>NBT</b>	F (60.6 sec)	E (42.3 sec)	B (13.9 sec)	B (16.8 sec)	B (10.1 sec)	B (10.1 sec)
<b>NBR</b>	F (75.1 sec)	F (51.4 sec)	B (15.8 sec)	B (17.5 sec)	B (10.7 sec)	B (10.7 sec)
<b>WBT</b>	F (104.3 sec)	F (118.6 sec)	C (23.2 sec)	D (38.4 sec)	B (13.0 sec)	B (13.0 sec)
<b>WBR</b>	F (104.8 sec)	F (112.7 sec)	C (24.6 sec)	D (37.0 sec)	B (13.4 sec)	B (13.4 sec)



# SAN LUIS POE IMPACT STUDY

## MAIN STREET AND B STREET

Three concepts were developed for the intersection of Main Street and B Street to address congestion and pedestrian-vehicle conflict issues:

- **Concept 1 – Signalize Intersection.** The installation of a traffic signal at Main Street and B street was analyzed as a mitigation measure to improve traffic operations. The intersection would operate with permitted left-turn phasing on all approaches and with the existing lane configurations. **PLANNING LEVEL COST: \$600,000**
- **Concept 2 – HAWK Signal.** The installation of a High Intensity Activated Crosswalk (HAWK) signal was considered due to the high amount of pedestrian activity. A HAWK signal would be installed along the south leg of Main Street and provide an allocated amount of 'WALK' time when the push button is activated for pedestrians and indicates a red signal for vehicles. Then, a flashing 'DON'T WALK' notifies pedestrians not to begin crossing while flashing red lights are displayed for drivers warning them to stop for pedestrians. A HAWK signal would allow platoons of pedestrians and vehicles dedicated green time, with little delay to both modes of travel and increased safety to pedestrians. **PLANNING LEVEL COST: \$300,000**
- **Concept 3 – Roundabout.** The intersection reconstructed as a roundabout was analyzed to improve the flow of traffic and the LOS/delay for B Street. Intersections with stop control only on the minor approach often experience greater delays since the high volume of traffic on the major approach does not stop thus creating fewer gaps for vehicles to turn. A roundabout reduces the number of conflict points and the speed of vehicles providing an increase in acceptable gaps for all movements at each approach. The high volume of pedestrians may impede operations and traffic flow at this roundabout location. **PLANNING LEVEL COST: \$1,500,000**

Pros and cons for these three concepts are shown in **Figure 27**. Pros for Concept 1 include that a traffic signal will improve safety on all four crosswalks and reduce the delay on B Street. Cons include the expense of installing a traffic signal as well as the ongoing monitoring and maintenance.

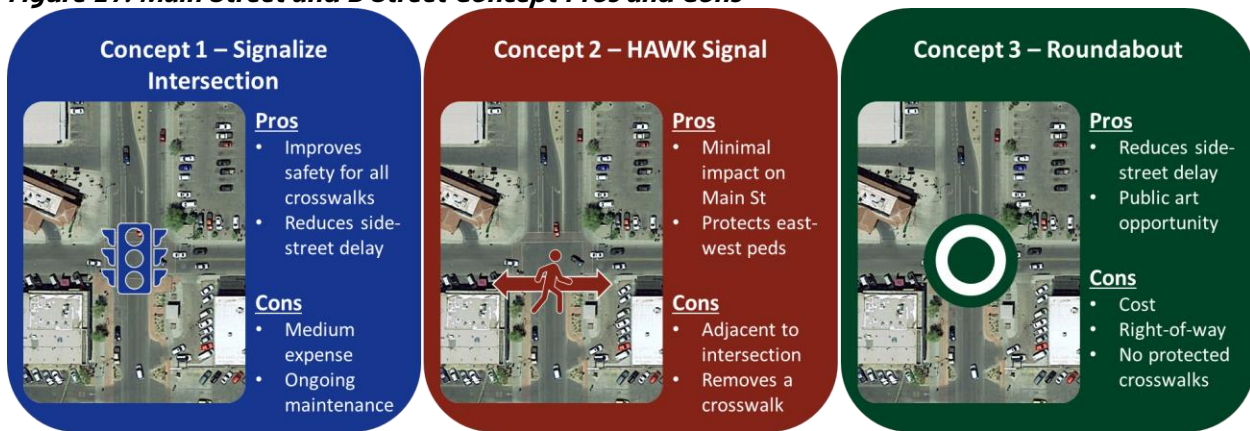
Pros for Concept 2 include that it has minimal impact on Main Street traffic which is heavier than on B Street as well as added protection for pedestrians crossing Main Street. Cons for Concept 2 include that a HAWK adjacent to an intersection is unconventional and potentially confusing; additionally, installing the HAWK will necessitate removing the crosswalk on the north leg of the intersection, reducing pedestrian connectivity.

Pros for Concept 3 include a reduction of vehicular delay on B Street and that the roundabout provides an opportunity for public art, similar to the other two roundabouts on Main Street. Cons include that it is the most expensive alternative, may require purchasing additional right-of-way from adjacent property owners, and that roundabouts are often not comfortable for pedestrians because there are no signals to stop vehicles.



# SAN LUIS POE IMPACT STUDY

**Figure 27. Main Street and B Street Concept Pros and Cons**



Using the Opening Year and 20-Year Models, these concepts were modeled to quantify the congestion impacts. The LOS and vehicle delay results for the overall intersection are shown in **Table 10**. Impacts to failing movements in the Opening Year and 20-Year Models were reviewed for each concept and the results are shown in **Table 11**.

**Table 10. Main Street and B Street Overall Intersection Results**

MODEL	BASELINE		CONCEPT 1		CONCEPT 2		CONCEPT 3	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Opening Year	A (3.0 sec)	A (8.2 sec)	B (14.6 sec)	C (24 sec)	A (4.8 sec)	B (10.7 sec)	A (4.9 sec)	B (13.2 sec)
20-Year	A (3.3 sec)	A (10.0 sec)	B (13.7 sec)	D (45.4 sec)	A (5.8 sec)	B (14.2 sec)	A (2.2 sec)	B (14.2 sec)

**Table 11. Main Street and B Street Failing Movements Results**

MOVE-MENT	BASELINE		CONCEPT 1		CONCEPT 2		CONCEPT 3	
	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR
WBL	E (37.3 sec)	E (35.7 sec)	C (32.2 sec)	C (33.9 sec)	D (30.6 sec)	E (37.5 sec)	A (9.4 sec)	A (9.4 sec)
WBT	E (42.9 sec)	E (49.0 sec)	C (30.7 sec)	C (29.0 sec)	E (35.1 sec)	E (48.1 sec)	A (9.1 sec)	C (24.0 sec)



# SAN LUIS POE IMPACT STUDY

## CESAR CHAVEZ BOULEVARD AND MAIN STREET

Three concepts were developed for the intersection of Cesar Chavez Boulevard and Main Street to address congestion and pedestrian-vehicle conflict issues:

- **Concept 1 – Dual Westbound Lefts and Two Westbound Through Lanes.** To accommodate the increase of vehicles making a westbound left-turn from Cesar Chavez Boulevard onto Main Street, the installation of dual-left turn lanes was considered. Signal operations would need to be adjusted to provide protected only left turn phasing for the eastbound and westbound left turns. The two westbound through lanes in the concept design for the Cesar Chavez Boulevard Multimodal Improvements Project would remain. **PLANNING LEVEL COST: \$500,000**
- **Concept 2 – Dual Westbound Lefts and a Single Westbound Through Lane.** Similar to Concept 1, dual westbound left-turn lanes that operate with protected left-turn phasing were considered to improve intersection operations. The intersection was evaluated with a single westbound through lane to analyze operation in case the feasibility of further widening beyond the Cesar Chavez Boulevard Multimodal Improvements Project assumptions is constrained by right-of-way acquisition. **PLANNING LEVEL COST: \$50,000**
- **Concept 3 – Dual Westbound Lefts, Two Westbound Through Lanes, and Northbound/Southbound Right-Turn Lanes.** In addition to providing dual-left turn lanes, providing dedicated right-turn lanes for the northbound and southbound approaches to accommodate future traffic conditions and reduce delay for the northbound and southbound approaches. **PLANNING LEVEL COST: \$1,500,000**

Pros and cons for these three concepts are shown in **Figure 28**. Pros for Concept 1 include that it adds capacity for westbound left turns, which becomes a failing movement by the 20-Year Model. Cons are that it will require additional widening beyond that found in the concept design for the Cesar Chavez Boulevard Multimodal Improvements Project.

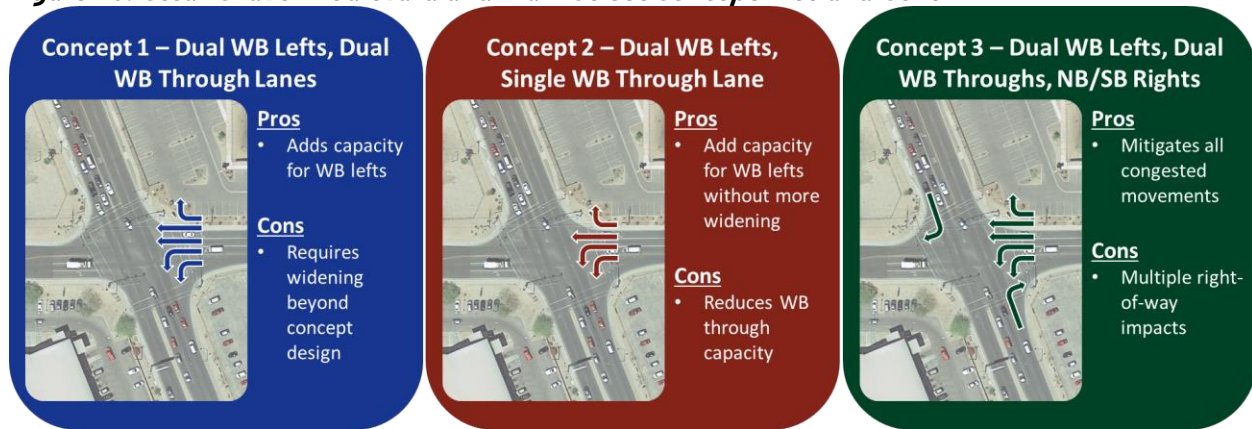
Pros for Concept 2 include that it adds additional westbound left turn capacity without requiring additional widening. Cons include that it will reduce the capacity for the westbound through movement, which could increase delay.

Pros for Concept 3 include that it adds capacity to all the failing movements at the intersection. Cons include that there are likely right-of-way impacts on three of the four corners of the intersection (northwest, northeast, and southeast corners) to add additional lanes.



# SAN LUIS POE IMPACT STUDY

**Figure 28. Cesar Chavez Boulevard and Main Street Concept Pros and Cons**



Using the Opening Year and 20-Year Models, these concepts were modeled to quantify the congestion impacts. The LOS and vehicle delay results for the overall intersection are shown in **Table 12**. Impacts to failing movements in the Opening Year and 20-Year Models were reviewed for each concept and the results are shown in **Table 13**.

**Table 12. Cesar Chavez Boulevard and Main Street Overall Intersection Results**

MODEL	BASELINE		CONCEPT 1		CONCEPT 2		CONCEPT 3	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Opening Year	B (19.0 sec)	D (42.5 sec)	C (23.1 sec)	D (47.2 sec)	C (21.7 sec)	D (43.4 sec)	C (24.2 sec)	C (33.8 sec)
20-Year	C (27.2 sec)	D (49.0 sec)	C (26.1 sec)	E (58.6 sec)	D (37.8 sec)	D (52.9 sec)	C (26.1 sec)	C (33.8 sec)

**Table 13. Cesar Chavez Boulevard and Main Street Failing Movements Results**

MOVE-MENT	BASELINE		CONCEPT 1		CONCEPT 2		CONCEPT 3	
	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR	OPEN YEAR	20-YEAR
<b>SBL</b>	D (54.2 sec)	E (58.8 sec)	E (66.4 sec)	D (54.3 sec)	E (65.6 sec)	E (69.4 sec)	D (40 sec)	D (40 sec)
<b>SBT</b>	D (48.9 sec)	E (55.7 sec)	E (57.1 sec)	E (68.5 sec)	E (55.8 sec)	E (63.0 sec)	D (36.2 sec)	D (36.2 sec)
<b>EBL</b>	D (45.1 sec)	F (149 sec)	E (64.9 sec)	D (40.5 sec)	E (72.6 sec)	E (68.9 sec)	B (15.9 sec)	F (115 sec)
<b>WBL</b>	F (98.2 sec)	F (92.3 sec)	E (63.6 sec)	F (180 sec)	D (50.5 sec)	E (76.0 sec)	D (45.0 sec)	D (45.0 sec)



# SAN LUIS POE IMPACT STUDY

## CESAR CHAVEZ BOULEVARD AND 4<sup>TH</sup> AVENUE


One concept was developed for the intersection of Cesar Chavez Boulevard and 4<sup>th</sup> Avenue to address congestion on the southbound approach:

- **Concept 1 – Southbound Right-Turn Lane.** To accommodate the 20-Year Model traffic volumes, the addition of a right-turn southbound right-turn lane was evaluated at this intersection. **PLANNING LEVEL COST: \$250,000**

Pros and cons for this concept are shown in **Figure 29**. Pros include that adding the southbound right turn lane reduces overall delay. Cons include the cost of construction the lane as well as increasing the pedestrian crossing distance across the north leg of the intersection.

**Figure 29. Cesar Chavez Boulevard and 4<sup>th</sup> Avenue Concept Pros and Cons**

Concept 1 – Exclusive Left, Through, Right Lanes



**Pros**

- Reduces delay

**Cons**

- Cost
- Increases ped crossing distance

Using the Opening Year and 20-Year Models, this concept was modeled to quantify the congestion impacts. The LOS and vehicle delay results for the overall intersection are shown in **Table 14**. Impacts to failing movements in the Opening Year and 20-Year Models were observed for the concept and the results are shown in **Table 15**.

**Table 14. Cesar Chavez Boulevard and 4<sup>th</sup> Avenue Overall Intersection Results**

MODEL	BASELINE		CONCEPT 1	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Opening Year	B (15.7 sec)	C (22.2 sec)	B (15.5 sec)	C (32.9 sec)
20-Year	B (19.6 sec)	C (33.2 sec)	B (15.0 sec)	D (37.7 sec)

**Table 15. Cesar Chavez Boulevard and 4<sup>th</sup> Avenue Failing Movements Results**

MOVE-MENT	BASELINE		CONCEPT 1	
	OPENING YEAR	20-YEAR	OPENING YEAR	20-YEAR
SBL	C (26.2 sec)	E (61.2 sec)	D (49.4 sec)	D (54.7 sec)



# SAN LUIS POE IMPACT STUDY

## CESAR CHAVEZ BOULEVARD AND MESA STREET

Three concepts were developed for the intersection of Cesar Chavez Boulevard and Mesa Street to address the northbound left-turn movement which will no longer be able to be made after the Cesar Chavez Boulevard Multimodal Improvements Project is constructed:

- **Concept 1 – Circulating Route.** The vehicles that currently make northbound left turns in this concept will need to exit the Post Office Archibald Street and D Street, travel to the Main Street and D Street roundabout to turn left (north) and make another left turn at the Main Street Cesar Chavez Boulevard intersection to travel westbound on Cesar Chavez Boulevard. **PLANNING LEVEL COST: \$0**
- **Concept 2 – U-Turn Route.** The vehicles that currently make northbound left turns in this concept will need to make a northbound right-turn at Cesar Chavez Boulevard and Mesa Street and make an eastbound U-turn at Main Street and Cesar Chavez Boulevard to travel westbound on Cesar Chavez Boulevard. **PLANNING LEVEL COST: \$0**
- **Concept 3 – San Luis Plaza Drive Connector.** This concept includes one-way connector roadway between Mesa Street and the planned roundabout at San Luis Plaza Drive and Cesar Chavez Boulevard. Vehicles that are currently making a northbound left onto Cesar Chavez Boulevard would instead utilize this connector to access the roundabout at San Luis Plaza Drive and Cesar Chavez Boulevard and then turn left (west) onto Cesar Chavez Boulevard. This concept was included in the conceptual design for the Cesar Chavez Boulevard Multimodal Improvements Project. **PLANNING LEVEL COST: \$1,000,000**

Pros and cons for these concepts are shown in **Figure 30**. Pros for Concept 1 include that the northbound left movement is accommodated on existing streets, so no additional infrastructure is needed. Cons include that it is a long, circuitous route with several left turns.

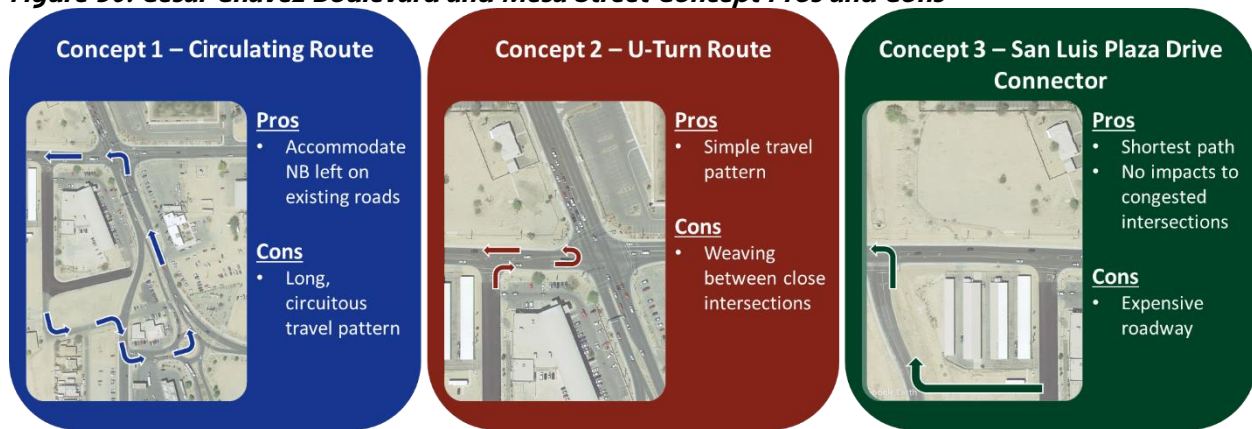
Pros for Concept 2 include that it is a simple and intuitive travel pattern. Cons include the short distance between Mesa Street and Main Street, making weaving to the left-turn lane challenging during peak times.

Pros for Concept 3 include that it is the shortest path to replace the northbound left turn and there are not impacts to congested intersections. Cons include the expense of building the new roadway down a large hill between Mesa Street and San Luis Plaza Drive.



# SAN LUIS POE IMPACT STUDY

**Figure 30. Cesar Chavez Boulevard and Mesa Street Concept Pros and Cons**



Using the Opening Year and 20-Year Models, these concepts were modeled to quantify the congestion impacts. The LOS and vehicle delay results for the overall intersection are shown in **Table 16**.

**Table 16. Cesar Chavez Boulevard and Mesa Street Overall Intersection Results**

MODEL	BASELINE		CONCEPT 1		CONCEPT 2		CONCEPT 3	
	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK	AM PEAK	PM PEAK
Opening Year	A (1.0 sec)	A (3.5 sec)	A (1.0 sec)	A (5.0 sec)	A (1.1 sec)	C (28.5 sec)	A (1.6 sec)	C (26.3 sec)
20-Year	A (1.6 sec)	D (39.2 sec)	A (1.7 sec)	B (12.9 sec)	A (1.5 sec)	C (28.5 sec)	A (1.4 sec)	C (27.2 sec)



# PHASE 3 IMPLEMENT



## PHASE 3 – IMPLEMENT

### CIRCULATION RECOMMENDATIONS

A single recommendation has been made for each of the five constrained intersections based on:

- The results of the Opening Year and 20-Year Models
- Impacts to pedestrian safety and walkability in the downtown area
- The planning-level cost and ongoing maintenance needs
- Input from City staff on preferred treatments

#### WILLIAM BROOKS AVENUE AND URTUZUASTEGUI STREET



**Concept 1 – Signalize Intersection** is recommended. This concept is the less expensive alternative and adequately accommodates anticipated traffic levels. It also adds signalized pedestrian crossings, which are more comfortable than the current stop-controlled crosswalks

#### MAIN STREET AND B STREET



**Concept 1 – Signalize Intersection** is recommended. A traffic signal will mitigate delay issues on the westbound left and through movements while adding signalized crossings for pedestrians on all legs of the intersection. This concept increases the overall delay at the intersection, but still maintains an acceptable LOS while improving east-west travel and safety.

#### CESAR CHAVEZ BOULEVARD AND MAIN STREET



**Concept 3 – Dual Westbound Lefts, Two Westbound Through Lanes, and Northbound/Southbound Right-Turn Lanes** is recommended. This intersection becomes the primary pinch point for traffic in the 20-Year Model. Adding additional turn lanes will ensure that congestion at this intersection does not negatively impact surrounding intersections and business access. Additionally, a third southbound through lane from north of Cesar Chavez Boulevard connecting to Archibald Street should be considered beyond the 20-Year Model timeframe to accommodate increasing southbound traffic.

#### CESAR CHAVEZ BOULEVARD AND 4<sup>TH</sup> AVENUE



**Concept 1 – Southbound Right-Turn Lane** is recommended. While this concept slightly increases the crossing distance for pedestrians, it will ensure southbound traffic congestion does not impact the neighborhood north of Cesar Chavez Boulevard and maintains access to adjacent properties.



# SAN LUIS POE IMPACT STUDY

## CESAR CHAVEZ BOULEVARD AND MESA STREET



**Concept 3 – San Luis Plaza Drive Connection** is recommended. While this concept has the highest cost, it provides the best accessibility from the Post Office, a critical community destination. The other two concepts do not adequately address the circulation needs and negatively impact the intersection of Cesar Chavez Boulevard and Main Street, which is anticipated to become increasingly congested.

## PARKING RECOMMENDATIONS



The following parking recommendations are broken into two timeframes: short-term and long-term strategies. The short-term recommendations are anticipated to mitigate existing parking constraints in the downtown area and the long-term strategies should be implemented as conditions change in downtown and the parking system becomes increasingly constrained.

### SHORT TERM: IMPLEMENT PARKING TIME LIMITS

In the short-term, it is recommended that parking time limits and ‘No Parking’ restrictions are implemented in the downtown study area. Due to the high demand of parking near the POE, many commercial and residential streets and alleys are at or beyond their parking capacity. This overparking results in restricted access for emergency vehicles in alleys, limited parking for local businesses and residents, and increased congestion from vehicles circulating to find parking. Recommended short-term strategies are:

- Review and Revise San Luis City Code
- Stakeholder Engagement.
- Remove Existing Parking Meters
- Construct North Lot Improvements
- Implement ‘No Parking’ and Time Restrictions
- Establish Regular Parking Enforcement
- Perform Ongoing Monitoring

The intended benefits and potential challenges of the short-term recommendations include:

 Intended Benefits	 Potential Challenges
<ul style="list-style-type: none"> <li>▪ Reduced parking demand in high-occupancy areas near the POE</li> <li>▪ Improved safety in alleyways through removal of parked vehicles</li> <li>▪ Increased parking turnover in high-demand areas through time limits</li> <li>▪ Increased off-street parking inventory to absorb existing on-street demand</li> </ul>	<ul style="list-style-type: none"> <li>▪ Coordination with the San Luis Police Department to enforce parking limits</li> <li>▪ Substantial funding is required to implement North Lot Improvements</li> <li>▪ Some loss of revenue with the removal of parking meters</li> <li>▪ Resources for an ongoing parking monitoring program</li> </ul>



# SAN LUIS POE IMPACT STUDY

## Short-Term Recommendation Implementation Steps

1

### Review and Revise City Code

Ensure that the proposed actions (adding parking time limits, restricting parking in alleys, enforcement activities through both the Police Department and Public Works Department) are all statutorily enabled by the City Code. An initial review of the City Code indicates that all necessary elements are enabled, but should be further investigated before implementation

2

### Stakeholder Engagement

Meet with downtown residents and business owners to discuss the planned changes to the parking system, including implementing time restrictions on all streets in the downtown area, restricting parking in alleyways, and removing the parking meters from downtown streets. Buy-in will be important to successfully implement these strategies.

3

### Remove Existing Parking Meters

Parking meters are present on a handful of block faces, but they are outdated and require frequent maintenance. The City does not have an active contract with the meter vendor and the meters are anticipated to no longer be able to process credit or debit card transactions soon. It is recommended that these meters are removed in lieu of multi-space meters/kiosks and mobile pay technology.

4

### Construct North Lot Improvements

To absorb the long-term parking, the City will need to improve the parking facilities at the north end of downtown using the concept in the San Luis Master Plan for Downtown Parks and Parking Lots. This concept includes paving and formalizing the parking facilities, adding bus pick-up/drop-off areas for agricultural shuttles, and adding amenities such as park space, public restrooms, and a police substation. The City will need to work with agricultural companies to establish the designated areas as the only pick-up/drop-off areas for workers.

5

### Implement 'No Parking' and Time Restrictions

It is recommended that the City implement ordinances and signage to permit parking in alleyways on one side only to maintain emergency access. Other areas with known safety issues should also be posted with 'No Parking' signage. For blocks where long-term parking is a known problem, shown in **Figure 31**, a six-hour time limit should be implemented through signage between 8:00 AM and 5:00 PM. This restriction will prevent long-term parking by workers while still allowing customers to park on-street for local businesses.

6

### Enforcement

Coordinate with the Police and Public Works Departments to enforce the six-hour time restrictions and new 'No Parking' areas. The six-hour time limit allows for simple enforcement with two runs through downtown per day using License Plate Reader (LPR) technology: one to record license plates in the morning and one to identify violations and issue citations in the afternoon. Regular enforcement will ensure the time limits and 'No Parking' restrictions are effective in eliminating long-term parking and safety hazards.

7

### Ongoing Monitoring

Regular on-street parking occupancy counts should be conducted by the City to evaluate the effectiveness of the Short-Term Recommendations. If occupancy approaches 80% on unrestricted block faces, the City should consider adding multi-space meters/kiosks or implement a Residential Parking Permit program to further regulate parking occupancy.



# SAN LUIS POE IMPACT STUDY



## Code Changes

Adjustments may be needed to the San Luis City Code, including language related to alleyway parking, implementation of time limits, and parking enforcement by both the Police and Public Works Departments.

### Supporting Code:

The following ordinances support the City of San Luis in their authority to implement and enforce 'No Parking' restrictions and time-limit parking restrictions:

- 10.15.100 Parking Zones and Rates
- 10.15.235 Parking in Alleys
- 10.15.280 Time Limit and Operation of Parking Meters
- 10.15.990 Penalty



## Technology Needs

- Initiation of LPR technology to aid enforcement of parking time limit and parking enforcement at the improved North Lot.
- Implementation of multispace meters or kiosks for the North Lot and downtown block faces with paid on-street parking.

A *multi-space meter or kiosk* is comprised of a secure, weather-proof metal cabinet. It typically features a digital display that provides instructions on completing a transaction. These kiosks offer a wide variety of payment options, including Mastercard, Visa, contactless credit/debit cards, Apple Pay, and Google Pay. The kiosks can also accept cash or coins, however it is not recommended due to significant costs with cash collection and maintenance.



## Potential Costs

- LPR Technology - \$20,000 - \$35,000 (capital) and \$4,000 - \$4,500 (annual)
- Multi-space Meters/Kiosks - \$7,000 - \$12,000 per multispace meter/kiosk
- Mobile Payment System - \$5,000 - \$10,000
- North Lot Improvements - \$7.8 million
- 'No Parking' and Time Restriction Signs - \$100 per sign
- Enforcement Time – dependent on salary and enforcement frequency



## Supporting Strategies

- Remove existing parking meters or move to multispace meters/kiosks and mobile pay options for paid parking.
- Implement signage in Downtown San Luis, implementing a six-hour parking limit for on-street parking in high-demand areas.
- Implement 'No Parking' signs at locations with safety issues, such as alleyways and near intersections.
- Make improvements to the North Lot to include on- and off-street parking facilities, as well as bus pullouts for agricultural company buses to have a central pick-up and drop-off location.



## Key Partnerships

Engage with key stakeholders to obtain opinion on the removal of meters and implementation of time limits. Partnership with the Police and Public Works Departments is key for enforcing the parking time limits. Coordinate with agricultural companies to determine a centralized pick-up and drop-off location for employees in Downtown San Luis.



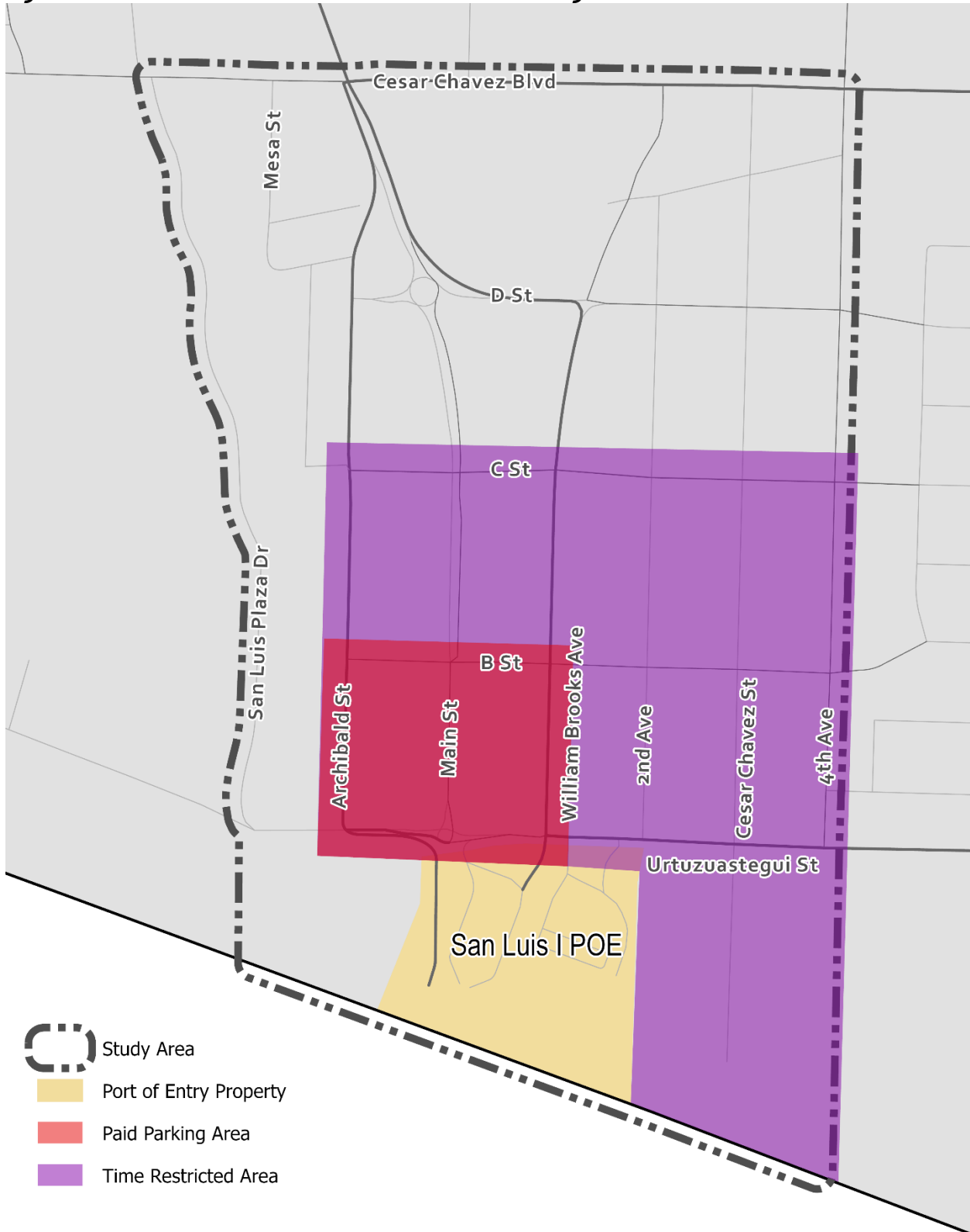
## Performance Metrics

Establish ongoing monitoring of time-restricted and paid parking as well as parking occupancy throughout the study area. If on-street occupancy increases to approximately 80%, explore introducing paid parking or implement a Residential Parking Permit Program (discussed in the long-term recommendations).



# SAN LUIS POE IMPACT STUDY

Figure 31. Recommended Paid and Time-Restricted Parking Areas





# SAN LUIS POE IMPACT STUDY

## LONG TERM: IMPLEMENT A RESIDENTIAL PARKING PERMITS



Following implementation of the short-term parking recommendations, including time restrictions and improvements to the North Lot, if parking conditions are not resolved, it is recommended that the City of San Luis implements a Residential Parking Permit (RPP) program and consider construction of a South Lot, located in the industrial park adjacent to the POE. Recommended long-term strategies are:

- Need identification
- Stakeholder engagement
- Implement the RPP program
- RPP signage and enforcement efforts
- Ongoing monitoring
- Construction of a South Lot located on the south side of Urtuzuastegui Street as close to the POE as possible

### What is a Residential Parking Permit (RPP) Program?

An RPP program aims to ensure that residents have reasonable access to on-street parking near their homes by restricting transient (short-term) parking. To accomplish this, on-street parking is restricted to residents and residential visitors. Programs are typically created based on the request of the residents within the given area. Physical or virtual permits are issued to residents at a nominal annual cost and visitor passes can be obtained by contacting the City department responsible for RPP management. Short-term parkers may still be permitted if that is a desire of the City or residents but are subject to time restrictions.

The intended benefits and potential challenges that can arise with the long-term parking recommendations includes:

 Intended Benefits	 Potential Challenges
<ul style="list-style-type: none"><li>▪ Reduced all-day parking occupancy in residential neighborhoods</li><li>▪ Increased off-street parking inventory for agricultural workers near the POE</li></ul>	<ul style="list-style-type: none"><li>▪ May need to address concerns and manage neighborhood impacts, such as a RPP Program</li><li>▪ Coordination with the Police and Public Works Departments to enforce permit compliance</li><li>▪ Substantial funding is required to construct a South Lot</li></ul>



# SAN LUIS POE IMPACT STUDY

## Long-Term Recommendation Implementation Steps

1



2



3



4



5



6

### **Review and Revise City Code**

Ensure that the proposed actions (including implementation and enforcement of an RPP) are all statutorily enabled by the City Code.

### **Stakeholder Engagement**

Meet with downtown residents and business owners to discuss specifics about the rules of an RPP and whether they want to implement the program. Stakeholders will need to be informed about all potential costs and bureaucratic processes behind purchasing and obtaining resident permits, visitor passes, the potential for continued short-term parking if desired, etc. Residents must decide if the benefits of an RPP program outweigh the drawbacks.

### **Implement the RPP Program**

Define parking program procedures, such as number of permits issues per household, application/permit fees, physical vs. digital permits, and duration of permits with reissuance procedure. These procedures must all then be communicated back to local residents and business owners.

### **RPP Program Signage and Enforcement**

Implement signage within the RPP program area, restricting parking to permit holders from 8:00 AM to 5:00 PM. Enforcement of the RPP rules, especially at the start of the program, is critical to its success. Coordination with the Police and Public Works Departments will be required to develop an enforcement plan.

### **Ongoing Monitoring**

Regular on-street parking occupancy counts should be conducted by the City to evaluate the effectiveness of the RPP program. If occupancy of on-street parking approaches 80%, consider constructing a South Lot.

### **Construct South Lot**

If parking demand cannot be met through the Short-Term recommendations and an RPP program, the City should investigate constructing a South Lot. This process will involve securing a property in the industrial park that is large enough to accommodate unmet parking demands, serve agricultural shuttle pick-up/drop-off operations, and house amenities similar to those proposed for the North Lot. The South Lot should be constructed on the south side of Urtuzuastegui Street as close to the POE as feasible to minimize walking and driving time for workers. A concept circulation is shown in **Figure 32**.



# SAN LUIS POE IMPACT STUDY

## Long-Term Recommendation Considerations



### Required Changes

Adjustments may be needed to the San Luis City Code to include allowance of an RPP program and associated enforcement activities.

#### Code Modifications to allow for permit parking areas:

The following ordinance language may be implemented to support the City of San Luis in their authority to implement and enforce an RPP program:

##### Establishment of Permit Parking Zones

*"Whenever the City Administrator determines that on-street parking congestion in a particular district is such that the restriction or prohibition of parking during certain hours of the day and days of the week is necessary to reduce hazardous traffic conditions and to promote the health, safety, and welfare of the district by providing adequate parking spaces to gain access to residences, businesses, and institutions, permit parking may be authorized in such districts. The issuance or renewal of a permit under this section shall not be granted until all outstanding parking infractions under the city code are paid in full. The establishment of permit parking shall not conflict with any restricts contained in this traffic code, "*

##### Parking in Permit Parking Area

*"No person shall park in a vehicle beyond the posted time limit in a permit parking area authorized by the City Administrator as a permit parking area except those vehicles displaying a valid permit or having a registered license plate associated with a virtual permit."*



### Technology Needs

- Virtual parking permit system, if needed.
- LPR technology to aid enforcement of the parking permit program.



### Potential Costs

Specific costs cannot be determined at this time for the long-term recommendations as they may change substantially by the time the City implements them. Potential costs include the cost administering the RPP program, LPR technology, staff time for enforcement, RPP signage, and the South Lot.



### Supporting Strategies

To issue the residential permits to residents within the study area, the City will need to define:

1. Number of permits issued per household
2. Associated application and permit fees
3. Utilization of physical or digital permits
4. Duration of permits and associated reissuance procedures

Implementation of RPP signage within the designated zone area.



### Key Partnerships

Engage with key stakeholders to obtain opinion on the implementation of the RPP program. Partnership with the Police and Public Works Departments is key for enforcing the RPP.



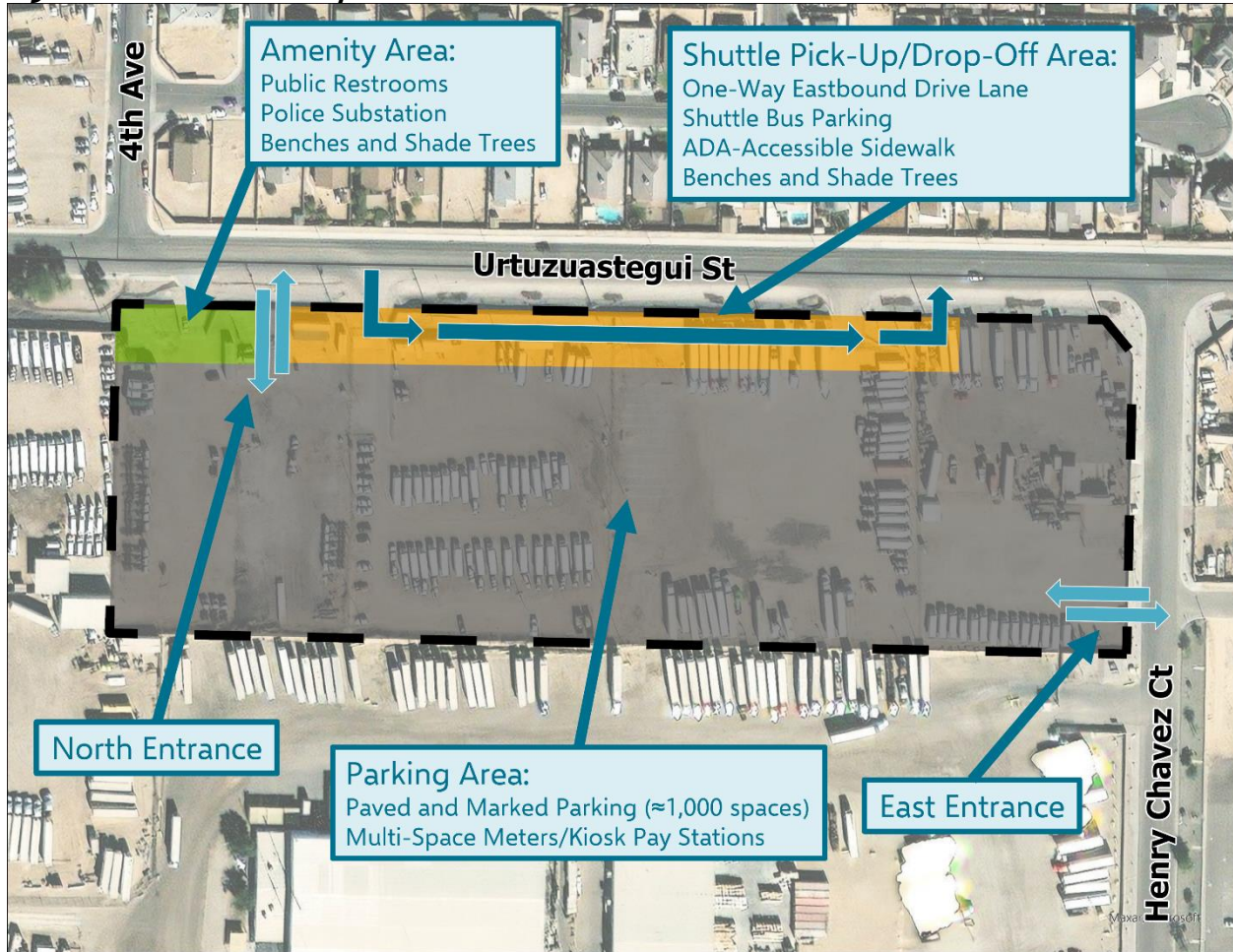
### Performance Metrics

Establish ongoing monitoring of the RPP area as well as parking occupancy throughout the study area. If on-street parking occupancy increases to approximately 80%, explore constructing the South Lot.



# SAN LUIS POE IMPACT STUDY

**Figure 32. South Lot Concept**





# APPENDICES



## APPENDICES

### APPENDIX A. CLASSIFICATION COUNT SHEETS



## APPDENDIX B. TMC SHEETS



## APPENDIX C. DETAILED SURVEY RESULTS



## APPENDIX D. DETAILED PARKING OCCUPANCY DATA



## APPENDIX E. DETAILED SIMULATION MODEL RESULTS





## AGENDA ITEM REVIEW FORM

### Work Session

2. B.

**Meeting Date:** 03/01/2023  
**Department Head:** Kay Macuil, City Attorney, Attorney's Office  
**Submitted By:** Kay Macuil, City Attorney, Attorney's Office  
**Action Requested:** Discussion Item - No Action to be Taken

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### ITEM:

Discussion and possible directions to staff on any and all matters regarding parking in alleys and the San Luis City Code § 10.15.235. **(Miguel Alvarez, Interim Police Chief)**

### SUMMARY:

This item was on the City Council's Meeting agenda for December 28, 2022, but was continued so that a Work Session could be arranged.

The fire trucks and solid waste collection trucks need to get through the alleys and provide sanitation and public safety assistance if there is a fire where access is needed in the alley. The current code requires only ten feet (10') of the alleys to be left clear for traffic to get through. Fire trucks cannot get through the alleys in an emergency if cars are parked, obstructing their path. The city's solid waste collection trucks cannot pick up and empty trash containers in alleys where vehicles are parked. So the city's sanitation workers must manually pick up and empty the trash containers, delaying service.

The information on the parking plan may help guide how to navigate residents concerns about parking.

### RECOMMENDATION / SUGGESTED MOTION:

**Discussion and possible directions to staff only, non-action item.**

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### Fiscal Impact

<b>IS THERE FISCAL IMPACT ASSOCIATED WITH THIS ITEM:</b>	No.
<b>CITY/STATE/FEDERAL FUNDS:</b>	N/A
<b>TOTAL:</b>	N/A
<b>BUDGETED AMOUNT:</b>	N/A
<b>AVAILABLE AMOUNT TO TRANSFER:</b>	N/A
<b>ACCT NAME &amp; GL#/REMAINING BALANCE BEFORE PURCHASE:</b>	N/A
<b>FISCAL IMPACT STATEMENT (IF THIS IS A BUDGET TRANSFER, YOU MUST ATTACH THE BUDGET ADJUSTMENT FORM):</b>	
	N/A

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### Attachments

Ordinance No. 433  
Current City Code on Alley Parking  
Fire Department Presentation

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# Ordinance

OFFICE OF THE  
MAYOR  
CITY OF SAN LUIS

No. 433

**AN ORDINANCE OF THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN LUIS, ARIZONA, AMENDING CITY CODE § 10.15.235, TITLED, PARKING IN ALLEYS; CONTINUING THE PENALTY FOR VIOLATIONS UNDER CITY CODE § 10.15.990; REPEALING ANY CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.**

**BE IT ORDAINED** by the Mayor and City Council of the City of San Luis, Arizona:

**Section 1:** Section 10.15.235 of the San Luis City Code ("SLCC") shall be amended and restated to read:

(A) No person shall park a vehicle within an alley within the area bounded by Urtuzuastegui Street on the south, Fourth Avenue on the east, Cesar Chavez Boulevard on the north, and William Brooks Avenue on the west.

(B) No person shall stop, stand, or park a vehicle within an alley in a position that blocks the driveway entrance to any property abutting the alley.

(C) No person shall stop, stand, or park a vehicle within an alley where official traffic signs prohibit it, or traffic laws otherwise prohibit it.

(D) No person shall stop, stand, or park a vehicle within an alley within the area described in subsection (A) above except for the purpose of stopping or standing briefly for loading and unloading (including, but not limited to, assisting a disabled person in getting in or out of a vehicle) and then not for a period longer than is actually necessary to load or unload.

(E) No person shall leave a vehicle unattended during loading or unloading as described in the above subsection.

(F) Zones prohibiting or allowing parking, stopping, standing, loading, and unloading may be designated under the procedure established in San Luis City Code Section 10.15.060./

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**Section 2: Penalty for Violations.** This ordinance is penalized as a civil traffic violation under San Luis City Code § 10.15.990(C), which states, quote:

*Parking Regulations.*

(1) A person who violates any section of SLCC 10.15.200 through 10.15.295 is guilty of a civil traffic infraction. Violations of SLCC 10.15.200 through 10.15.295 for which a civil sanction is imposed shall be treated as a civil offense and hearings and appeals shall be conducted in accordance with the rules of procedure in civil traffic violation cases as set forth in the A.R.S. Rules Volume 17B.

(2) Any person violating any of the provisions of SLCC 10.15.200 through 10.15.295 which are designated as subject to civil sanction or penalty shall be punished by imposition of a civil sanction not to exceed \$500.00 unless another penalty is specified.

(a) Any person who fails to comply with payment of a civil sanction shall be guilty of violating A.R.S. § 13-2810, interference with judicial proceedings. A conviction shall not preclude the imposition of the assessment of a default fee and/or other fees as set forth below.

(b) In addition to any civil sanction imposed, the Municipal Court shall assess a default fee of not less than \$75.00 for a failure to pay any civil sanction imposed by the court.

(c) A judge or hearing officer may waive all or part of the default fee if the payment of the fee would cause a financial hardship to the defendant.

(d) If the court refers any delinquent fines, fees, sanctions, penalties or restitution for collection, any collection or attorney costs are recoverable from the defendant and may be added to any balance due from the defendant to the court.

(e) The imposition of a penalty does not prevent revocation or suspension of a license, permit or franchise.

(f) Violations of SLCC 10.15.200 through 10.15.295 that are continuous with respect to time may be abated by injunctive or other equitable relief. The imposition of a penalty does not prevent injunctive or equitable relief.

**Section 3: Repealing Conflicting Provisions.** If a conflict between the provisions of this ordinance and any other ordinance, city code, resolution, order, regulation, or policy of the City of San Luis, the conflicting provisions are repealed, superseded, and replaced, and the provisions of this ordinance shall govern effective as of the effective date of this ordinance.

**Section 4: Severability.** If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

**Section 5: Effective Date.** This provision of this ordinance shall become effective on May 1, 2023.

**PASSED, ADOPTED, and APPROVED** by the Mayor and City Council of the City of San Luis, Yuma County, Arizona, this \_\_\_\_ day of March 2023.

\_\_\_\_\_  
Nieves Riedel, Mayor

**ATTEST:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Sonia Cornelio, City Clerk

\_\_\_\_\_  
Kay Marion Macuil, City Attorney

## **10.15.235 Parking in alleys.**

(A) No person shall park a vehicle within an alley in a manner or under conditions as to leave available less than ten feet of the width of the roadway for the free movement of vehicular traffic, and no person shall stop, stand or park a vehicle within an alley in a position as to block the driveway entrance to any abutting property.

(B) No person shall park any vehicle in any alley, except commercial cars, trucks or wagons for the purpose of loading and unloading, then not for a period longer than is actually necessary to load or unload. Vehicles displaying state disabled parking identifying insignia may stand or park in an alley while loading or unloading persons for a period not to exceed five minutes.

(C) At no time shall a vehicle parked in an alley be left unattended during the time of loading and unloading. (Ord. 189 § 1, passed 8-11-2004. Code 1982 § 10-3-8. Code 2012 § 72.27.)

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**The San Luis City Code is current through Ordinance 426, passed June 8, 2022.**

Disclaimer: The City Clerk's Office has the official version of the San Luis City Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

[City Website: www.sanluisaz.gov](http://www.sanluisaz.gov)

[Code Publishing Company](#)

- THE BIGGEST CONCERN TO THE FIRE DEPARTMENT IS SAFETY AND TIMELY SERVICE TO OUR RESIDENTS.
- WE STRIVE TO DECREASE OUR RESPONSE TIMES.
- THESE TIMES ARE PROVIDED TO AZDHS. AZDHS IS THE AGENCY WHO GOVERNS OUR CERTIFICATE OF NECESSITY.
- IF WE DON'T MEET RESPONSE TIMES LISTED ON OUR CON, WE CAN LOSE OUR PRIVLEDGE TO TRANSPORT OUR RESIDENTS.
- WE GET AN AUDIT EVERY ONE TO THREE YEARS.

# Alley Parking



# Alley Parking

Pictures with cars on one side.

- When there are cars on one side of the street, we can manage to safely deploy our ladder truck, but not in all alley ways as you can see.
- Time is very important to the fire department because it can have life and death implications.

# Alley Parking

- When there is parking on both sides of the alley way, there is no way that we can safely deploy our ladder truck in a safe and secure manner.

- There are areas that we cannot even access the houses on the alley way because of parked vehicles.



# Alley Parking

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- It is concerning to the Fire Department not being able to have access to the houses in the alley way.
- The golden hour in medical emergencies and fires that get toned out are very important. There needs to be something done to better serve the residents of the City of San Luis within the area of downtown.

