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Arizona Ports of Entry Study

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Cambridge Systematics, Inc.

Final Report

CAMBRIDGE SYSTEMATICS

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report

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Final Report

prepared for

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Executive Summary

Arizona's Ports of Entry (POEs) are part of an integrated commercial motor vehicle enforcement activity that is administered by the Arizona Department of Transportation (ADOT) Enforcement and Compliance Division (ECD). These domestic POEs currently consist of 22 fixed sites in 14 locations that are operated by personnel who manage and perform inspections, provide permits, and perform other related duties. The function of these POEs is both to provide services to and enforce state and federal laws for interstate commercial vehicles entering and leaving the State of Arizona. [Note that this study does not consider POEs serving the border with Mexico, nor enforcement needs of intrastate commercial vehicle throughout the State of Arizona.] This report is the culmination of previous working papers and contains information related to the current and future port conditions, as well as deficiencies and a set of recommendations for ADOT's POE operations over the next 20 years.

Purpose of the Port of Entry System

Size and weight enforcement operations are mandated by the Federal Government. The Surface Transportation Assistance Act (STAA) of 1978 provided the United States Department of Transportation (U.S. DOT) with the ability to require states to enforce size and weight standards. In addition to size and weight enforcement state agencies also enforce commercial vehicle safety regulations. The primary objectives of these enforcement operations are to ensure the safety of the motoring public, and to preserve the state's highway infrastructure.

A combination of human, technological and physical resources are used to enforce Federal (e.g., Federal Motor Carrier Safety Regulations, Federal size and weight laws and regulations, Federal hazardous material regulations), and state safety and credential regulations as well as to educate companies and their drivers on proper operating procedures. Typical enforcement interactions include carrier compliance reviews, vehicle and driver safety inspections, size and weight enforcement, and traffic safety enforcement. Electronic screening technology is often used on the mainline to identify and screen commercial vehicles prior to the vehicle entering an enforcement site. This screening allows a site to focus resources on vehicles that are known to be non-compliant (e.g., overweight, operating without the proper authority/credential), are operated by a motor carrier with a poor safety history, or require other services.

The use of port of entry facilities is an approach that is taken by many western states, including Arizona, to perform enforcement operations and provide credentialing services to commercial vehicles. A port of entry facility is a fixed enforcement facility that is located at a state or national border crossing along a highway. Facilities are typically located on the inbound side of the highway and focus on screening commercial vehicles entering the state but facilities can also be operated on the outbound side of the highway to screen vehicles leaving the state. Functions of a POE facility include safety enforcement, size and weight enforcement, vehicle credential verification and issuance, and non-commercial motor vehicle transactions.

Overview of the Arizona Port of Entry System

Arizona's Ports of Entry are the primary tool used by the Arizona Department of Transportation (ADOT) to monitor the safety of the trucking industry and protecting State infrastructure. Additionally, Arizona's POEs serve a number of functions, including the verification and issuance of credentials, size and weight enforcement, and the performance of driver and vehicle safety inspections.

At the direction of ADOT, the project team gathered information through research, interviews, and on-site visits to catalogue and evaluate the current and future conditions and deficiencies of the POE system. Additionally the team identified a set of recommendations for ADOT's POE facilities. A general overview of the findings and recommendations regarding the port system as a whole is organized into a number of categories and summarized in Table ES.1

Table ES.1 Port of Entry Operational Summary

Category	Findings	Recommendations
Directional Focus	Primary focus on inbound traffic. Some facilities on outbound side, but screening is often limited by staff availability.	Operate outbound facilities as virtual enforcement sites.
Operating Hours	Operating hours range widely depending on facility type and location. Few sites operated 24/7, allowing for vehicles to bypass the facility during non-operating hours.	Operate all facilities 24/7. Some facilities operated virtually, reducing staffing commitments.
Business Activities	POEs perform multiple functions, and staff are generally divided by duty type: • Law enforcement officers focus on size, weight, and safety enforcement • Customer service representatives (CSRs) issue and verify credentials of commercial vehicles. Interviewed stakeholders reported that two of the most time consuming activities at POE facilities are issuing credentials and verifying drivers' license status.	Explore the potential to allow non-enforcement personnel at port facilities to issue fines, or to assist in the commercial vehicle inspection process. This is currently being done in multiple states. Transfer credential issuing to an online or off-site virtual system, reducing the need for on-site staff to perform this activity
Staffing	Generally adequate to perform basic functions at inbound ports.	Increase efficiency by developing outbound sites as virtual facilities that utilize off-site staff. Adopt technological solutions to increase efficiency and effectiveness at all sites.
Physical Condition	Age and physical condition varies by POE. Most facilities at least 20 years of age.	Update technology at all ports, and infrastructure and administration facilities where required.
Technological Limitations	Mainline screening limited to PrePass program and a few Weigh-In-Motion scales. Port technology and scales dysfunctional or obsolete at some locations.	Adopt mainline vehicle screening technologies such as license plate or U.S. DOT number readers at all POEs. Integrate screening, weight, and enforcement systems to increase enforcement effectiveness and efficiency.

Current and Future Conditions of Arizona's Ports of Entry

Traffic Volumes

Truck traffic in Arizona has been steadily increasing, and will likely continue to increase in coming years. These increases are partially due to the fact that the southwestern U.S. has seen increases in both population and industrial growth over the last decades. Arizona's population growth has ranked as one of the highest in the nation, and is projected to remain high for the next 20 years. Additionally, employment is expected to increase at a high annual rate, increasing the volume of commodities produced by Arizona by as much as threefold by 2030. [1]

In addition to increases in freight flows to/from Arizona produced by or serving the residents of the State, Arizona is expected to see increases in freight flows from other domestic and international sources. Trade projections show a continuing upward trend of goods entering or departing the U.S. through the ports of Long Beach, Los Angeles, and San Diego.[2] This trend in turn leads to increases in truck traffic traveling through Arizona to reach other U.S. destinations, particularly on the I-40, I-10, and I-8 interstates. Additionally, Arizona is strategically located to serve traffic from the increasing industrial development and port growth along the northern Pacific Coast of Mexico. Finally, growth in freight traffic is expected along the CANAMEX corridor, which includes the proposed I-11 corridor between Las Vegas and Phoenix as well as pieces of U.S. 93, I-10, and I-19 in Arizona.[3] Overall, the traffic forecasts in this section assume that Arizona is expected to keep its status as a high- truck or commercial traffic through state, while increasing its share of warehousing/distribution and industrial facilities within the State.

Table ES.2 provides a summary of current (2012) and projected future (2032) mainline truck or commercial traffic volumes at each of the POEs. Growth rate projections for each location are also included, categorized as very high, high, average, or low, depending on the characteristics of a particular location.

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[1] Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

[2] Cambridge Systematics. (2012) SCAG Regional Goods Movement Study (Draft). Prepared for the Southern California Association of Governments (SCAG).

[3] Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

Table ES.2 Summary of Current and Projected Average Daily Truck Traffic (ADTT) at Arizona POEs

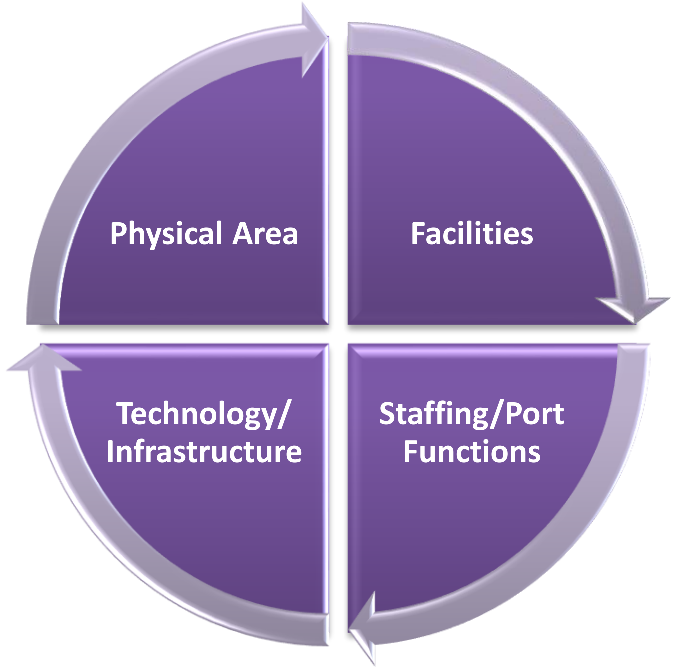
		Inbound Traffic Forecast			Outbound Traffic Forecast		
Port of Entry	Location	2012	2032 High	2032 Low	2012	2032 High	2032 Low
Duncan	U.S.-70	96	145	119	89	177	135
Ehrenburg	I-10	5,308	15,488	8,044	6,052	12,042	7,527
Fredonia	U.S.-89A	299	873	454	248	494	376
Kingman	U.S.-93	1,416	2,818	2,146	1,565	3,114	2,372
Page	U.S.-89	215	626	325	201	399	304
Parker	SR-95	436	867	542	317	481	395
San Simon	I-10	2,997	4,541	3,730	3,105	9,060	4,705
Sanders	I-40	4,246	6,434	5,284	3,995	11,657	6,054
Springerville	U.S.-60	32	48	40	36	72	55
St George	I-15	2,546	7,429	3,858	2,559	5,092	3,878
Teec Nos Pos	U.S.-160	96	280	145	76	152	116
Topock	I-40	2,279	4,536	3,454	1,839	3,659	2,787
Yuma (B-8)	N 4th Ave	446	888	676	317	480	394
Yuma (I-8)	I-8	1,843	3,667	2,793	2,487	3,769	3,094
TOTAL		**22,256**	**48,641**	**31,611**	**22,886**	**50,647**	**32,190**
Growth Rate Legend:	*Very High*	*High*	*Average*	*Low*			

Note: Further information on current and future traffic volumes can be found in Appendix B.

Assessment of Current and Future Conditions

The current and future conditions and needs of Arizona's POE system were assessed using four categories: physical area, facilities, technology/infrastructure, and staffing/port functions, as shown in Figure ES.1. Presenting the assessment in these four categories allows ADOT to understand the needs of each POE and target investment in a way that matches likely approaches to funding and project sequencing, providing a management benefit to ADOT and users of the ports.

Figure ES.1 Assessing Port of Entry Conditions



Within the four categories the POEs were assessed on a total of 29 criteria. Each POE could score one point per criterion. For example, a POE with a functioning multi-axle scale would receive one point while a site without one would receive zero points. A score of 29 out of 29 represents a facility that needs no improvements while lesser scores indicate a facility in need of some upgrades in order to operate as intended. Further details on the assessment process can be found in Appendix B of this report.

The highest overall score of 20 out of 29 points was assigned to Ehrenberg (IB), and the lowest score of 5 out of 29 points was assigned to Teec Nos Pos, Duncan, and Sanders (OB). However, it should be noted that this assessment does not wholly represent the ability of each of these ports to perform their individual functions. The needs at each port differ based on traffic volumes, location, and other criteria, and thus scores should be considered in context of these factors. High volume ports such as Ehrenberg and San Simon may receive more benefits from capacity enhancing investments such as screening and scale technologies than low volume ports such as Duncan or Parker. It is recommended that any assessment result be considered as one of several aspects when determining the potential needs of a port.

Looking Ahead

A well-developed POE network will not only ensure that port facilities are operated at high volume border crossing locations, but will also utilize technology to maximize the efficiency of port resources and provide flexibility of operations that allow port sites to support each other. In addition, with the proper technology in place, port sites can be a major source of commercial vehicle data that can be used to enhance functions throughout ADOT.

To accomplish these objectives, the desired characteristics of a port of entry facility include the ability to:

- Identify as many vehicles as possible at a reasonable cost;
- Integrate information about credentials (at both the carrier and vehicle levels) and operating weights (at highway speed and if needed at the static scale);
- Provide both POE staff and drivers with a physical port facility sufficiently designed to allow an efficient flow through the facility and containing enough spaces for both weight and safety inspections;
- Provide POE staff with efficient access to information and the ability to configure automated bypass criteria, including being able to vary criteria over the course of a day, week, or year;
- Provide POE staff with a working environment which allows them to safely and efficiently interact with commercial vehicle drivers and their corresponding vehicles; and
- Provide commercial vehicle drivers with information in a timely manner to instruct them how to proceed either through or around the facility.

Port Concepts of Operation

Through the evaluation process, Arizona's POEs were individually evaluated and then grouped based on shared characteristics, functions, and needs. Specialized "Concept of Operations" (ConOps) scenarios were developed by the project team to provide a blueprint for "ideal" port operations for different port groups. Three ConOps scenarios were identified for the Arizona POE system using information gathered throughout this project.

- Staffed Port of Entry Facility(ConOps 1);
- Virtual Supported Port of Entry Facility (ConOps 2); or
- Virtual Unsupported Port of Entry Facility (ConOps 3).

Each ConOps is designed to match the characteristics and functionality of a subset of Arizona's POEs, and the Department's objectives for the POE facilities.. Through consultation with ADOT, variations on these ConOps were also identified to allow scaling of features due to traffic volumes, staffing, or other considerations. Figure ES.2 provides a visual conceptual overview of the three recommended ConOps Scenarios, and Table ES.3 provides a summary of the features associated with each scenario. The graphical depictions are not representative of actual proposed site layouts. They are intended to provide a basic understanding of the features associated with each of the ConOps Scenarios and how they are utilized by enforcement personnel. Actual site layouts and traffic flow will vary depending on the site location, geometry, and operational needs.

Figure ES.2 Visual Conceptual Overview of Three Arizona POE ConOps Scenarios

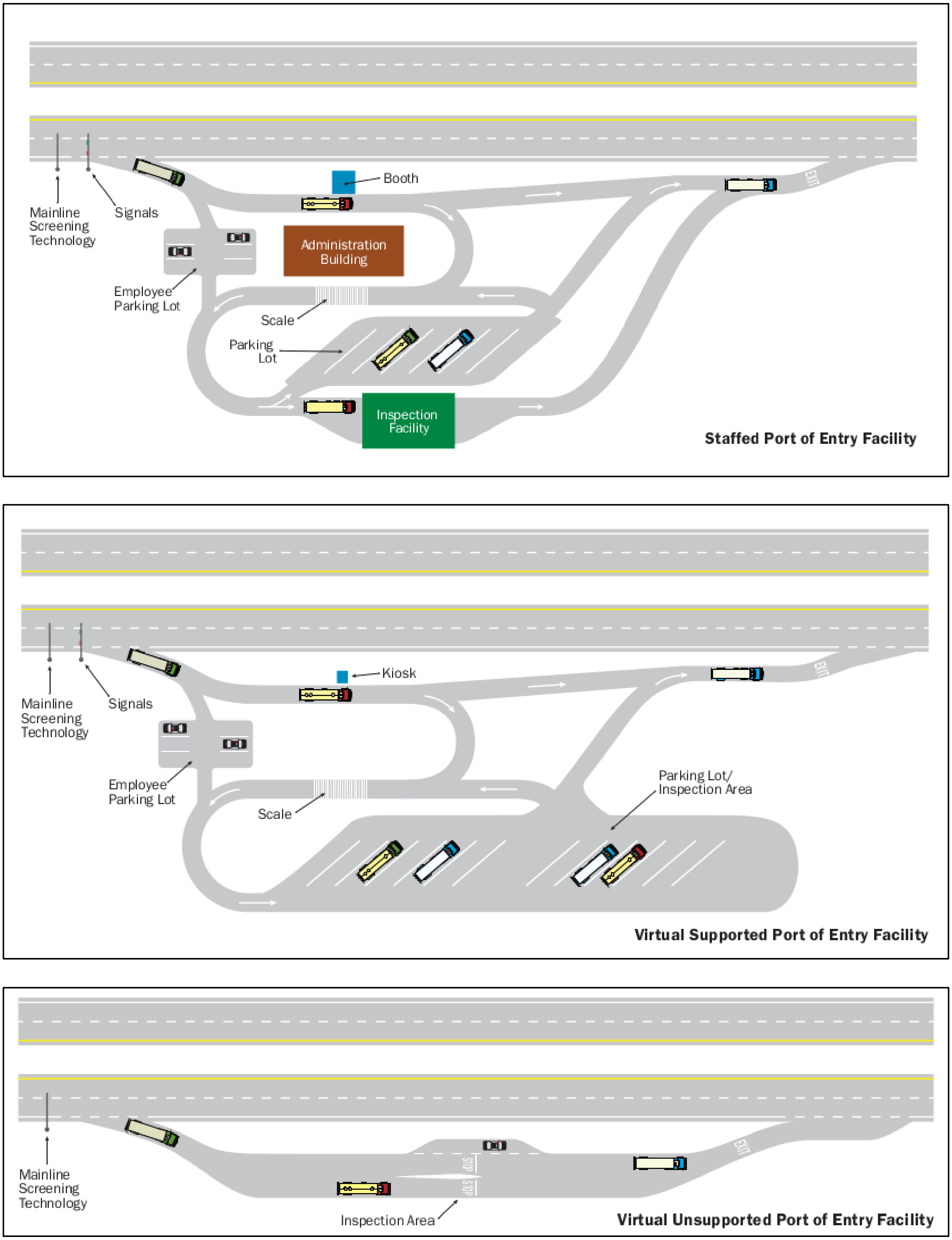


Table ES.3 ConOps Scenarios Feature Comparison

Features	ConOps Scenario 1: Staffed POE Facility	ConOps Scenario 2: Virtual Supported POE Facility	ConOps Scenario 3: Virtual Unsupported POE Facility
Mainline Vehicle Screening	Yes	Yes	Yes
Secondary Screening/Sorting	Optional	Optional	No
Static Scale	Yes	Yes	No
On-Site Support Staff	Yes	No	No
On-Site Enforcement Staff	Yes	Yes	Optional
Virtual Processing Booths	No	Yes	No
Administration Building	Yes	No	No
Inspection Facilities	Yes	Optional	No
Internal Return Loop	Yes	Yes	No

ConOps Assignments for Arizona Ports of Entry

Each of Arizona's POEs was assigned to a ConOps scenario. Inbound and outbound facilities were separately evaluated and matched, while bi-directional facilities were treated as a single unit. The project team's recommendations emphasize staffed facilities at inbound POE locations with high traffic volumes, and virtual facilities at other sites. The ability to effectively serve current and estimated future truck traffic in the region is heavily emphasized. The summary results of the assignment process are[4]:

- 7 facilities defined as a "Staffed Port of Entry" facility;
- 7 facilities defined as a "Virtual Supported Port of Entry" facility; and
- 7 facilities defined as a "Virtual Unsupported Port of Entry" facility.

Table ES.4 outlines the recommended ConOps scenarios, by POE.

[4] St. George outbound was not considered as part of the assignment process as it is owned and operated by UDOT.

Table ES.4 2032 Recommended POE ConOps

ConOps 1: Staffed Facility	ConOps 2: Virtual Supported Facility	ConOps 3: Virtual Unsupported Facility
Ehrenberg (IB)	Ehrenberg (OB)	Yuma B-8 (OB)
Sanders/Chambers (IB)	Sanders/Chambers (OB)	Parker
San Simon (IB)	San Simon (OB)	Fredonia
St. George (IB)	Topock (OB)	Page
Topock (IB)	Yuma I-8 (OB)	Duncan
Yuma I-8 (IB)	Kingman (OB)	Teec Nos Pos
Kingman (IB)	Yuma B-8 (IB)	Springerville

IB- Inbound; OB– – Outbound

Twenty Year Investment Profile for Arizona's Ports of Entry

Overview

In order to create a logical and feasible timeline for ADOT to invest in the POE system, the project team developed a 20 year investment profile. This profile is based on the idea that improvements to the port system should be made over time, and should be made with a focus both on short- and long-term improvements. Key investments in technology that can be made quickly and provide a foundation for upgrading the entire port system should be considered high priority investments. As port volumes increase over the next 20 years, a "rolling" programming approach can be used to prioritize and allocate funds among the Arizona POE system. Similar to the assessment of current conditions undertaken, the approach used to identify and prioritize investment needs at each of the ports is as follows:

- Use current and future traffic volumes to assign the specific ***physical infrastructure*** needed for the 20-year planning horizon. Compare these needs to current conditions and build a list of necessary physical improvements. Physical improvements are expected to last for the full planning horizon;
- Consider the ***current technology*** at the facility, and determine which technologies are needed to reach the minimum level of the scenario. Unlike physical improvements, the technology improvements are only expected to last 7-10 years, and similar capital costs will be needed at that interval to maintain adequacy;
- Finally, given the physical and technology attributes of the site, consider the operating costs required, primarily staffing. Unlike the capital costs, these are ongoing annual costs.

To develop a Port by Port investment plan, the identified investment needs were grouped into three categories:

- Mainline screening technology, e.g., weight and credential screening, cameras, signage and signals on the mainline

- Other technology investments, e.g., scales, booths, kiosks, ramp sorting, signage and signals within the facility
- Physical improvements, e.g., land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements

Each port was then assigned a timeframe (short, medium, long) for investments in each of these categories. Table ES.5 contains a potential investment summary for achieving the recommended ConOps for each Port over a 20-year horizon.

Table ES.5 Potential Investment and Implementation Summary

Timeframe	Type of Investment	POE Facilities
Short (1 – 5 yrs)	Mainline screening technology, e.g., weight and credential screening, cameras, signage and signals on the mainline	All Ports
Short (1 – 5 yrs)	Other technology investments, e.g., scales, booths, kiosks, ramp sorting, signage and signals within the facility	Ehrenberg
Short (1 – 5 yrs)	Physical improvements, e.g., land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Ehrenberg
Medium (6 – 10 yrs)	Other technology investments, e.g., scales, booths, kiosks, ramp sorting, signage and signals within the facility	San Simon, Sanders / Chambers, Topock, Yuma I-8, Kingman (OB)
Medium (6 – 10 yrs)	Physical improvements, e.g., land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	San Simon, Sanders / Chambers, Kingman (OB)
Long (11 – 20 yrs)	Other technology investments, e.g., scales, booths, kiosks, ramp sorting, signage and signals within the facility	Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos
Long (11 – 20 yrs)	Physical improvements, e.g., land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Topock, Yuma I-8, Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos

An overall summary of current and future conditions, as well as short, medium, and long term investment needs for each of the port facilities is provided in Table ES.6. Specific improvements and total timeframe costs are provided in Tables 10 through 12 in Section 6 of this report.

Table ES.6 Arizona Port of Entry Summary Findings and Investment Recommendations

Port of Entry	Current and Future Condition Summary			Investment Needs		
	Evaluation Criteria Met (%)[1]	Future Traffic Conditions[2]	Recommended ConOps Scenario[3]	Total Cost ($1,000)[4]	Needs Summary[4]	Timeframe[4]
Ehrenberg	69% IB[8] 48% OB	Very High	IB Staffed Facility (1.A) OB Virtual Supported Facility (2)	$20,578	Mainline Screening[5]; Port Technology[6]; Physical Improvements[7]	Short
Sanders	57% IB 17% OB	Very High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2))	$18,916	Mainline Screening	Short
					Port Technology; Physical Improvements	Medium
San Simon	59% IB 26% OB	High to Very High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,245	Mainline Screening	Short
					Port Technology; Physical Improvements	Medium
Topock	55% IB 26% OB	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,290	Mainline Screening	Short
					Port Technology	Medium
					Physical Improvements	Long
Yuma I-8	31% IB 21% OB	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,418	Mainline Screening	Short
					Port Technology	Medium
					Physical Improvements	Long
Kingman	64% IB OB- N/A	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$17,020	Mainline Screening (IB & OB)	Short
					Port Technology; Physical Improvements (Outbound Only)	Medium
					Port Technology; Physical Improvements (Inbound Only)	Long
St. George	62% IB OB – N/A	High	IB Staffed Facility (1.B) OB – N/A	$11,535	Mainline Screening (Inbound Only)	Short
					Port Technology; Physical Improvements (Inbound Only)	Long

Port of Entry	Current and Future Condition Summary			Investment Needs		
	Evaluation Criteria Met (%)[1]	Future Traffic Conditions[2]	Recommended ConOps Scenario[3]	Total Cost ($1,000) [4]	Needs Summary[4]	Timeframe[4]
Yuma B-8	24% IB	Low	IB Virtual Supported Facility (2)	$5,470	Mainline Screening	Short
	OB- N/A		OB Virtual Unsupported Facility (3)		Port Technology; Physical Improvements	Long
Fredonia	21% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Parker	31% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Page	31% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
Teec Nos Pos	17% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
Duncan	17% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Springerville	24% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long

[1] See Section 2.3
[2] See Section 2.2
[3] See Section 5.3
[4] Costs, Investment needs, and timeframe include inbound and outbound, unless indicated
[5] Mainline screening technology includes weight and credential screening, cameras, signage and signals on the mainline
[6] Other technology investments include scales, booths, kiosks, ramp sorting, signage and signals within the facility
[7] Physical improvements include land acquisition, ramp / lane and safety / security improvements, inspection and parking facilities, and administration building amenities
[8] IB – Inbound; OB – Outbound

The investments recommended in Table ES.6 are based on the assessment of current and future port infrastructure, technology, and functionality as described throughout this report, and are aligned with the ConOps scenarios developed for the Arizona Ports of Entry. Investments included represent the minimum needed to improve existing infrastructure to allow facilities to perform the functions of the assigned ConOps scenario. Existing infrastructure was assumed to be in usable (or repairable/upgradable) condition unless otherwise indicated.

All estimates represent 2013 costs and ADOT should take into account potential cost escalation over time when developing future project budgets. In some cases supplemental costs, including land acquisition, may be required as determined by ADOT. Additionally, costs may increase in the event that ADOT determines that utilizing existing infrastructure at a particular site is either unfeasible or inappropriate. It is recommended that a full engineering evaluation be undertaken prior to each stage of the investment process. Final investment costs for each project should be determined and evaluated during the final stages of scoping and design.

Port investment needs and estimates are explained in greater detail in Section 6.

Alternative Investment Options

The investments recommended as part of this report are based on the project team's assessment of current and future port infrastructure, technology, and functionality as described throughout this report, and are aligned with the ConOps scenarios developed for the Arizona Ports of Entry. These recommendations assume that ADOT funding levels will be at levels adequate to fund these investments.

However, realizing that funding levels can vary from year to year, modifications may need to be made to the timeframes presented. For example, it may be necessary to implement incremental improvements to the ports. In this case, it is recommended to make investments in the following order:

- **Implement Mainline Screening Technology and Technology Systems Integration:** The ability to screen vehicles on the mainline is critical to serving Arizona's growing traffic levels and is foundational to all of the ConOps scenarios. Mainline screening allows for more effective enforcement operations, improved data quality, and increased traffic management capabilities. Furthermore, screening technology is relatively low cost and can be implemented at all port locations with either on-site or off-site "virtual" staffing.
- **Target Investments to Bring Infrastructure up to Functional or Serviceable Levels and Replace Outdated Technology and Facilities:** This includes installing/repairing scales, signs, lights, administration facilities, and inspection facilities.
- **Invest in Technological and Operational Functionality:** Includes booths, kiosks, additional screening, signage, and signals. Includes transitioning to virtual sites, if appropriate.
- **Make Additional Capacity Enhancements:** Includes administration facilities, inspection facilities, parking, ramp and geometric improvements in order to serve expected future traffic volumes.

It should be noted that a reduced funding approach, combined with projected increases in commercial vehicle traffic, would have an adverse impact on the efficiency of enforcement operations. This could result in decreased commercial vehicle safety and cause increased pavement degradation.

Additional Process and Policy Recommendations

Adopting best practice procedures is crucial to increase the effectiveness and efficiency of the Arizona POE system. In addition to the technology and infrastructure investment plan, the project team has identified some related process and policy topics where additional research and/or changes may provide ADOT benefits related to POE operations.

- **Fine Structure and Allocation:** One possible method for assisting with the funding of port improvement projects may be through changes to the state's existing fine structure. ADOT should review the existing schedule and allocation of citations to be sure it aligns with those of neighboring states and determine if changes would be appropriate.
- **Legislative Review:** To ensure that ADOT gets the most out of its technological investments it is recommended that existing legislative language be examined to ensure that it is not prohibitive and to determine if legislation to increase the ADOT's flexibility to use technology as an enforcement tool needs to be explored.
- **Remove Non-Enforcement Personnel from POEs:** Given that it will be possible for carriers to obtain permits and credentials online, ADOT may wish to explore the idea of removing the on-site support staff from the POEs. ADOT could instead utilize interactive kiosks, wireless internet, or a similar technology to maintain these functions at the site.
- **Expand Authority of Port Customer Service Representative Staff:** If instead ADOT wishes to maintain non-enforcement personnel at port facility locations than it should explore expanding their responsibilities. Some state agencies employ civilian personnel at port facilities to issue citations for various commercial vehicle infractions, or to assist in the commercial vehicle inspection process. This type of staffing arrangement is one that could enhance POE operations in Arizona.

1.0 Introduction

This document is the final report produced as part of the Arizona Port of Entry (POE) study. The document includes all of the information collected as part of the three working papers developed during the project. Cambridge Systematics, Inc. (CS) is the prime contractor for this study, with support Kimley-Horn and Associates, Inc. as well as BGM Consulting. The study is authorized by the Arizona Department of Transportation (ADOT).

1.1 Document Organization

This report is organized into seven primary sections, and a series of appendices:

- Section 1 provides a summary of the work performed;
- Section 2 documents the process used to determine current conditions at ADOT's domestic port of entry facilities as well as an explanation of the methodology used to forecast future mainline traffic volumes and identify deficiencies. This section also contains a summary of current and future conditions and deficiencies at each of the port facilities;
- Section 3 provides a snapshot of commercial vehicle enforcement operations across the country and identifies future trends in the commercial vehicle enforcement sector;
- Section 4 contains a detailed explanation of the three concept of operations (ConOps) developed for this study;
- Section 5 provides information on, and a sample walkthrough of, the methodology used to assign the previously identified ConOps to the existing port facilities.
- Section 6 presents the ConOps assignments for each facility and contains the methodology for identifying investment needs at each of the port facilities. This section also contains a detailed investment profile outlining short, medium, and long-term investments at each port facility.
- Section 7 provides a summary of study findings and recommendations.
- Six appendices provides a list of data sources and stakeholders interviewed for this study as well as data tables, charts, interview and site survey forms, and photos of the facilities. Table 1.1 outlines the contents of the Appendices.

Table 1.1 Appendix Contents

Appendix	Contents
A	• List of data sources used to determine current conditions for the port facilities; • A list of stakeholders interviewed by the project team; and • Detailed overview of the current conditions at the Arizona's port of entry facilities from Working Paper 1.
B	• Detailed overview of future port conditions forecast; • Description of the current conditions assessment methodology; and • POE assessment matrix.
C	• Detailed write-ups of current conditions for each of the 14 domestic port of entry locations.
D	• Daily and monthly traffic data for each port location.
E	• Copies of interview questionnaires used for Working Paper 1; and • All completed port facility site assessment forms used in Working Paper 1.
F	• Catalog of photos of each facility collected during the current conditions assessment.

1.2 Summary of Work Performed

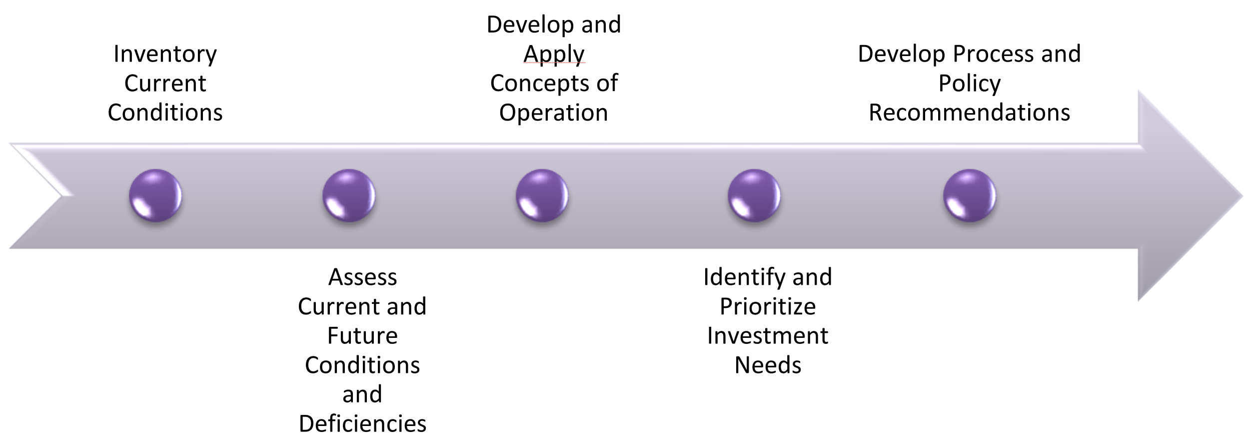
At the direction of the Arizona Department of Transportation, the CS technical team gathered and evaluated the current and future conditions and deficiencies as well as identified a set of recommendations for ADOT's existing POE facilities through a series of working papers. The POEs examined as part of this effort consisted of 22 fixed sites at 14 domestic border crossing locations and did not include international ports of entry serving the border with Mexico, nor did it explore enforcement needs of intrastate commercial vehicles throughout the State of Arizona. The research for these papers was conducted through a combination of data collection, literature review, site visits, site evaluations, and stakeholder interviews. A complete list of data sources can be found in Appendix A.

- Working Paper 1 provided a detailed inventory of current conditions at each of the port facilities through a combination of data collection, literature review, and site assessments.
- Working Paper 2 provided an assessment of current conditions, as well as a forecast of future conditions and deficiencies. This analysis was performed using ADOT traffic data and standard forecasting methodologies.
- Working Paper 3 provided information on best practices, future port operational trends and a set of evaluation criteria for grouping the existing port facilities. Also included was a

methodology for identifying and prioritizing investment needs at each of the port facilities. Lastly, a set of ancillary process and policy recommendations for port related operations were developed.

- The Final Report is a consolidation of the three working papers with additional information related to best practices and potential funding sources.

Figure 1.1 Summary of Work Performed



2.0 Current and Future Conditions

This section provides a high level overview of current and future conditions of Arizona's port of entry facilities. An outline of the process used to document and assess current conditions as well as the methodology for forecasting future conditions is provided. Also included in this section is a summary of current and future conditions at each of the 14 individual port of entry locations. More detailed information on the conditions at each of these locations can be found in Appendix C and D.

2.1 Methodology

Current Conditions

At the direction of the Arizona Department of Transportation, the project team performed an assessment of the current conditions at each of the state's 14 non-international POE facilities. A combination of data collection, literature review, and site assessments was used to evaluate each facility. In addition to reviewing data sources and visiting port facilities, the project team conducted a series of stakeholder interviews with state and federal personnel, both on-site and central office ADOT staff were interviewed. Additional information about data sources reviewed and interviews conducted can be found in Appendix A.

The POE facility site assessments were conducted during the months of September and October, 2012. The technical team visited each of the 14 facilities and documented each site's layout and features, both physical and technological. For the facilities that are currently closed, documentation focused on those characteristics that were externally visible. To standardize this documentation effort, a site assessment form was developed and used for this process. Completed forms for each of the site's can be found in Appendix E. The technical team also took photographs of each facility; these can be found in Appendix F.

Forecast of Future Conditions

Current traffic volumes for each port of entry were collected as part of Task 2. For the purposes of this study, these volumes were seasonally adjusted to estimate the 2012 daily traffic volumes. Future truck traffic forecasts were developed using a "high" and "low" approach, based on data sources that include the ADOT Statewide Travel Demand Model[1], Federal Highway Administration's (FHWA) Freight Analysis Framework Version 3 (FAF3)[2], and traffic counts

1 Data provided by the ADOT Multimodal Planning Division, December, 2012

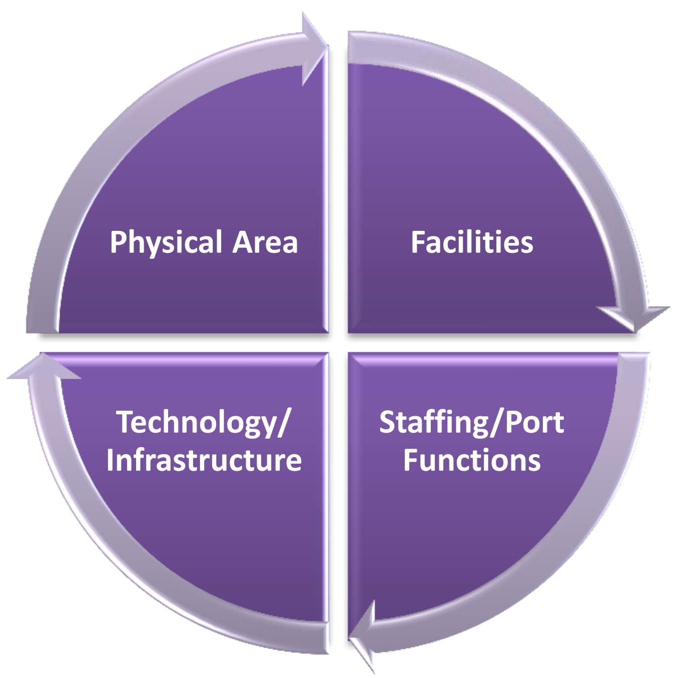
2 http://ops.fhwa.dot.gov/freight/freight_analysis/faf/index.htm

conducted as part of the project. Using these data sources, as well as other resources, four potential growth rates were developed (very high - 5.5%, high - 3.5%, average -2.1%, and low - 1.1%) and applied to the current truck traffic volumes to produce the 10 and 20-year forecasts. Further details about the traffic forecasting methodology are included in Appendix B.

Assessment of Current and Future Conditions

The current and future conditions and needs of Arizona's POE system were assessed using four categories: physical area, facilities, technology/infrastructure, and staffing/port functions, as shown in Figure 2.1. Presenting the assessment in these four categories allows ADOT to understand the needs of each POE and target investment in a way that matches likely approaches to funding and project sequencing, providing a management benefit to the state and users of the ports. A complete list of assessment criteria for each category, as well as a POE Assessment Matrix with each of these criteria for each port, can be found in Appendix B.

Figure 2.1 Assessing Port of Entry Conditions



2.2 Overview of Ports

Current Conditions

Arizona's POE facilities serve a number of functions that include the verification and issuance of credentials, size and weight enforcement, and the performance of driver and vehicle safety inspections. The port facilities are the Department's primary tool for monitoring the safety of the trucking industry and protecting State infrastructure. Our findings regarding the POE facilities are organized into a number of categories of conditions, as described below.

Directional Focus

All of the sites focus primarily on traffic coming into the state. Many of the POE locations, however, have facilities on both sides of the highway to also enable screening of traffic departing the state. Screening of outbound traffic is not as frequent and is often limited by staff availability. The outbound sites are often opened to support a specific initiative of targeted enforcement.

Operating Hours and Status

Table 2.1 presents four categories of operating methods for the POE facilities. The sites are classified into those which are open continuously (24 hours a day and 7 days a week), those which are open during weekdays but may be closed overnight (at least 16 hours a day and 5 days a week), those with limited hours of weekday operation (less than 16/5), and those which have been closed. All sites are closed on Thanksgiving Day and Christmas Day.

Table 2.1 Port of Entry Facility Operating Hours

	Primary Sites	Secondary Sites
Open 24/7	Ehrenberg,San Simon	N/A
Open at least 16/5	Kingman, St. George, Sanders, Topock, Yuma (I-8)	Yuma (B-8)
Open less than 16/5	N/A	Page, Teec Nos Pos,
Closed	N/A	Duncan, Fredonia, Parker, Springerville

Business Activities

All of the POEs studied, when open, have staff to perform the following functions:

- Credentials Issuance (IRP, IFTA, OSOW);
- Credential and VIN Verification;
- CVSA Safety Inspections; and

- Weight Enforcement.

A summary of traffic volumes and port activities for each POE from 2009 through 2011 can be found in Appendix A. Port activity statistics are as reported by ADOT staff and may have minor differences due to discrepancies in the data source and/or reporting methodology. In particular the following statistics have varying definitions among port personnel:

  - **Credentials checked –** may include all vehicles weighed and/or viewed by POE staff, or more specifically vehicles where the driver has provided credential documentation to POE staff for review.
  - **Pre-cleared -** at the primary POEs, this refers to vehicles that are confirmed by the PrePass™ system to have the appropriate credentials (even when the port is closed); at the secondary POEs, this can refer to vehicles in a number of categories, including those manually bypassed by port staff.
  - **Waved-thru -** this refers to vehicles that enter the POE but then are directed by POE staff to bypass the scale and/or credential checkpoint and exit the POE.

It should also be noted that hours of operation at the port facilities was not always constant from year to year and this inconsistency had an impact on the operational data reported by the port facilities.

ADOT does not receive revenue from citations for weight violations or citations issued during the CVSA inspection process. The ADOT revenue generated by the port facilities comes from VIN verification fees and the issuance of credentials. Interviewed stakeholders reported that two of the most time consuming activities at POE facilities are issuing credentials and verifying drivers' license status. Many interview subjects believed that adoption of technology solutions in these two areas would provide substantial reductions in time spent in the facility for vehicle drivers. Port operations data, including cost and revenue data, is presented in greater detail in Appendix A.

Physical Condition

The age and overall physical condition of the existing port facilities differs greatly. The Kingman POE facility was redesigned in 1998 and the Ehrenberg and Sanders facilities are the subject of current redesign discussions, but some facilities are at least 50 years of age. Common themes highlighted by on-site staff during the stakeholder interview process included:

- Ramps are too short for the mix and volume of traffic during peak periods;
- Lack of truck parking and sometimes general parking; and
- Antiquated physical layout and often a limited amount of right-of-way.

Additional information on physical condition can be found in Appendix A.

Technological Limitations

Similar to the age of the port facilities, the technological capabilities at most ports tend to be limited. Vehicle screening and scanning is limited to the PrePass program. Many of the functions performed start off being labor intensive at the point of carrier identification.

Additional categories of technological limitation as identified by on-site staff through the stakeholder interview process include:

- Little to no integration of screening technology applications;
- Lack of sensors to close stations when their queues or parking lots fill up;
- Manual communication with dispatch to check drivers' license status;
- Weigh-in-motion devices, if installed, are typically older and their effectiveness varies depending on roadway temperatures and other factors; and
- Lack of reliable redundancy for power and telephone services.

Additional information on technological limitations can be found in Appendix A.

Staffing

The port facilities are staffed with both enforcement officers and customer service representatives (CSRs)[3]. The CSR staff members are responsible for the issuance of credentials and verification of credentials of commercial vehicles passing through the facility. Enforcement officers focus their efforts on size, weight, and safety enforcement. Staff indicated in interviews that additional staff would be beneficial in the following areas:

- After hours to increase officer safety; and
- On-site mobile enforcement to prevent scale runners and monitor bypass routes.

Of the 14 non-international port of entry facilities, four are currently closed, in part due to lack of staffing. A common theme that was voiced during the interviews was a lack of effectiveness in recruiting new enforcement staff and a general inability to retain quality officers after initial training.

Some of the participants interviewed asserted that the existing wage scale for commercial vehicle enforcement officers may be a contributing factor in the inability to retain the services of quality employees. In many cases a new officer will apply for a position with the State, undergo training, gain some experience, and then apply for a position at a Federal Agency such as Customs and Border Patrol.

Additional information on staffing can be found in Appendix A.

3 An exception is the Teec Nos Pos site which is staffed only by enforcement personnel who perform all necessary functions at the Port Facility.

Future Traffic Conditions

Truck traffic in Arizona has been steadily increasing, and will likely continue to increase. In the coming years, Arizona's population growth has ranked as one of the highest in the nation, and is projected to remain high for the next 20 years. Employment is also expected to increase at a high annual rate, increasing the volume of commodities produced by Arizona by as much as threefold by 2030. [4]

In addition to increases in freight flows to/from Arizona produced by or serving the residents of the State, Arizona is expected to see increases in freight flows from other domestic and international sources. Trade projections show a continuing upward trend of goods entering or departing the U.S. through the ports of Long Beach, Los Angeles, and San Diego.[5] This trend in turn leads to increases in truck traffic traveling through Arizona to reach other U.S. destinations, particularly on the I-40, I-10, and I-8 interstates. Additionally, Arizona is strategically located to serve traffic from the increasing industrial development and port growth along the northern Pacific Coast of Mexico. Finally, growth in freight traffic is expected along the CANAMEX corridor, which includes the proposed I-11 corridor between Las Vegas and Phoenix as well as pieces of U.S. 93, I-10, and I-19 in Arizona.[6] Overall, the traffic forecasts in this section assume that Arizona is expected to keep its status as a high- truck or commercial traffic through state, while increasing its share of warehousing/distribution and industrial facilities within the State.

Table 2.2 summarizes the current and future truck flows, measured in average daily truck traffic (ADTT) at each Port of Entry. As indicated in the table, the ADTT for the years 2022 and 2032 in both directions for POEs is expected to increase, especially for:

- Ehrenburg – Located on I-10 is expected to be a major route for increasing freight flows from the Ports of Los Angeles and Long Beach. Traffic levels can potentially double or triple by 2032.
- San Simon and Sanders – These ports representing the interstate crossings on the east side of Arizona may also see significant increases in traffic from freight flows inbound from California and Mexico, as well as freight generated by Arizona's growing industrial and warehousing sectors.

4 Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

5 Cambridge Systematics. (2012) SCAG Regional Goods Movement Study (Draft). Prepared for the Southern California Association of Governments (SCAG).

6 Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

Table 2.2 Summary of Current and Projected Average Daily Truck Traffic (ADTT) at Arizona POEs

			Inbound Growth Rates		Inbound Traffic Counts					Outbound Growth Rates		Outbound Traffic Counts				
Port of Entry	Region	Location	High	Low	2012	2022 High	2022 Low	2032 High	2032 Low	High	Low	2012	2022 High	2022 Low	2032 High	2032 Low
Duncan	E	US-70	2.1%	1.1%	96	118	107	145	119	3.5%	2.1%	89	126	110	177	135
Ehrenburg	SW	I-10	5.5%	2.1%	5,308	9,067	6,534	15,488	8,044	3.5%	1.1%	6,052	8,537	6,749	12,042	7,527
Fredonia	N	US-89A	5.5%	2.1%	299	511	369	873	454	3.5%	2.1%	248	350	305	494	376
Kingman	NW	US-93	3.5%	2.1%	1,416	1,998	1,743	2,818	2,146	3.5%	2.1%	1,565	2,208	1,927	3,114	2,372
Page	N	US-89	5.5%	2.1%	215	366	264	626	325	3.5%	2.1%	201	283	247	399	304
Parker	NW	SR-95	3.5%	1.1%	436	614	486	867	542	2.1%	1.1%	317	391	354	481	395
San Simon	E	I-10	2.1%	1.1%	2,997	3,689	3,343	4,541	3,730	5.5%	2.1%	3,105	5,304	3,822	9,060	4,705
Sanders	E	I-40	2.1%	1.1%	4,246	5,227	4,737	6,434	5,284	5.5%	2.1%	3,995	6,824	4,918	11,657	6,054
Springerville	E	US-60	2.1%	1.1%	32	39	36	48	40	3.5%	2.1%	36	51	44	72	55
St George	N	I-15	5.5%	2.1%	2,546	4,349	3,134	7,429	3,858	3.5%	2.1%	2,559	3,610	3,150	5,092	3,878
Teec Nos Pos	N	US-160	5.5%	2.1%	96	164	118	280	145	3.5%	2.1%	76	108	94	152	116
Topock	NW	I-40	3.5%	2.1%	2,279	3,215	2,806	4,536	3,454	3.5%	2.1%	1,839	2,594	2,264	3,659	2,787
Yuma (B-8)	SW	N 4th Ave	3.5%	2.1%	446	629	549	888	676	2.1%	1.1%	317	390	353	480	394
Yuma (I-8)	SW	I-8	3.5%	2.1%	1,843	2,599	2,269	3,667	2,793	2.1%	1.1%	2,487	3,062	2,774	3,769	3,094
TOTAL			**3.8%**	**1.7%**	**22,256**	**32,588**	**26,496**	**48,641**	**31,611**	**3.9%**	**1.7%**	**22,886**	**33,835**	**27,111**	**50,647**	**32,190**

Growth Rate Legend: *Very High* *High* *Average* *Low*

Note: Further information on current and future traffic volumes can be found in Appendix B.

2.3 POE Assessment

The current and future conditions and needs of Arizona's POE system were assessed using four categories: physical area, facilities, technology/infrastructure, and staffing/port functions. Presenting the assessment in these four categories allows ADOT to understand the needs of each POE and target investment in a way that provides the most benefit to the state and users of the ports. Table 2.3 provides the list of criteria under each category which were utilized to conduct the POE assessment. The POE Assessment Matrix, which provides Port-specific details about each of these criteria, is provided in Appendix B.

The POE Assessment Summary Table (Table 2.4) presents an overview of the ports' ability to meet the criteria used in the POE Assessment Matrix. For each category, ports are assessed on the number of that category's criteria which they meet at present, for example whether they have a static scale, or adequate truck parking. Ports are subdivided into groups, depending on whether they met 50 percent or greater, between 25 and 50 percent, or less than 25 percent of criteria.

Overall, the ports were assessed on 29 criteria, each worth one point. The highest overall score of 20 out of 29 points was assigned to Ehrenberg (IB), and the lowest score of 5 out of 29 points was assigned to Teec Nos Pos, Duncan, and Sanders (OB). However, it should be noted that the needs at each port differ based on traffic volumes, location, and other criteria, and these scores should be considered in context of these factors. High volume ports such as Ehrenberg and San Simon may receive more benefits from capacity enhancing investments such as screening and scale technologies than low volume ports such as Duncan or Parker. Thus, although this assessment focuses on the presence or absence of certain criteria, it is recommended that these results be considered as one of several aspects when determining the potential needs of a port.

Table 2.3 POE Assessment Criteria

Physical Area	Facilities	Technology and Infrastructure	Staffing and Functions
Located near population centers	Administration building in fair to good condition, with amenities for staff, drivers, and visitors	Technology and systems applications communicate, share data, and are self-calibrated based on live data from multiple sources.	Staffing is sufficient to handle primary activities such as screening, enforcement and, permitting at the primary facility
Accommodates oversized and/or overweight (OSOW) vehicles	Safe, secure, and well-lit facilities, including pedestrian access if necessary	Mainline vehicle screening, such as Weigh In Motion (WIM) technology	Staffing is sufficient to occasionally perform secondary duties, such as enforcement activities at an outbound port or as a mobile detachment
No easy access bypass routes	Administration building layout provides visibility of port and mainline traffic	Mainline credential screening,	At least 1% of vehicles that receive credential checks are inspected
Ability to expand into surrounding area	Dedicated inspection area	Secondary vehicle screening, such as additional WIM on the ramp	Utilize electronic screening to allow vehicles to bypass
Internal bypass lane	Covered or indoor inspection facilities with paved or other floor material	Other ramp screening or tracking systems, such as electronic credentialing or cameras	
Site recirculation - Return loop	Inspection pit facility	Single axle static scale	
Adequate ramp length		Three platform or multi-axle static scale	
Adequate truck parking		Electronic signals on the mainline directing trucks to enter or bypass facility	
Adequate employee/visitor parking		Electronic signals within the facility directing trucks	
		Mainline camera to document bypasses	

Table 2.4 POE Assessment Summary

Category	Percentage of Criteria Met by Each Port					
	Percentage of Criteria Met by Each Port		Percentage of Criteria Met by Each Port		Percentage of Criteria Met by Each Port	
Total	Ehrenberg (IB)	69%	Ehrenberg (OB)	48%	Yuma B-8 (IB)	24%
	Kingman (IB)	64%	Yuma I-8 (IB)	31%	Springerville	24%
	St. George (IB)	62%	Page	31%	Yuma I-8 (OB)	21%
	San Simon (IB)	59%	Parker	31%	Fredonia	21%
	Sanders (IB)	57%	San Simon (OB)	26%	Sanders (OB)	17%
	Topock (IB)	55%	Topock (OB)	26%	Teec Nos Pos	17%
					Duncan	17%
Physical Area	Topock (IB)	78%	Ehrenberg (OB)	44%	Sanders (OB)	22%
	Ehrenberg (IB)	67%	Sanders (IB)	44%	San Simon (OB)	22%
	Kingman (IB)	56%	Topock (OB)	44%	Fredonia	22%
	St. George (IB)	56%	Yuma B-8 (IB)	44%		
	San Simon (IB)	56%	Yuma I-8 (IB & OB)	33%		
	Page	56%	Teec Nos Pos	33%		
	Springerville	56%	Duncan	33%		
			Parker	33%		
Facilities	Ehrenberg (OB)	67%	San Simon (OB)	33%	Topock (IB & OB)	17%
	Kingman (IB)	67%	Page	33%	Yuma I-8 (IB)	17%
	Parker	67%	Fredonia	33%	Teec Nos Pos	17%
	Ehrenberg (IB)	50%			Duncan	17%
	St. George (IB)	50%			Springerville	17%
	Sanders (IB)	50%			Sanders (OB)	0%
	San Simon (IB)	50%			Yuma I-8 (OB)	0%
					Yuma B-8 (IB)	0%
Technology and Infrastructure	Kingman (IB)	75%	Ehrenberg (OB)	30%	Sanders (OB)	20%
	Sanders (IB)	75%	Yuma I-8 (IB)	30%	Yuma I-8 (OB)	20%
	Ehrenberg (IB)	70%	San Simon (OB)	25%	Page	20%
	St. George (IB)	70%			Yuma B-8 (IB)	20%
	San Simon (IB)	70%			Parker	20%
	Topock (IB)	60%			Topock (OB)	15%
					Duncan	10%
					Fredonia	10%
					Teec Nos Pos	0%
					Springerville	0%
Staffing and Functions (Inbound and Outbound Ports Combined)	Ehrenberg	88%	Sanders	33%	Page	0%
	St. George (IB)	75%	San Simon	33%	Duncan	0%
	Kingman (IB)	50%	Topock	33%	Parker	0%
			Yuma I-8	33%		
			Teec Nos Pos	25%		
			Yuma B-8 (IB)	25%		
			Fredonia	25%		
			Springerville	25%		

2.4 Port of Entry Conditions Summaries

This section contains a summary of the current and future conditions at each of the port facilities as well as a list of deficiencies as identified by ADOT stakeholders through interviews conducted as part of the project. These deficiencies were used in the evaluation of the port facilities to identify needs (Section 5) and develop a port of entry investment plan(Section 6).

The summaries are presented in the following order:

Primary Ports

- Ehrenberg
- Kingman
- St. George
- Sanders
- San Simon
- Topock
- Yuma I-8

Secondary Ports

- Page
- Teec Nos Pos
- Yuma B-8
- Duncan
- Fredonia
- Parker
- Springerville

Ehrenberg Port of Entry

Location:

I-10, three miles east of Ehrenberg, AZ

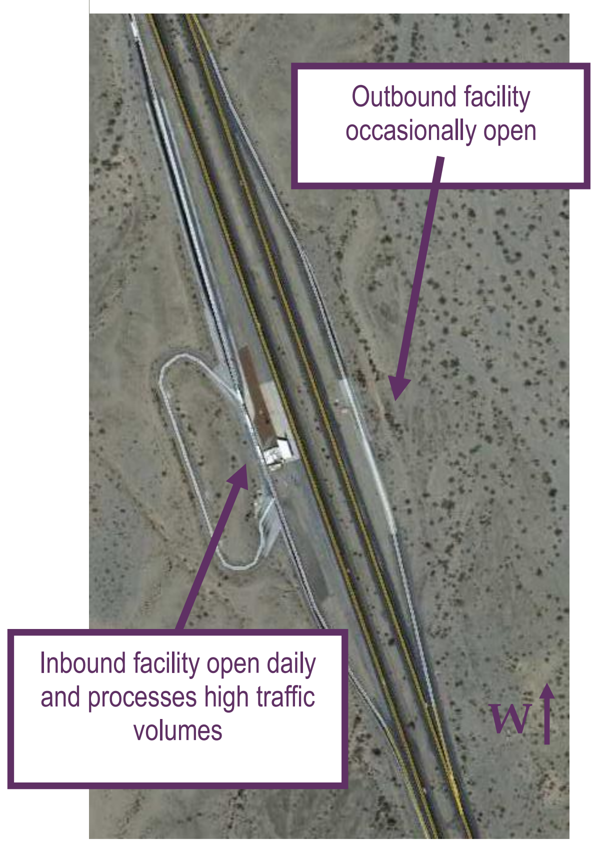
Current Site Flow:

Eastbound: Trucks are screened on the mainline using a PrePass transponder reader and WIM scale. A CMS notifies drivers to enter the port. Inside the port, truck credentials are checked at booths or the administration building, and vehicles are weighed on a three-platform scale. When the queue backs up onto the mainline, staff wave through vehicles in the bypass lane. The facility has 21 parking spaces for trucks, but no enclosed inspection facilities.

Westbound: No mainline screening facilities. All trucks must enter the facility and pass over the three-platform static scale. The facility has 7 parking spaces for trucks, but no enclosed inspection facilities.

2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	24/7	Occasionally
Port Traffic	1,359,337	N/A
Cred. Check rate	22%	N/A
Vehicle Weigh rate	21%	N/A
Inspection Rate	1.33%	N/A
Port Infrastructure		
Mainline Screening	WIM & PrePass	None
Credential Booths	2	0
Static Scale	Mutli-platform	Multi-platform
Inspection Facilities	N/A	N/A
Truck Parking Spaces	21	7
Admin. Building	Average condition	Average condition; functionally obsolete

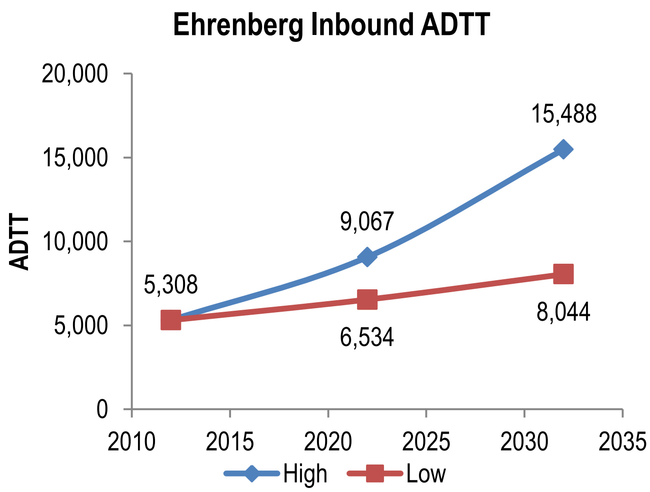
Aerial View of Ehrenberg POE

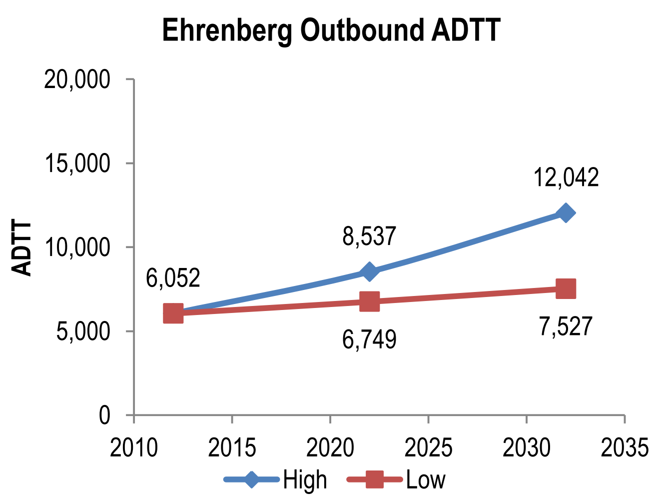


Future Traffic Trends:

Eastbound traffic on I-10 is projected to grow at an average (2.1%) to a very high rate (5.5%) annually over the next 20 years. Westbound traffic is projected to grow at a low (1.1%) to high (3.5%) rate. This high level of growth is primarily attributed to increasing freight arriving through the Ports of Los Angeles and Long Beach, growth in trade with Mexico, and an increased industrial focus within the state.

Current and future truck traffic volumes at Ehrenberg are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No westbound mainline screening
- No eastbound ramp SSWIM

3. Physical

- Short eastbound ramp can cause vehicle queue to backup onto mainline
- Inspection facilities and parking have poor ground condition and lack cover
- Lack of lighting at westbound facility

Kingman Port of Entry

Location:

US 93, two miles northwest of Kingman, AZ

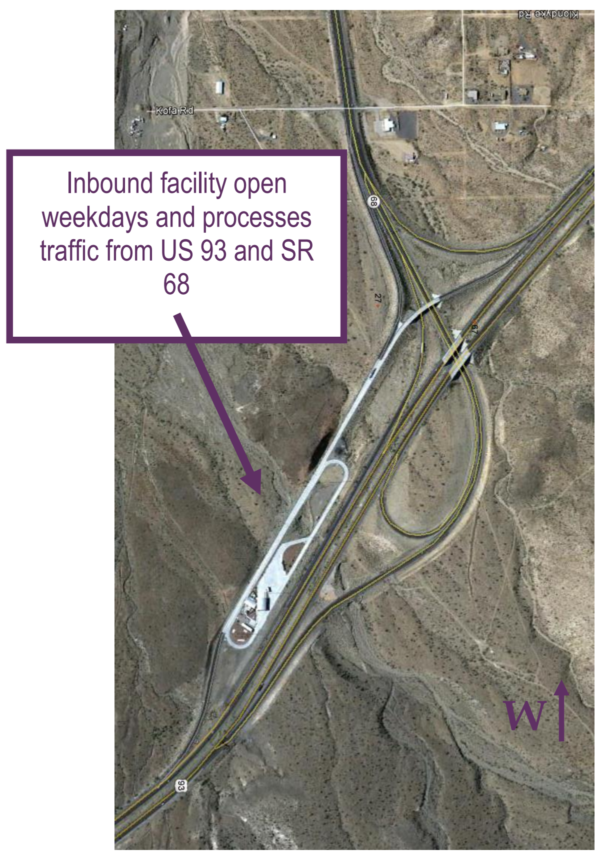
Current Site Flow:

Eastbound: Trucks merging from US 93 SB and SR 68 EB are screened on the mainline using a PrePass transponder reader. A LCS notifies drivers to enter the port. Inside the port, truck credentials are checked at the administration building, and vehicles are weighed on a three-platform scale. Staff cannot see mainline traffic from the administration building, and there is no WIM to weigh trucks bypassing the port. Trucks can only exit the port traveling southbound on US 93. The facility has 11 parking spaces for trucks and a canopied inspection facility, including an inspection pit.

Westbound: Currently no outbound facility.

2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	24/5	No facility
Port Traffic	120,382	N/A
Cred. Check rate	70%	N/A
Vehicle Weigh rate	67%	N/A
Inspection Rate	0.10%	N/A
Port Infrastructure		
Mainline Screening	PrePass	None
Credential Booths	0	N/A
Static Scale	Multi-platform	N/A
Inspection Facilities	Sheltered lane, inspection pit	N/A
Truck Parking Spaces	11	N/A
Admin. Building	Good condition; suboptimal layout	N/A

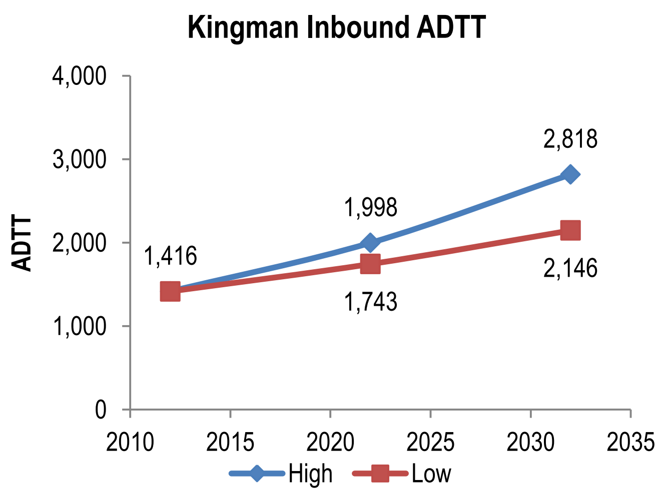
Aerial View of Kingman POE

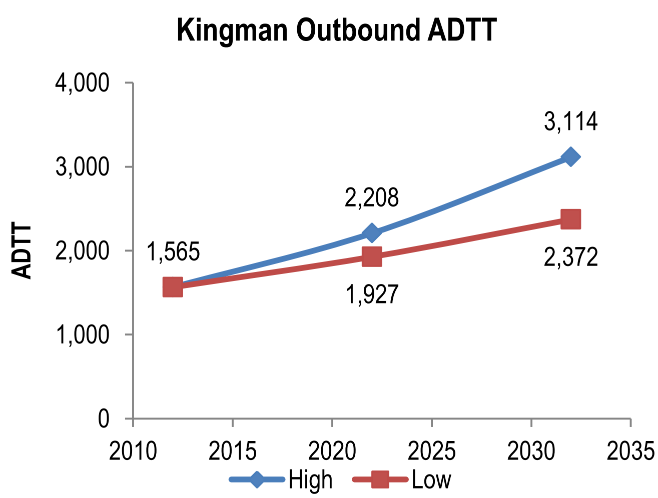


Future Traffic Trends:

Both inbound and outbound traffic at Kingman is projected to grow at an average (2.1%) to a high (3.5%) rate over the next 20 years. Kingman is situated on the CANAMEX trade lane, and will likely see increased traffic volumes as US-Mexico imports and exports grow.

Current and future truck traffic volumes at Kingman are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline weight screening; signals have poor visibility

3. Physical

- Inspection pit inadequate for low-clearance vehicles
- Lack of inspection area lighting
- Mainline traffic is not directly visible from the administration building
- Difficult for trucks to enter the facility due to hill; Trucks can only exit on US93

4. Operational

- No outbound facility

St. George Port of Entry

Location:

I-15, one mile north of the Arizona border in St. George, UT.

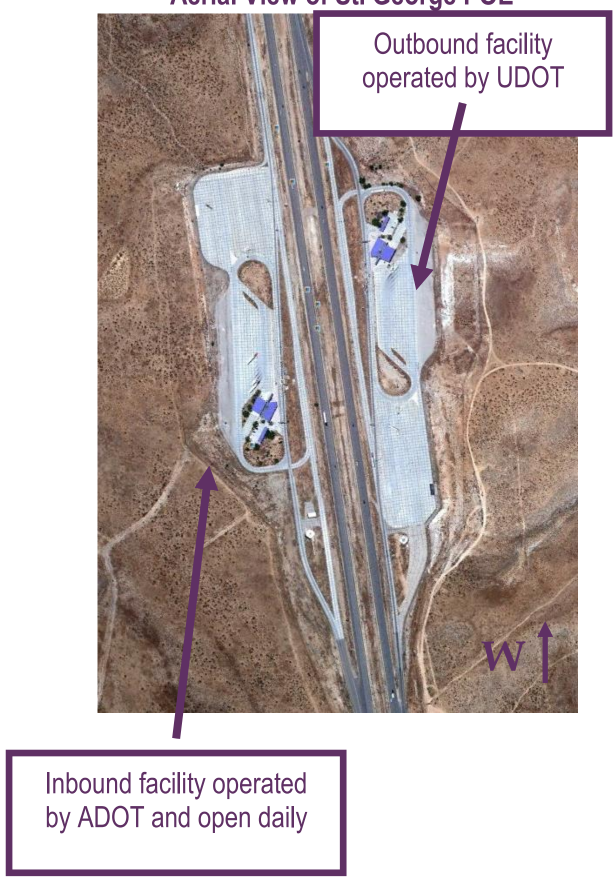
Current Site Flow:

Southbound: Trucks are screened on the mainline using a PrePass transponder reader. A LCS notifies drivers to enter the port. A SSWIM scale exists on the ramp, but is reportedly inaccurate. Inside the port, vehicles are weighed on a three-platform scale. A large overhead CMS indicates whether drivers should exit the port or loop around the administration building for additional screening, credential check, or inspection. A two lane inspection facility includes an inspection pit. 16 parking spaces are located at the main site, with 19 spaces at an overflow lot..

Northbound: Facility managed and operated by the Utah Department of Transportation (UDOT).

2011 Statistics	SB (Inbound)	NB (Outbound)
Operating Hours	20/7	UDOT Facility
Port Traffic	355,457	N/A
Cred. Check rate	21%	N/A
Vehicle Weigh rate	3%	N/A
Inspection Rate	2.00%	N/A
Port Infrastructure		
Mainline Screening	PrePass	UDOT Facility
Credential Booths	1	N/A
Static Scale	Multi-platform	N/A
Inspection Facilities	Sheltered lane; inspection pit	N/A
Truck Parking Spaces	35	N/A
Admin. Building	Good condition	N/A

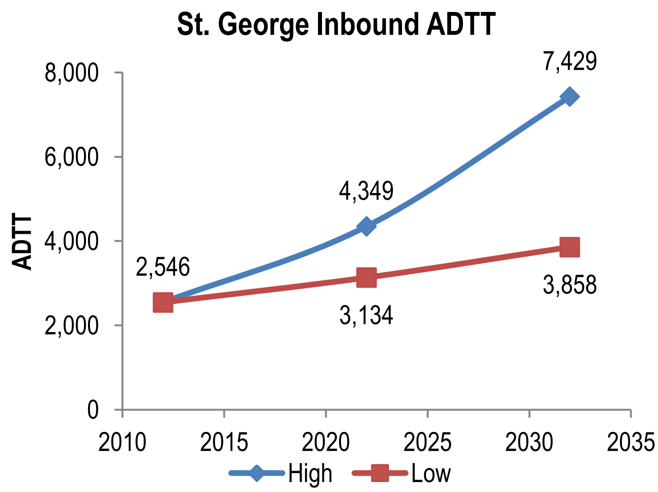
Aerial View of St. George POE

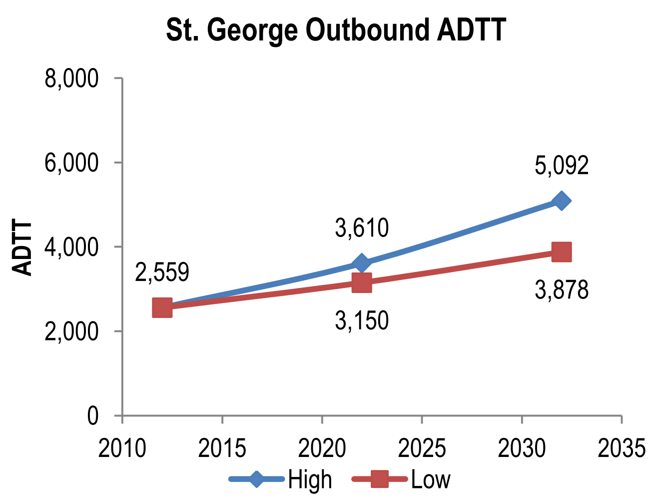


Future Traffic Trends:

I-15 is projected to experience average (2.1%) to high (3.5%) or very high (5.5%) traffic growth in both the northbound and southbound directions over the next 20 years.

Current and future truck traffic volumes at St. George are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline weight screening; Ramp WIM needs calibration
- Electronic sign at the administration building is poorly located

3. Physical

- Trucks have difficulty navigating the circulation loop and entrance to the parking lot
- Lack of lighting on platform scale and administration building

4. Operational

- Joint jurisdiction and shared staff responsibilities create challenges

Sanders Port of Entry

Location:

I-40, one mile east of Sanders, AZ.

Current Site Flow:

Westbound: Trucks are screened on the mainline using a PrePass transponder reader and WIM scale. A CMS notifies drivers to enter the port. Inside the port, truck credentials are checked at booths or the administration building, and vehicles are weighed on a three-platform scale. When the queue backs up onto the mainline, staff wave through vehicles in the bypass lane. The facility has 8 parking spaces for trucks, a canopied inspection facility, but no inspection pit.

Eastbound: No mainline screening facilities. All trucks must enter the facility and pass over the three-platform static scale. The facility has 8 parking spaces for trucks, but no enclosed inspection facilities.

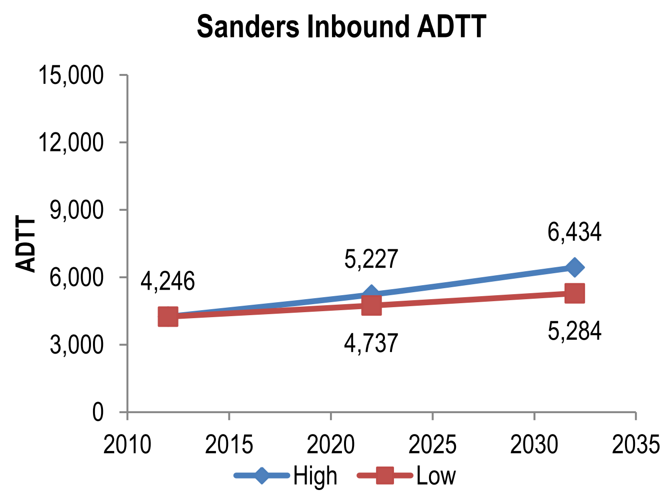
2011 Statistics	WB (Inbound)	EB (Outbound)
Operating Hours	17/7	Occasionally
Port Traffic	1,269,655	N/A
Cred. Check rate	30%	N/A
Vehicle Weigh rate	29%	N/A
Inspection Rate	0.09%	N/A
Port Infrastructure		
Mainline Screening	WIM & PrePass	None
Credential Booths	1	0
Static Scale	Multi-platform	Multi-platform
Inspection Facilities	Canopy Lane	Parking Lot
Truck Parking Spaces	8	8
Admin. Building	Average condition; functionally obsolete	Functionally obsolete

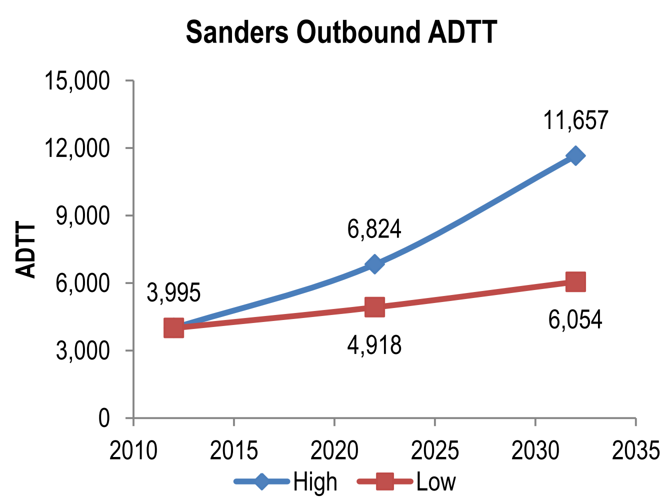
Aerial View of Sanders POE

Future Traffic Trends:

Sanders will likely see an average (2.1%) to a very high (5.5%) growth in traffic eastbound, due to the increases in through freight from the Ports of Los Angeles and Long Beach that travel via truck through Arizona. Growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state may also contribute to increasing outbound truck traffic traveling along I-40. Sanders is projected to see a low (1.1%) to average (2.1%) growth rate for westbound traffic.

Current and future truck traffic volumes at Sanders are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No eastbound mainline screening
- Westbound mainline screening and WIM screening malfunction in poor weather; CMS is nonfunctional
- Westbound static scale is inadequate an not calibrated with the WIM

3. Physical

- No inspection facilities
- Short ramp, close to 191 off ramp; causes vehicles to backup onto the mainline
- Dim lighting in canopy and truck parking area

San Simon Port of Entry

Location:

I-10, three miles east of San Simon, AZ.

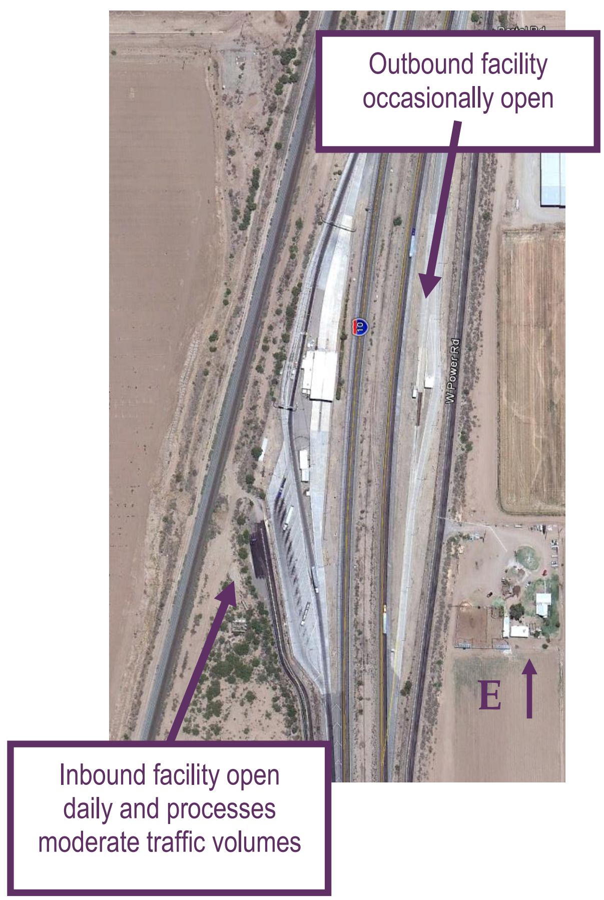
Current Site Flow:

Westbound: Trucks are screened on the mainline using a PrePass transponder reader and WIM scale. A CMS notifies drivers to enter the port. Inside the port, truck credentials are checked at booths or the administration building, and vehicles are weighed on a three-platform scale. A mile long inbound ramp is generally long enough to prevent queue backups onto the mainline, except occasionally in winter, when staff must wave through vehicles in the bypass lane. The facility has 15 parking spaces for trucks, a canopied inspection facility, but no inspection pit.

Eastbound: No mainline screening facilities. All trucks must enter the facility and pass over the three-platform static scale, which is non-functioning in need of replacement. The facility has 7 parking spaces for trucks, but no enclosed inspection facilities.

2011 Statistics	WB (Inbound)	EB (Outbound)
Operating Hours	24/7	Occasionally
Port Traffic	806,595	N/A
Cred. Check rate	53%	N/A
Vehicle Weigh rate	52%	N/A
Inspection Rate	0.37%	N/A
Port Infrastructure		
Mainline Screening	WIM & PrePass	None
Credential Booths	1	1
Static Scale	Single-platform	Multi-platform
Inspection Facilities	Canopy Lane	Parking Lot
Truck Parking Spaces	15	7
Admin. Building	Average condition; functionally obsolete	Average condition; functionally obsolete

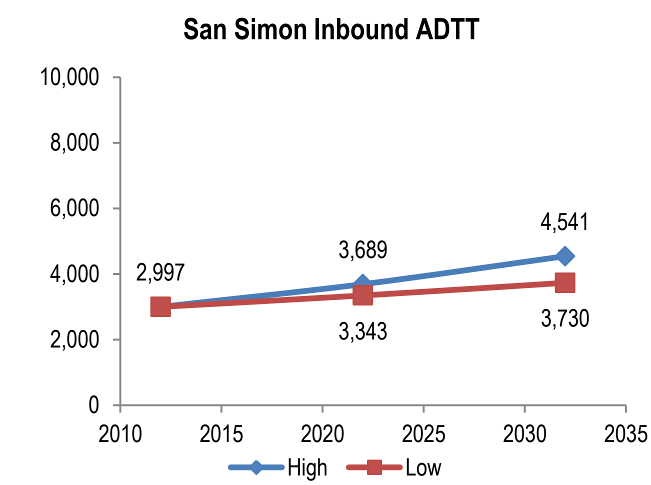
Aerial View of San Simon POE

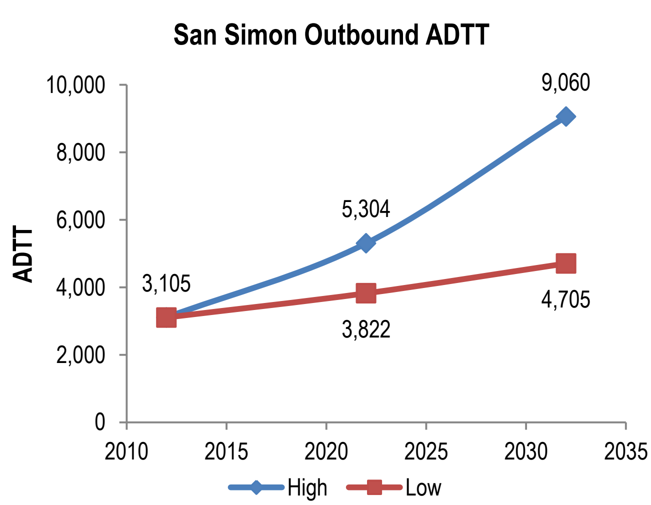


Future Traffic Trends:

San Simon eastbound traffic is expected to grow at an average (2.1%) to a very high rate (5.5%), partially due to container freight volumes moving from the Ports of Los Angeles and Long Beach to US destinations. Growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state will also increase the inbound and outbound truck traffic traveling along I-10. Westbound traffic is projected to grow at a low (1.1%) to average (2.1%) rate.

Current and future truck traffic volumes at San Simon are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No eastbound screening
- Single-platform scale on the eastbound side
- Westbound multi-platform scale needs maintenance

3. Physical

- Inspection facilities lack pits
- Administration building needs maintenance and upgrades: both sides have limited lighting; westbound lacks security cameras
- Neither facility has a return loop; trucks often backup in the facility

Topock Port of Entry

Location:

I-40, nine miles southeast of Topock, AZ.

Current Site Flow:

Eastbound: Trucks are screened on the mainline using a PrePass transponder reader and WIM scale. A CMS notifies drivers to enter the port. Inside the port, truck credentials are checked at the administration building, and vehicles are weighed on a three-platform scale. When the queue backs up onto the mainline, staff wave through vehicles in the bypass lane. The facility has 13 parking spaces for trucks, but no separate inspection facilities exist.

Westbound: No mainline screening facilities. All trucks must enter the facility and pass over the three-platform static scale, which is currently non-functional and in need of replacement. The facility has 4 parking spaces for trucks, but no separate inspection facilities.

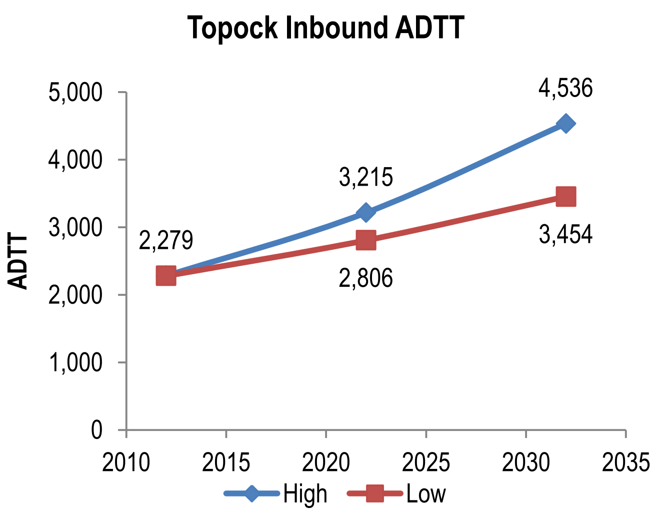
2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	24/5	Occasionally
Port Traffic	557,351	N/A
Cred. Check rate	37%	N/A
Vehicle Weigh rate	37%	N/A
Inspection Rate	.034%	N/A
Port Infrastructure		
Mainline Screening	WIM & PrePass	None
Credential Booths	0	0
Static Scale	Multi-platform	Multi-platform
Inspection Facilities	Parking Lot	Parking Lot
Truck Parking Spaces	13	4
Admin. Building	Poor condition; functionally obsolete	Poor condition; functionally obsolete

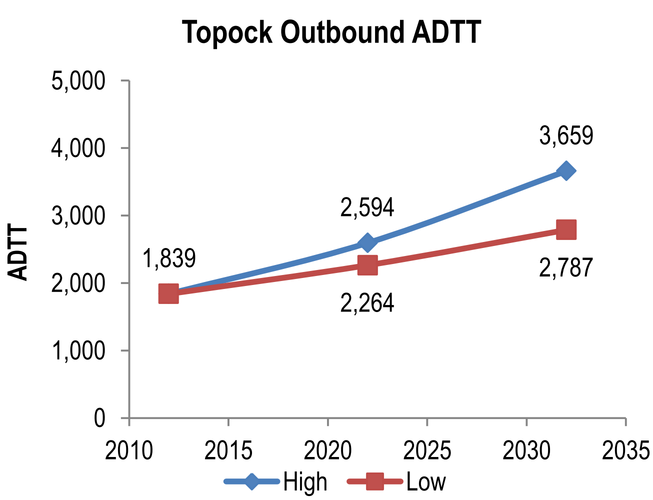
Aerial View of Topock POE

Future Traffic Trends:

Both inbound and outbound traffic at Topock are projected to grow at an average (2.1%) to a high (3.5%) rate over the next 20 years. Although more the freight traffic growth is expected on I-10, truck traffic on I-40 will also experience growth from the increases of freight arriving through the Ports of Los Angeles and Long Beach. Growth in trade with Mexico, and developing warehousing and distribution centers within the state may also contribute to increasing outbound truck traffic traveling along I-40.

Current and future truck traffic volumes at Topock are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No eastbound mainline screening
- Scale on westbound side needs maintenance
- Limited telecommunications technology at the port facility

3. Physical

- Short ramps cause queue backups onto the mainline
- Lack of dedicated inspection facilities and inspection pits
- Administration building requires repairs and upgrades

Yuma I-8 Port of Entry

Location:

I-8, one mile southeast of the Arizona – California border in Yuma, AZ

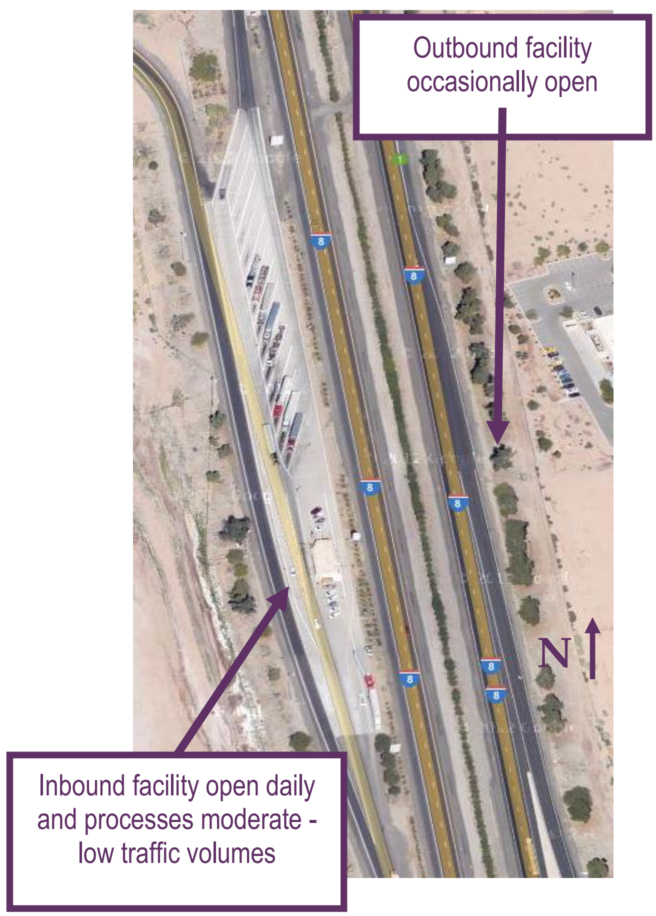
Current Site Flow:

Eastbound: Trucks are screened on the mainline using a PrePass transponder reader. Inside the port, truck credentials are checked at the administration building, and vehicles are weighed on a single-platform scale. A loudspeaker and red/green signal are used to notify drivers to exit the facility or park for additional screening. There is no return loop; vehicles needing to be re-weighed must back up through the bypass lane. Staff manage queue backups by waving through vehicles in the bypass lane. The facility has 15 parking spaces for trucks, but no enclosed inspection facilities.

Westbound: No mainline screening facilities. All trucks must enter the facility and pass over the single-platform static scale. The facility has no parking spaces or inspection facilities. Truck drivers needing a permit must "park" at the front of the credential check/scale lane line. Remaining vehicles must wait for the first driver to complete their transaction before the line can move forward.

2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	16/7	Occasionally
Port Traffic	133,915	47,963
Cred. Check rate	68%	98%
Vehicle Weigh rate	42%	99%
Inspection Rate	0.52%	0.52%
Port Infrastructure		
Mainline Screening	PrePass	None
Credential Booths	0	0
Static Scale	Single-platform	Single-platform
Inspection Facilities	Parking lot	None
Truck Parking Spaces	15	Road Shoulder
Admin. Building	Poor condition	Poor condition

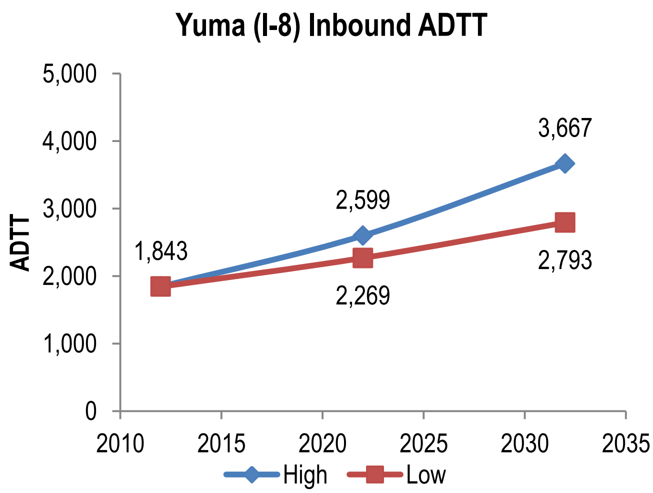
Aerial View of Yuma I-8 POE

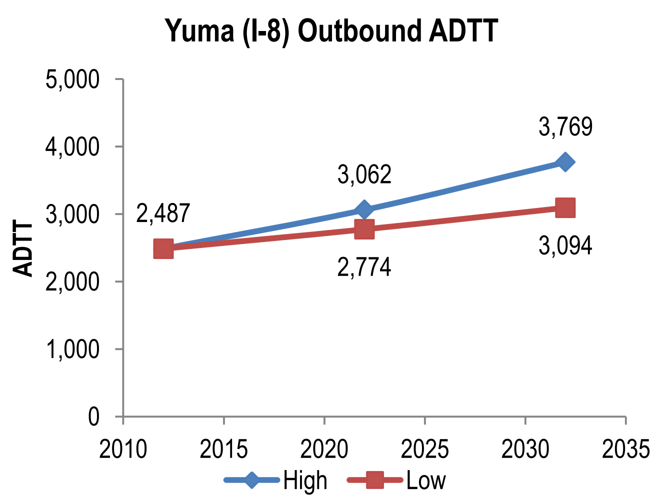


Future Traffic Trends:

Traffic volumes at Yuma I-8 are projected to grow at an average (2.1%) to a high (3.5%) rate eastbound over the next 20 years, partially due to increasing freight traffic arriving at the Port of San Diego. Westbound traffic volumes are expected to grow at a low (1.1%) to an average (2.1%) rate over the next 20 years.

Current and future truck traffic volumes at Yuma I-8 are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No westbound mainline screening; no eastbound mainline weight screening
- Single platform scales at both facilities

3. Physical

- Short ramps cause queue backups onto the mainline
- Lack of dedicated inspection facilities and inspection pits
- Single lane westbound facility requires vehicles to be services one at a time
- Administration building has minimal lighting and security

Page Port of Entry

Location:

US 89, six miles south of the Arizona – Utah border and just northwest of Page, AZ.

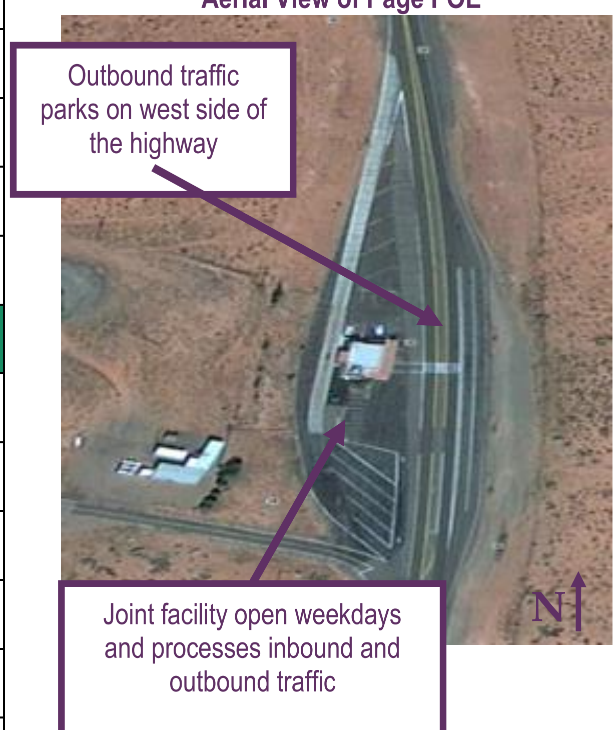
Current Site Flow:

This facility serves both inbound and outbound traffic from the administration building located on the west side of the highway. Southbound traffic enters the facility and passes over a single platform static scale. A loudspeaker and red/green signal light are used to notify drivers to exit the facility or park for additional screening. There are four parking spots on the southbound side, but no covered inspection facilities.

Northbound traffic must park on the east side of the highway. Drivers exit their vehicles and walk across the highway to reach the POE facility. There is room for 6 vehicles to park in the northbound lane. The facility is shared between POE and Motor Vehicle Division (MVD) customer service center staff.

2011 Statistics	SB (Inbound)	NB (Outbound)
Operating Hours	8/5	8/5
Port Traffic	7,804	10,275
Cred. Check rate	100%	100%
Vehicle Weigh rate	32%	9%
Inspection Rate	0.42%	0.42%
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	Single-platform	
Inspection Facilities	Parking lot	
Truck Parking Spaces	4 + Permit parking lanes	
Admin. Building	Average condition; shared with MVD	

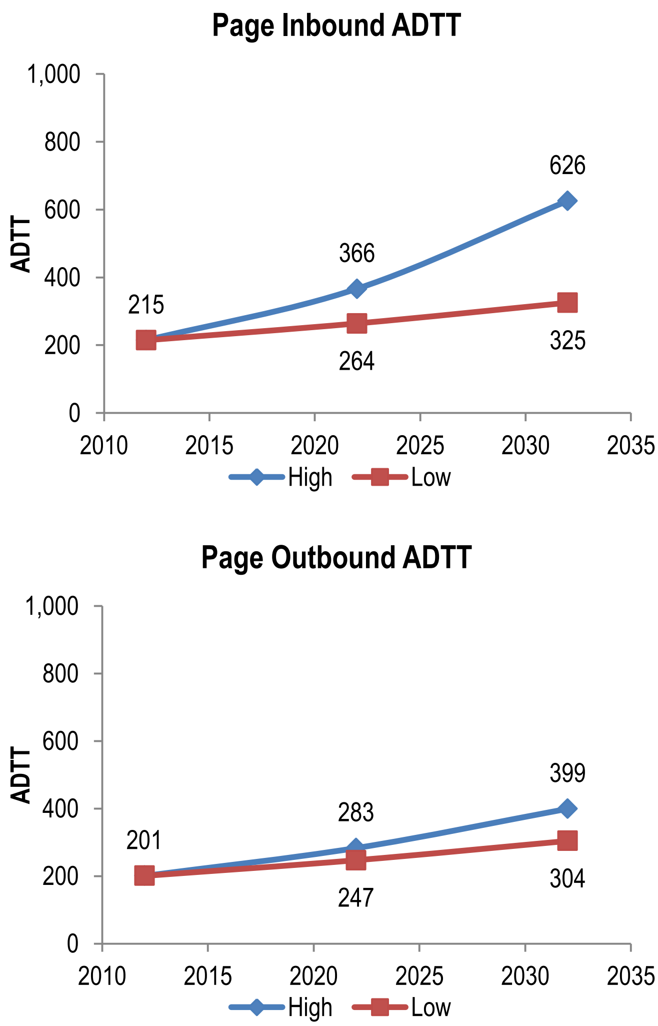
Aerial View of Page POE



Future Traffic Trends:

Although traffic volumes overall will remain low, southbound traffic into Arizona through Page is expected to grow at an average (2.1%) to a very high (5.5%) rate, tripling the number of freight trucks moving through the port by 2032. Similarly northbound traffic at Page is expected to grow at an average (2.1%) to a high (3.5%) rate, doubling by 2032.

Current and future truck traffic volumes at Page are shown below.



Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- Single platform static scale
- Manual signage as opposed to electronic signals

3. Physical

- Northbound drivers must park and cross highway or make a difficult U-turn into the facility
- No dedicated inspection facilities or pit
- Lack of lightning and security cameras

Teec Nos Pos Port of Entry

Location:

US 160, five miles west of the Arizona – New Mexico border in Teec Nos Pos, Arizona.

Current Site Flow: This facility serves both inbound and outbound traffic from the administration building located on the north side of the highway. Westbound traffic directly enters the facility and may pass over portable scales. Eastbound traffic must park on the south side of the highway. Drivers exit their vehicles and walk across the highway to reach the POE facility. All drivers are required to park and bring their credentials into the administration building. There are no inspection facilities at Teec Nos Pos.

The facility serves as a Motor Vehicle Division (MVD) customer service center, with POE staff carrying out duties normally reserved for MVD staff. The site is surrounded by undeveloped land that is part of the Navajo Indian Reservation.

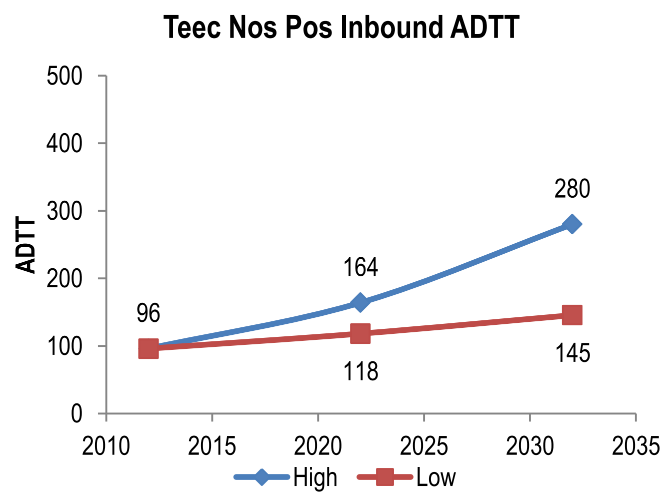
2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	10/5	10/5
Port Traffic	12,158	8,689
Cred. Check rate	85%	63%
Vehicle Weigh rate	N/A	N/A
Inspection Rate	1.49%	1.49%
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	None	
Inspection Facilities	Parking lot	
Truck Parking Spaces	3 + Permit parking lanes	
Admin. Building	Average condition; shared with MVD	

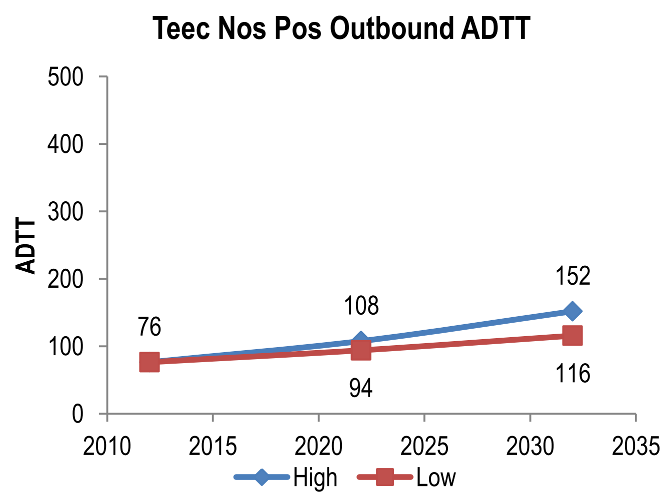
Aerial View of Teec Nos Pos POE

Future Traffic Trends:

Although traffic volumes at Teec Nos Pos will remain very low, inbound traffic is expected to grow at an average (2.1%) to a very high (5.5%) rate, and outbound volumes are expected to grow at an average (2.1%) to a high rate (3.5%), more than doubling traffic by 2032.

Current and future truck traffic volumes at Teec Nos Pos are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- No static scale; portable scales only

3. Physical

- Eastbound drivers must park and cross highway
- No dedicated inspection facilities or pit
- Facility has no room for internal truck circulation
- Administration building is crowded due to shared space with MVD staff

Yuma B-8 Port of Entry

Location:

B-8 (4th avenue), less than one mile south of the Arizona-California border in Yuma, Arizona.

Current Site Flow:

The B-8 Yuma POE facility is an inbound (SB) port only. An outbound (NB) port used to be open many years ago but it has been abandoned. All southbound traffic enters the port and passes over a single platform static scale. Staff use a loudspeaker and a red/green signal light to notify drivers to either exit the facility or park for additional screening. There are no dedicated parking spaces or inspection facilities. Truck volumes are heavy enough at times (particularly during the winter agricultural season) that the queue of vehicles waiting to be checked at the B-8 Yuma POE occasionally backs up to B-8/4th Avenue. When this occurs, POE staff has to wave through trucks to reduce the queue length.

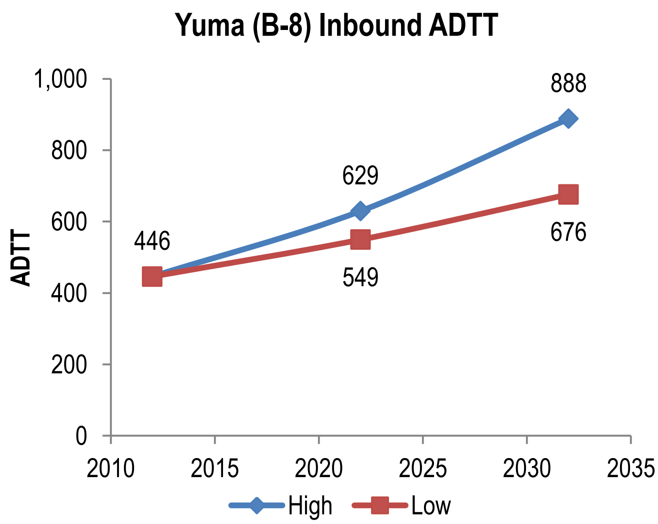
2011 Statistics	SB (Inbound)	NB (Outbound)
Operating Hours	16/5	No facility
Port Traffic	26,574	N/A
Cred. Check rate	93%	N/A
Vehicle Weigh rate	93%	N/A
Inspection Rate	0.19%	N/A
Port Infrastructure		
Mainline Screening	None	N/A
Credential Booths	0	N/A
Static Scale	Single-platform	N/A
Inspection Facilities	None	N/A
Truck Parking Spaces	Permit parking lane	N/A
Admin. Building	Poor condition; functionally obsolete	N/A

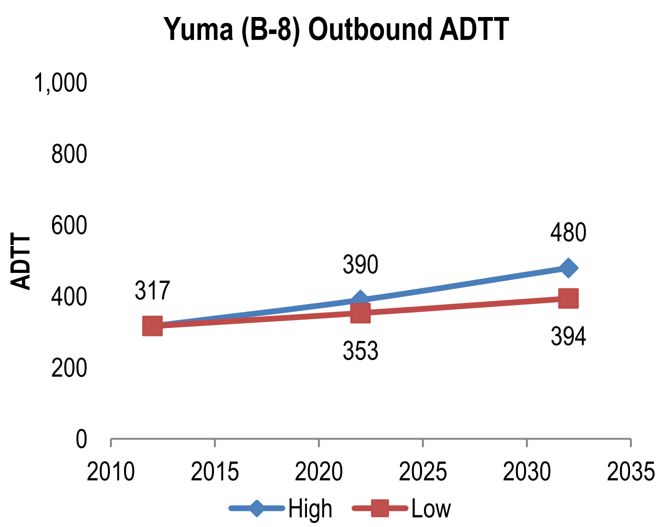
Aerial View of Yuma B-8 POE

Future Traffic Trends:

Although expected to remain moderately low overall, traffic volumes inbound at Yuma B-8 are expected to grow at an average (2.1%) to a high (3.5%) rate, doubling the amount of truck traffic by 2032. Outbound growth is expected to be lower, with low (1.1%) to average (2.1%) growth rates over the next 20 years.

Current and future truck traffic volumes at Yuma B-8 are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- Single-platform static scale
- Manual signage as opposed to electronic signals

3. Physical

- No inspection facilities
- No return loop, trucks must back up through the facility
- Administration building in need of repair and upgrades

4. Operational

- No outbound facility

Duncan Port of Entry

Location:

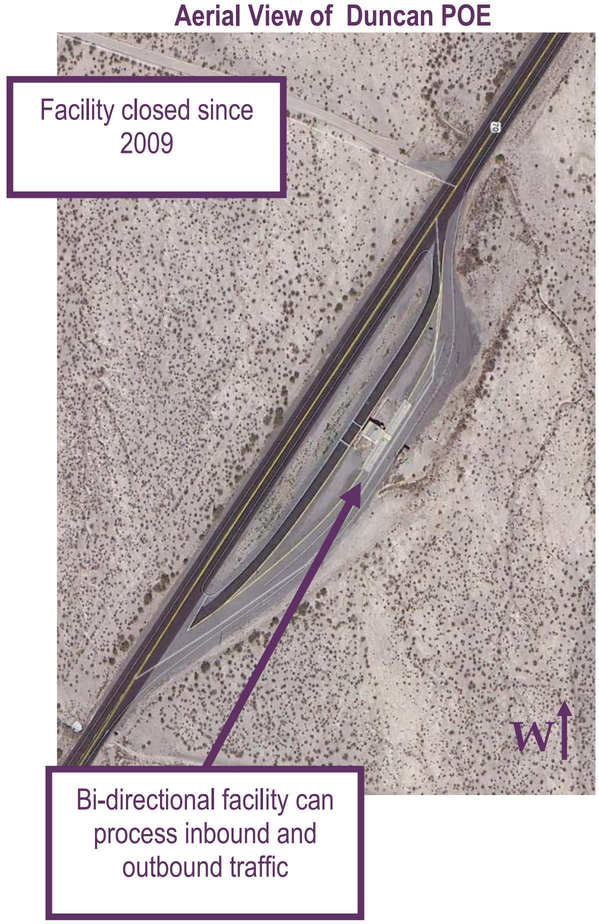
US 70, five miles east of Duncan, Arizona

Current Site Flow:

This facility has been closed since 2009 In prior years, Duncan served both inbound and outbound traffic from the administration building located on the north side of the highway. There are no mainline screening features. Both eastbound and westbound traffic enter the facility and pass through a bi-directional credential check / static scale lane. LCS facing both directions direct trucks to continue through the facility or park on the shoulder for additional screening. No dedicated parking or inspection facilities are located at the site.

2011 Statistics	WB (Inbound)	EB (Outbound)
Operating Hours	(8-20) / 5	(8-20) / 5
Port Traffic	5,599	6,635
Cred. Check rate	76%	73%
Vehicle Weigh rate	63%	62%
Inspection Rate	0.28%	0.28%
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	Single-platform – Currently removed	
Inspection Facilities	None	
Truck Parking Spaces	Road Shoulder	
Admin. Building	Currently Closed	

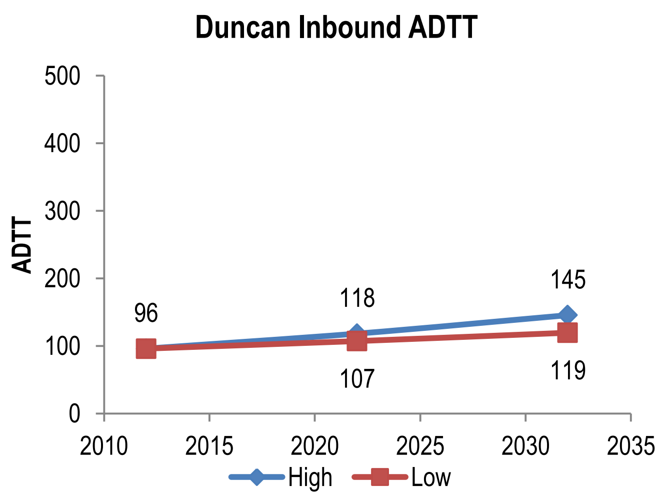
Aerial View of Duncan POE

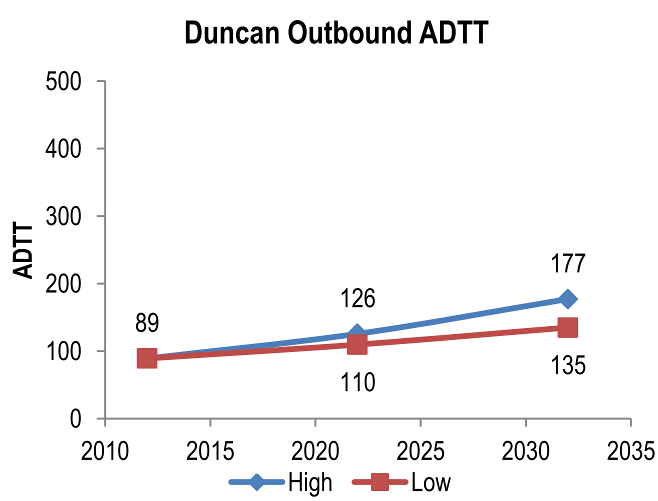


Future Traffic Trends:

Duncan sees some of the lowest volumes of any Arizona POE, and is expected to see only a low (1.1%) to an average (2.1%) growth rate of inbound trucks and an average (2.1%) to a high (3.5%) growth rate for outbound trucks, resulting in a potential doubling by 2032.

Current and future truck traffic volumes at Duncan are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- Single-platform static scale
- Manual signage as opposed to electronic signals

3. Physical

- No inspection facilities
- No return loop, trucks must back up through the facility
- Administration building in need of repair and upgrades

4. Operational

- No outbound facility

Fredonia Port of Entry

Location:

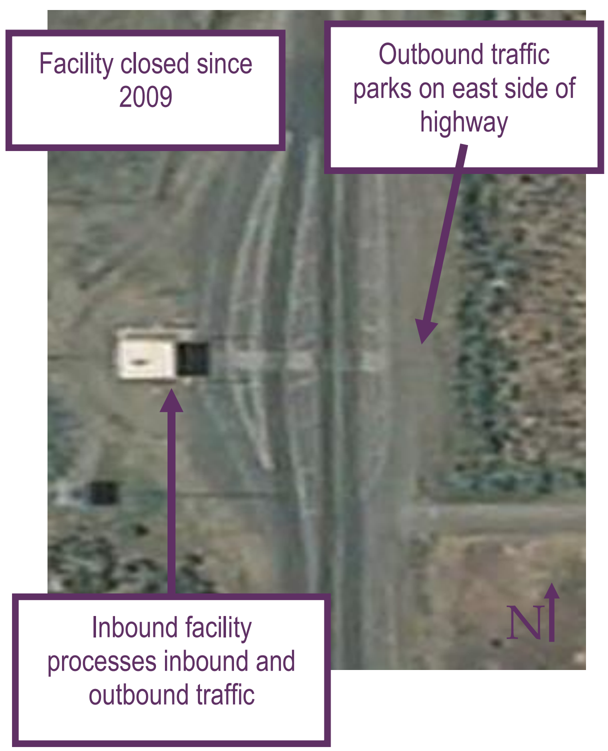
US 89A, three miles south of the Arizona – Utah border in Fredonia, AZ. Fredonia also serves as the POE for traffic on SR 389.

Current Site Flow:

This facility has been closed since 2009 The site is located on the west side of the highway and includes an off-ramp and on-ramp for southbound traffic. There are no mainline screening features. Southbound traffic enters the facility and proceeds to the administration building, where red/green signals and loudspeakers are used to direct trucks to continue through the facility or park on the shoulder for additional screening. NB truck traffic parks on the east side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. No dedicated parking or inspection facilities are located at the site.

2011 Statistics	SB (Inbound)	NB (Outbound)
Operating Hours	9/4	9/4
Port Traffic	5,434	6,173
Cred. Check rate	81%	78%
Vehicle Weigh rate	N/A	N/A
Inspection Rate	3.03%	3.03%
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	None	
Inspection Facilities	None	
Truck Parking Spaces	Permit parking lanes	
Admin. Building	Currently Closed	

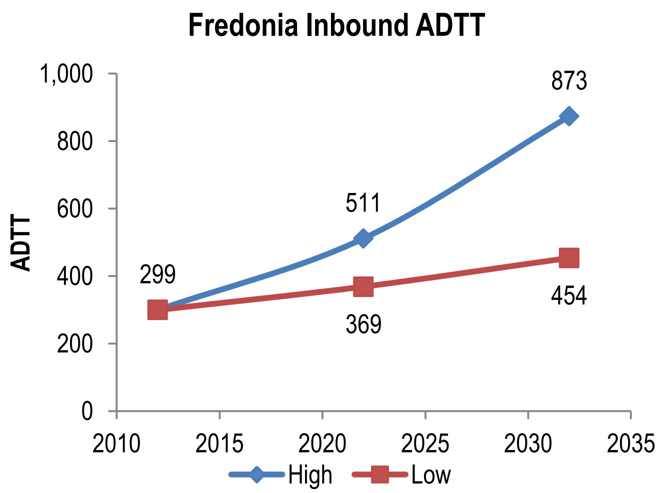
Aerial View of Fredonia POE

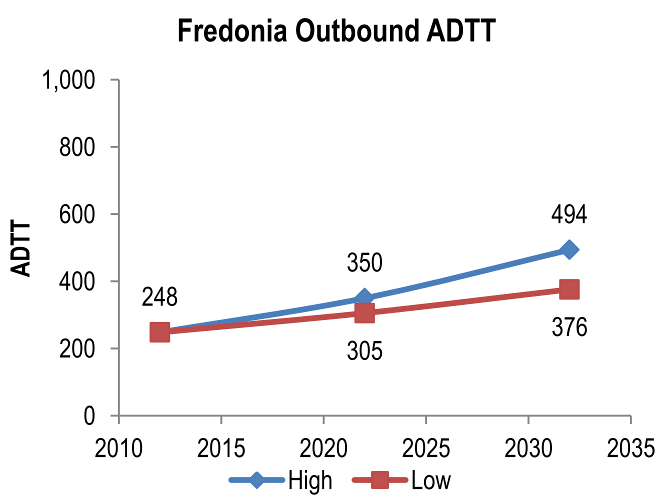


Future Traffic Trends:

Fredonia is expected to see average (2.1%) to very high (5.5%) growth for inbound traffic, and average (2.1%) to high (3.5%) growth for outbound traffic over the next 20 years. This is in part due to increased freight flows moving north – south within the region, although total volumes will remain low.

Current and future truck traffic volumes at Fredonia are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- No static scales
- No electronic signals

3. Physical

- Northbound drivers must park and cross highway
- No inspection facilities
- Limited lighting and security cameras

4. Operational

- Site is closed

Parker Port of Entry

Location:

SR 95S (California Avenue), less than one mile southeast of the Arizona – California border in Parker, AZ

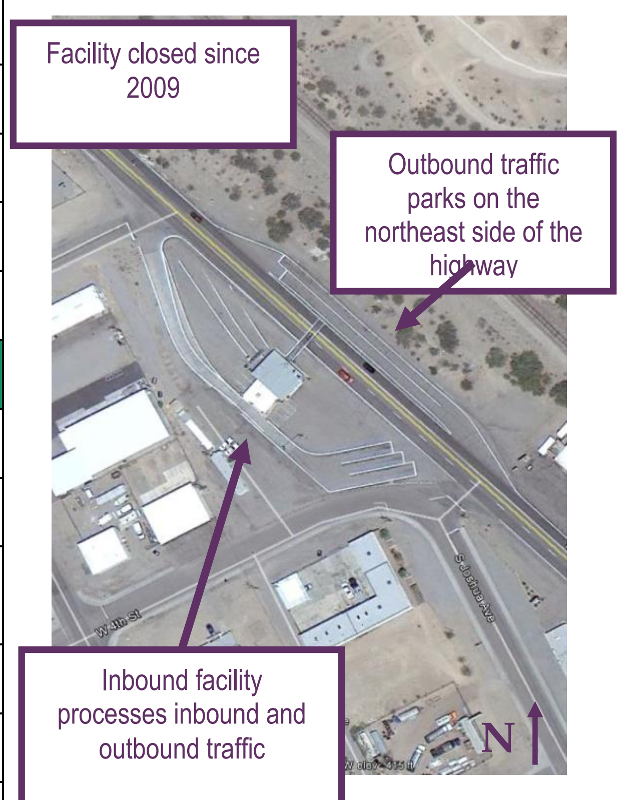
Current Site Flow:

This facility has been closed since 2009 The site is located on the southwest side of the highway and includes an off-ramp and on-ramp for eastbound traffic. There are no mainline screening features. Eastbound traffic enters the facility and proceeds to the static scale at the administration building. Red/green signals and loudspeakers are used to direct trucks to continue through the facility or park for additional screening.

Westbound truck traffic parks on the northeast side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The site has three dedicated parking spots, and a canopied two-lane inspection facility, but no inspection pit. ADOT is currently in the process of converting the Parker POE into an unmanned screening site to be supported by mobile enforcement.

2011 Statistics	EB (Inbound)	WB (Outbound)
Operating Hours	8/5	8/5
Port Traffic	30,127	N/A
Cred. Check rate	99%	N/A
Vehicle Weigh rate	100%	N/A
Inspection Rate	0.10%	N/A
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	Single-platform –insufficient for weighing most vehicles	
Inspection Facilities	Two lane canopy	
Truck Parking Spaces	3 + Permit parking lanes	
Admin. Building	Currently Closed	

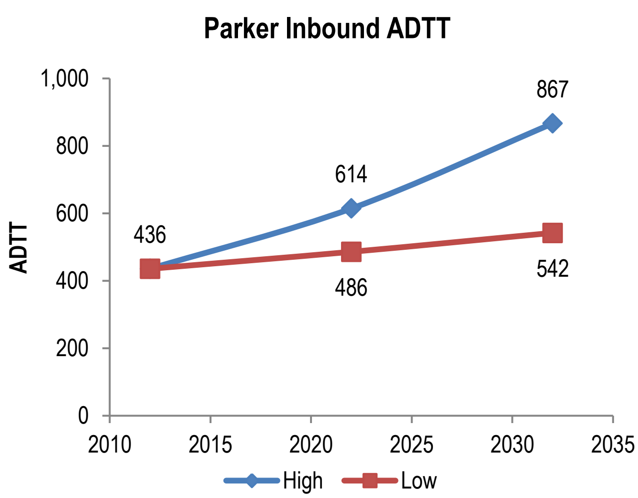
Aerial View of Parker POE

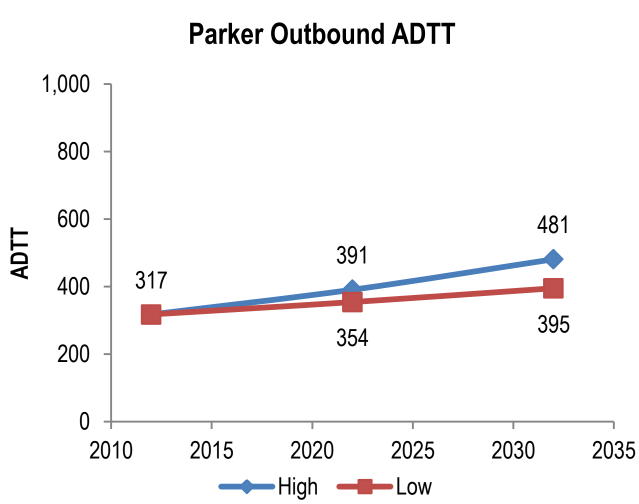


Future Traffic Trends:

Parker is expected to see average (2.1%) to high (3.5%) growth inbound, and low (1.1%) to average (2.1%) growth for outbound traffic over the next 20 years. These trends are in part attributed to increasing freight flows from the west coast ports, as SR-95 can be used to bypass port facilities on I-40 (Sanders) and I-10 (Ehrenberg).

Current and future truck traffic volumes at Parker are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- No static scales
- No electronic signals

3. Physical

- Short ramp and significant grade
- Northbound drivers must park and cross highway
- No inspection pit
- Limited lighting and security cameras

4. Operational

- Site is closed

Springerville Port of Entry

Location:

US 60, sixteen miles west of the Arizona – New Mexico border and one mile northwest of Springerville, AZ.

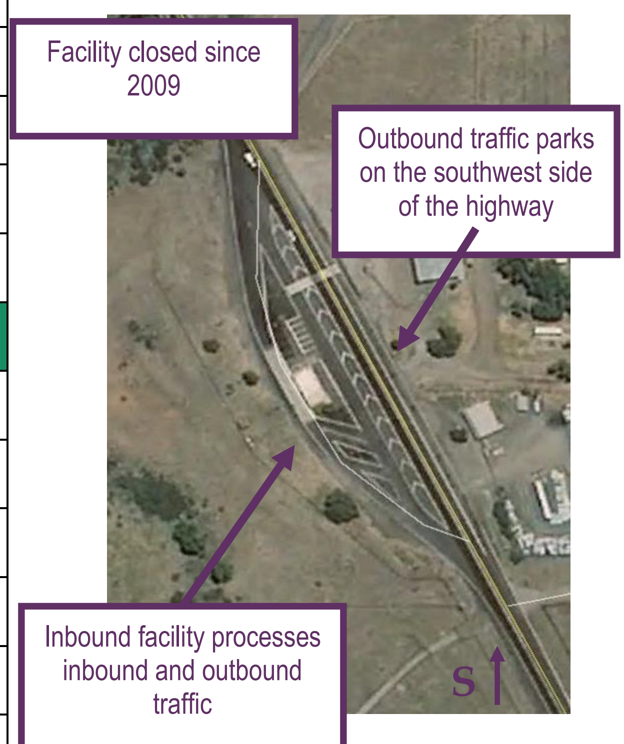
Current Site Flow:

This facility has been closed since 2009 The site is located on the northeast side of the highway and includes an off-ramp and on-ramp for westbound traffic. There are no mainline screening features. A concrete pad is located adjacent to the administration building, but no scale is present. There is no existing signage or signals on the westbound side directing drivers where to park. The site has three truck parking spots, but no separate inspection facility.

Eastbound truck traffic parks on the south side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. Springerville previously served as a MVD customer service center.

2011 Statistics	WB (Inbound)	EB (Outbound)
Operating Hours	8/5	8/5
Port Traffic	3,528	3,579
Cred. Check rate	100%	100%
Vehicle Weigh rate	N/A	N/A
Inspection Rate	1.64%	1.64%
Port Infrastructure		
Mainline Screening	None	
Credential Booths	0	
Static Scale	None	
Inspection Facilities	Parking lot	
Truck Parking Spaces	3 + Permit parking lane	
Admin. Building	Currently Closed	

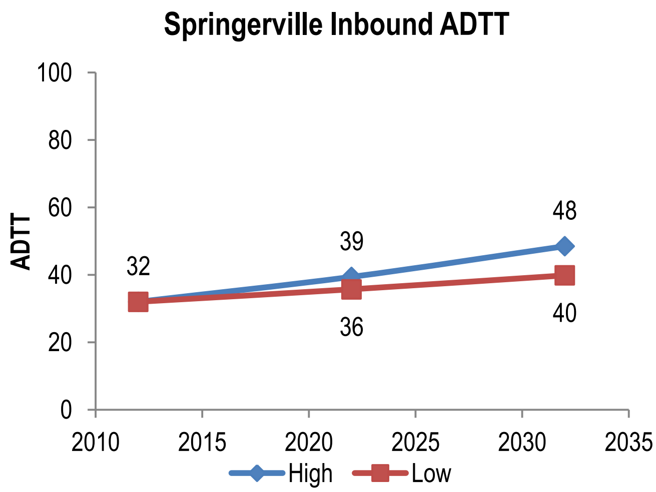
Aerial View of Springerville POE

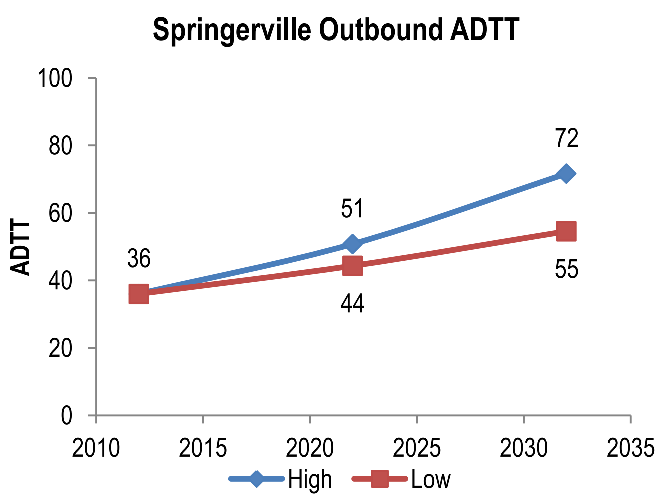


Future Traffic Trends:

Springerville is expected to see low (1.1%) to average (2.1%) growth inbound, and average (2.1%) to high (3.5%) growth outbound., although volumes will remain extremely low.

Current and future truck traffic volumes at Springerville are shown below.





Identified Deficiencies

1. Technology Integration

2. Other Technology

- No mainline screening
- No static scale
- No electronic signals

3. Physical

- Eastbound drivers must park and cross highway
- No inspection facilities
- Limited lighting and security cameras

4. Operational

- Site is closed

3.0 National Best Practices and State of Operations

Size and weight enforcement operations are mandated by the federal government. The Surface Transportation Assistance Act (STAA) of 1978 provided the United States Department of Transportation (USDOT) with the ability to require states to enforce size and weight standards. This legislation allowed Federal Highway Administration (FHWA) to withhold up to 10 percent of a state's federal-aid highway funding for failing to adequately enforce these standards or failing to certify/report their activities. This policy is documented in 23 CFR (Code of Federal Regulations) Part 657. In addition to size and weight enforcement State agencies also enforce commercial vehicle safety regulations. The primary objectives of these enforcement operations are to ensure the safety of the motoring public, and to preserve the state's highway infrastructure.

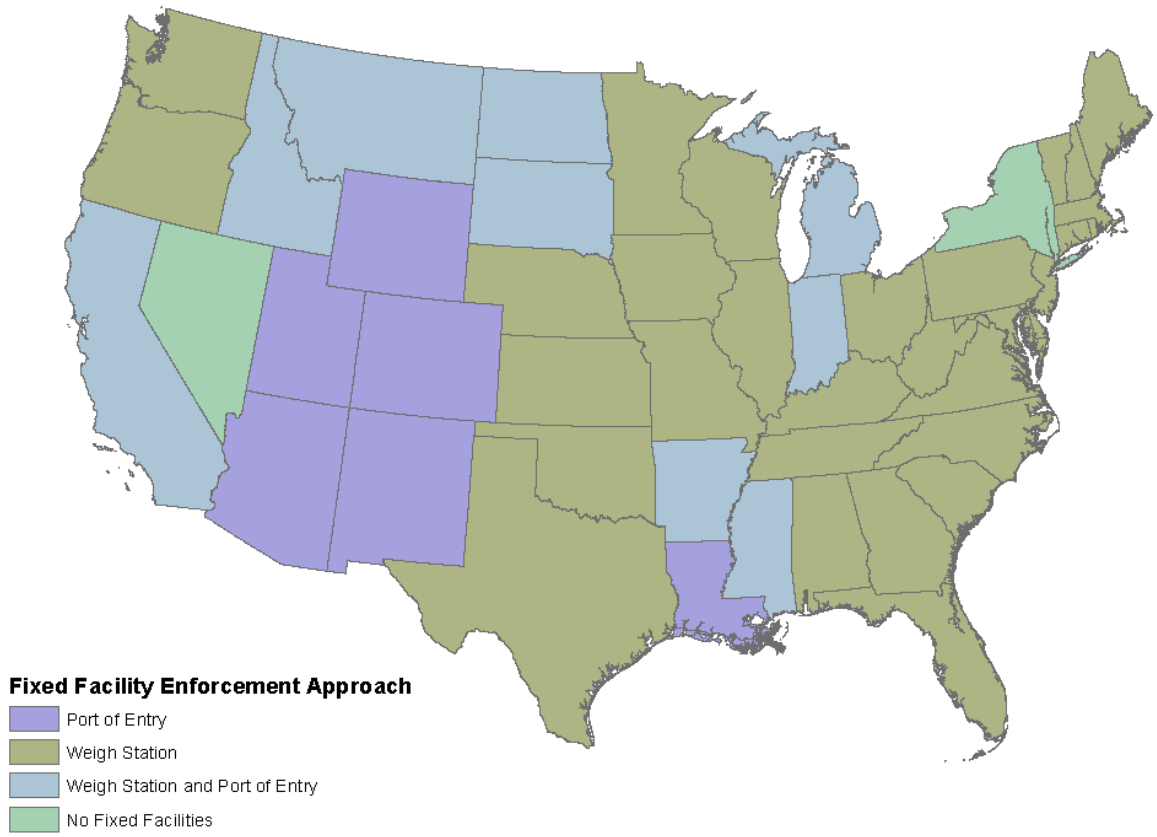
A combination of human, technological and physical resources are used to enforce federal (e.g., Federal Motor Carrier Safety Regulations, federal size and weight laws and regulations, federal hazardous material regulations), and state safety and credential regulations as well as to educate companies and their drivers on proper operating procedures. Typical enforcement interactions include carrier compliance reviews, vehicle and driver safety inspections, size and weight enforcement, and traffic safety enforcement. The Federal Motor Carrier Safety Administration's CSA program has expanded the typical suite of enforcement interactions to include warning letters, phone investigations, and targeted on-site reviews.

States traditionally have employed a blended approach to roadside enforcement that includes both fixed facilities, and mobile operations. With the exception of Nevada and New York, all of the lower 48 states utilize fixed facilities to support their commercial vehicle enforcement program. Fixed facility enforcement operations vary between the states with the two most common facility types being weigh stations and ports of entry. Many states favor one type of fixed facility or the other while some states combine the use of the two. Both facility types serve the same general purpose and posses many of the same features. The fundamental difference between the two facility types is that commercial vehicle operators typically have the option to purchase credentials at a port of entry to be compliant. This option does not exist at most weigh stations and the carriers therefore must be in full compliance prior to entering a weigh station.

Mobile operations are fairly standard throughout the states with officers using mainline virtual screening sites, on-board mobile technology, and their professional judgment to identify vehicles in need of enforcement intervention. Typically mobile enforcement activities supplement fixed facility enforcement efforts by monitoring facility bypass routes and providing coverage in areas where a facility is not present.

Figure 3.1 shows the approach to commercial vehicle enforcement taken by each state throughout the US.

Figure 3.1 Fixed Facility Enforcement Approach by State



3.1 Fixed Facility Enforcement Operations

Ports of Entry

The use of port of entry facilities is an approach that is taken by many western states, including Arizona, to perform commercial vehicle enforcement operations. A port of entry facility is a fixed enforcement facility that is located at a state or national border crossing along a highway. Facilities are typically located on the inbound side of the highway and focus on screening commercial vehicles entering the state but can also be operated on the outbound side of the highway to screen vehicles leaving the state should the resources be available. The functions of a port of entry facility can include the following:

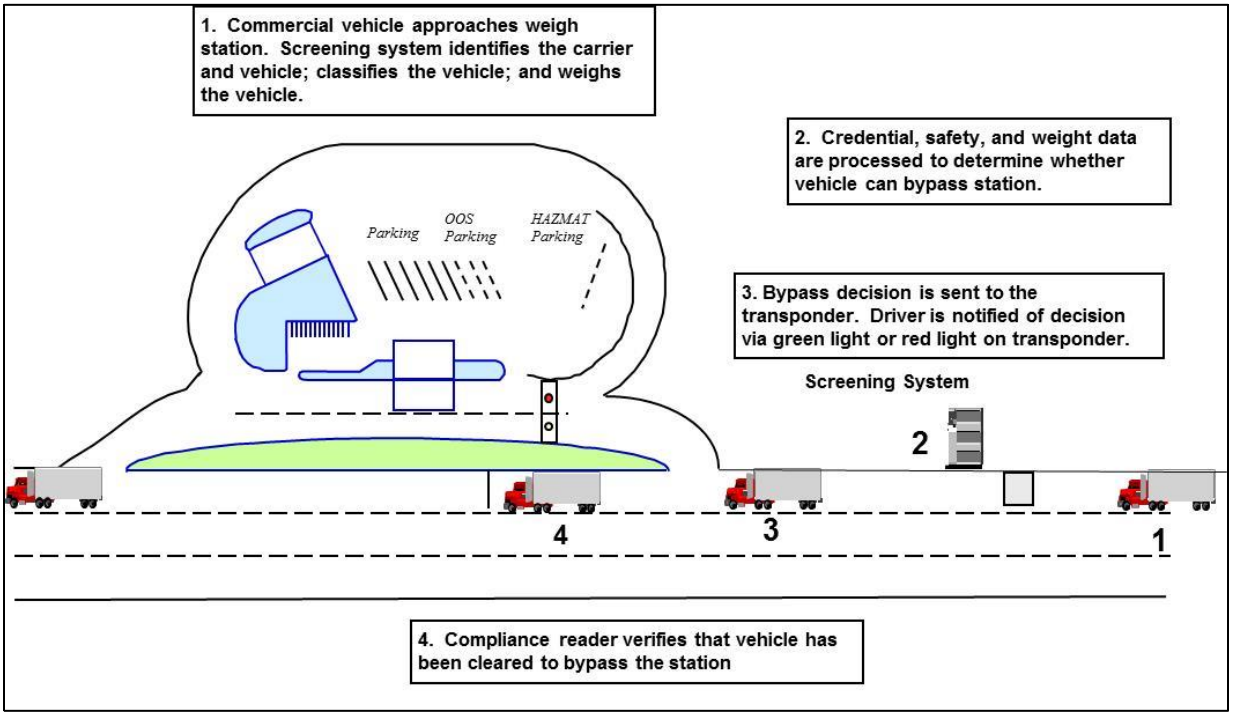
- Commercial Vehicle Safety Enforcement
  - Level 1,2, and 3 CVSA Inspections

- Commercial Vehicle Size and Weight Enforcement
  - Width, Height, Length, and Weight
- Commercial Vehicle Credential Verification and Issuance
  - International Registration Plan, International Fuel Tax Agreement, Oversize and Overweight, Unified Carrier Registration
- Non-Commercial Motor Vehicle Transactions
  - Licensing, Vehicle Registration, VIN Verification

Larger port facilities are typically located at border crossings along trade corridors, Interstate routes, or other major highways with high volumes of mainline truck traffic. These facilities typically employ a full on-site staff and have a large footprint with extensive permanent infrastructure that can include an administration building, inspection facilities, and parking to accommodate a large number of commercial vehicles.

Electronic screening technology often is used on the mainline at these sites to screen participating commercial vehicles, in order to focus a site's enforcement resources on commercial vehicles that are known to be non-compliant (e.g., overweight, operating without the proper authority/credential) or that are operated by a motor carrier with a history of poor safety performance. Figure 3.2 illustrates the typical configuration of an electronic screening system at a fixed facility. Commercial vehicles that are targeted for an inspection, or unable to be identified by screening technology, are notified through either in-cab technology or roadside signals that they must proceed into the enforcement facility where they will undergo additional screening and/or visual inspection by an enforcement officer. Vehicles on the mainline that are identified by mainline screening and not targeted for an inspection are notified that they are allowed to bypass the fixed facility.

Figure 3.2 Electronic Screening Configuration at a Fixed Enforcement Facility



Smaller, more modest port facilities are located at border crossings along secondary highways to screen vehicles entering the state on less traveled routes and mitigate the number of operators bypassing primary port facilities in an effort to avoid enforcement review. These facilities tend to employ fewer staff resources, have a smaller facility footprint, and have less sizeable permanent infrastructure. These ports, like the primary ports, use automated vehicle identification technology to screen vehicles on the mainline to determine which vehicles should be pulled into the facility for enforcement intervention. Commercial vehicle operators are able to obtain needed credentials from on-site staff as needed.

A strength of operating port of entry facilities is that enforcement is able to screen a vast majority of interstate traffic coming into, and exiting, the state. On-site staffing also allows carriers to obtain all necessary credentials as they enter the site without having to acquire them in advance. One of the disadvantages of this approach is that ports of entry provide limited to no focus on intrastate traffic . With all of the fixed facilities located at border crossings the only possible enforcement interaction for an intrastate hauler is with mobile enforcement units. The other drawback of this approach is the cost of maintaining an on-site staff at these locations to facilitate credential transactions that could be handled using online resources.

Weigh Stations

Like port of entry facilities, weigh stations are fixed enforcement facilities where commercial vehicles are inspected for safety and credential compliance and reviewed to ensure that they are operating within their legal or permitted limitations. States utilizing this approach to fixed facility enforcement typically supplement facilities located at border crossings, aimed at interacting with interstate commerce, with facilities located strategically within the state to interact with intrastate commerce. Mainline traffic volumes, and highway type, determine whether there is a single facility at a given location or collocated facilities to conduct enforcement operations on traffic in both directions of travel.

Unlike port of entry facilities, weigh stations do not perform credential issuance as no non-enforcement personnel typically are present on-site. A few states do maintain on-site non-enforcement personnel at these sites, but they are there to provide support to enforcement functions. The State of Florida is an example of a state that uses this approach. At least one non-enforcement staff member is present at a weigh station facility when it is in operation. These staff members are given the authority, in state statute, to enforce commercial vehicle regulations related to size, weight and credentials. By allowing non-enforcement staff to perform this function, enforcement personnel can focus on identifying vehicles in need of CVSA inspections.

As with port of entry facilities, enforcement personnel at weigh stations utilize mainline screening to determine which vehicles should be pulled into the facility for further review. Carriers lacking proper credentials, or those who fail to pass a safety inspection, are placed out of service until they obtain the appropriate credentials or resolve any safety issues identified during inspection. States utilizing this approach issue the majority of their credentials through online systems and have toll-free numbers for carriers to call should they require further assistance in obtaining the appropriate credentials.

3.2 Mobile Enforcement Operations

Mobile enforcement operations are performed on some level in all states. This approach involves officers moving around the state using their professional judgment, combined with on-board technological applications, to identify vehicles in need of intervention. Once a vehicle is identified they are either directed to pull over to the side of the road, or are taken to a safe parking area, where the officer then checks credentials, performs a CVSA inspection, or weighs the vehicle with portable scales. In some cases, mobile units set-up temporary weigh stations at pull-offs or rest areas for enforcement purposes.

Typically mobile enforcement operations are used to supplement enforcement operations at fixed facilities. Mobile officers will patrol facility bypass routes (i.e., routes that can be taken to allow a commercial vehicle to bypass a fixed facility) and other highways in an effort to increase enforcement coverage and discourage carriers from avoiding fixed facility locations. With recent advances in mainline screening technology some states are performing targeted mobile enforcement by selectively deploying resources based on live data streams from various highways within the state.

Instead of using mobile enforcement to enhance fixed facility operations a few states elect to use this approach as their primary method for commercial vehicle enforcement. Nevada is an example of a state that takes this approach. New York is another example of a state that does not employ traditional fixed facilities for commercial vehicle enforcement. New York is a state that is unable to use technology alone to target specific carriers for review. Vehicles must be selected for intervention through the use of officer judgment or random selection. Given this limitation New York uses a combination of certified non-enforcement inspectors and enforcement personnel to perform commercial vehicle enforcement operations at various rest areas, and at the roadside, throughout the state. Other states, including many in the more urban Northeast, elect to use mobile enforcement as their primary means of enforcement when their fixed facilities are easily bypassed by numerous secondary routes.

3.3 Port of Entry Best Practices

A well-developed port of entry network will ensure that facilities are operated at high volume border crossing locations but will also utilize technology to maximize the efficiency of resources. An effective network also will provide flexibility of operations that allow port sites and mobile enforcement to work together in support of each other. Only commerce that is potentially in violation, or require support services, should be impacted by facility operations.

To attain these operational characteristics port facilities need to operate in a manner where the greatest possible percentage of commercial vehicles on the mainline leading up to the port facility are identified and screened based on real-time credential status, weight analysis, and safety risk. The challenge for Arizona, and most states, is how to maximize the sites objectives in the face of increasing traffic volumes and limited financial and human resources.

In this section we begin our analysis of those tradeoffs by considering various characteristics of "ideal" operations so that we may understand how Arizona's POE network could evolve over time.

Functions and Operations

To effectively balance vehicle flow with appropriate levels of review, enforcement, and customer support the desired characteristics of port operations include the ability to:

- Identify and screen as many vehicles on the mainline as possible at a reasonable cost;
- Integrate information about credentials (at both the carrier and vehicle levels) and operating characteristics (e.g., weight) at highway speed on the mainline;
- Provide both POE staff and drivers with a physical port facility sufficiently designed to allow efficient flow of vehicles through the facility with enough space for both weight and safety inspections;
- Provide POE staff with efficient access to information and the ability to configure and vary automated bypass criteria as appropriate over the course of a day, week, or year;
- Provide POE staff with a working environment which allows them to safely and efficiently interact with commercial vehicle drivers and their corresponding vehicles;
- Provide commercial vehicle drivers with information in a timely manner to instruct them how to proceed either through or around the facility; and

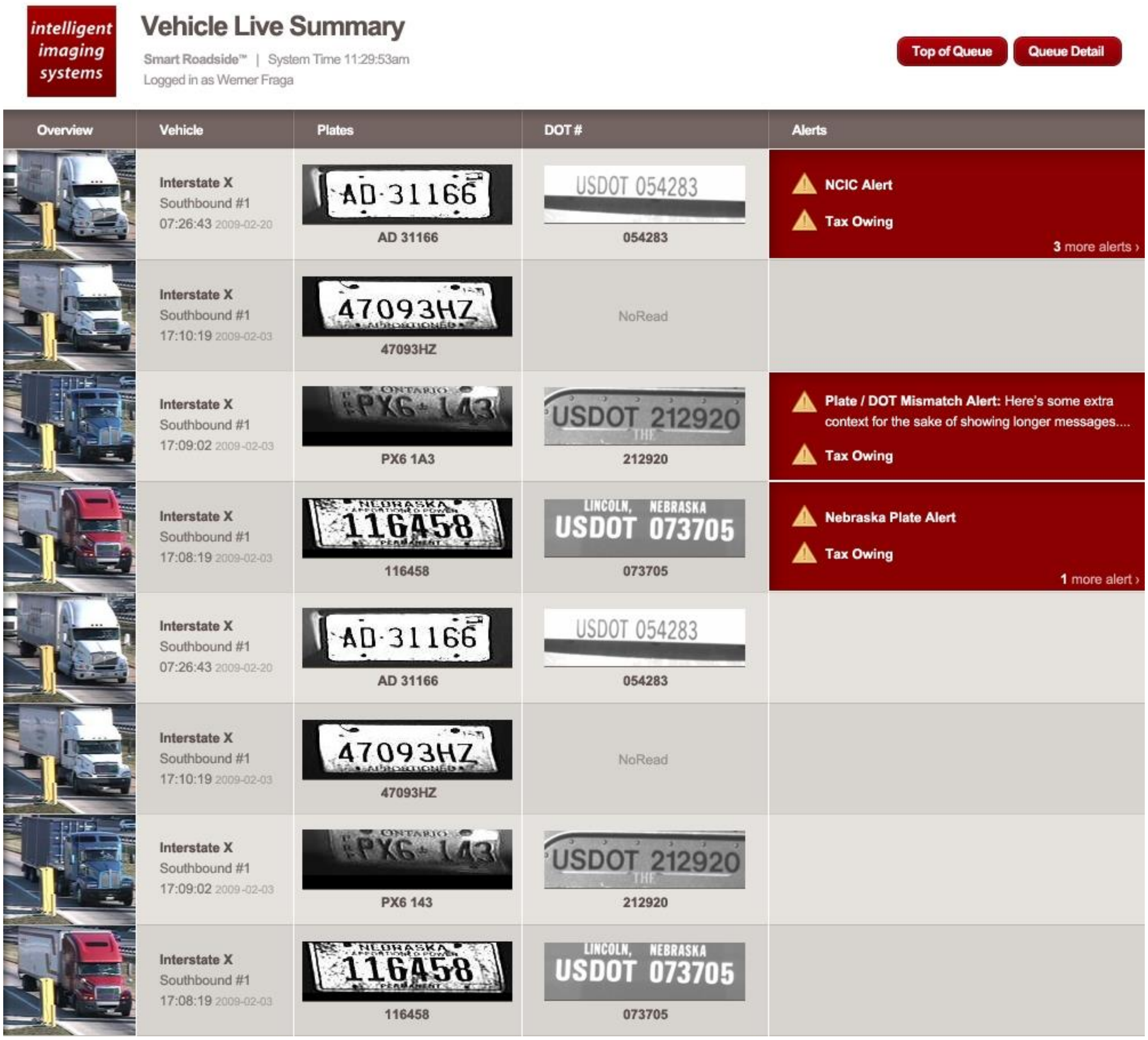
- Provide commercial vehicle drivers with the ability to obtain appropriate credentials as needed either through the use of technological applications or interaction with appropriate staff.

The method for accomplishing these objectives at a reasonable cost will vary by POE. As we consider various scenarios for POE configuration, addressing these objectives will remain paramount. The vast majority of states are actively using some form of mainline screening to evaluate truck traffic that travels the highways within their borders. State agencies in Florida, North Carolina and Washington are examples of agencies currently using screening technology to collect data on all commercial vehicles operating on the mainline.

The most common technology applications in place at these facilities include Weigh-in-Motion (WIM) and Automated Vehicle Identification (AVI). These applications gather data related to both the vehicle and the carrier from a remote clearinghouse. The most common AVI technologies currently being utilized are vehicle transponders or some combination of License Plate Readers (LPR) and/or USDOT Readers. Signalization and changeable message signs (CMS) are used to inform drivers to either remain on mainline or to enter the truck enforcement facility at an exit ramp. When truck demand into the facility requires the operation of two or more internal lanes, an integrated ramp sort is used to manage queue lengths by directing vehicles to the appropriate lane.

If a truck has been directed to enter the POE and proceed to a booth or static scale, the data collected by the AVI is integrated with WIM and static scale data. Integrated information is typically presented using color coding to help users easily identify violations or other areas of concern. An effective user interface allows the staff member on duty to quickly review the information and determine if there is a need for any additional action to be taken. Figure 3.3 illustrates one state's user interface for its roadside enforcement system.

Figure 3.3 Sample Roadside Enforcement Interface



An auto-calibration system is typically employed to ensure the accuracy of the mainline WIM. The auto-calibration system compares readings from the static scales to those taken by the WIM and calibrates as necessary. A high degree of WIM accuracy reduces unneeded wear and tear on facility infrastructure while allowing staff to focus their efforts on vehicles most likely to require intervention.

Vehicles determined to be in need of a CVSA inspection by on-site law enforcement personnel are directed to a designated inspection area within the facility. High volume locations have enclosed or covered inspection facilities containing pits to allow the inspection of all vehicles, including low-boy trailers and car haulers. Sites without enclosed inspection facilities have a hard and level parking area where inspections are performed.

Carrier permits and credentials are typically obtained prior to the beginning of a trip. Credentials are obtained through an online issuance system , a permit service agency, or verbal interaction with the credential issuing agency over the phone or in person. This practice allows on-site personnel to focus solely on enforcement functions. Credential and safety information is provided to the roadside screening system via a state data repositories that integrate data from in-state credentialing systems as well as out of state credentialing systems, and Federal safety systems (e.g., SAFER).

Data Collection and Integration

With the proper technology port sites can be a major source of commercial vehicle data that can be used to enhance functions throughout the Department. Data that typically can be collected electronically at port sites include:

- Truck Counts and Classification
- Truck Sizes and Weights
- Carrier Credential Data
- Carrier Safety Data
- Driver Safety Data
- Vehicle Safety Data

The truck count and classification data can be used to support traffic modeling functions. Much of the other data can provide interesting insights into the movement of freight into or out of a state. With the right data collection approach a state could identify whole truck trips and gain a better understanding of its commercial vehicle traffic flows including potential estimates of intrastate versus interstate traffic volumes. Collected data can also be used by decision makers in many areas including allocation of improvement funds, program investment, staffing needs, and mobile enforcement strategy.

The information from the electronic screening system can also be used by enforcement agencies to set their staffing schedules and ensure that sufficient resources are on-duty during peak travel times. The State of Mississippi recently conducted an analysis of its roadside screening data and found a noticeable increase in over-weight vehicles passing by its fixed facilities after they closed. This information prompted the state to modify its hours of operations at its fixed sites.

Because this data comes from various technology applications and other sources, it is important that there is a method for consolidating the data into a user-friendly format for field use as well as desk side analysis. This is especially crucial at the port facilities themselves where the information collected by on-site technology is a critical component of the vehicle and driver screening process. As such, the information should be integrated into a single interface that allows for quick processing by port staff. If staff assigned to process incoming vehicles are forced to search for collected data in multiple locations the efficiency gains provided by employing a piece of technology could be greatly reduced.

3.4 Future Trends in Commercial Vehicle Enforcement

Technological applications are becoming more frequently used as a tool to enhance commercial vehicle enforcement efforts. For many years the process for screening and interacting with commercial vehicles was a manual one that relied on officer judgment and experience. Many enforcement functions are now being supplemented or replaced altogether by advanced technology.

The most commonly deployed "future" trend in roadside enforcement is the virtual compliance station (VCS), also commonly referred to as a virtual weigh station (VWS). A VCS is an enforcement facility that does not require continuous staffing and is monitored from another location.[1] VCS technology typically is deployed in order to:

- **Increase compliance** with federal and state size and weight standards through augmented enforcement operations (e.g., screening commercial vehicles; persistent enforcement operations on known bypass routes around fixed facilities; persistent enforcement operations on routes that are not regularly patrolled by mobile enforcement assets due to remoteness/geography/topography);
- **Improve the efficiency and effectiveness** of roadside enforcement assets by targeting their activities at commercial vehicles that are known to be overweight, are improperly credentialed, or are operated by high-risk motor carriers;
- **Expand the geographic scope of enforcement operations** into urban areas and/or roadside environments that do not have sufficient physical space to build a fixed inspection station or support manned enforcement operations;
- **Improve resource allocation and staffing decisions** through the analysis of data (e.g., days/times when most non-compliant vehicles are detected) captured by the VCS; and
- **Reduce costs** associated with the expansion of commercial vehicle size and weight/safety enforcement programs.

At a minimum, a VCS/VWS deployment must support the following functionality:

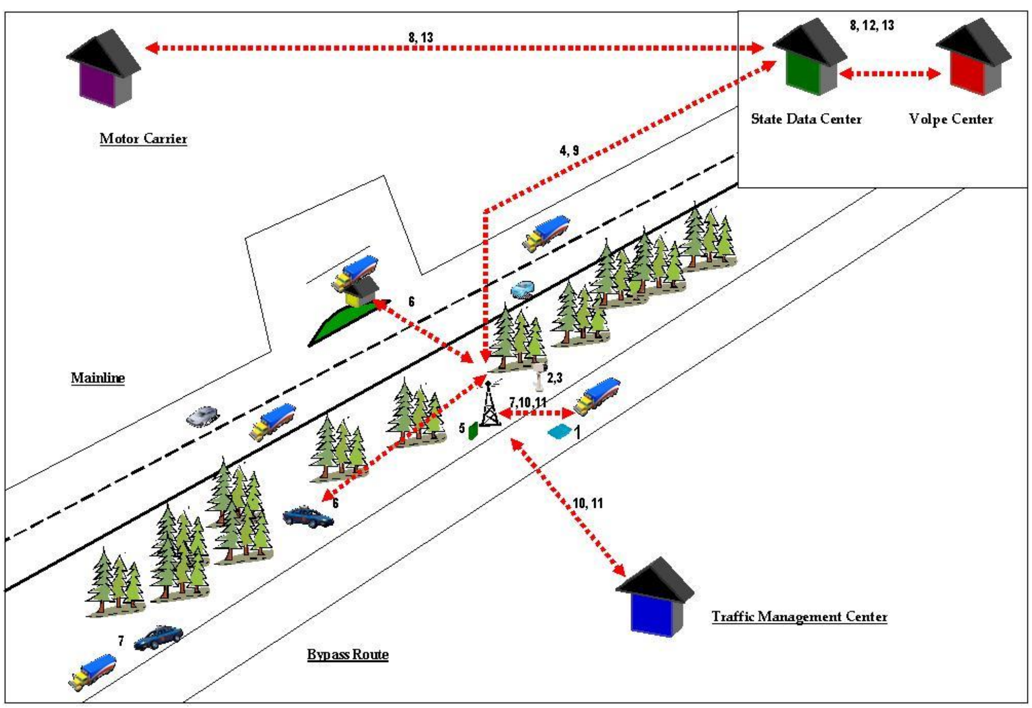
- **Real-time weighing of a commercial vehicle**—Determine a commercial vehicle's approximate axle weights as the vehicle moves across a weigh-in-motion (WIM) scale, and calculate the gross vehicle weight and classification based on the number of axles, as well as axle weights and spacings;
- **Real-time identification of a commercial vehicle**—Identify accurately all commercial vehicles that pass the site;

1 Technology Deployment Challenges and Guidelines on the Use of Weigh-in-Motion in Roadside Enforcement, submitted by Cambridge Systematics to the Federal Highway Administration, April 2009, as part of the Truck Size and Weight Enforcement Technology Project, page 12.

- **Integration of real-time data for screening decisions**—Integrate commercial vehicle identification and weight data in real-time/near real-time, in order to support manual (i.e., decisions made by roadside enforcement personnel) or automated (i.e., decisions calculated by the system and then forwarded to a human) targeting of specific commercial vehicles for further enforcement action; and
- **Communication of data to enforcement personnel in real-time**—Communicate VCS/VWS data (e.g., vehicle photo, weight data) to authorized users (e.g., mobile enforcement personnel stationed downstream from the VWS, enforcement personnel stationed at a fixed inspection site that could be dispatched to intercept an overweight vehicle) in a timely and secure manner[2].

Figure 3.4 illustrates a typical VCS/VWS deployment on a route that allows a commercial vehicle to avoid a fixed inspection site. In this deployment, commercial vehicles are identified via a license plate reader (LPR) camera, a United States Department of Transportation (USDOT) number reader (USDOT-R) camera, and optical character recognition (OCR) software. In this scenario, vehicles that are targeted for inspection are flagged for enforcement personnel positioned downstream from the VCS/VWS site where a roadside enforcement inspection can be conducted safely.

Figure 3.4 Typical VCS/VWS Deployment Scenario



2 Concept of Operations for Virtual Weigh Stations, submitted by Cambridge Systematics to the Federal Highway Administration, June 2009, as part of the Truck Size and Weight Enforcement Technology Project, page 4-2.

Other key trends in this area include:

- **Move Toward Alternative Identification Technologies:** States have long struggled with accurately identifying a sufficient number of commercial vehicles on the mainline as part of their electronic screening programs. Traditional screening programs that rely on in-cab transponders have required carriers to pro-actively enroll in state screening programs. Other non-voluntary programs have relied on camera-based systems using optical character recognition to capture pictures of a commercial vehicle's license plate and USDOT numbers to support the screening process. While all vehicles were candidates for screening (i.e., no prior enrollment was required), these camera-based systems often had difficulty accurately identifying license plates or USDOT numbers at mainline speeds due to environmental factors (e.g., speed, weather, dirt, shadows). To address these short-comings, some states are piloting a smartphone based screening system that allows commercial trucks to bypass inspection stations using a driver's smartphone. The system uses GPS technology to determine when a carrier is approaching an inspection station (e.g., geofence around an inspection site), and then connects to the state's inspection program software to determine whether the carrier can bypass the inspection station. The software function is similar to that of a transponder, without requiring additional hardware to be installed in the vehicle.
- **Better Linking Internal Station Operations to Mainline Screening Decisions:** Mainline e-screening decisions often are not fully integrated into internal station operations and secondary (e.g., ramp, human) screening decisions. As such, a vehicle targeted for inspection due to safety or credential considerations on the mainline often are directed back on to the mainline if they are not overweight because the secondary screening decision is based solely on weight. To address this problem, states are working to better link the mainline screening decision to subsequent screening decisions to ensure that vehicles that have been targeted for inspection are inspected or at least directed to an enforcement officer for visual review.
- **Developing Alternative Inspection Technologies:** The physical capacity of the inspection facilities and the number of safety inspections that can be conducted by an inspector in an hour are two key factors limiting the safety benefits of the e-screening program. FMCSA has been developing a Wireless Roadside Inspection (WRI) concept to help address these capacity-related issues. The WRI concept enables "public sector entities (people and systems) [to] examine the condition of [a] vehicle and driver by assessing data collected by on-board systems ." By enabling wireless inspections on a portion of the trucks passing an inspection facility, the number of trucks required to pull-into the station would decrease, which would free-up station/inspector capacity, and thereby increase the number of targeted vehicles that could be inspected.
- **Use Roadside Data Collection to Support Alternative Enforcement Strategies:** E-screening information can be used to support additional enforcement measures already in place, such as the issuance of compliance reviews or warning letters. Often, the e-screening system will target a vehicle for inspection, but physical limitations at an inspection site mean that the vehicle does not get inspected at that time. However, this does not necessarily mean that no enforcement action can be taken. By identifying which carriers routinely receive red lights

from the e-screening system for operating overweight, or for being non-compliant with safety (e.g., out of service orders) or credentials regulations (e.g., operating without a valid registration), the e-screening data can support the targeting of a carrier for subsequent enforcement activities. This can work in conjunction with or supplement the current system that targets carriers for warning letters or compliance inspections.

- **Deploy Virtual Weigh Stations:** Many states, including Arizona, are also moving towards reducing or eliminating the permit and credential issuance functions currently in place at port of entry facilities. Changes to permit issuance systems will allow for drivers to obtain permits and other credentials online and in a timely manner, eliminating the need for port facilities to maintain staff to issue these credentials on-site.

The benefit to the agency that will be provided by these technological advancements will be a reduction in port facility costs along with increased port operations efficiency. By reducing the number of vehicles unnecessarily entering a port facility, the required amount of staff and space to operate a facility are reduced which will result in a corresponding reduction of operations and maintenance costs. The motor carrier industry will benefit from this technology through a reduction in fuel and operating costs, as a result of fewer delays and faster port transitions resulting from improvements to mainline screening.

4.0 Port Concepts of Operations

After current conditions were collected for each of Arizona's domestic ports of entry, the ports were evaluated to determine their future needs in terms of infrastructure, technology, staffing, and operations. The focus of this evaluation was identifying areas to increase port efficiency and effectiveness through appropriate use of technology and other investments. Some ports were identified as candidates for virtual or remote enforcement, yet at all ports, even those continuing to operate as a staffed facility, use of technology is a key factor in the evaluation process.

Ports were evaluated individually and then grouped into "clusters" based on shared characteristics and needs. "Concept of Operations" (ConOps) scenarios were then developed to meet the needs of Arizona ports while being reflective of the "ideal" operations described earlier. Three basic ConOps were identified with variations within some ConOps to allow proper scaling of features based on mainline traffic volumes. A quantitative approach was used to assign each port to the appropriate scenario. These steps are detailed in Section 5. The summary results of the assignment process are:

- Seven facilities defined as a "Staffed Port of Entry" facility;
- Seven facilities defined as a "Virtual Supported Port of Entry" facility; and
- Seven facilities defined as a "Virtual Unsupported Port of Entry" facility.[1]

Figures 4.1 through 4.3 outline the functionality of the three ConOps. The ConOps are described, in detail, in the following sub-sections. The fact that the same number of facilities were eventually assigned to each ConOps is purely coincidental to the analysis process.

1 St. George Outbound was not included in the assignment process as it is owned and operated by UDOT.

Figure 4.1 Staffed Port of Entry Facility

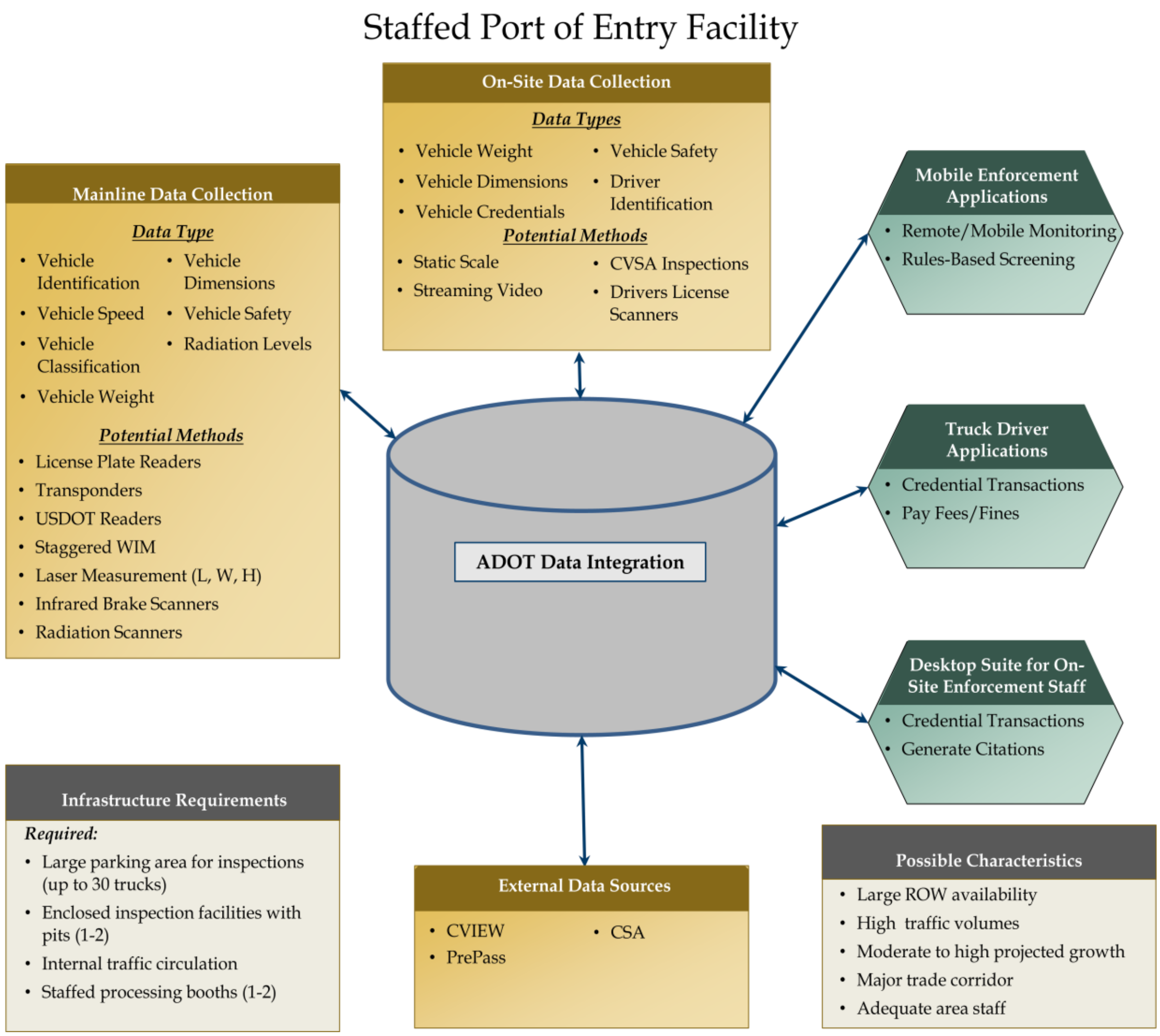


Figure 4.2 Virtual Supported Port of Entry Facility

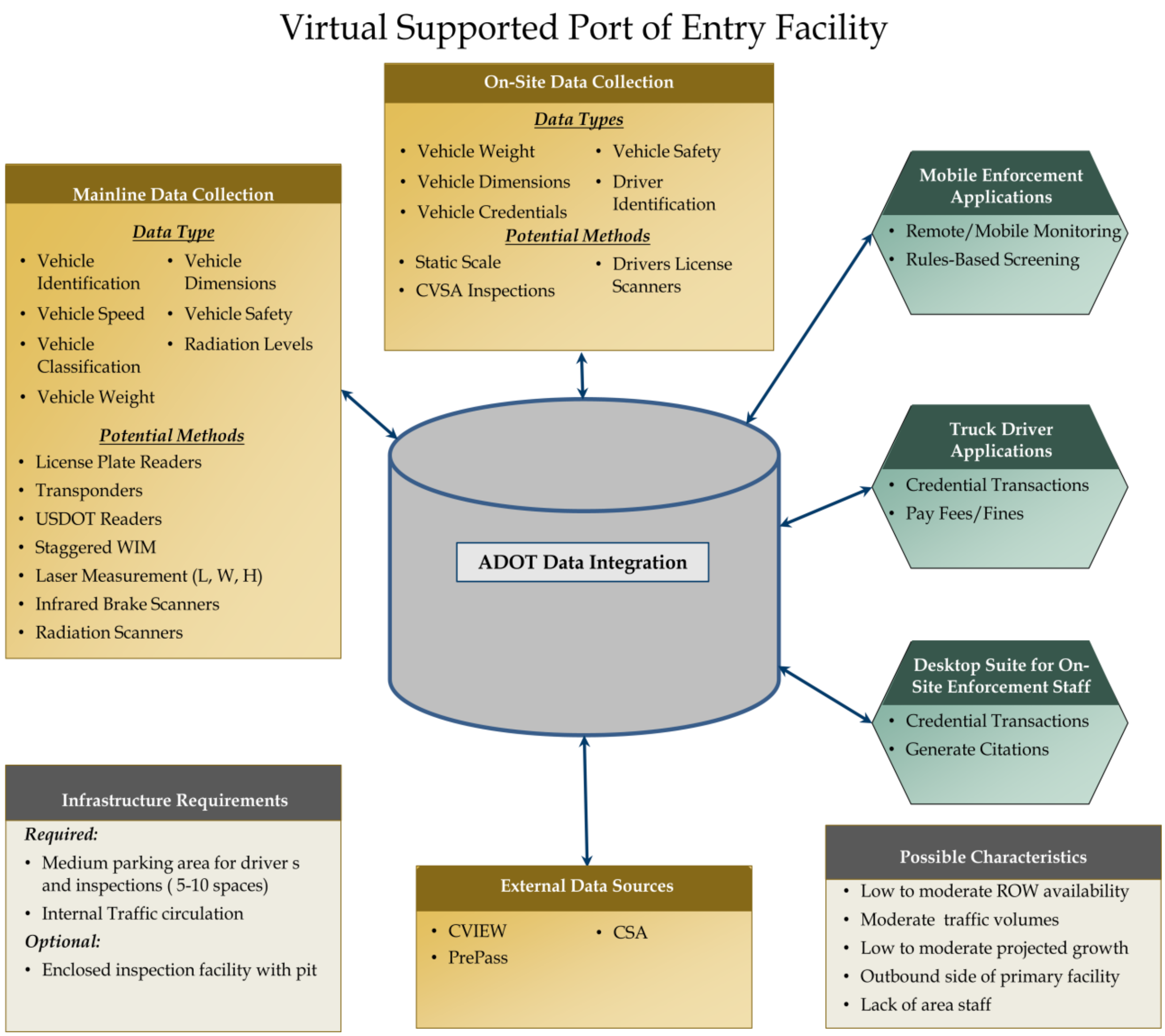
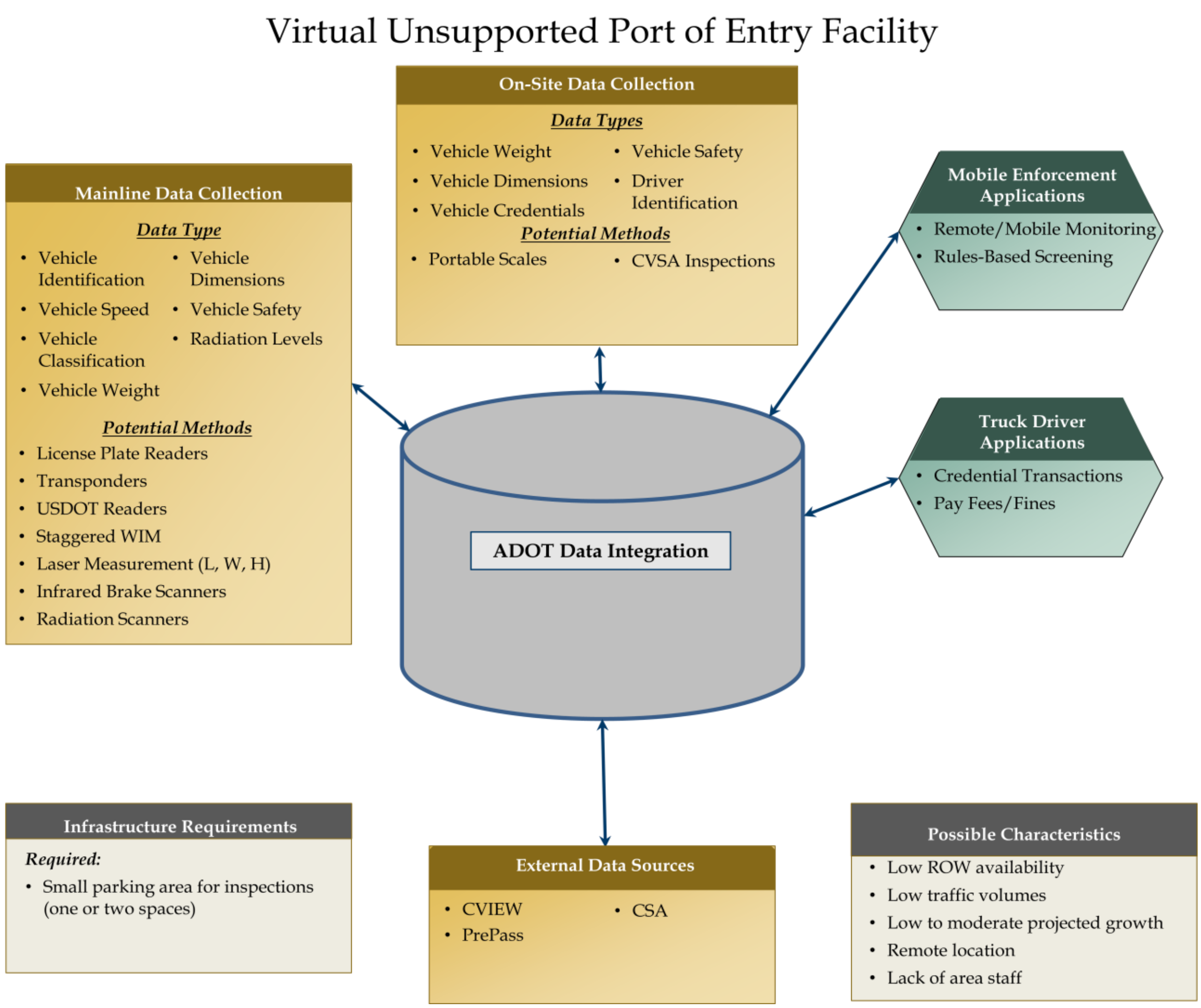


Figure 4.3 Virtual Unsupported Port of Entry Facility



4.1 Staffed Port of Entry Facility

This port facility type is designed for sites with moderate to high traffic volumes that are located on the inbound side of major trade corridors or Interstate routes, and have high projected growth in traffic volume. Port facilities assigned to this group have projected mainline daily traffic volumes of approximately 1,500 to 15,000 trucks. This ConOps features:

- Mainline screening;
- Ramp sorting;
- Processing booths;
- Multi-platform static scales;
- An administration building;
- An enclosed inspection facility with inspection pits; and
- Internet connectivity for a driver's devices.

This facility type leverages the latest technology to support a complete on-site port staff. Mainline screening collects data about the vehicle and determines whether or not it should be pulled into the site for additional screening. Screening allows staff to focus their efforts on those vehicles with inadequate credentials or safety records. Information collected through electronic screening is combined with other relevant data sources and integrated into a single user interface to assist on-site staff with the various steps of vehicle processing. Enforcement personnel are able to access facility data streams through a similar interface to support enforcement efforts.

The facility has a covered or enclosed inspection facility with pits capable of accommodating vehicles of all types, including oversize vehicles, lowboy trailers, and car haulers. The facility has the ability to circulate traffic internally to safely allow vehicle reweighing as needed. Approximately 30 commercial vehicles should be able to park at the facility given the space available. To assist carriers with the process of acquiring credentials, and performing other online transactions, there is a wireless internet connection and a set of interactive kiosks available. This functionality provides drivers the option to complete basic transactions without requiring a staff member, freeing port staff to focus on other tasks.

This port facility type functions efficiently at sites that are located within or near a municipality with a population sufficient enough to provide adequate staffing resources. Ideal sites either have an existing footprint large enough to support a full facility and related physical and technological infrastructure, or the room to expand to accommodate these items.

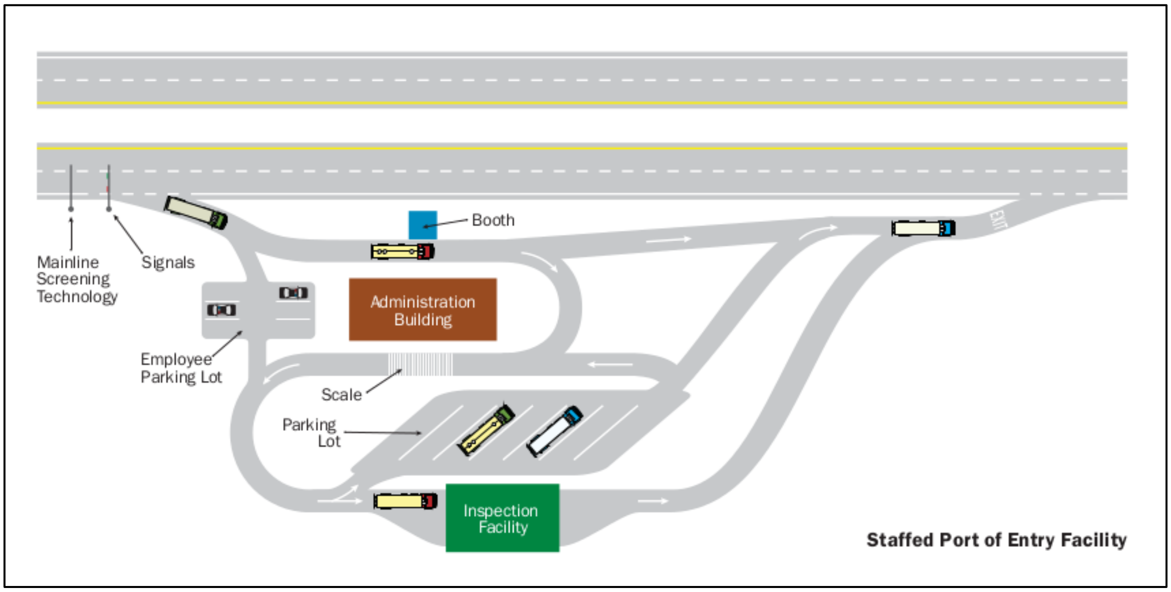
While it is recommended that all staffed facilities sites adopt this concept of operations, the size and characteristics of an individual facility will be scaled based on their projected truck traffic volumes. We have identified two tiers for this facility type, outlined in Table 4.1.

Table 4.1 Staffed Port of Entry Facility Characteristics

Facility Tier	Traffic Volume Range	Traffic Processing Speed	Recommended Booths/Static Scales	Recommended Inspection Bays	Recommended Inspection Pits
1.A	7,680 - 15,360	120 vehicles per hour	2	2	1-2
1.B	Up to 7,680	120 vehicles per hour	1	2	1

Figure 4.4 is a graphical depiction of a sample Staffed Port of Entry Facility. The graphical depiction is not representative of the actual proposed site layout. It is intended to provide a basic understanding of the features associated with the ConOps Scenario and how they are utilized by enforcement personnel. Actual site layouts and traffic flow will vary depending on the site location, geometry, and needs of the facility.

Figure 4.4 Staffed Port of Entry Facility



Commercial vehicle traffic on the mainline is screened with vehicles selected to pull into the facility being notified via electronic signal. Once inside the facility, vehicles are sorted based on queue length into the appropriate processing lane. Vehicles interact with ADOT staff at the processing booth where their credentials are examined and they are instructed as to what to do next. If the vehicle has the proper credentials, was not flagged as being overweight, and is not selected for inspection, the vehicle will be directed to return to the mainline.

If the vehicle is missing required credentials, the driver is directed to park and proceed to the administration building to obtain the appropriate credentials. If the vehicle was flagged as overweight by the mainline weigh-in-motion technology the driver will be directed to the static scales in the facility for further evaluation. If the vehicle is selected by an on-site enforcement officer to be inspected than the vehicle is directed to either the enclosed inspection facilities with pits or to the parking lot, depending on the type of inspection being performed.

4.2 Virtual Supported Port of Entry Facility

This port facility type is designed for sites that are located on the outbound side of major trade corridors or Interstate routes, where a staffed facility is in place on the inbound side, and for sites located on major non-interstate routes that have moderate commercial vehicle volumes and low to moderate projected growth. Inbound port facilities assigned to this group are projected to have daily mainline traffic volumes of less than 1,500 trucks daily. Outbound facilities that are co-located with an inbound staffed facility are projected to have daily mainline traffic volumes similar those on the inbound side. This ConOps features:

- Mainline screening;
- Secondary sorting;
- Virtual processing booths;
- Multi-platform static scale;
- Kiosks for purchasing credentials; and
- Internet connectivity for a driver's own devices.

This site type is supported remotely by ADOT administrative staff through the use of virtual processing booths. Virtual processing booths are comprised of interactive kiosks that allow for two-way communication between commercial vehicle drivers and off-site ADOT staff, or enforcement personnel. Features of the booths include a high definition display and camera, interactive touch screen, speakers, microphone, barcode scanner, credit card swipe, and weather-resistant infrastructure designed to handle outdoor conditions including rain, snow, heat, and cold. The drivers will use the high definition camera or bar code scanner to transmit credentials to the off-site ADOT staff for verification. Drivers can use the interactive touch screen and credit card swipe to request new credentials, which will be processed in real-time by the off-site staff. ADOT staff and drivers will communicate using the high definition display screen, speakers, and microphone.

Though this technology is not yet commonly employed in port facilities, some jurisdictions have begun to use similar virtual systems, and interactive kiosk technology is being increasingly used to automate various interactions in the industry. In December of 2011 the United States Customs and Border Patrol proposed the use of similar kiosk technology to operate an unmanned border crossing at Big Bend National Park in Texas. The Utah Department of Transportation also utilizes a similar approach to operate outbound port of entry facilities where outbound facilities are managed from a corresponding fully staffed inbound facility located across the highway. Staff on the inbound side of the POE manage port traffic, weigh vehicles, and verify and issue credentials at the outbound port using a combination of cameras, microphones, and speakers. The state of Florida is also in the process of implementing an unmanned weigh station facility.

Similar to the fully staffed facility type, this facility utilizes mainline screening to determine which vehicles are directed into the facility and which are allowed to bypass. Information collected through electronic screening is combined with other relevant data sources and integrated into a single user interface for remote staff. As with the staffed facility type, enforcement personnel are able to access facility data streams through a similar interface to support enforcement efforts.

An administration building is not needed as on-site administrative staff are not required to support this facility type. The virtual booths allow for commercial vehicle operators to interact with staff located anywhere within the state. The virtual processing booths could be supported by staff located in Phoenix, by staff located at another port of entry elsewhere in the state, or by mobile enforcement personnel through their laptops. On-site enforcement support is required at the site for weight enforcement and the performance of vehicle and driver safety inspections.

This site type has parking available to accommodate 5 to 10 commercial vehicles and a static scale. The site has the ability to circulate traffic internally to safely allow vehicles to be reweighed if needed. Drivers are able to acquire credentials and perform other related online transactions through interaction with ADOT personnel via virtual processing booths, the use of on-site interactive kiosks, or through their personal devices using a wireless connection at the facility.

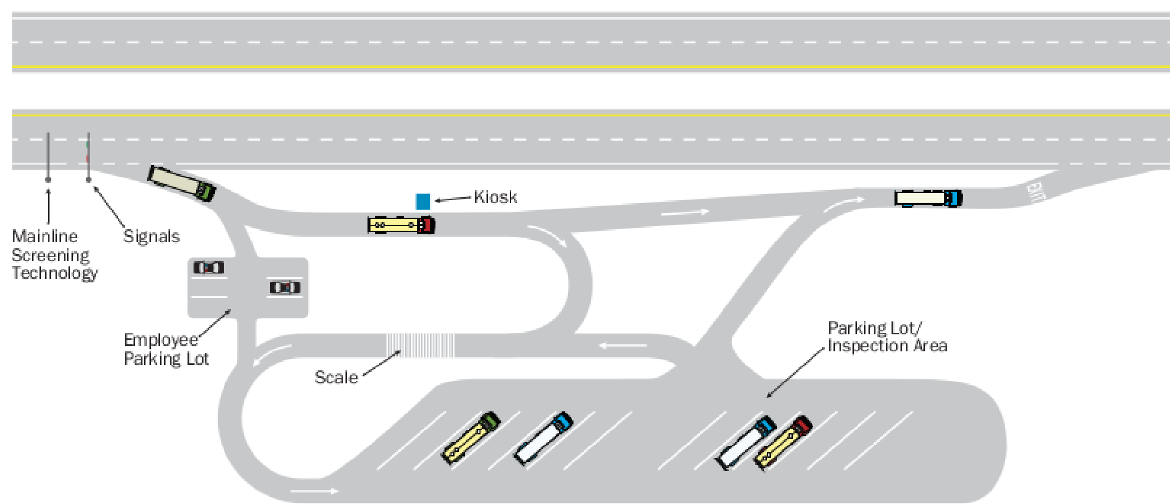
The lack of need for an administration building or permanent inspection facilities allows for this ConOps to be used at site locations lacking a significant footprint or those without room to expand to accommodate a full facility. Additionally, the lack of required on-site administrative staff allows for this facility type to be used in more remote locations. Table 4.2 outlines the characteristics of this facility type.

Table 4.2 Virtual Supported Port of Entry Facility Characteristics

Facility Tier	Traffic Volume Range	Traffic Processing Speed	Recommended Booths/Static Scales
2	770 to 3,840	12 – 60 vehicles per hour	1 – Mutli-platform static scale

Figure 4.5 is a graphical depiction of a sample Virtual Supported Port of Entry Facility. The graphical depiction is not representative of the actual proposed site layout. It is intended to provide a basic understanding of the features associated with the ConOps Scenario and how they are utilized by enforcement personnel. Actual site layouts and traffic flow will vary depending on the site location, geometry, and needs of the facility.

Figure 4.5 Virtual Supported Port of Entry Facility



Virtual Supported Port of Entry Facility

Similarly to the staffed port facility, commercial vehicle traffic on the mainline is screened and vehicles selected to pull into the facility are notified via electronic signal. Vehicles entering the facility are directed to a virtual processing booth through which they communicate with ADOT staff and receive direction on how to proceed through the facility. If the vehicle has the proper credentials, was not flagged as being overweight, and is not selected for inspection, the vehicle will be directed to return to the mainline.

If the vehicle is found to be in need of credentials then the driver can obtain the appropriate credentials through the virtual processing booth. If traffic volume is high enough to generate a queue at the facility then the driver will be directed to park the vehicle and obtain appropriate credentials from either an on-site interactive kiosks or from their own device using the wireless internet connection provided at the facility. Vehicles found to be in violation of their axle or gross weights by mainline weigh-in-motion technology are directed to the static scale in the facility for further evaluation by on-site enforcement personnel.

A vehicle can also be directed to park by on-site enforcement personnel monitoring facility data streams from their laptops and visually examining the vehicles entering the site. Vehicles selected by enforcement for inspection are directed to the parking area for further evaluation.

4.3 Virtual Unsupported Port of Entry Facility

This port facility type is designed for sites with low mainline traffic volumes, low projected growth, and are located in remote locations, or on non-interstate highways. Port facilities assigned to this group have projected mainline daily traffic volumes of less than 300 trucks per day. This ConOps features:

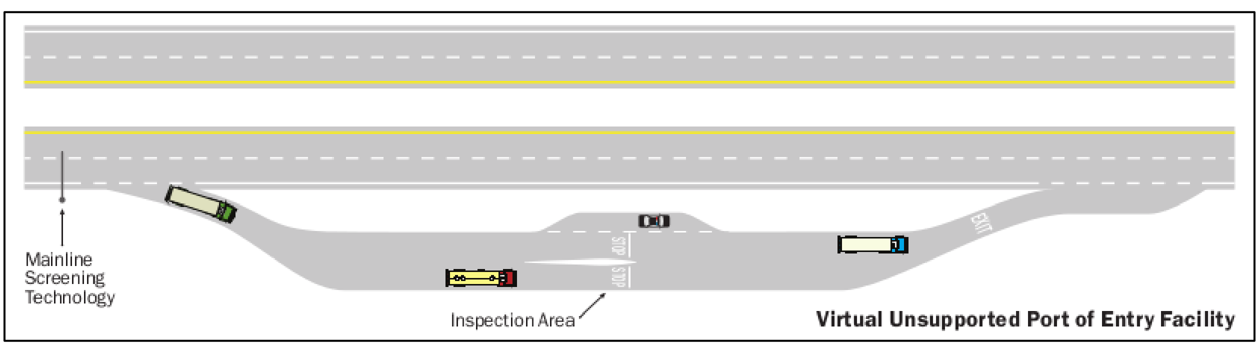
- Mainline screening technology;
- Small pull off or parking area with room for 1 or 2 commercial vehicles; and
- Internet connectivity for a driver's devices.

This ConOps focuses primarily on data collection and, as a result, does not require any facility infrastructure. The facilities of this type are supported as needed by mobile enforcement equipped with portable scales. The level of enforcement support is determined by Departmental decisions based on data streams provided by the mainline screening technology. In order to allow carriers to acquire credentials and perform other online transactions there would be a wireless internet connection available at the site.

The lack of required staffing and infrastructure for this ConOps makes it ideal for those sites located in very remote locations and those sites that have minimal traffic volume. Mainline data collection allows for flexible deployment of enforcement resources to promote greater efficiency.

Figure 4.6 is a graphical depiction of a Virtual Unsupported Port of Entry Facility. The graphical depiction is not representative of the actual proposed site layout. It is intended to provide a basic understanding of the features associated with the ConOps Scenario and how they are utilized by enforcement personnel. Actual site layouts and traffic flow will vary depending on the site location, geometry, and needs of the facility.

Figure 4.6 Virtual Unsupported Port of Entry Facility



This facility type is not constantly open, but is always collecting data on the mainline. This facility functions primarily as a data collection site and is supported by mobile enforcement personnel as needed. This site type does not require a static scale as officers performing enforcement operations at this facility type will use portable scales to weigh vehicles as needed. This ConOps does not require any onsite ADOT administrative staff.

When present at the site, mobile enforcement officers can monitor the facility data streams on their laptops but must manually direct vehicles they wish to examine into the site. The site features only a parking area large enough to accommodate 1-2 commercial vehicles and a couple patrol cars. The physical facility is just large enough to "keep carriers honest" while the automated data collection provides information to management to assist with the scheduling of roaming enforcement staff. The flexibility of this approach allows the Department to assign levels of staffing that keep the per-vehicle maintenance and operating costs in line with the larger sites

5.0 Port Evaluation Criteria and ConOps Assignment

The ConOps from the previous section were developed to provide the Department with the ability to match a port's infrastructure, technology, and operations to the characteristics and needs. These three scenarios serve as the baseline models for developing the future vision of each port, and, when needed, each can be adapted to meet a site's individual characteristics. This approach allows for both a streamlined, simplified plan for future investment, while still allowing the Department the flexibility needed to serve the needs of sites with a wide variety of characteristics.

The subsequent challenge is to assign each site to the appropriate ConOps. Traffic volumes are a primary driver in determining which ConOps scenario fits a particular site, but other Departmental goals should also be considered when assigning a ConOps scenario. Additional considerations which emerged from a discussion between CS team members and the project's Technical Advisory Committee included:

- A primary credentialing and enforcement focus on traffic inbound to Arizona;
- Constrained facility size and/or prohibitive land acquisition costs; and
- Using technology to minimize the need for infrastructure and staffing investments.

The ConOps scenarios were designed to fulfill the needs and functions of the Arizona POE system while allowing the Department the flexibility to address these and other considerations. The features of each ConOps, summarized in Table 5.1, differ in terms of technology, infrastructure, and staffing, yet they have in common the ability to provide the department with a method for identifying vehicles using the Arizona highway system, and collecting and providing data that can be used to trigger or support enforcement actions.

Table 5.1 ConOps Feature Comparison

Features	Fully Staffed Facility	Virtual Supported Facility	Virtual Unsupported Facility
Mainline Vehicle Screening	Yes	Yes	Yes
Secondary Screening/Sorting	Yes	Yes	No
Static Scale	Yes	Yes	No
On-Site Support Staff	Yes	No	No
On-Site Enforcement Staff	Yes	Yes	Optional
Virtual Processing Booths	No	Yes	No
Administration Building	Yes	No	No
Inspection Facilities	Yes	No	No

Features	Fully Staffed Facility	Virtual Supported Facility	Virtual Unsupported Facility
Internal Return Loop	Yes	Yes	No

In addition to providing for flexible implementation at the POEs, the ConOps scenarios are designed in such a way that sites can easily transition from one ConOps to another as demand or funding requires, or be built as hybrid facilities should the Department need to possess a certain functionality at a location to meet specific needs. For example, the Department may decide that a virtual supported facility processes a high enough volume of vehicles to warrant investing in inspection facilities, or a virtual unsupported facility is staffed often enough to warrant the installation of a static scale. For the port location at Teec Nos Pos, which is currently operating as satellite Motor Vehicle Division (MVD) office, ADOT may elect to maintain the existing administrative building in order to preserve this functionality at those locations.

All sites will have the mainline vehicle screening and data collection architecture that is paramount in operating a virtual unsupported site. Although it is recommended that all staffed or supported facilities be operated 24/7, the infrastructure can allow for a site to be operated as an unsupported site in the off hours if it is not operated as a 24-hour facility. Staffed facilities built with virtual booths can be operated occasionally as virtual supported facilities. Additionally, by varying the level of enforcement staff assigned to both staffed and virtual facilities, the level of enforcement activity can be adjusted, allowing the operations to vary based on seasonal or other characteristics.

5.1 Characteristics for Differentiating Ports

Traffic Volumes

Estimates of current truck traffic volumes and forecasts of future truck traffic volumes were created as part of Task 2 and 3 of this study, and are outlined in Appendix B of this report. These estimates are used to initially assign ports to "clusters", which will be used in Section 5.3 as a primary factor in associating each port with a ConOps scenario.

The largest ports in the Arizona POE system have up to 100 times the volume of truck traffic at the smallest ports. The smallest ports on interstate routes have 4-5 times the volume of the largest non-interstate ports. These differences in truck traffic are projected, based on ADOT and FHWA data sources, to remain or increase over the next 20 years. The bulk of truck traffic and truck traffic growth are concentrated on the key routes of I-10 and I-40 through, which carry two-thirds of all traffic volumes through Arizona ports.

Directionality

Arizona's port of entry system currently functions primarily to serve traffic inbound to the state with fewer resources devoted to outbound facilities. Outbound facilities, however, represent an opportunity to increase screening, data collection, revenue collection, enforcement activities, and also represent partnership opportunities with neighboring states. Resources devoted to Arizona outbound ports can be utilized most effectively when it is combined with or works in collaboration with the inbound port for a neighboring state.

Expansion Potential

Arizona's ports sit on land of varying sizes which are not always consistent with capacity needs. Some ports have room to expand within existing facilities or adjacent state-owned land. Others are surrounded by topographical constraints (rivers, elevation), infrastructure (highway ramps or bridges), sites of local, state, or national significance such as parks or reserves, or sit among privately developed land. These constraints will impact the potential for growth or development of a port. In some cases, there is no available land to build or expand a port.

Existing Infrastructure

As detailed in previous working papers, Arizona's ports have a range of different facilities and infrastructure. Some ports currently have multiple check lanes, static and WIM scales, and mainline screening technology, while others operate with very little technology. The existing infrastructure influences both the needs at the existing site and the potential development at future port facilities. For some technologies, in particular mainline screening technology, recommended implementation will be similar across all of the ports while other pieces of infrastructure or technology recommended will vary among the ports. In some cases, ports will be able to meet the recommended standards with minimal investment, while in others non-existent or outdated port facilities will need greater investment.

5.2 ConOps Scenario Capacity Calculations and Assumptions

Each ConOps scenario described above is associated with a certain capacity for handling truck traffic and inspections. For example, the lowest tier of staffed facility, 1.B, has one booth and static scale lane. The facility has two inspection facilities, and one facility has an inspection pit.

The assumptions made in capacity calculations are as follows:

Table 5.2 Assumptions Used in Capacity Calculations

Infrastructure	Vehicle capacity per hour
Credentialing lane with multi-platform static scale	120
Virtual booth with multi-platform static scale	12 - 60
Inspection booth or pit	1

Source: ADOT staff interviews and BGM Consulting

Additional assumptions include:

- Staffed facilities are operated 24/7 or operated as a virtual facility during non-peak hours;
- Traffic is generally clustered around a 16 hour period daily[1]; and
- An inspection rate target of one percent of mainline vehicles[2].

For example, facility type 1.B has one staffed credentialing lane and can process 120 vehicles per hour, or up to 1,920 vehicles within the facility per day. With electronic screening procedures set to bypass 75 percent of vehicles on the mainline, 25 percent of trucks are pulled into the port. Thus, facility type 1.B is rated for a maximum of 7,680 daily trucks on the mainline.

Facility type 1.B can handle one inspection, per bay, per hour. At a facility operating 24 hours a day, this means that up to 48 vehicles can receive Level I inspections in the two inspection bays. One inspection bay will also contain a pit, allowing up to 24 inspections using this facility per day. A second pit would not be necessary as the number of Level I inspections that occur on a typical day do not justify the cost of installation. Level II and Level III inspections may also be conducted outside of the inspection bays in the dedicated inspection area or truck parking area.

5.3 Port "Clusters" and Assignment to ConOps Scenarios

Before assigning each port to a ConOps scenario, Arizona's POEs were grouped based on shared needs and characteristics. These characteristics, largely influenced by traffic volume, were used as a starting point to determine appropriate ConOps scenarios, with adjustments made for other qualitative factors. These groups or "clusters" of ports are as follows:

- Cluster 1: Large Ports - These large primary ports serve as key interstate access routes to the State of Arizona. In general, staffed facilities are recommended at inbound locations. Outbound facilities have similarly high traffic levels as inbound facilities. In general, virtual facilities are recommended at outbound locations. Cluster 1 ports currently have the highest levels of infrastructure and some are currently programmed for replacement or improvement. The level of investment required to reach or maintain a certain level of service will vary by facility.
- Cluster 2: Medium Ports - These medium-traffic primary ports are located at interstate or state route locations. A mixture of staffed and virtual facilities are recommended for these ports, based on the individual characteristics of each port, including current infrastructure

1 A 16 hour period is used for this analysis in order to model common traffic patterns, in which trucks do not travel uniformly throughout the day. This approach strikes a balance between minimizing the disruption from peak periods and minimizing the port's capital and operational expenses.

2 This assumption is based on ongoing safety benefits research CS is performing for FMCSA. The final report is expected to be published in September 2013.

and staffing levels and projected traffic growth. Most Cluster 2 ports have not yet been programmed for replacement or improvement.

- Cluster 3: Small Ports - These small ports are located in locations with significantly less traffic than Cluster 1 and 2 ports. Virtual facilities are recommended for all Cluster 3 ports. All small ports will require investment in mainline screening technologies, in addition to targeted investments in mobile or fixed facilities to facilitate enforcement.

In general, staffed facilities are recommended for Cluster 1 ports inbound and virtual facilities are recommended on the outbound side. A mix of staffed and virtual facilities is recommended for Cluster 2 ports. Virtual facilities are recommended for Cluster 3 ports. Table 5.3 summarizes the cluster and ConOps assignments for each POE. For each POE, the infrastructure, technology, and staffing investment needs are summarized. These factors and improvement needs are discussed in more detail in Section 6.0.

Table 5.3 Port Clusters and ConOps Scenarios

Cluster	Port	Direction	Recommended ConOps Scenario	Infrastructure Investments Needed?	Technology Investments Needed?	Type of Staffing (on-site or off-site)	Notes
Cluster 1: Large Ports	Ehrenberg	IB	1.A	Yes	Yes	On-site	
		OB	2	Some	Yes	Both	
Cluster 1: Large Ports	Sanders	IB	1.B	Yes	Yes	On-site	Sanders facility planned to move to the Chambers, AZ location
		OB	2	Some	Yes	Both	
Cluster 1: Large Ports	San Simon	IB	1.B	Yes	Yes	On-site	San Simon facility area is tightly constrained by surrounding highway and rail infrastructure
		OB	2	Some	Yes	Both	
Cluster 2: Medium Ports	St. George	IB	1.B	N/A	N/A	N/A	St. George operates in conjunction with UDOT; Inbound facility located in Utah; Outbound facility operated by UDOT and is not assigned to a ConOps scenario
		OB	N/A	N/A	N/A	N/A	
Cluster 2: Medium Ports	Topock	IB	1.B	Yes	Yes	On-site	
		OB	2	Some	Yes	Both	
Cluster 2: Medium Ports	Yuma I-8	IB	1.B	Yes	Yes	On-site	Yuma I-8 facility is tightly constrained by surrounding highway infrastructure
		OB	2	Some	Yes	Both	
Cluster 2: Medium Ports	Kingman	IB	1.B	Yes	Yes	On-site	No existing Kingman outbound facility
		OB	2	Some	Yes	Both	
Cluster 3: Small Ports	Yuma B-8	IB	2	Some	Yes	Both	Expansion of the Yuma B-8 facility into the surrounding area is difficult; no existing outbound facility
		OB	3	No	Yes	Off-site	

Cluster	Port	Direction	Recommended ConOps Scenario	Infrastructure Investments Needed?	Technology Investments Needed?	Type of Staffing (on-site or off-site)	Notes
Cluster 3: Small Ports	Parker	IB / OB	3	No	Yes	Off-site	Parker operated as a single facility; Expansion difficult
Cluster 3: Small Ports	Fredonia	IB / OB	3	No	Yes	Off-site	Fredonia operated as a single facility
Cluster 3: Small Ports	Page	IB / OB	3	No	Yes	Off-site	Page operated as a single facility; shared use with Motor Vehicle Division (MVD) customer service center with separate MVD staff
Cluster 3: Small Ports	Duncan	IB / OB	3	No	Yes	Off-site	Duncan operated as a single facility
Cluster 3: Small Ports	Teec Nos Pos	IB / OB	3	No	Yes	Off-site	Teec Nos Pos operated as a single facility; shared use with MVD customer service center (POE staff performed MVD duties)
Cluster 3: Small Ports	Springerville	IB / OB	3	No	Yes	Off-site	Springerville operated as a single facility; previously utilized as a MVD customer service center

5.4 Methodological Example

The process undertaken to assign a ConOps scenario to each POE took into account both quantitative and qualitative factors. In this section a methodological example using the Topock POE is presented.

Example: Topock POE Traffic and Expansion Potential

Current mainline average daily truck traffic (ADTT) at Topock is 2,279 vehicles per day inbound and 1,839 vehicles per day outbound. Future traffic levels are projected to reach as high as 4,536 inbound and 3,659 outbound vehicles per day. Topock is an interstate port, and has a significant amount of existing infrastructure, including credentialing lanes and scales, and screening technology (on the inbound side only). Topock has the potential to expand its site on both the inbound and outbound sides.

Example: Topock POE ConOps Assignment

The appropriate ConOps scenario for Topock inbound would be to the smaller of the staffed port facilities: ConOps 1.B. The multi-platform static scale and credentialing lane in this ConOps will be sufficient to handle future traffic growth through 2032. On the outbound side, Topock also fits the traffic volume criteria for the smaller staffed port facility, but due to the Department's focus on inbound credentialing and enforcement, it is recommended to develop the outbound site as a virtual facility: ConOps 2. When operating a high-volume virtual facility, the traffic volumes throughout the station can be metered by adjusting the percentage of traffic brought into the station by the mainline screening. In the future, the outbound station could transition from a virtual to a staffed facility if resources permit.

Example: Topock POE ConOps Implementation Requirements

In order to meet the criteria and functionality of these ConOps scenarios, infrastructure and facility investments will be needed at Topock. The implementation of mainline screening technology should be the first priority, in order to begin to capture data on vehicles as soon as possible, and to support both staffed and virtual sites. Both directions will also require inspection areas and the inbound site will require facility improvements. Determining improvement needs will be discussed in further detail in Section 6.0

To meet a target of inspecting one percent of mainline traffic, Topock will have to conduct a combined 80 inspections per day for the inbound and outbound facilities. With two inspection bays on the inbound side and one on the outbound side, up to 72 Level I inspections could be conducted. Additional Level II and III inspections would be conducted in the other inspection or parking facilities, and higher inspection targets could be met by increasing the number of these types of inspections conducted.

6.0 Investment Needs and Funding Opportunities

In this section we review the approach for identifying which long-term investment needs are required for each port of entry, and build a roster of recommended improvements so that each port meets the minimum operating conditions of the ConOps to which the port has been assigned. We then review the process for prioritizing necessary improvements in a manner which allows for a relatively consistent annual capital investment budget for the 20-year planning horizon. We also highlight potential funding opportunities and sources to support the port of entry program and its investment needs moving forward.

Our recommendations in this report emphasize staffed facilities (ConOps 1.A and 1.B) at inbound locations with high traffic volumes. Facilities with lower traffic volumes or at outbound locations are recommended for virtual enforcement (ConOps 2 and 3). The ability to effectively serve current and estimated future truck traffic in the region is heavily emphasized. Current physical infrastructure and the ability to expand have also been considered.

Recommended ConOps assignments are shown in Table 6.1 below. These take into account traffic volumes and needs of the ports through 2032, allowing the Department to sequence investments over the 20-year time frame. Later in this section we demonstrate how the sequencing might work under the assumption of a less constrained funding and staffing scenario. We realize, however, that the specifics of agency funding and the relative priorities of the POE system against other investments may either accelerate or decelerate the eventual pace compared to the pace shown in our assignment. As a result, our assignments in Section 6.2 are divided into "short" (1-5 year), "medium" (6-10 year) and "long" (11 or more year) time frames.

Table 6.1 2032 Recommended POE ConOps

ConOps 1: Staffed Facility	ConOps 2: Virtual Supported Facility	ConOps 3: Virtual Unsupported Facility
Ehrenberg (IB)	Ehrenberg (OB)	Yuma B-8 (OB)
Sanders/Chambers (IB)	Sanders/Chambers (OB)	Parker
San Simon (IB)	San Simon (OB)	Fredonia
St. George (IB)	Topock (OB)	Page
Topock (IB)	Yuma I-8 (OB)	Duncan
Yuma I-8 (IB)	Kingman (OB)	Teec Nos Pos
Kingman (IB)	Yuma B-8 (IB)	Springerville

Note: ConOps assignments for all ports are flexible and can be altered to reflect Departmental goals and funding availability.

6.1 Methodology for Identifying Investment Needs

The approach used to identify investment needs at each of the ports is as follows:

- Use current and future traffic volumes to assign the specific ***physical infrastructure*** needed for the 20-year planning horizon. Compare these needs to current conditions and build a list of necessary physical improvements. Physical improvements are expected to last for the full planning horizon;
- Consider the ***current technology*** at the facility, and determine which technologies are needed to reach the minimum level of the assigned ConOps scenario. Unlike physical improvements, the technology improvements are only expected to last 7-10 years, and similar capital costs will be needed at intervals to maintain adequacy;
- Finally, given the physical and technology attributes of the site, consider the operating costs required, primarily staffing. Unlike the capital costs, these are ongoing annual costs.

Overview of Investment Needs

The current conditions for each site were inventoried and evaluated as parts of Tasks 1 and 2. These conditions are separated into four types of criteria:

- Physical area, including location, layout, expansion potential, and parking areas;
- Facilities, including administration building, pedestrian access, and inspection areas;
- Technology and infrastructure, including screening technology, signals and communication systems, scales, and other technology features; and
- Staffing and operations, including the ability to perform primary and secondary functions with current staffing levels, inspection rates, and use of electronic screening to improve workflow.

Each of these four criteria is expanded upon and example applications of the evaluation methodology for each are presented in the following subsections.

Physical Infrastructure Needs

Physical area and facilities conditions are considered together in this section as "Physical Infrastructure". Each ConOps scenario has its own needs in terms of the physical infrastructure required with staffed (ConOps 1) facilities most closely resembling the layout and physical infrastructure of the current POE system. Staffed facilities include sizeable ramps and lanes, administration buildings, credentialing buildings, inspection facilities, large parking facilities, and possibly other improvements, depending on the site specific characteristics. Physical infrastructure in the virtual (ConOps 2 and 3) ports is greatly reduced. For ConOps 2 ports, a much smaller, multi-use space is required for truck parking, inspections, and credentialing needs. ConOps 3 ports require minimal multi-use space for occasional enforcement activities.

Example: Estimating Physical Infrastructure Needs at Topock

The Topock Port of Entry is again presented as an example of how physical infrastructure needs were evaluated. Topock is assigned to the staffed ConOps scenario 1.B on the inbound side, and the virtual ConOps scenario 2 for the outbound site. Given the characteristics of the ConOps and the inventoried conditions at the site, a table inventorying the current physical infrastructure conditions is presented in Table 6.2. Later in this section, Tables 6.5 and 6.6 will consider the technological and operational staffing needs at the Topock site.

Table 6.2 Inventory of Current Physical Infrastructure Conditions at Topock

Category	Investment	Topock Inbound	Topock Outbound
Physical Infrastructure	Expansion of Port facility size: Land clearing costs	Can Expand	Can Expand
	Accommodation of oversize and/or overweight (OSOW) vehicles: Lane widening	OK	OK
	Geometric improvements to lengthen ramp	Ramp length is ok	Needs improvement
	Additional vehicle lanes within the facility	OK	OK
	Internal traffic circulation	OK	Needs improvement
	Vehicle Processing Booths (Staffed)	Needs Improvement - no processing booth	NA
	Additional truck parking	OK	OK
	Additional employee/visitor parking	OK	OK
	Administration building improvements (Interior)	Needs improvement	NA
	Facility improvements (Exterior Lighting/Facility Grounds)	Needs improvement	Needs improvement
	Covered or indoor inspection facilities with paved or other floor material	Needs improvement – no inspection facilities	NA
	Inspection pit facility	Needs improvement – no inspection facilities	NA

Estimating Technology Needs

As with physical infrastructure, many of the ports have a technological gap between the current availability and the desired technologies for each ConOps scenario. The technology categories identified in one or more of the three ConOps are as follows:

- Mainline screening;
- Ramp sorting and traffic management;

- Static scales;
- Kiosks for purchasing credentials; and
- Internet connectivity for a driver's own devices;

"Mainline screening" is a broad category, and the specific technologies and connectivity acquired will have a direct effect on the percentage of truck volume which can be properly screened, and therefore a corresponding effect on the amount of physical infrastructure needed. Table 6.3 provides a listing of the wide varieties of data categories and technology needs which can be classified under the broader heading of "mainline screening."

Table 6.3 Current Screening Technologies

Data Category	Current Applicable Technologies
Vehicle Counts, Classification and Speed	Electronic Loops
	Weigh-in-Motion
	Radar
Vehicle Size and Weight	Weigh-in-Motion
	Laser Measurement
	Beam Break
	Load Cell
	Quartz Peizoelectric
	Seismic
	Bridge Strain Gauges
Vehicle Credentials	License Plate Reader
	USDOT Reader
	Transponder
Carrier Safety	License Plate Reader
	USDOT Reader
	Transponder
Vehicle Safety	Infrared Brake Scanner
	License Plate Reader
	USDOT Reader
	Transponder

Example: Estimating Technology Needs at Topock

The Topock Port of Entry is again presented as an example of how technology needs were evaluated. Topock is assigned to the staffed ConOps scenario 1.B on the inbound side, and the virtual ConOps scenario 2 for the outbound site. Table 6.4 is an example outlining the technological needs of the Topock port of entry.

Table 6.4 Inventory of Current Technology Conditions at Topock

Category	Investment	Topock Inbound	Topock Outbound
Technology	Mainline vehicle weight screening such as Weigh in Motion (WIM) technology	OK	Needs improvement
	Mainline credential screening such as LPR/UDOT-R	PrePass only – needs improvement	Needs improvement
	Mainline camera to document bypassers	OK	Needs improvement
	Electronic signals on mainline to direct trucks into the facility	OK	Needs improvement
	Three platform or multi-axle static scale	OK	Needs improvement
	Ramp sorting system, including cameras or technology to track trucks through the station	Needs improvement	Needs improvement
	Electronic signals within the facility directing trucks	Needs improvement	OK
	Vehicle Processing Booths (Virtual)	NA	Needs Improvement - no virtual processing booth
	CCTV and systems applications that communicate, share data, and are self-calibrated	Needs improvement	Needs improvement

Estimating Operational Staffing Needs

Each ConOps scenario has its own requirements in terms of staffing requirements. Recommendations for the number of staff are estimated as follows, and summarized in Table 6.5:

- **ConOps scenario 1 (A and B):** Staffing estimates are based on current vehicle processing goals of 120 vehicles per hour, an inspection rate of 1% of total mainline vehicle volume and up to 3 transaction counters available to issue credentials as needed. These ranges may be adjusted during times of low or high truck volumes. Cross-training staff will allow for optimization of staffing during times of higher or lower than average volumes.

- **ConOps scenario 2:** Staffing estimates allow for one person per shift to operate the virtual processing booth and two on-site enforcement personnel per shift to perform inspections and write citations. Processing booth staff may also support virtual transactions as necessary.

- **ConOps scenario 3:** No permanent staff are dedicated to the locations. Instead, supervisory functions can be combined with those of a nearby POE, or run from a centralized location. Enforcement personnel will be used on an as-needed basis to perform enforcement activities and write citations.

Table 6.5 Operational Needs for Each ConOps

Task Categories	ConOps 1	ConOps 2	ConOps 3
Processing Booth	4-8 FTE (non-enforcement)	4 FTE (non-enforcement) at a remote facility	No permanent staff
Commercial Vehicle Inspections and Weight Enforcement	12-20 FTE (enforcement)	8 FTE (enforcement)	Occasional enforcement personnel
Transaction Counter	4-12 FTE (non-enforcement)	4 FTE (non-enforcement) at remote facility; may be combined with processing booth staff	No permanent staff
Supervisor	4 FTE (non-enforcement)	4 FTE (non-enforcement) at nearby POE or remote facility	Jurisdiction of nearby POE or centralized service

Example: Estimating Operational Staffing Needs at Topock

The Topock Port of Entry is again presented as an example of how operational staffing needs were evaluated. Topock is assigned to the staffed ConOps scenario 1.B on the inbound side, and the virtual ConOps scenario 2 for the outbound site. Table 6.6 is an example outlining the operational staffing needs at the Topock port of entry.

Table 6.6 Inventory of Current Staffing Conditions at Topock

Category	Investment	Topock Inbound	Topock Outbound
Staffing and Operations	ADOT CSR Staff	Reported adequate for current levels of activity	Virtual staff would be needed to support port activities
Staffing and Operations	Enforcement Staff	Reported adequate for current levels of activity	Enforcement staff would be needed to maintain a consistent enforcement presence

Unprioritized Investments- Roster

As part of the POE assessment conducted in Task 3, a matrix defining the current conditions at each POE was developed. This POE Assessment matrix was used, in turn, for Task 4 to inform the development of a list of investment needs for the Arizona POE system. Table 6.7 details the investments required for the Arizona POE system. These investments are organized according to criteria as described in the previous subsections, but are not further prioritized in this table. For each individual port, investment needs will vary based on its assignment to ConOps scenario 1, 2 or 3.

Table 6.7 Unprioritized Investments for the Arizona POE system

Category	Investment	Applicable ConOps	Cost Estimate
Physical Infrastructure	Accommodation of oversize and/or overweight (OSOW) vehicles: Lane widening	1,2	$25 – 35K per 100’
Physical Infrastructure	Geometric improvements to lengthen ramp	1,2	$20 – 25K per 100’
Physical Infrastructure	Additional vehicle lanes within the facility	1,2	$20 – 25K per 100’
Physical Infrastructure	Internal traffic circulation	1,2	$20 – 25K per 100’
Physical Infrastructure	Additional truck parking	1,2	$40 – 50K per parking space
Physical Infrastructure	Additional employee/visitor parking	1	$8 - 10K per parking space
Physical Infrastructure	Administration building improvements (Interior)	1	$500K – 2M
Physical Infrastructure	Facility improvements (Exterior Lighting/Safety and Security)	1,2	$500 – 1.5M
Physical Infrastructure	Covered or indoor inspection facilities with paved or other floor material	1,2	$500K – 1M per inspection bay
Physical Infrastructure	Inspection pit facility	1,2	$250 – 300K per inspection pit
Physical Infrastructure	Land clearing costs, Landscaping and Related Costs	1,2,3	20% of Total
Technology	Mainline vehicle screening	1,2,3	$600 - 650k
Technology	Mainline camera to document bypassers	1,2,3	$10 – 15K
Technology	Electronic signals on mainline to direct trucks into the facility	1,2,3	$20 - 30K
Technology	CCTV and systems applications that communicate, share data, and are self-calibrated	1,2,3	$175 - 225K
Technology	Three platform or multi-axle static scale	1,2	$250 - 500K
Technology	Vehicle Processing Booths (Staffed)	1	$200 - 250K
Technology	Vehicle Processing Booths (Virtual) / Interactive Kiosks	2	$150 - 200K
Technology	Ramp sorting system, including cameras or technology to track trucks through the station	1,2	$50 - 75K
Technology	Electronic signals within the facility directing trucks	1,2	$10 - 25K
Misc.	Construction Contingencies	1,2,3	15% of Total
Misc.	Construction Labor	1,2,3	25% of Total
Staffing and Operations	ADOT CSR Staff	1,2	$25K - 45K per FTE

Category	Investment	Applicable ConOps	Cost Estimate
Staffing and Operations	Enforcement Staff	1,2,3	$35 – 70K per FTE

Note: All cost estimates represent 2013 costs

Source: BGM Consulting, Chambers Port of Entry Draft Final Project Assessment, Ehrenberg POE Cost Estimate

6.2 Aligning Port of Entry Function with ConOps Scenarios

Developing a prioritized, consistent approach to leverage infrastructure and staffing in a manner proportional to the amount of commercial vehicle traffic in a region will enable Arizona to efficiently manage resources and lead to a more effective mix of compliance and enforcement activity. The following sections document the approach to developing a prioritized POE investment strategy.

Prioritizing POE Investments

Considering the roster of identified investments from Table 6.7, one of the key questions is the sequencing of investments. It is clear that not all sites can have physical improvements made in a short time frame. The following sequence, for example, would be appropriate if funding can be provided in a twenty year horizon:

- Mainline screening improvements to all facilities within a 1-5 year time frame;
- Physical and other technological improvements to Ehrenberg within a 1-5 year time frame;
- Physical and other technological improvements to other high volume primary ports within a 6 – 10 year time frame; and
- Physical and other technological improvements to remaining primary and secondary ports within a 11 – 20 year time frame.

The specific sequencing will need to be based on the available funds for improvements and will require additional detailed analysis of site renovations by ADOT. As a result, the specific schedule may need to be expanded or may be able to be compressed.

Mainline Technology Improvements

Mainline technology improvements include vehicle identification, vehicle screening such as weigh-in-motion, credential checking, cameras, and electronic signals to drivers. As a suite, these technologies need to be implemented to deploy the full concept of operations. Our recommendation, therefore, is to prioritize these investments in the short term.

In-Port Technology Improvements: Scales, Kiosks, Internet, and Other Communications

There are three main types of improvements in this category:

- Ports being operated as staffed or virtually supported facilities require multi-platform static scales, which are not in place or currently non-functioning at several ports;
- The technologies to be used for the virtually staffed facilities (ConOps #2) to provide kiosks to allow carriers to communicate with State employees as well as the credential check booths used at staffed facilities; and
- Basic communications needs at all facilities, such as providing wireless internet so that carriers may apply for oversize/overweight permits once ADOT deploys its new Internet-based permitting system.

Our recommendation is that this infrastructure be prioritized over the medium to long term. The timeframe for the kiosks is likely to be highly dependent on the ADOT processes for defining the mechanics of how these operations will function, but we would anticipate a deployment no later than when the physical improvements to the virtually staffed facilities would begin. In both of these categories, it is likely that additional investments will need to be made over time to continue to align with information technology trends.

Physical Improvements: Facilities and Layout

Improvements in this category include inspection facilities, administration building facilities (both internal and external), safety and security upgrades, and any changes to site layout, including extending ramps, adding parking facilities, or redesigning site layout. Virtual facilities may make use of repurposing existing infrastructure, and thus will require minimal physical improvements, whereas staffed facilities will require larger investments to modernize and optimize site layout. Our recommendation, therefore, is to space these investments along with technology investments in the medium to long term.

Recommended Short, Medium, and Long Term POE Investment Strategy Summary

Table 6.8 provides a summary of investments over a short, medium, and long-term time frame. Mainline screening technology investments have been prioritized in the short-term, as these are required for all future port ConOps. Technology and physical investments to Ehrenberg have also been given short term priority in order to take advantage of already programmed funds. Other technology and physical investments have been assigned to the medium or long term time frame.

Table 6.8 Potential Investment and Implementation Summary

Timeframe	Type of Investment	POE Facilities
Short (1 – 5 yrs)	Mainline screening technology, e.g. weight and credential screening, cameras, signage and signals on the mainline	All Ports
Short (1 – 5 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	Ehrenberg
Short (1 – 5 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Ehrenberg
Medium (6 – 10 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	San Simon, Sanders / Chambers, Topock, Yuma I-8, Kingman (OB)
Medium (6 – 10 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	San Simon, Sanders / Chambers, Kingman (OB)
Long (11 – 20 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos
Long (11 – 20 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Topock, Yuma I-8, Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos

6.3 Detailed Summary of Recommended POE Investments

This section provides a detailed cost breakdown of the short, medium, and long-term investment priorities that were identified in the previous sections. Investment needs developed by comparing current facility conditions and assigned ConOps requirements. Additional assumptions are presented in Table 6.9 and the detailed investment summaries are presented in Tables 6.10 through 6.12.

Table 6.9 Investment Assumptions

Assigned ConOps	Parking Facilities	Ramp Length	Oversize Vehicle Accommodations	Site Recirculation	Exterior Security / Safety features
ConOps 1	30 CMV 10 Employee	Calculated based on percentage of average hourly traffic; minimum 1,000 feet	At least one lane 20' wide	Site needs adequate space in parking lot, return loop, or other configuration to allow for vehicles to travel between credentialing, inspection, and scale areas without backing up or returning to the mainline	Adequate lighting and security cameras for ramps, parking and inspection areas, and around the administration building
ConOps 2	10 CMV	Calculated based on percentage of average hourly traffic; minimum 600 feet	N/A	N/A	Adequate lighting and security cameras for ramps, and parking and inspection areas
ConOps 3	2 CMV	No minimum set	N/A	N/A	Adequate lighting and security cameras for ramps, and parking and inspection areas

The investments recommended in this chapter and summarized in Tables 6.10 through 6.12 are based on the assessment of current and future port infrastructure, technology, and functionality as described throughout this report, and are aligned with the ConOps scenarios developed for the Arizona Ports of Entry. Investments included represent the minimum needed to improve existing infrastructure to allow facilities to perform the functions of the assigned ConOps scenario. Existing infrastructure was assumed to be in usable (or repairable/upgradable) condition unless otherwise indicated.

Cost estimates presented in Tables 6.10 through 6.12 were developed by the project team using these assumptions and aligning with, when possible, estimates from ADOT documentation of planned investments in the Ehrenberg and Chambers Ports of Entry. These costs are outlined in Table 6.7. All estimates represent 2013 costs and ADOT should take into account potential cost escalation over time when developing future project budgets. In some cases supplemental costs, including land acquisition, may be required as determined by ADOT. Additionally, costs may increase in the event that ADOT determines that utilizing existing infrastructure at a particular site is either unfeasible or inappropriate. It is recommended that a full engineering evaluation be undertaken prior to each stage of the investment process. Final investment costs for each project should be determined and evaluated during the final stages of scoping and design.

Table 6.10 Short Term Investment Summary by Port of Entry ($1000s)

Port	Con Ops	Port Short Term Cost	Physical Infrastructure									Screening				Technology				Contin. (15%)	Labor (25%)
			OSOW Vehicle Imp.	Build/ Lengthen Ramps	Internal Traffic Circ.	Parking	Admin Building (internal)	Lighting, Safety, Security Imp.	Insp. Facilities (indoor)	Insp. Pit	Land Clearing, Landscaping, and Related Costs	Mainline Vehicle Screen.	Mainline Cameras	Mainline Electronic Signals	Tech and Systems Integ.	Three-platform Scale	Booths and Kiosks	Ramp Sorting and Tracking	Elec. Signals Within Facility		
Ehrenberg (IB)	1.A	16,280	150	325	-	500	3,000	1,500	2,000	300	1,555	650	15	30	225	500	500	75	-	1,699	3,256
Ehrenberg (OB)	2	4,298	-	188	125	100	-	500	-	-	183	650	15	30	225	500	400	75	-	449	860
Sanders (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Sanders (OB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
San Simon (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
San Simon (OB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
St. George (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
St. George (OB)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Topock (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Topock (OB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Yuma I-8 (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Yuma I-8 (OB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Kingman (IB)	1.B	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Kingman (OB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Yuma B-8 (IB)	2	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Yuma B-8 (OB)	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Fredonia	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Parker	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Page	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Teec Nos Pos	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Duncan	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
Springerville	3	1,323	-	-	-	-	-	-	-	-	-	650	15	30	225	-	-	-	-	138	265
TOTALS		**45,705**	**150**	**513**	**125**	**600**	**3,000**	**2,000**	**2,000**	**300**	**1,738**	**13,650**	**315**	**630**	**4,725**	**1,000**	**900**	**150**	**-**	**4,769**	**9,141**

Table 6.11 Medium Term Investment Summary by Port of Entry ($1000s)

			Physical Infrastructure									Screening				Technology					
Port	Con Ops	Port Medium Term Cost	OSOW Vehicle Imp.	Build/ Lengthen Ramps	Internal Traffic Circ.	Parking	Admin Building (internal)	Lighting, Safety, Security Imp.	Insp. Facilities (indoor)	Insp. Pit	Land Clearing, Landscaping, and Related Costs	Mainline Vehicle Screen.	Mainline Cameras	Mainline Electronic Signals	Tech and Systems Integ.	Three-platform Scale	Booths and Kiosks	Ramp Sorting and Tracking	Elec. Signals Within Facility	Contin. (15%)	Labor (25%)
Ehrenberg (IB)	1.A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrenberg (OB)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sanders (IB)	1.B	13,254	71	25	-	1,100	3,000	1,500	1,000	300	1,399	-	-	-	-	500	250	75	-	1,383	2,651
Sanders (OB)	2	3,017	33	283	-	100	-	500	-	-	183	-	-	-	-	500	400	75	-	315	603
San Simon (IB)	1.B	14,549	72	-	125	750	-	1,500	2,000	300	1,549	-	-	-	-	500	250	75	-	1,518	2,910
San Simon (OB)	2	3,051	69	-	125	100	-	500	-	-	191	-	-	-	-	500	400	75	-	318	610
St. George (IB)	1.B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George (OB)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Topock (IB)	1.B	1,222	-	-	-	-	-	-	-	-	-	-	-	-	-	500	250	75	25	128	244
Topock (OB)	2	1,402	-	-	-	-	-	-	-	-	-	-	-	-	-	500	400	75	-	146	280
Yuma I-8 (IB)	1.B	1,186	-	-	-	-	-	-	-	-	-	-	-	-	-	500	250	75	-	124	237
Yuma I-8 (OB)	2	1,402	-	-	-	-	-	-	-	-	-	-	-	-	-	500	400	75	-	146	280
Kingman (IB)	1.B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kingman (OB)	2	3,551	100	250	125	250	-	500	-	-	245	-	-	-	-	500	400	75	25	371	710
Yuma B-8 (IB)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yuma B-8 (OB)	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fredonia	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Parker	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Page	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Teec Nos Pos	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Duncan	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Springerville	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS		**42,633**	**345**	**720**	**375**	**2,300**	**6,000**	**4,500**	**3,000**	**600**	**3,568**	**-**	**-**	**-**	**-**	**4,500**	**3,000**	**675**	**75**	**4,449**	**8,527**

Table 6.12 Long Term Investment Summary by Port of Entry ($1000s)

			Physical Infrastructure									Screening				Technology					
Port	Con Ops	Port Long Term Cost	OSOW Vehicle Imp.	Build/ Lengthen Ramps	Internal Traffic Circ.	Parking	Admin Building (internal)	Lighting, Safety, Security Imp.	Insp. Facilities (indoor)	Insp. Pit	Land Clearing, Landscaping, and Related Costs	Mainline Vehicle Screen.	Mainline Cameras	Mainline Electronic Signals	Tech and Systems Integ.	Three-platform Scale	Booths and Kiosks	Ramp Sorting and Tracking	Elec. Signals Within Facility	Contin. (15%)	Labor (25%)
Ehrenberg (IB)	1.A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ehrenberg (OB)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sanders (IB)	1.B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sanders (OB)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Simon (IB)	1.B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
San Simon (OB)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. George (IB)	1.B	10,212	195	38		500	3,000	1,500			1,047	-	-	-	-	500	250	75	-	1,066	2,042
St. George (OB)	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Topock (IB)	1.B	13,327	38	38	-	850	3,000	1,500	2,000	300	1,545	-	-	-	-	-	-	-	-	1,391	2,665
Topock (OB)	2	1,695	-	38	125	320	-	500	-	-	197	-	-	-	-	-	-	-	-	177	339
Yuma I-8 (IB)	1.B	13,573	116	88	125	740	3,000	1,500	2,000	300	1,574	-	-	-	-	-	-	-	-	1,416	2,715
Yuma I-8 (OB)	2	1,613	60	-	125	250		500	-	-	187	-	-	-	-	-	-	-	-	168	323
Kingman (IB)	1.B	10,824	137	-	-	950	3,000	1,500	-	-	1,117	-	-	-	-	500	250	75	-	1,129	2,165
Kingman (OB)	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yuma B-8 (IB)	2	2,652	-	-	125	100	-	500	-	-	145	-	-	-	-	500	400	75	-	277	530
Yuma B-8 (OB)	3	173	-	-	-	100	-	-	-	-	20	-	-	-	-	-	-	-	-	18	35
Fredonia	3	345	-	-	-	200	-	-	-	-	40	-	-	-	-	-	-	-	-	36	69
Parker	3	173	-	-	-	100	-	-	-	-	20	-	-	-	-	-	-	-	-	18	35
Page	3	173	-	-	-	100	-	-	-	-	20	-	-	-	-	-	-	-	-	18	35
Teec Nos Pos	3	173	-	-	-	100	-	-	-	-	20	-	-	-	-	-	-	-	-	18	35
Duncan	3	345	-	-	-	200	-	-	-	-	40	-	-	-	-	-	-	-	-	36	69
Springerville	3	345	-	-	-	200	-	-	-	-	40	-	-	-	-	-	-	-	-	36	69
TOTALS		**55,621**	**547**	**200**	**500**	**4,710**	**12,000**	**7,500**	**4,000**	**600**	**6,011**	**-**	**-**	**-**	**-**	**1,500**	**900**	**225**	**-**	**5,804**	**11,124**

6.4 Funding Opportunities

The following section provides an overview of relevant federal programs and other potential funding opportunities to support investment related to port of entry operations in the State of Arizona. Where applicable the amount of funding available on annual basis, as well as the requirements for obtaining funds, has been included.

Commercial Vehicle Information Systems (CVISN)

Commercial Vehicle Information Systems and Networks (CVISN) Core and Expanded Program is a collection of information systems and communications networks that are owned and operated by governments, motor carriers, and other stakeholders that support commercial vehicle operations (CVO). The vision for this program is to implement core CVISN and Expanded CVISN to improve the safety and productivity of motor carriers and their drivers, and reduce regulatory and administrative costs for public- and private-sector stakeholders through improved data sharing, electronic credentialing, and targeted automated screenings and enforcement of high-risk carriers at the roadside. The objective of this research program is to support FMCSA in continuing the technology deployment and administrative oversight that has facilitated progress in establishing CVISN in fifty States and the District of Columbia. This partnership between the ITS JPO and FMCSA to fund and coordinate CVISN with the National ITS Architecture was established in previous legislations. The focus of CVISN is to provide continued support in the following four key areas:

- Support for Core and Expanded CVISN Deployment Capabilities;
- External Support for the ITS/CVO CVISN Program;
- Technical Support for ITS/CVO Training and CVISN Deployment Workshops; and
- Program, Research, and Policy Support for the ITS/CVO CVISN Program.

Core CVISN functionality is segmented into three programs areas:

Electronic Credentials Administration (ECA)

Projects within this program area automate the application, processing, and issuance of commercial vehicle operating credentials and permits. The projects are designed to streamline regulatory processes, expedite commercial vehicle credentialing processes, and reduce motor carrier and agency costs. Projects include web portals allowing registered motor carriers to apply for and receive credentials and permits online and/or make payments electronically.

Safety Information Exchange (SIE)

Projects within this program area facilitate the exchange of motor carrier credential and safety data among agencies in a state and between jurisdictions in order to augment enforcement programs, support the targeting of high-risk commercial vehicles, and streamline regulatory programs. Commercial Vehicle Information Exchange Window (CVIEW) typically is the primary means of sharing credentials data with and receiving credentials data from other jurisdictions (via national SAFER system). CVIEW houses states' commercial vehicle credentials data (e.g., IFTA, IRP, OS/OW) and allows state law enforcement, registration, weigh station, and administrative personnel easy access to this information stored in the database.

Additional elements often included in safety information exchange deployments are:

- Wireless connectivity to CVIEW, SAFER, and other data repositories;
- Web-based query interface to allow roadside enforcement personnel to access CVIEW;
- Web-based query interface to allow motor carriers and desk side enforcement personnel to access CVIEW; and
- Facility to cross-check credentials prior to issuance of other credentials.

Electronic Screening (ES)

Projects within this program area electronically identify a commercial vehicle, verify its size, weight, and credentials information, and review its carrier's past safety performance while the vehicle is in motion. Vehicles that are: 1) properly credentialed; 2) operated by a motor carrier with a history of safe operations; and 3) within weight limits, if the site is instrumented for weight measurements, are allowed to bypass inspection facilities. The projects are designed to target roadside enforcement services at high-risk motor carriers/motor vehicles, and reduce operating costs for safe and legal motor carriers.

CVISN Funding Opportunity Summary

- $25M a year available through grant program application and award of projects in the areas of safety, credentialing, and screening;
- 50/50 program requires state match of 50%; and
- $1.5M available to each state for Core program deployment and then an additional $1M per year available for Expanded deployment.

Performance and Registration Information Systems (PRISM)

The Performance and Registration Information Systems Management (PRISM) program was developed to meet the challenge of reducing the number of commercial vehicle crashes of a rapidly expanding interstate carrier population. It has increased the efficiency and effectiveness of federal and state safety efforts through a more accurate process for targeting the highest-risk carriers, which allows for a more efficient allocation of scarce resources for compliance reviews and roadside inspections. The PRISM program requires that motor carriers improve their identified safety deficiencies or face progressively more stringent sanctions up to the ultimate sanction of a federal out-of-service order and concurrent state registration suspensions. The PRISM program has proven to be an effective means of motivating motor carriers to improve their compliance and performance deficiencies.

PRISM and CVISN are closely related programs managed by FMCSA. While both programs seek to improve motor carrier safety through information exchange, they have distinct objectives. They have similar, but not identical, requirements for the exchange of interstate registration credential data with the states but different business rules for updating and processing that data. The two programs share the Safety and Fitness Electronic Records (SAFER) commercial vehicle information exchange system as their common data repository, which is more formally called the SAFER/PRISM Central Site.

PRISM Funding Opportunity Summary

- $5M a year available through grant program application and award;
- 100 percent program requires NO state match; and
- $500K available to each state for PRISM deployment.

Wireless Roadside Inspections for Trucks and Buses (WRI)

The goal of FMCSA's Wireless Roadside Inspection Program is to demonstrate the feasibility and value of assessing truck and bus drivers and vehicles up to 30 times more often than is possible using today's inspection systems. An added benefit is that it will keep safe and legal drivers and vehicles moving on the highways and help alleviate congestion. The program will evaluate the potential benefits to both the motor carrier industry and government, and the outcomes will guide FMCSA in developing associated policy decisions and potential enforcement strategies.

The FMCSA WRI program is evaluating different strategies for identifying and inspecting commercial vehicles at the roadside using a mix of technologies including dedicated short range communications (DSRC), satellite based technology, and license plate reader technology. FMCSA is coordinating and will be evaluating three separate deployments of the WRI architecture in the states of Kentucky, Tennessee and New York. Inspection results will be made available in real-time to motor carriers as well as state and Federal enforcement personnel. This program is viewed as a key building block for FMCSA's objective of significantly expanding the number of inspections that are conducted each year and the base of data on which to make performance-based enforcement decisions.

A "wireless inspection" is a process where public sector entities (people and systems) examine the condition of the vehicle and driver by assessing data collected by on-board systems. The data used in the assessment is termed the "Safety Data Message Set". The Safety Data Message Set (SDMS) will be delivered using wireless communications in real time to the public sector infrastructure. The SDMS will contain basic identification data (for driver, vehicle, carrier, container, and cargo), record of duty status, and vehicle condition data that are typically available to safety inspectors during current roadside inspections. The roadside enforcement sites that will query and receive SDMSs from CMVs are envisioned to include fixed weigh stations, unmanned remote sites on bypass routes and state borders, and mobile police cruisers. Depending on the availability of enforcement resources, interdiction strategies acting on the SDMS will include real-time and non-real time scenarios.

Truck Parking Grant Programs[1]

The Moving Ahead for Progress in the 21st Century Act (MAP-21) went into effect on July 6th, 2012 and it authorizes the issuance of funding for truck parking under the National Highway Performance Program (NHPP), The Surface Transportation Program (STP), and the Highway Safety Improvement Program (HSIP). Projects eligible to receive funding under one of these programs can include the following:

- Construction of safety rest areas with truck parking;
- Construction of truck parking areas adjacent to commercial truck stops or travel plazas;
- Opening of existing facilities to truck parking, including inspection facilities, weigh stations, and park and ride facilities;
- Promoting availability of public or privately owned truck parking facilities on the National Highway System;
- Construction of turnouts for commercial motor vehicles along the National Highway System; or
- Improving geometry of interchanges on the National Highway System to improve access to truck parking facilities.
- Funding amounts vary by state;
- Standard federal share is 90%

State Agency Collaboration

Another potential method for obtaining funds to support port of entry operations is through collaboration with other state agencies. There are many potential ways for a state to engage in a collaborative relationship with another agency, but the most common instances are through corridor coalitions and partnerships between neighboring states.

Corridor coalitions are typically comprised of a number of states located along a major interstate route that elect to work together to address various issues, including those related to interstate commercial vehicle operations. The I-95 Corridor Coalition is an example of a group of states that have worked together to take on issues related to size and weight permitting, regulatory harmonization, emergency response coordination, and other related topics.

Exploring partnerships with neighboring states, in many cases, can provide the same potential benefits of working as part of a corridor coalition. In some cases they can prove even more advantageous as the lower number of involved stakeholders can simplify any necessary agreement processes. ADOT is already taking this approach through their work with the Utah Department of Transportation port of entry facility at St. George. Another example of where

1 http://www.fhwa.dot.gov

this type of arrangement is in practice is in Mississippi, where the States of Louisiana and Mississippi share an eastbound weigh station facility on I-10.

A variation of this arrangement, whereby each state operates its own inbound facility along major Interstate routes on either side of the border, may be an approach worth exploring with neighboring states such as New Mexico or California. Collaborating in this manner would allow each state to maintain a single facility to screen inbound traffic as opposed to multiple facilities to maintain an enforcement presence in both directions. Assuming both parties could come to an agreement on acceptable levels of operation and coordination, this arrangement could significantly reduce operating costs for both agencies as well as potentially improve enforcement effectiveness.

Public-Private Partnership

Public-Private Partnerships, or P3, opportunities have been increasingly utilized by government agencies as a method for funding various projects when agencies lack sufficient resources to address an area of need. A P3 arrangement allows a private entity to be involved in one or more aspects of a public agency project, including design, construction, financing, operations, and maintenance.[2] One common example of this arrangement is a toll road. In this situation a government agency authorizes a private entity to charge tolls along a highway in exchange for the assumption of maintenance and management responsibilities. P3's have been used all across the world to fund various projects as it can improve project delivery by achieving better value, timeliness and accountability. The Florida DOT is an example of a government agency that has taken this approach to improve fixed facility enforcement operations in their state. They are currently in the process of privatizing a number of their weigh station facilities.

The Federal Highway Administration (FHWA) Office of Innovative Program Delivery (IPD) is currently developing a comprehensive toolkit with tools and guidance documents designed to assist stakeholders with the four key phases of P3s[3]:

- **Developing Legislation and Policy**- Before an agency can implement a P3 they must first establish a legislative framework for using this project type. State legislation, and supporting policy, typically define the types of P3s that are allowed, the process for entering into a P3, and the rules governing these arrangements. Effective legislation focuses on allowing an agency to benefit from a P3 while protecting public interests.
- **Identifying, Evaluating, and Structuring Projects-** States must determine if they are going to analyze projects on an individual basis or develop a P3 program to support their use. They must then determine criteria for determining when a project is a potential P3 candidate. Identification of projects with P3 potential early in the planning process ensures that this alternative is taken into consideration during the scoping and design of the project.

[2] http://www.fhwa.dot.gov/ipd/p3/index.htm

[3] http://www.fhwa.dot.gov/ipd/p3/toolkit/index.htm

This allows for an effective evaluation of a P3 arrangement versus other project delivery methods. Aspects of a project to be evaluated include project life cycle costs as compared to long term revenue projections, and the value associated with transferring projects risks to a private entity.

- **Conducting Procurement-** The procurement process surrounding P3s generally requires a greater level of flexibility than is needed for standard project types. Agencies must allow for innovation by the bidding parties and be able to conduct transparent negotiations with multiple stakeholders. Agencies must also be sure to develop performance measures for inclusion in the agreement. Effective performance measures will penalize poor performance and provide incentive to exceed performance expectations.
- **Project Monitoring and Oversight-** Once a P3 contract is in place, the role of the government agency switches from planning and construction to performance management. Agency personnel must be able to effectively monitor and manage project activities to ensure that the performance goals outlined in the contract agreement are achieved. Agency personnel are responsible for assessing penalties and awards based on project performance.

In 2009 Arizona enacted comprehensive legislation[4] (Senate Bill 2396; 2009 Ariz. Sess. Laws, Chap. 141) authorizing the use of P3s for transportation projects. The legislation allows for P3s to be used for the design, construction, financing, maintenance, management, or leasing of transportation facilities, or other projects determined by the DOT to serve the public interest. Under this legislation P3 agreements are limited to 50 years in length, renewable by ADOT, and are authorized to use availability payments and revenue sharing. Both solicited and unsolicited proposals are allowed, and no legislative approval is required prior to implementation of a P3.

Given that Arizona already has a legislative framework in place to support the use of P3s, ADOT should explore the use of this arrangement as a method for funding various infrastructure projects including the construction, or improvement, of its port facilities. ADOT should determine how best to align this strategy with its broader objectives and outline a consistent approach to identifying and evaluating projects for P3 consideration.

[4] www.ncsl.org

7.0 Conclusions and Recommendations

Arizona's POE system is diverse in many aspects, including location/geography, size, age, and (to a degree) function. Six POEs are on the interstate system, while the remaining eight are located at various US/state highways and arterial roads. Today the POE system focuses primarily on interstate vehicles. Over time ADOT may wish to explore an approach that shifts some of its enforcement focus to include intrastate vehicles as well. The future will bring increasingly high numbers of trucks to and through Arizona, which will place increased demands on the current POE system. A new paradigm is needed to connect technology, infrastructure, and staff to allow the system to meet the challenges of the near and long term future.

This section presents the results of the analysis of current and future conditions at Arizona's 14 POE sites. Based on the analysis of future traffic volumes and existing port conditions, one of three concepts of operations (ConOps) was assigned to each port facility. An investment profile was developed for each POE to align existing port infrastructure and technology with the needs of its assigned ConOps. These investments were prioritized as either short, medium, or long-term and costs were normalized to balance agency spending over the 20-year timeframe. This approach makes effective use of Arizona's current resources, while targeting growth and funding towards investments that will maximize the efficiency and flexibility of the State's POE system. Lastly, this section includes a series of process and policy recommendations related to POE facility operations at the system level.

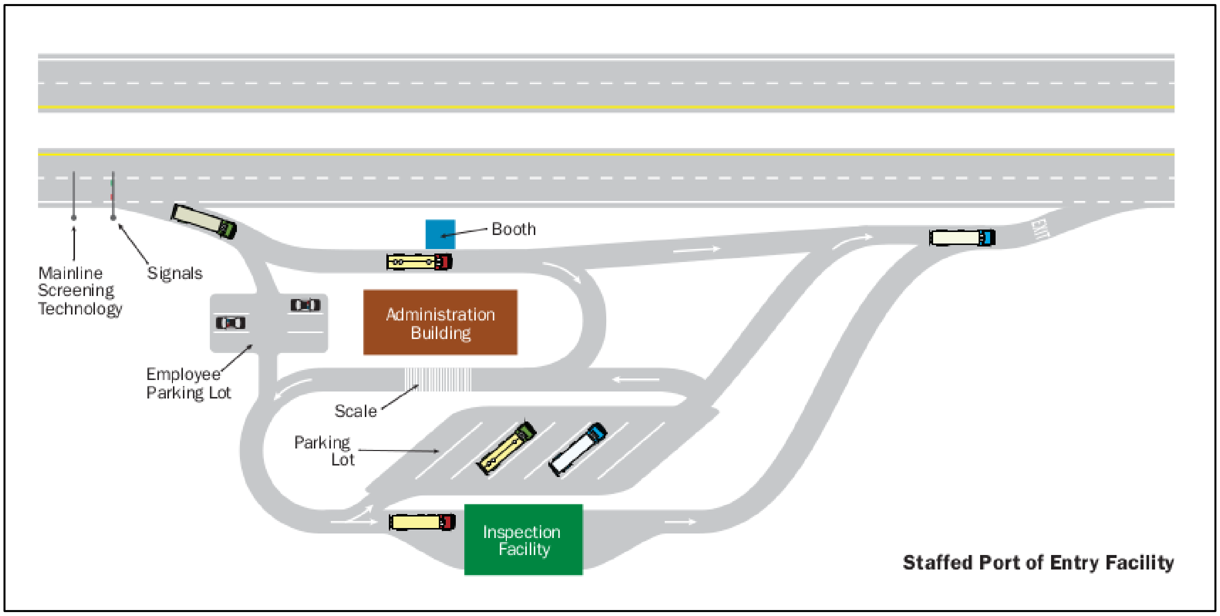
7.1 Port of Entry Facility Recommendations

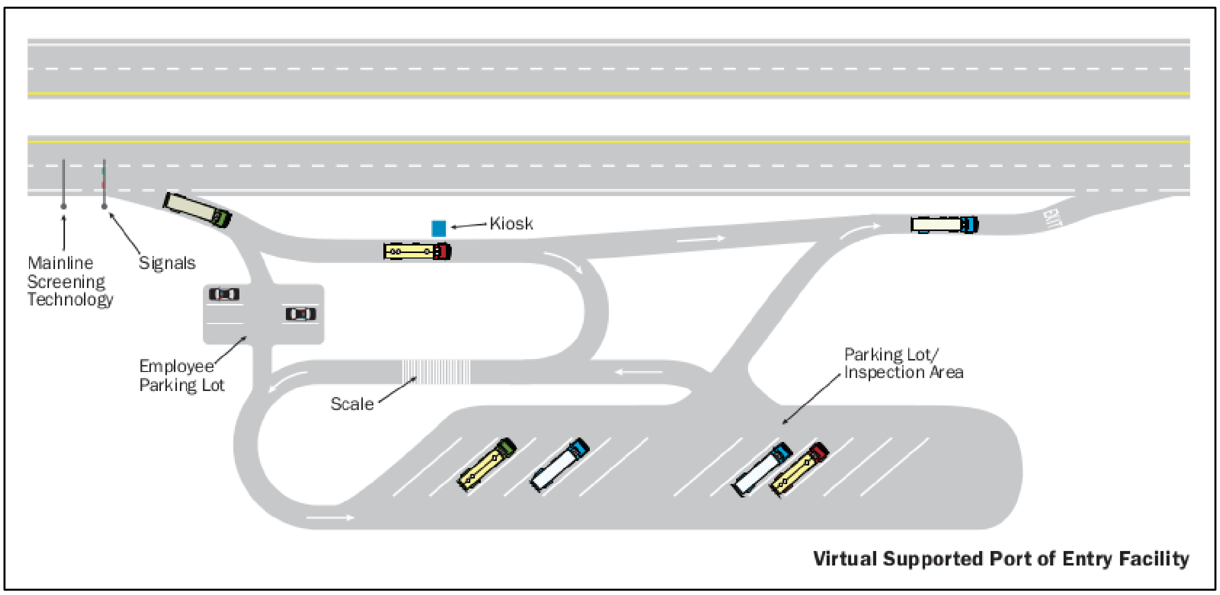
Given projected growth of commercial vehicle traffic in the state of Arizona over the next 20 years the project team recommends the POE facilities in the state of Arizona be operated using one of the following three ConOps:

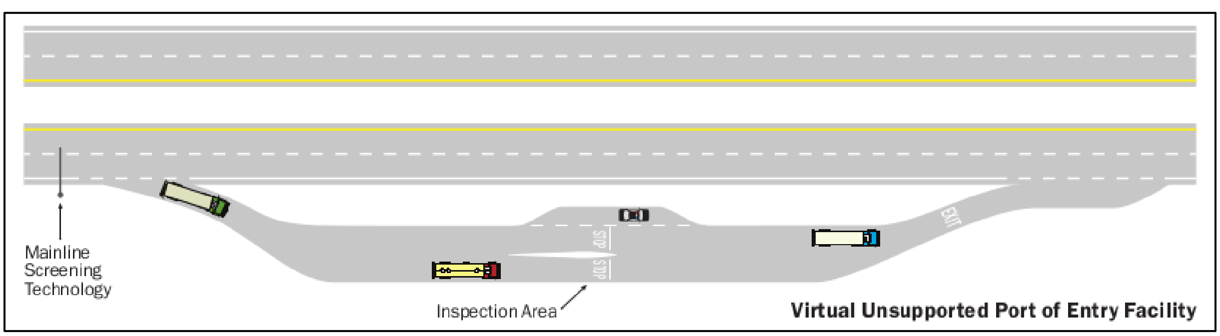
- Staffed Port of Entry Facility(ConOps 1);
- Virtual Supported Port of Entry Facility (ConOps 2); or
- Virtual Unsupported Port of Entry Facility (ConOps 3).

Figure 7.1 provides a visual overview of the three recommended ConOps Scenarios. The graphical depictions are not representative of actual proposed site layouts. They are intended to provide a basic understanding of the features associated with each of the ConOps Scenarios and how they are utilized by enforcement personnel. Actual site layouts and traffic flow will vary depending on the site location, geometry, and operational needs.

Figure 7.1 Visual Conceptual Overview of the Three ConOps Scenarios







Each ConOps, summarized in Table 7.1, differ in terms of technology, infrastructure, and staffing features, yet they share the ability to provide ADOT with a method for identifying vehicles using the Arizona highway system, and collecting and providing data that can be used to trigger or support enforcement actions.

Table 7.1 ConOps Feature Comparison

Features	Fully Staffed Facility	Virtual Supported Facility	Virtual Unsupported Facility
Mainline Vehicle Screening	Yes	Yes	Yes
Secondary Screening/Sorting	Yes	Yes	No
Static Scale	Yes	Yes	No
On-Site Support Staff	Yes	No	No
On-Site Enforcement Staff	Yes	Yes	Optional
Virtual Processing Booths	No	Yes	No
Administration Building	Yes	No	No
Inspection Facilities	Yes	No	No
Internal Return Loop	Yes	Yes	No

The ConOps assignments for the ADOT POE facilities are summarized in Table 7.2.

Table 7.2 Arizona Port of Entry Facility ConOps Recommendations

ConOps 1: Staffed Facility	ConOps 2: Virtual Supported Facility	ConOps 3: Virtual Unsupported Facility
Ehrenberg (IB)	Ehrenberg (OB)	Yuma B-8 (OB)
Sanders/Chambers (IB)	Sanders/Chambers (OB)	Parker
San Simon (IB)	San Simon (OB)	Fredonia
St. George (IB)	Topock (OB)	Page
Topock (IB)	Yuma I-8 (OB)	Duncan
Yuma I-8 (IB)	Kingman (OB)	Teec Nos Pos
Kingman (IB)	Yuma B-8 (IB)	Springerville

7.2 Port of Entry Investment Needs

The project team has identified and prioritized a series of investments for the POE facilities over the short, medium, and long term. These investments are required to bridge the gap between existing facility conditions and the requirements necessary to operate the site as its designated ConOps. These investments are summarized in Table 7.3.

Table 7.3 Port of Entry Investment Summary

Timeframe	Type of Investment	POE Facilities
Short (1 – 5 yrs)	Mainline screening technology, e.g. weight and credential screening, cameras, signage and signals on the mainline	All Ports
Short (1 – 5 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	Ehrenberg
Short (1 – 5 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Ehrenberg
Medium (6 – 10 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	San Simon, Sanders / Chambers, Topock, Yuma I-8, Kingman (OB)
Medium (6 – 10 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	San Simon, Sanders / Chambers, Kingman (OB)
Long (11 – 20 yrs)	Other technology investments, e.g. scales, booths, kiosks, ramp sorting, signage and signals within the facility	Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos
Long (11 – 20 yrs)	Physical improvements, e.g. land acquisition, ramp and lane improvements, inspection and parking facilities, administration building amenities, safety and security improvements	Topock, Yuma I-8, Kingman (IB), St. George (IB), Yuma B-8, Duncan, Fredonia, Page, Parker, Springerville, Teec Nos Pos

An overall summary of current and future conditions, as well as short, medium, and long term investment needs for each of the POE facilities is provided in Table 7.4.

Table 7.4 Arizona Port of Entry Summary Findings and Investment Recommendations

	Current and Future Condition Summary			Investment Needs		
Port of Entry	**Evaluation Criteria Met (%)[1]**	**Future Traffic Conditions[2]**	**Recommended ConOps Scenario[3]**	**Total Cost ($1,000)[4]**	**Needs Summary[4]**	**Time Frame[4]**
Ehrenberg	69% IB[8] 48% OB	Very High	IB Staffed Facility (1.A) OB Virtual Supported Facility (2)	$20,578	Mainline Screening[5]; Port Technology[6]; Physical Improvements[7]	Short
Sanders	57% IB 17% OB	Very High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2))	$18,916	Mainline Screening	Short
					Port Technology; Physical Improvements	Medium
San Simon	59% IB 26% OB	High to Very High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,245	Mainline Screening	Short
					Port Technology; Physical Improvements	Medium
Topock	55% IB 26% OB	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,290	Mainline Screening	Short
					Port Technology	Medium
					Physical Improvements	Long
Yuma I-8	31% IB 21% OB	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$20,418	Mainline Screening	Short
					Port Technology	Medium
					Physical Improvements	Long
Kingman	64% IB OB- N/A	High	IB Staffed Facility (1.B) OB Virtual Supported Facility (2)	$17,020	Mainline Screening (IB & OB)	Short
					Port Technology; Physical Improvements (Outbound Only)	Medium
					Port Technology; Physical Improvements (Inbound Only)	Long
St. George	62% IB OB – N/A	High	IB Staffed Facility (1.B) OB – N/A	$11,535	Mainline Screening (Inbound Only)	Short
					Port Technology; Physical Improvements (Inbound Only)	Long

	Current and Future Condition Summary			Investment Needs		
Port of Entry	Evaluation Criteria Met (%)[1]	Future Traffic Conditions[2]	Recommended ConOps Scenario[3]	Total Cost ($1,000)[4]	Needs Summary[4]	Time Frame[4]
Yuma B-8	24% IB	Low	IB Virtual Supported Facility (2)	$5,470	Mainline Screening	Short
	OB- N/A		OB Virtual Unsupported Facility (3)		Port Technology; Physical Improvements	Long
Fredonia	21% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Parker	31% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Page	31% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
Teec Nos Pos	17% IB / OB	Low	Virtual Unsupported Facility (3)	$1,495	Mainline Screening	Short
Duncan	17% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long
Springerville	24% IB / OB	Low	Virtual Unsupported Facility (3)	$1,668	Mainline Screening	Short
					Port Technology; Physical Improvements	Long

[1] See Section 2.3
[2] See Section 2.2
[3] See Section 5.3
[4] Costs, Investment needs, and time frame include inbound and outbound, unless indicated
[5] Mainline screening technology includes weight and credential screening, cameras, signage and signals on the mainline
[6] Other technology investments include scales, booths, kiosks, ramp sorting, signage and signals within the facility
[7] Physical improvements include land acquisition, ramp / lane and safety / security improvements, inspection and parking facilities, and administration building amenities
[8] IB – Inbound; OB - Outbound

As these recommended investments are implemented at each POE, the statewide enforcement network will begin to see a shift in focus to increasing throughput, efficiency, and data collected, while decreasing the number of trucks that are required to enter the POE facilities. This will allow ADOT to target their efforts on identifying those vehicles that most require port or enforcement activity and allow the system to efficiently and effectively serve the growing traffic volumes in the future.

7.3 Additional Process and Policy Recommendations

In addition to the technology and infrastructure investment plan, related process and policy topics where additional research and/or changes may provide ADOT benefits related to POE operations have been identified. Topics where legislation or policy may need to be added or modified in order to support the use of advanced technology, or enhance operations, at the POE facilities are also identified. These topics are summarized in Figure 7.2 and discussed in the following subsections.

Figure 7.2 Process and Policy Recommendations

Fine Structure and Allocation

Each week Arizona sees thousands of trucks near, at, or over the current weight limits traveling through and within the state. Overweight vehicles can do damage to hundreds of lane miles in a single trip, and the sum total of these trips is a significant contributor to maintenance needs on the roadway system. Although ADOT is responsible for maintaining many of the roads that these trucks travel on, overweight fines and inspections resulting in citations currently issued by enforcement personnel at POE facilities do not generate very much revenue for ADOT. The revenue from these citations goes primarily to the counties in which the citation is written, with a portion being placed into the Highway User Revenue Fund. The benefit of these activities is the preservation of highway infrastructure and increased safety of vehicles operating in the state.

One possible method for assisting with the funding of port improvement projects may be through changes to the state's existing fine structure. ADOT should review the existing schedule of fees to ensure that it is adequate both nationally and in comparison to neighboring states. Several states, including New Jersey[1] and Tennessee, have recently performed similar reviews of their fine and fee structures. ADOT may also wish to explore methods for capturing a greater portion of citation revenue from port related activities. Legislative changes would be required to alter the current fine structure or allow the addition of an administrative fee to all existing fines.

Internal Legislative Review

A major hurdle facing the effective implementation of various enforcement related technology applications is outdated state legislation. In many cases states are unable to take full advantage of, or even implement various technologies due to wording in various state statutes. To ensure that ADOT gets the most out of its technological investments, it is recommended that existing legislative language be examined and language that would be prohibitive to the use of technology in support of commercial vehicle enforcement efforts be modified as necessary. It is also recommended that ADOT draft or adopt legislation to support the use of technology as an enforcement tool where appropriate.

A primary example of legislation that should be adopted is legislation to increase the utilization of the Performance Registration Information Systems Management (PRISM) program in Arizona. Components of this legislation would include the following:

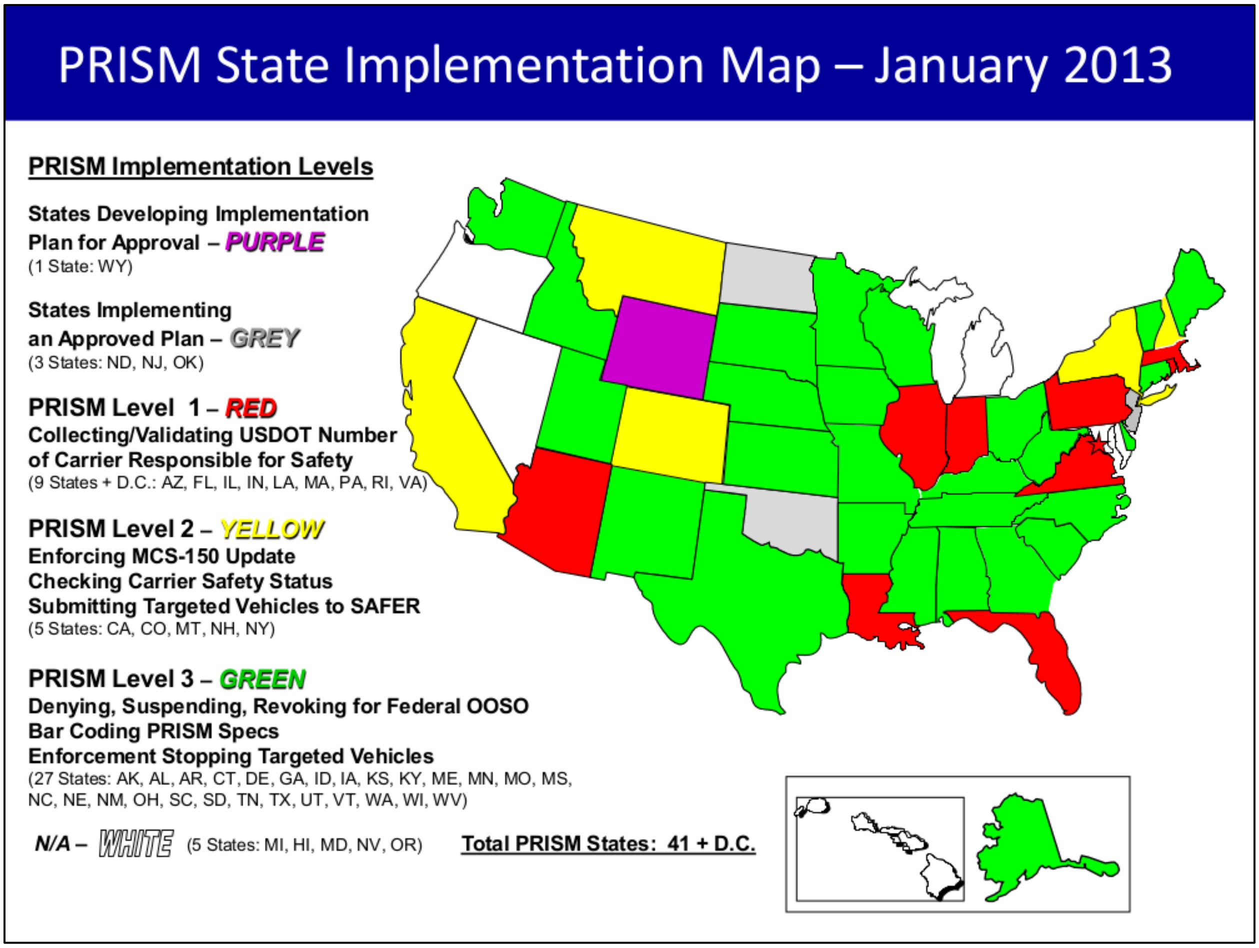
- Authority to deny, suspend or revoke a carrier's operating authority in Arizona if they have received a federal out-of –service order.
- Authority to impose sanctions on a carrier who is attempting to evade previously imposed sanctions by changing their company name and/or USDOT number.
- Authority to prohibit a carrier from obtaining an intrastate credential when placed out-of-service by FMCSA.

As shown in Figure 7.3, Arizona is currently at Level 1 of PRISM implementation, collecting and validating USDOT numbers. There are currently 32 states at levels 2 and 3 of PRISM implementation. States at the higher levels of implementation are using data collected through

[1] http://www.state.nj.us/transportation/refdata/research/reports/NJ-2013-001.pdf

various technological applications to identify carriers with a history of unsafe or illegal behavior and focus enforcement resources as necessary.

Figure 7.3 PRISM State Implementation Map January 2013



Source: http://www.fmcsa.dot.gov/safety-security/prism/prism-states.aspx

The adoption of enhanced PRISM legislation would increase the efficiency of Arizona port of entry enforcement operations as it would permit technology on the mainline to make vehicle screening decisions based on a national dataset. It would also provide enforcement officers with a broader perspective on a carrier's behavior and history, allowing them to more effectively target vehicles for inspection or other enforcement action. To assist states in the adoption of the various levels of PRISM legislation the Federal Motor Carrier Safety Association (FMCSA) has model legislation available upon request.

Another example of legislation that ADOT may wish to explore is that which would allow for the issuance of a citation to those vehicles illegally bypassing a POE facility on the mainline electronically and without officer intervention. This approach would be similar to the way many states use photo enforcement to issue tickets to individuals running red lights. This legislation would allow port facility staff to focus their attention on those vehicles entering the site and remove risks associated with enforcement officers having to chase down these individuals. This ability would also be helpful for discouraging vehicles from illegally bypassing virtually supported sites when mobile enforcement is either occupied or off-site.

Technological applications are becoming more frequently used as a tool to enhance commercial vehicle enforcement efforts. For many years the process for screening and interacting with commercial vehicles was a manual one that relied on officer judgment and experience. Many enforcement functions are now being supplemented or replaced altogether by advanced technology. ADOT should work to align existing laws with the needs of tomorrow's enforcement environment, starting with the adoption of improved PRISM legislation.

Removal of Non-Enforcement Personnel from Port Facilities

The issuance of commercial vehicle permits and credentials is currently a designed function of Arizona port of entry facilities. This system requires each POE facility to maintain a number of non-enforcement personnel to perform credentialing functions. Efficiencies may be achieved by eliminating these personnel from the port facilities. Moving towards online credentialing systems would effectively reduce the need for interaction with on-site port staff. ADOT has already recognized this opportunity and began a project to deploy an online size and weight permit system prior to this study.

Requiring carriers to purchase credentials through online systems or permit vendors before entering the state would eliminate the need for non-enforcement staff to be located at the port facility and subsequently reduce the number of vehicles entering the facility for non-enforcement related interactions. Streamlining the port functions to focus on enforcement activities could provide benefits of increased safety and operational efficiency by reducing traffic and potential for vehicle - vehicle or vehicle - pedestrian interaction within the facility. This approach is not uncommon and is one that is employed by the majority of agencies across the country.

For carriers that do not, or are unable to, obtain proper credentials or permits before entering the state, an option to obtain credentials at the port through online or phone systems can be provided without locating staff at port facilities. Interactive kiosks or wireless internet can be provided to allow carriers to obtain credentials from online systems. Alternatively, credentials can be obtained via a mobile phone by contacting a permit service company, or ADOT permitting staff located off-site.

Some of the POE facilities also serve as Motor Vehicle Division (MVD) satellite offices and process various non-commercial vehicle transactions. In some instances on-site port staff perform these functions; in others MVD provides on-site staff to support these functions. As ADOT moves more towards virtual POE operations, they may wish to examine alternative ways to provide this service as well. Determining any appropriate MVD service changes will require review of issues that are beyond the scope of this study.

Expand Authority of Port CSR Staff

If instead ADOT wishes to maintain non-enforcement personnel at port facility locations than it should explore expanding their roles and responsibilities. Some state agencies utilize "weight enforcement" personnel at port facilities who possess legal authority to issue fines or citations to commercial vehicles who are operating above legal weight. These staff members are civilians who issue fines or citations to overweight vehicle operators and perform other basic service related functions such as credential issuance. States with this type of staff support can allow the civilian staff to monitor traffic through the site while enforcement personnel focus their efforts on selecting vehicles for inspection. This type of staffing arrangement is one that could enhance port of entry operations in Arizona.

Through a review of development and implementation of these arrangements in other states, a set of guidelines were developed. In order to implement an arrangement utilizing weight enforcement personnel at POE facilities, Arizona must do the following:

- Develop a policy that defines a type of authority for non-enforcement personnel with a prescribed or predefined certification to perform certain enforcement related functions at port of entry locations.
- Clearly define measureable limits and responsibilities for the certification holder. The roles and responsibilities of certified non- enforcement personnel can be defined in a way that best fits the needs of the state.
- Develop initial training programs for certification of personnel, dependent on the scope of services allowed in the policy. A continuing education program can also be implemented for this certification.

Additional implementation considerations include:

- Some states only allow weight enforcement personnel to process weight, permit and credential issues. Others allow personnel to do the above and perform Level 1 inspection at their assigned facility.
- Some states require personnel to be under the supervision of law enforcement officers.
- Typically both law enforcement officers and weight enforcement personnel that perform inspections must be CVSA certified, due to liability issues.

Having CSR staff with the authority to issue citations to overweight vehicles would enhance the efficiency of virtual port operations by eliminating the need for a vehicle which was found to be overweight on a static scale to be handed off to on-site enforcement personnel who may or may not be already occupied. New York and Florida are examples of states that currently employ this approach to enhancing enforcement operations. In Florida non-enforcement personnel are allowed to issue fines to carriers for violating motor vehicle statutes but cannot perform safety inspections or issue any citations. The State of New York uses CVSA trained non-enforcement personnel to perform safety inspections to supplement the efforts of law enforcement personnel. These inspectors are able to place vehicles out of service and write safety citations according to CVSA safety standards.

Appendix A: Current Conditions- Overview

A.1 Summary of Work Performed

At the direction of the Arizona Department of Transportation, the CS technical team performed an assessment of the current conditions at each of the state's 14 non-international POE facilities. The project team used a combination of data collection, literature review, and site assessments to evaluate each facility.

Table A.1 contains the data sources reviewed as part of this effort. The sources utilized were identified in coordination with ADOT stakeholders.

Table A.1 Reviewed Data Sources

Name	Source	Year	Description
ADOT Documents			
ADOT Port of Entry Statistics (Annual and Monthly)	ADOT	2009 – 2012 (YTD)	Summary statistical information for Enforcement Services, CY2011. Includes traffic, VIN verification, CVSA inspections, weight enforcement, citations, fines, single trip permits, overdimensional permits, envelope permits, other permits, registration compliance, commercial/non-commercial revenue, New Mexico, and Office of Special Investigations, by facility. Also included are reports and figures detailing operating hours, commercial vehicle inspections, weight, OOS, and other violations, revenue sources, and permits issued.
ADOT Ports-of-Entry Five Year Plan (FY2001-2005)	ADOT	2001	5-year plan for Motor Vehicle Enforcement Services in AZ. Overview of POE locations, MVES roles and responsibilities, facilities and equipment, POE funding sources, FTEs and actual/ estimated costs, equipment and construction funding, strategic issues and difficulties facing POE operations, and improvements planned over the next 5 years.
ADOT Ports-of-Entry Five-Year Plan (FY 2006 – 2010)	ADOT	2005	5-year plan for Motor Vehicle Enforcement Services in AZ. Overview of POE locations, MVES roles and responsibilities, facilities and equipment, POE funding sources, FTEs and actual/ estimated costs for FY2003-2006, equipment and construction funding, strategic issues and difficulties facing POE operations, and improvements planned over the next 5 years.

Name	Source	Year	Description
Arizona DOT Ports of Entry Planning and Design Guidance Manual	ADOT	February, 2006	Provides generic planning and design guidance to facilitate future POE development in Arizona.
Arizona Multimodal Freight Analysis Study	ADOT	2008	Overview and results of freight analysis study, including trends affecting freight movements, policy implications, and strategic responses
Arizona Statewide Rest Area Study	ADOT	2011	Study to develop a strategic plan for rest area facility management through 2031
Chambers Port of Entry Initial Project Assessment	ADOT	July, 2012	Overview of proposed development of a POE facility on WB I-40 (MP 322)
ECD Monthly Management Report	ADOT	June, 2012	Monthly report of enforcement and compliance activity
Measurement Tools for Assessing Motor Vehicle Division Port of Entry Performance	ADOT	September, 2003	Research report which develops performance measures for the AZDOT POE program, with a focus on relating measures to the intended outcome of particular activities.
Port of Entry Weigh-in-Motion Feasibility Study	ADOT	1989	Analysis of the feasibility of using WIM technology for enforcement applications in Arizona
Port Runners – Impacts and Solutions	ADOT	June, 2005	Report quantifying the occurrence of port running in Arizona
San Simon Port of Entry Final Location Design Concept Report	ADOT	April, 2010	Report and recommendations for changes to I-10 POE near San Simon
Statement of Qualifications Package – Design of Topock Port of Entry Facility	ADOT	2012	Notice requesting qualifications for firms to provide engineering and architectural services for redesign of the Topock POE facility
Strategic Program Area Review - Ports of Entry (Joint SPAR Report)	ADOT, ADPS, ADA	2006	Report of collaborative and joint POE requirements and utilization by ADOT, ADPS, ADA
2004 Motor Vehicle Sunset Program	ADOT	2004	Sunset Review of the Arizona DOT Motor Vehicle Division dated September 2004.
2013-2017 Five Year Transportation Facilities Construction Program	ADOT	June, 2012	Five year funding summaries and project lists for state highway program, Regional Transportation Plan – Freeway Program, and Airport Capital Improvement Program.
30% Concept Report: Business 8, State Line to First Street Railroad Crossing Improvements	ADOT	February, 2012	Railroad crossing reconstruction project outline, part of ADOT Project 8-B YU 0 H7999 01U
Non-ADOT Documents			

Name	Source	Year	Description
Oklahoma's Ports of Entry Program (Presentation)	Oklahoma DOT		Overview of new Port construction projects and technology
2007 Truck Weigh Station Long Range Plan	Florida DOT	2007	Assessment of current conditions and long term recommendations for Florida weigh stations.

In addition to reviewing data sources and the port facilities themselves, the technical team conducted a series of stakeholder interviews with State and Federal personnel. The stakeholders included both on-site and central office ADOT staff, commercial vehicle enforcement personnel, and representatives from the Federal Motor Carrier Safety Administration (FMCSA).

Table A.2 presents the list of 22 stakeholders who were interviewed in this task.

Table A.2 Reviewed Data Sources

Name	Organization
Sergeant Begay	ADOT: ECD
Terry Conner	ADOT: ECD
Sergeant Crawford	ADOT: ECD
Michael DenBleyker	ADOT: ITD
Matthew Fix	FMCSA
Sergeant Graff	ADOT: ECD
Lieutenant Hall	ADOT: ECD
Lieutenant Hash	ADOT: ECD
Officer Hillman	ADOT: ECD
Mark Hoffman	ADOT: MPD
Officer Howard	ADOT: ECD
Officer James	ADOT: ECD
Lieutenant Johnson	ADOT: ECD
Steve Kalina	ADOT: TSG
Lieutenant Lightfoot	ADOT: ECD
Sergeant Mandel	ADOT: ECD
Lieutenant O'Hara	ADOT: ECD
Lieutenant Renner	ADOT: ECD
Sergeant Upshaw	ADOT: ECD
Officer Whitehorse	ADOT: ECD
Sergeant Zaragoza	ADOT: ECD

Lieutenant Zepeda	ADOT: ECD

Copies of the questionnaires used in the interview process can be found in Appendix E.

The POE facility site assessments were performed during the months of September and October of 2012. The technical team visited each of the 23 facilities at the 14 locations and documented each site's layout and features, both physical and technological. For the facilities that are currently closed, documentation focused on those characteristics that were externally visible. To standardize this documentation effort, a site assessment form was developed and used for this process. Completed forms for each of the site's can be found in Appendix E. The technical team also took photographs of each facility; these can be found in Appendix F.

A.2 Summary of Findings Regarding Current Conditions

Arizona's POE facilities serve a number of functions that include the verification and issuance of credentials, size and weight enforcement, and the performance of driver and vehicle safety inspections. The port facilities are the Department's primary tool for monitoring the safety of the trucking industry and protecting State infrastructure.

Our findings regarding the POE facilities are organized into a number of categories of conditions.

Directional Focus

All of the sites focus primarily on traffic coming into the state. Many of the POE locations, however, have facilities on both sides of the highway to enable screening of traffic departing the state. Screening of outbound traffic is not as frequent and is often limited by staff availability. The outbound sites are often opened to support a specific initiative of targeted enforcement.

Operating Hours and Status

Table A.3 presents four categories of operating behavior for the POE facilities. The sites are classified into those which are open continuously (24/7), those which are open during weekdays but may be closed overnight (at least 16/5), those with limited hours of weekday operation (less than 16/5), and those which have been closed. All sites are closed on Thanksgiving Day and Christmas Day.

Table A.3 Port of Entry Facility Operating Hours

	Primary Sites	Secondary Sites
Open 24/7	Ehrenberg,San Simon	N/A
Open at least 16/5	Kingman, St. George, Sanders, Topock, Yuma (I-8)	Yuma (B-8)
Open less than 16/5	N/A	Page, Teec Nos Pos,
Closed	N/A	Duncan, Fredonia, Parker, Springerville

Traffic Volumes

Table A.4 presents a summary of the traffic volumes for each POE. Daily counts were obtained by averaging over one week intervals collected between September and November, 2012. Traffic counts for Kingman were created by averaging counts from the month of October, 2012 which were obtained from the ADOT's Transportation Data Management System. Traffic counts at the St. George location were obtained over a three day period, and then validated with counts provided by the Utah Department of Transportation.

Table A.4 Arizona Domestic Port of Entry Traffic Counts

	Inbound			Outbound			
Port of Entry	2012 Observed ADT	2012 Observed ADTT	Truck Percentage	2012 Observed ADT	2012 Observed ADTT	Truck Percentage	Truck Class. Method
Duncan	417	96	23%	418	89	21%	Class
Ehrenberg	11,102	4,234	38%	11,863	4,827	41%	Size
Fredonia	4,596	276	6%	4,535	271	6%	Class
Kingman	9,635	1,414	15%	9,569	1,562	16%	ADOT Counts
Page	2,037	311	15%	2,139	291	14%	Class
Parker	2,711	420	15%	2,575	306	12%	Class
San Simon	5,293	2,884	54%	5,295	2,988	56%	Size
Sanders	8,305	3,994	48%	8,223	3,758	46%	Size
Springerville	406	32	8%	406	36	9%	Class
St. George	8,473	2,746	32%	8,208	2,757	34%	Class
Teec Nos Pos	2,070	112	5%	1,987	89	4%	Class
Topock	6,355	3,058	48%	5,186	2,467	48%	SIze
Yuma B-8	7,112	396	6%	6,135	281	5%	Class
Yuma I-8	6,223	1,144	18%	5,994	1,544	26%	SIze
Average	5,338	1,508	28%	5,181	1,519	29%	
Total	80,073	22,625	28%	77,714	22,785	29%	

Note: When vehicle counts were differentiated by class, ADTT was calculated using vehicles in NHTSA classifications 4-13: buses, single unit trucks, and multiple unit trucks and trailers. When vehicle counts were differentiated by size, ADTT was calculated using vehicles with total length over 25', with the exception of Kingman, where ADTT was calculated using vehicles with total length over 20'.

Business Activities

All of the POEs studied, when open, have staff to perform the following functions:

- Credentials Issuance (IRP, IFTA, OSOW);
- Credential and VIN Verification;
- CVSA Safety Inspections; and
- Weight Enforcement.

Table A.5 presents a summary of traffic volumes and port activities for each POE from 2009 through 2011. All port operations activity statistics are as reported by ADOT staff at the port of entry facility. Currently, these statistics are reportedly manually and have no standard criteria in regards to how they are being reported. As a result minor differences may occur between total traffic and the sum of inbound and outbound traffic due to discrepancies in the data source and/or reporting methodology.

In particular, the following statistics have varying definitions among port personnel.

- **Credentials checked -** at most of the POEs, this refers to vehicles that enter the POE facility and are weighed and/or viewed to check they have the appropriate tags corresponding to their estimated weight; at POEs that do not have a permanent scale in the direction of travel of the vehicle, this refers to vehicles where the driver has provided credential documentation to POE staff for review; this category only applies when the POE is open.
- **Pre-cleared -** at the primary POEs, this refers to vehicles that are confirmed by the PrePass system to have the appropriate credentials (even when the port is closed); at the secondary POEs, this sometimes refers to vehicles that are visually recognized by POE staff as vehicles that have already had credentials checked and therefore do not need to stop and have them checked again; at some POEs with mainline weigh-in-motion scales and vehicle detector loops, this may also include vehicles that bypass the POE completely (port runners), vehicles that are waved thru by POE staff after they have been weighed but before their credentials are checked, and even sometimes all vehicles that enter the POE facility for credential checking (effectively double-counting the "credentials checked" vehicles in terms of total vehicles approaching the POE), depending on how the configuration of equipment and how the vehicle count data is collected and processed.
- **Waved-thru -** this refers to vehicles that enter the POE but then are directed by POE staff to bypass the scale and/or credential checkpoint and exit the POE (as a side note, the magnitude of waved-thrus seems to generally be lower than what POE staff said in terms of how frequently they have to wave thru traffic, so it is hard to know for sure how accurate this number is);

It should also be noted that hours of operation at the port facilities was not always constant from year to year and this had an impact on the operational data reported by the port facilities. Port operations data is presented at the individual port level, and in greater detail, in Appendix C and D.

Table A.5 Arizona Domestic Port of Entry Summary Statistics: Annual Averages 2009-2011 (Inbound and Outbound)

		Traffic Statistics				*Weight Statistics*				*CVSA Inspections*		
Port of Entry	**Total Hours of Operation**	**Total Traffic**	**Credentials Checked**	**Pre-Cleared**	**Wave-Throughs**	**Vehicles Weighed**	**Vehicles Overweight**	**Citations Written (Weight)**	**Citations Written (Non-weight)**	**CVSA Inspections**	**Violations Found (Driver/ Vehicle)**	**Average Annual Revenue**
Duncan	542	6,194	4,629	1,565	1	3,886	47	2	13	23	81	164
Ehrenberg	6,871	1,348,977	237,300	1,124,456	1,066	1,328,722	6,584	941	4,707	4,648	10,559	1,259,490
Fredonia	1,991	11,607	9,234	2,373	-	182	1	1	7	133	168	31,124
Kingman	2,378	73,738	45,485	30,855	199	142,004	626	51	392	101	178	152,916
Page	3,738	29,452	26,592	2,998	1	30,685	106	36	165	59	156	111,086
Parker	1,710	30,127	29,726	391	10	30,117	632	38	87	31	52	46,671
San Simon	7,556	779,078	397,193	400,892	2,096	842,162	4,043	415	3,633	1,896	9,654	1,356,849
Sanders	6,467	1,237,316	382,820	934,893	1,272	1,997,163	6,234	411	1,795	295	1,120	1,095,216
Springerville	648	7,107	7,107	-	-	2,384	172	13	61	58	284	12,594
St. George	13,086	973,518	201,182	779,016	-	759,345	1,304	157	406	1,284	2,446	1,195,323
Teec Nos Pos	3,544	23,104	16,762	5,016	-	5,240	120	33	157	102	142	103,538
Topock	4,284	475,239	196,188	296,085	963	726,213	2,246	218	2,109	623	805	404,115
Yuma B-8	1,917	24,433	20,208	5,389	-	30,702	188	12	89	86	346	87,113
Yuma I-8	3,334	177,115	91,797	96,039	130	129,727	852	58	477	399	1,262	823,490
Average	4,148	371,215	119,016	262,855	410	430,609	1,654	170	1,007	696	1,947	477,121
Total	58,066	5,197,005	1,666,223	3,679,966	5,736	6,028,529	23,153	2,384	14,095	9,737	27,252	6,679,690

Note: Averages calculated for operating years only

The ADOT revenue generated by the port facilities comes from VIN verification fees and fees related to the issuance of the following credentials:

- **International Registration Plan (IRP):** a registration reciprocity agreement for commercial vehicles operating within the United States, the District of Columbia and provinces of Canada. This credential is required for carriers operating across multiple jurisdictions and provides a method for payment of fees on the basis of weight and distance operated in all jurisdictions.
- **International Fuel Tax Agreement (IFTA):** an agreement between the lower 48 States and Canadian provinces to report the fuel use of carriers operating across multiple jurisdictions. Credentials are issued and quarterly reports are filed by the carriers to determine the net tax or refund due and to redistribute taxes from collecting states to states to whom it is due.
- **Oversize/Overweight (OSOW):** Carriers can obtain a permit from ADOT to exceed state size and weight limitations when hauling non-divisible commodities on state owned highways.

Revenue generated from citations for weight violations, or citations issued during the CVSA inspection process, goes primarily to the counties in which the citation is written with a portion being placed into the Highway User Revenue Fund. The benefit of these activities is the preservation of highway infrastructure and increased safety of vehicles operating in the state.

Some of the POEs have staff to perform additional functions. Examples of these functions include outbound traffic screening and mobile enforcement.

Interviewed stakeholders reported that two of the most time consuming activities at POE facilities are issuing credentials and verifying drivers' license status. Many interview subjects believed that adoption of technology solutions in these two areas would provide substantial reductions in time spent in the facility for vehicle drivers.

Table A.6 presents a summary of average operating costs for each POE from 2009 through 2011. These costs include facility maintenance and operation expenses as well as staffing expenses. All statistics are as reported by ADOT.

Table A.6 Arizona Domestic Port of Entry Summary Statistics: Average Annual Operating Expenses 2009-2011

Port of Entry	Average Annual Operating Cost
Duncan	$81,549
Ehrenberg	$981,575
Fredonia	$42,487
Kingman	$281,106
Page	$150,437
Parker	$139,047

Port of Entry	Average Annual Operating Cost
San Simon	$956,216
Sanders	$1,002,586
Springerville	$42,435
St. George	$712,370
Teec Nos Pos	$237,239
Topock	$635,045
Yuma (I-8 &B-8)	$530,729
Average	$445,602
Total	$5,792,821

Note: Averages calculated for operating years only

Physical Condition

The age and overall physical condition of the existing port facilities differs greatly. The Kingman POE facility was redesigned in 1998 and the Ehrenberg and Sanders facilities are the subject of current redesign discussions. The vast majority of the facilities, however, are at least 20 years of age, and some facilities are at least 50 years of age.

Common themes highlighted by on-site staff during the stakeholder interview process and observed during the site assessments included:

- Ramps which are too short for the mix and volume of traffic during peak periods;
- Lack of truck parking and sometimes parking in general;
- When parking is available, at some facilities the parking area is just dirt;
- Antiquated physical layout often exacerbated by a limited amount of right-of-way. Examples include:
  - Exposure of those walking into the facility to incoming truck traffic;
  - Poor inner facility circulation for vehicles requiring additional checks;
  - Lack of adequate protection from the elements (sun, wind, rain) for inspectors;
  - Lack of inspection pits to enable staff to inspect oversize/overweight vehicles or lower trailers;
  - Site design before the implementation of American Disability Act (ADA) standards; and
  - Poor external lighting in the evening, impacting both physical safety as well as the ability to perform effective visual scans of approaching vehicles.
- Lack of private space for staff, a lack of break rooms and the need to share bathroom facilities with the public.

- Poor security accommodations for situations where officers need to question or hold drivers for reasons related to criminal violations or similar issues.

Technological Limitations

Similar to the age of the port facilities, the technological capabilities at most ports tend to be limited. Vehicle screening and scanning is limited to the PrePass program. While PrePass does certainly reduce the volume of vehicles which must enter the station, other identification technologies such as license plate or USDOT number readers are missing. Therefore, many of the functions performed start off being labor intensive at the point of carrier identification.

Additional categories of technological limitation as identified by on-site staff through the stakeholder interview process include:

- Older desktop computer and network technology. Laptops often do not have cellular-based "aircards" for network connectivity;
- Lack of sensors to close stations with shorter ramps when their queues or parking lots fill up;
- Lack of in-ground sensors at some sites, requiring manual daily truck counts;
- A reliance on handwritten citations as opposed to a form of electronic citations;
- Manual communication with dispatch to check drivers' license status;
- Lack of technology at some sites to measure vehicle height;
- Weigh-in-motion devices, if installed, are typically older and their effectiveness varies depending on roadway temperatures and other factors;
- Lack of reliable redundancy for power and telephone services; and
- Little to no integration of technology applications.

Staffing

Each of the port facilities are staffed with both enforcement officers and customer service representatives (CSR's)[1]. The CSR staff members are responsible for the issuance of credentials and verification of credentials of commercial vehicles passing through the facility. Enforcement officers focus their efforts on size, weight, and safety enforcement. During the course of performing their duties, officers will also assist in the verification of credentials for vehicles and drivers which they are examining. Staffing levels at the POEs that are currently open are generally adequate for performing the basic functions during the hours that the facilities are operating. Site staff interviewed indicate that the following are areas where additional staff would be beneficial:

[1] An exception is the Teec Nos Pos site which is staffed only by enforcement personnel who perform all necessary functions at the Port Facility.

- After hours to increase officer safety; and
- On-site mobile enforcement to prevent scale runners and monitor bypass routes.

Of the 14 non-international port of entry facilities, four are currently closed, in part due to lack of staffing. A common theme that was voiced during the interviews was difficulty in recruiting new enforcement staff and a general inability to retain quality officers after initial training.

The existing wage scale for commercial vehicle enforcement officers may be a contributing factor in the inability to retain the services of quality employees. In many cases a new officer will apply for a position with the State, undergo training, gain experience, then apply for a position at a federal agency with a higher wage scale such as Customs and Border Patrol.

Federal Data

Consistent with the Work Plan, the study team attempted to collect two types of federal data concerning AZ POE's. The results of this effort summarized here, shows that the available federal data is of limited utility to this study:

- State Reporting of Annual Key POE Statistics to FMCSA. The Study Team determined that, unlike some other states, key POE statistics are typically not developed and provided to FMCSA by AZDOT as part of any annual reporting to FMCSA. Therefore the Study Team has determined this this data is not available for the AZ POE Study.
- National Analysis and Information (A&I) Database[2]. The national A&I database was assessed for AZ POE data, but the data available was only at a very high-level for the state, and included international POE data. Therefore the Study Team has determined that the A&I data is not useful to the AZ POE Study.

[2] The A&I Database is a national dataset maintained by the FMCSA which contains state CVSA inspection records and carrier specific safety information.

Appendix B: POE Assessment and Future Condition Forecast - Overview

B.1 POE Assessment

The current and future conditions and needs of Arizona's POE system were assessed using four categories: physical area, facilities, technology/infrastructure, and staffing/port functions. Presenting the assessment in these four categories allows ADOT to understand the needs of each POE and target investment in a way that provides the most benefit to the state and users of the ports. Table B.1 provides the list of criteria under each category which were utilized to conduct the POE assessment. The POE Assessment Matrix, which provides Port-specific details about each of these criteria, is outlined in Table B.3.

The POE Assessment Summary Table (Table B.2) presents an overview of the ports' ability to meet the criteria used in the POE Assessment Matrix. For each category, ports are assessed on the number of that category's criteria which they meet at present, for example whether they have a static scale, or adequate truck parking. Ports are subdivided into groups, depending on whether they met 50 percent or greater, between 25 and 50 percent, or less than 25 percent of criteria.

Overall, the ports were assessed on 29 criteria, each worth one point. The highest overall score of 20 out of 29 points was assigned to Ehrenberg (IB), and the lowest score of 5 out of 29 points was assigned to Teec Nos Pos, Duncan, and Sanders (OB). However, it should be noted that the needs at each port differ based on traffic volumes, location, and other criteria, and these scores should be considered in context of these factors. High volume ports such as Ehrenberg and San Simon may receive more benefits from capacity enhancing investments such as screening and scale technologies than low volume ports such as Duncan or Parker. Thus, although this assessment focuses on the presence or absence of certain criteria, it is recommended that these results be considered as one of several aspects when determining the potential needs of a port.

Table B.1 POE Assessment Criteria

Physical Area	Facilities	Technology and Infrastructure	Staffing and Functions
Located near population centers	Administration building in fair to good condition, with amenities for staff, drivers, and visitors	Mainline vehicle screening, such as Weigh In Motion (WIM) technology	Staffing is sufficient to handle primary activities such as screening, enforcement and, permitting at the primary facility
Adequate ramp length	Safe, secure, and well-lit facilities, including pedestrian access if necessary	Mainline credential screening,	Staffing is sufficient to occasionally perform secondary duties, such as enforcement activities at an outbound port or as a mobile detachment
No easy access bypass routes	Administration building layout provides visibility of port and mainline traffic	Secondary vehicle screening, such as additional WIM on the ramp	At least 1% of vehicles that receive credential checks are inspected
Ability to expand into surrounding area	Dedicated inspection area	Other ramp screening or tracking systems, such as electronic credentialing or cameras	Utilize electronic screening to allow vehicles to bypass
Internal bypass lane	Covered or indoor inspection facilities with paved or other floor material	Single axle static scale	
Site recirculation - Return loop	Inspection pit facility	Three platform or multi-axle static scale	
Accommodates oversized and/or overweight (OSOW) vehicles		Electronic signals on the mainline directing trucks to enter or bypass facility	
Adequate truck parking		Electronic signals within the facility directing trucks	
Adequate employee/visitor parking		Mainline camera to document bypasses	
		Technology and systems applications communicate, share data, and are self-calibrated based on live data from multiple sources.	

Table B.2 POE Assessment Summary Table

	Percentage of Criteria Met by Each Port					
Category	**50% or Greater**		**25% - 50%**		**Less than 25%**	
Total	Ehrenberg (IB)	69%	Ehrenberg (OB)	48%	Yuma B-8 (IB)	24%
	Kingman (IB)	64%	Yuma I-8 (IB)	31%	Springerville	24%
	St. George (IB)	62%	Page	31%	Yuma I-8 (OB)	21%
	San Simon (IB)	59%	Parker	31%	Fredonia	21%
	Sanders (IB)	57%	San Simon (OB)	26%	Sanders (OB)	17%
	Topock (IB)	55%	Topock (OB)	26%	Teec Nos Pos	17%
					Duncan	17%
Physical Area	Topock (IB)	78%	Ehrenberg (OB)	44%	Sanders (OB)	22%
	Ehrenberg (IB)	67%	Sanders (IB)	44%	San Simon (OB)	22%
	Kingman (IB)	56%	Topock (OB)	44%	Fredonia	22%
	St. George (IB)	56%	Yuma B-8 (IB)	44%		
	San Simon (IB)	56%	Yuma I-8 (IB)	33%		
	Page	56%	Yuma I-8 (OB)	33%		
	Springerville	56%	Teec Nos Pos	33%		
			Duncan	33%		
			Parker	33%		
Facilities	Ehrenberg (OB)	67%	San Simon (OB)	33%	Topock (IB)	17%
	Kingman (IB)	67%	Page	33%	Topock (OB)	17%
	Parker	67%	Fredonia	33%	Yuma I-8 (IB)	17%
	Ehrenberg (IB)	50%			Teec Nos Pos	17%
	St. George (IB)	50%			Duncan	17%
	Sanders (IB)	50%			Springerville	17%
	San Simon (IB)	50%			Sanders (OB)	0%
					Yuma I-8 (OB)	0%
					Yuma B-8 (IB)	0%
Technology and Infrastructure	Kingman (IB)	75%	Ehrenberg (OB)	30%	Sanders (OB)	20%
	Sanders (IB)	75%	Yuma I-8 (IB)	30%	Yuma I-8 (OB)	20%

Category	Percentage of Criteria Met by Each Port: 50% or Greater		25% - 50%		Less than 25%	
	Ehrenberg (IB)	70%	San Simon (OB)	25%	Page	20%
	St. George (IB)	70%			Yuma B-8 (IB)	20%
	San Simon (IB)	70%			Parker	20%
	Topock (IB)	60%			Topock (OB)	15%
					Duncan	10%
					Fredonia	10%
					Teec Nos Pos	0%
					Springerville	0%
Staffing and Functions (Inbound and Outbound Ports Combined)	Ehrenberg	88%	Sanders	33%	Page	0%
	St. George (IB)	75%	San Simon	33%	Duncan	0%
	Kingman (IB)	50%	Topock	33%	Parker	0%
			Yuma I-8	33%		
			Teec Nos Pos	25%		
			Yuma B-8 (IB)	25%		
			Fredonia	25%		
			Springerville	25%		

Table B.3 provides the full assessment of each Port using the assessment criteria described in Table B.1. Each port is assessed on whether it meets the criteria (score of 1), does not meet the criteria (score of 0), or has non-functional technology that would otherwise meet the criteria (score of 0.5). For example, in the case of a three-platform static scale, a port would receive a score of 1 if they have a functioning three-platform scale, a score of 0 if the port has only a single axle or no scale, and a score of .5 if the port has a currently non-functioning three-platform scale.

TableB.3 POE Assessment Matrix

Legend:
1: present or meets criteria
0.5: present but nonfunctioning
0: absent or does not meet criteria

Category	Criteria	Ehrenberg (IB)	Ehrenberg (OB)	Kingman (IB)	St. George (IB)	Sanders (IB)	Sanders (OB)	San Simon (IB)	San Simon (OB)	Topock (IB)	Topock (OB)	Yuma I-8 (IB)	Yuma I-8 (OB)	Page	Teec Nos Pos	Yuma B-8 (IB)	Duncan	Fredonia	Parker	Springerville
Physical Area	Located near population center	1	1	1	1	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0
	Adequate ramp length	0	0	0	1	0	0	1	0	1	0	0	0	0	1	0	1	0	0	1
	No easy access bypass routes	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
	Ability to expand into surrounding area	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0
	Internal bypass lane	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1
	Site recirculation return loop	1	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	Accommodates oversize and/or overweight (OSOW) vehicles	0	0	0	0	1	0	1	0	1	1	1	1	0	1	1	0	0	0	1
	Adequate truck parking	1	1	1	0	0	0	1	1	1	1	0	0	1	0	0	0	0	1	1
	Adequate employee / visitor parking	1	1	0	1	1	0	1	0	1	0	0	0	1	1	1	0	1	1	1
Facilities	Administration building in fair to good condition, with amenities for staff, drivers, and visitors	1	1	1	0	0	NA	1	1	0	0	0	0	1	0	0	0	0	0	0
	Safe, secure, and well-lit facilities, including pedestrian access if necessary	0	1	0	0	0	NA	0	0	0	0	0	0	0	0	0	0	1	1	0
	Administration building layout provides visibility of port and mainline traffic	1	1	0	0	1	NA	1	1	1	1	1	0	1	1	0	1	1	1	1
	Dedicated inspection area	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Legend:
1: present or meets criteria
0.5: present but nonfunctioning
0: absent or does not meet criteria

Category	Criteria	Ehrenberg (IB)	Ehrenberg (OB)	Kingman (IB)	St. George (IB)	Sanders (IB)	Sanders (OB)	San Simon (IB)	San Simon (OB)	Topock (IB)	Topock (OB)	Yuma I-8 (IB)	Yuma I-8 (OB)	Page	Teec Nos Pos	Yuma B-8 (IB)	Duncan	Fredonia	Parker	Springerville
	Ports of Entry																			
	Covered or indoor inspection facilities with paved or other floor material	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0
	Inspection pit facility	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Technology and Infrastructure	**Mainline vehicle screening such as Weigh in Motion (WIM) technology**	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	Mainline credential screening	1	0	1	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0
	Secondary vehicle screening such as additional WIM on the ramp	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other ramp screening or tracking systems, such as electronic credentialing or cameras	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	Single axle static scale	1	1	1	1	1	1	1	1	1	05	1	1	1	0	1	0	0	1	0
	Three platform or multi-axle static scale	1	1	1	0	1	1	0	.5	1	0	0	0	0	0	0	0	0	0	0
	Electronic signals on the mainline directing trucks to enter or bypass facility	1	0	.5	1	.5	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	Electronic signals within the facility directing trucks	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	0
	Mainline camera to document bypassers	1	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
	Technology and systems applications communicate, share data, and are self-calibrated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Legend:
1: present or meets criteria
0.5: present but nonfunctioning
0: absent or does not meet criteria

		Ports of Entry																		
Category	**Criteria**	Ehrenberg (IB)	Ehrenberg (OB)	Kingman (IB)	St. George (IB)	Sanders (IB)	Sanders (OB)	San Simon (IB)	San Simon (OB)	Topock (IB)	Topock (OB)	Yuma I-8 (IB)	Yuma I-8 (OB)	Page	Teec Nos Pos	Yuma B-8 (IB)	Duncan	Fredonia	Parker	Springerville
Staffing and Operations	**Staffing is sufficient for primary activities**	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0
	Staffing is sufficient to occasionally perform secondary duties	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	At least 1% of vehicles that receive credential checks receive safety inspections	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
	Utilize electronic screening to allow vehicles to bypass	1	0	1	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0

B.2 Current and Future Port Revenue

Arizona's POEs receive revenue from several sources, including permit sales, VIN verifications, and other activities. Current revenue levels were reported by ADOT. Future revenue was projected for each of the forecast years based on an increase in revenue proportional to traffic volume increases, as described in Section B.3. Future operational changes, such as the implementation of a new online size and weight permit system, are not accounted for in these projections. While operational changes will likely have an effect on port specific revenue, total ADOT revenue for activities currently performed at the ports should increase as projected. These projections utilize the following assumptions:

- When available, 2011 revenue data was used to create forecasts, otherwise data for the last year in operation (2009) was used;
- Projections are adjusted for inflation at a rate of 2.4% annually;
- Truck traffic levels increase as described by the forecasts presented in the following section;
- The pending transition to an online permit system is not taken into account;
- Port operations through the forecast period are assumed to be similar to current operations;
- Staffing levels at each POE are maintained or increased to provide the current amount of revenue-generating services to future traffic, measured as a percentage of the total traffic receiving credential checks; and

- Trucks continue to enter the port and receive credential checks at current rates, calculated as a percentage of total traffic captured during the operating hours of the port.

Due to low traffic volumes and revenues reported at the Duncan and Springerville ports this method was not practical. Instead, for these ports a straight percentage of 75% (high) or 50% (low) of truck traffic was assumed to receive credential checks in future years.

The current and future revenue projections are detailed in Table B.4, below.

Table B.4 Current and Future Projected Revenue, by Port of Entry

	Current Revenue (ADOT)		2022 Projected Revenue		2032 Projected Revenue	
Port	**2011 ($)**	**2009 ($)**	**High ($)**	**Low ($)**	**High ($)**	**Low ($)**
Primary						
Ehrenberg	1,335,193		2,014,245	1,451,594	3,440,570	1,786,928
Kingman	214,259		366,458	319,800	516,907	393,641
St. George	1,251,027		1,834,332	1,321,937	3,133,349	1,627,199
Sanders	1,216,088		1,038,487	941,142	1,278,334	1,049,847
San Simon	1,474,615		1,757,095	1,592,390	2,162,754	1,776,497
Topock	430,643		376,067	328,185	530,528	403,978
Yuma (I-8 & B-8)	981,182		1,381,329	1,219,314	1,873,869	1,457,491
Secondary						
Page	148,072		328,813	257,641	521,085	317,062
Teec Nos Pos	169,292		247,731	190,774	399,288	234,684
Duncan*		6,733	14,346	8,683	17,613	9,654
Fredonia		31,124	73,012	57,045	116,031	70,255
Parker		46,671	54,493	43,097	76,901	48,074
Springerville*		12,584	16,778	10,621	20,803	12,090
TOTAL			9,503,186	7,742,223	14,088,032	9,187,400

* Due to the low traffic volumes and reported revenues, an alternate calculation method was used

B.3 Current and Future Truck Traffic

As part of the Ports of Entry assessment, projections of current (2012) and future (2022 and 2032) average daily truck traffic levels on the mainline were developed. The current traffic volumes were developed by Cambridge Systematics with 2012 traffic counts conducted by Traffic Research & Analysis, Inc. The forecasts for future traffic were developed by Cambridge Systematics with the assistance of the modeling staff of the Arizona Department of

Transportation, who provided data from the Arizona Statewide Travel Demand Model and assisted in developing traffic volumes for each Port of Entry.

Truck Traffic Trends

Truck traffic in Arizona has been steadily increasing, and will likely continue to increase in coming years. These increases are partially due to the fact that the southwestern U.S. has seen increases in both population and industrial growth over the last decades. Arizona's population growth has ranked as one of the highest in the nation, and is projected to remain high for the next 20 years. Additionally, employment is expected to increase at a high annual rate, increasing the volume of commodities produced by Arizona by as much as threefold by 2030.[1]

In addition to increases in freight flows to/from Arizona produced by or serving the residents of the state, Arizona is expected to see increases in freight flows from other domestic and international sources. Trade projections show a continuing upward trend of goods entering or departing the U.S. through the ports of Long Beach, Los Angeles, and San Diego.[2] This trend in turn leads to increases in truck traffic traveling through Arizona to reach other US destinations, particularly on the I-40, I-10, and I-8 interstates. Additionally, Arizona is strategically located to serve traffic from the increasing industrial development and port growth along the northern Pacific Coast of Mexico. Finally, growth in freight traffic is expected along the CANAMEX corridor, which includes pieces of US 93, I-10, and I-19 in Arizona.[3] Overall, the traffic forecasts in this section assume that Arizona is expected to keep its status as a high-traffic through state, while increasing its share of warehousing/distribution and industrial facilities within the state.

Forecast Methodology

Data sources used to construct future year truck traffic volumes include the ADOT Statewide Travel Demand Model, and the Federal Highway Administration's Freight Analysis Framework version 3 (FAF3), and reports of POE truck traffic from ADOT. Current traffic counts were collected as part of Task 2 over a weeklong period in September – October, 2012. The data sources used are summarized in Table B.5, and the raw data received is documented in Table B.6.

Current truck traffic volumes are based on seasonally adjusted traffic counts collected as part of Task 2. These counts were averaged and seasonally adjusted[4] to produce the 2012 average daily

1 Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

2 Cambridge Systematics. (2012) SCAG Regional Goods Movement Study (Draft). Prepared for the Southern California Association of Governments (SCAG).

3 Wilbur Smith Associates. (2007) Arizona Multimodal Freight Analysis Study. Prepared for the Arizona Department of Transportation.

4 Due to lack of monthly data at Duncan and Springerville POEs, counts at these POEs could not be seasonally adjusted.

truck traffic volumes. Due to construction activities, traffic counts were not possible at the Kingman POE. For Kingman, ADOT truck counts from 2011 were used and seasonally adjusted to develop the 2012 traffic volumes.

The forecast data, ADOT Statewide Travel Demand Model, and the FAF generally used to predict trends in traffic flow, and are less able to directly deal with traffic on a single link. Thus, for this task, these forecasts were analyzed using a regional approach where traffic volumes were aggregated and redistributed on a regional basis, and then the resulting traffic volumes were used to create a set of growth factors. These factors were then applied to the 2012 average daily truck traffic in order to increase the accuracy of the forecasts for a single link, and subsequently to project the 2022 and 2032 values for average daily truck traffic.

Forecasts for 2022 and 2032 average daily truck traffic were developed using a "high" and "low" approach. The scenario-based approach was chosen in order to best represent the uncertainty in the extent to which factors such as growth in freight flows from the Ports of Los Angeles and Long Beach, or growth in imports from Mexico, will influence future traffic patterns. For this study, the "high" scenario assumed that all of these factors would increase traffic to the greatest extent possible. Conversely, for the "low" scenario, these factors were assumed to have a minimal effect on traffic volumes, which are instead assumed to grow at or below statewide-average rates.

The projected growth rate for the state from the Arizona Multimodal Freight Study was 2.1%. However, recent updates to both the Arizona Statewide Travel Demand Model and FAF3 model indicate that growth rates might likely be higher, and potentially much higher, due to increasing freight flows in the region and increasing traffic on current and future major trade corridors. Economic factors such as growth in container traffic through California's and northern Mexico's ports, growth in trade along the CANAMEX corridor, and increased focus on warehousing and distribution activities within the state of Arizona support these trends. Thus, for this task, four growth factors were used: very high (5.5%), high (3.5%), average (2.1%), and low (1.1%).

Table B.5 Data Sources

Source	Type of Data	Time Period	Location	Notes
ADOT	Statewide Travel Demand Model	2008, 2015, 2035	Statewide	Link – specific traffic volumes received from ADOT
FHWA	FAF3	2007, 2035	Statewide	Link – specific traffic volumes created by Cambridge Systematics
Traffic Research & Analysis, Inc	Truck Counts	2012 (Sept / Oct)	Highways in the proximity of the ADOT POEs	Traffic counts collected daily for one week. Due to infrastructure and construction limitations, counts were not collected at the Kingman POE.
ADOT	Truck Counts		SR 68, US 93	ADOT Transportation Data Management System
ADOT	POE Traffic Counts	2009 – 2011	ADOT POEs	Total traffic" volumes reported by POEs annually

Table B.6 Raw Data Used in Forecast of Future Truck Volumes

	Data Source		FAF	ADOT STDM	Traffic Counts	ADOT STDM	ADOT STDM	FAF
Port	**Highway and Direction**		**2007**	**2008**	**2012**	**2015**	**2035**	**2035**
Duncan	US-70	Inbound	1	157	96	157	157	2
		Outbound		157	89	157	157	
Ehrenburg	I-10	Inbound	2760	4689	4234	5733	14283	6630
		Outbound	1427		4827			1045
Fredonia	US-89A	Inbound	4	282	327	5200	7242	6
		Outbound	4	364	271	6706	4664	6
Kingman	US-93	Inbound			1414*			
		Outbound		224	1562*	229	328	
Page	US-89	Inbound	31	883	311	686	1052	47
		Outbound	26	605	291	470	657	188
Parker	SR-95	Inbound	499	529	420	1620	2146	1260
		Outbound	772	515	306	1577	2289	805
San Simon	I-10	Inbound	2055	2664	2884	4308	6471	2395
		Outbound	2522		2988			1881
Sanders	I-40	Inbound	5427	3478	3994	38	38	6275
		Outbound	3578		3758			2581
Springerville	US-60	Inbound	2	13	32	1405	1210	4
		Outbound	3	13	36	1437	1893	5
St George	I-15	Inbound	1345		2546			3870
		Outbound	1345	2501	2559	1725	2791	3870
Teec Nos Pos	US-160	Inbound	1	113	112	160	189	1
		Outbound	1	77	89	108	251	1
Topock	I-40	Inbound	3703	3078	3058	3611	4325	5038
		Outbound	4808		2467			3263
Yuma (B-8)	N 4th Ave	Inbound		390	396	390	390	
		Outbound		390	281	390	390	
Yuma (I-8)	I-8	Inbound	968	1722	1144	1731	3447	2816
		Outbound	968		1544			2816

* ADOT Transportation Data Management System

Table B.7 summarizes the current and future truck flows, measured in average daily truck traffic (ADTT) at each Port of Entry. As indicated in the table, the ADTT for the years 2022 and 2032 in both directions for all POEs is expected to increase, especially for:

- Ehrenburg – I-10 is expected to be a major route for increasing freight flows from the Ports of Los Angeles and Long Beach. Arizona's efforts to increase warehousing and industrial capability will also lead to increasing growth along this corridor. If these projections are realized, traffic levels can potentially double or triple by 2032.
- San Simon and Sanders – Similar to the trends predicted for the Ehrenberg Port of Entry, San Simon (I-10) and Sanders (I-40) may also see significant increases in traffic from freight flows inbound from California and Mexico, particularly if Arizona increases its presence as an industrial and warehousing destination.

Table B.7 Summary of Current and Projected Average Daily Truck Traffic (ADTT) at Arizona POEs

			Inbound Growth Rates		Inbound Traffic Counts					Outbound Growth Rates		Outbound Traffic Counts				
Port of Entry	Region	Location	High	Low	2012	2022 High	2022 Low	2032 High	2032 Low	High	Low	2012	2022 High	2022 Low	2032 High	2032 Low
Duncan	E	US-70	2.1%	1.1%	96	118	107	145	119	3.5%	2.1%	89	126	110	177	135
Ehrenburg	SW	I-10	5.5%	2.1%	5,308	9,067	6,534	15,488	8,044	3.5%	1.1%	6,052	8,537	6,749	12,042	7,527
Fredonia	N	US-89A	5.5%	2.1%	299	511	369	873	454	3.5%	2.1%	248	350	305	494	376
Kingman	NW	US-93	3.5%	2.1%	1,416	1,998	1,743	2,818	2,146	3.5%	2.1%	1,565	2,208	1,927	3,114	2,372
Page	N	US-89	5.5%	2.1%	215	366	264	626	325	3.5%	2.1%	201	283	247	399	304
Parker	NW	SR-95	3.5%	1.1%	436	614	486	867	542	2.1%	1.1%	317	391	354	481	395
San Simon	E	I-10	2.1%	1.1%	2,997	3,689	3,343	4,541	3,730	5.5%	2.1%	3,105	5,304	3,822	9,060	4,705
Sanders	E	I-40	2.1%	1.1%	4,246	5,227	4,737	6,434	5,284	5.5%	2.1%	3,995	6,824	4,918	11,657	6,054
Springerville	E	US-60	2.1%	1.1%	32	39	36	48	40	3.5%	2.1%	36	51	44	72	55
St George	N	I-15	5.5%	2.1%	2,546	4,349	3,134	7,429	3,858	3.5%	2.1%	2,559	3,610	3,150	5,092	3,878
Teec Nos Pos	N	US-160	5.5%	2.1%	96	164	118	280	145	3.5%	2.1%	76	108	94	152	116
Topock	NW	I-40	3.5%	2.1%	2,279	3,215	2,806	4,536	3,454	3.5%	2.1%	1,839	2,594	2,264	3,659	2,787
Yuma (B-8)	SW	N 4th Ave	3.5%	2.1%	446	629	549	888	676	2.1%	1.1%	317	390	353	480	394
Yuma (I-8)	SW	I-8	3.5%	2.1%	1,843	2,599	2,269	3,667	2,793	2.1%	1.1%	2,487	3,062	2,774	3,769	3,094
TOTAL			**3.8%**	**1.7%**	**22,256**	**32,588**	**26,496**	**48,641**	**31,611**	**3.9%**	**1.7%**	**22,886**	**33,835**	**27,111**	**50,647**	**32,190**

Growth Rate Legend: *Very High* *High* *Average* *Low*

Appendix C: Individual Port Assessments

This section provides details of the assessments of individual ports using the criteria discussed in Section 2 of the final report. Each port was assessed in four categories: physical area, facilities, technology and infrastructure, and staffing and port functions. The purpose of the assessment in these four categories is to allow ADOT to understand the needs of each POE and target investment in a way that provides the most benefit to the state and users of the ports.

Section 2 also includes a measure of current truck traffic and a forecast of future truck traffic in 10 and 20 years. Port operational statistics and details are provided in Appendix A and B. These forecasts and statistics, along with the assessment of each POE's components, together provide a picture of the needs and deficiencies of the ports moving forward.

Two points are common across all POEs reviewed:

- None of the POE have integration of technology such as WIMs, static scales, and credentialing information; and
- Each Port of Entry has specific traffic, throughput, and functional differences. Thus, the assessment of each Port should be viewed in the context of these factors.

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C.1 Ehrenberg

The Ehrenberg Port of Entry (POE) is located along I-10 about three miles east of both Ehrenberg, Arizona and the Arizona-California border. The primary Ehrenberg POE facility is the inbound or eastbound (EB) port. An outbound or westbound (WB) port exists but it is only open occasionally. The Ehrenberg POE is managed and operated by ADOT.

Figure C.1 Ehrenberg Port of Entry Facility

The Ehrenberg POE site is on approximately 43.5 acres of land owned by the State of Arizona. The site is adjacent to undeveloped land that is owned by the Bureau of Land Management (BLM). The site contains an administration building and a parking lot, both of which were initially constructed in 1979. A tunnel exists between the EB POE and WB POE, but it has been abandoned.

The EB site layout consists of one permit parking lane, one credential check lane, and one oversize truck credential check lane that lead toward two freestanding credential check booths. After the credential check booths, the lanes converge to form one credential check/scale lane and one bypass lane. There is an internal circulation return loop. The EB site circulation is clockwise and the administration building is located outside the loop. The WB site layout consists of one credential check/scale lane and one bypass lane. There is no WB internal circulation return loop.

Figure C.2 Ehrenberg Port of Entry Satellite View

The Ehrenberg POE site is on approximately 43.5 acres of land owned by the State of Arizona. The site is adjacent to undeveloped land that is owned by the Bureau of Land Management (BLM). The site contains an administration building and a parking lot, both of which were initially constructed in 1979. A tunnel exists between the EB POE and WB POE, but it has been abandoned.

The EB site layout consists of one permit parking lane, one credential check lane, and one oversize truck credential check lane that lead toward two freestanding credential check booths. After the credential check booths, the lanes converge to form one credential check/scale lane and one bypass lane. There is an internal circulation return loop. The EB site circulation is clockwise and the administration building is located outside the loop. The WB site layout consists of one credential check/scale lane and one bypass lane. There is no WB internal circulation return loop.

The EB POE is currently open 24 hours a day, seven days a week and is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, three sergeants, six officers, and ten CSRs. There are three 8-hour shifts per day, with staff typically working five 8-hour days per week. Whenever the WB POE is open, it is staffed with personnel from the EB POE.

The primary screening features on the I-10 EB mainline prior to reaching the Ehrenberg EB POE are a PrePass transponder reader antenna and weigh-in-motion (WIM) scale with associated loop detectors, piezo sensors, overview cameras, and changeable message signs (CMS) that are located approximately one-half mile upstream of the exit ramp gore to the EB POE. The CMS notify truck drivers if they need to enter the port or not. A PrePass compliance antenna and another camera with associated loop detectors and piezo sensors are located just downstream on the mainline side of the exit ramp gore to document trucks that attempt to unlawfully bypass the port. Inside the EB POE, a three-platform static scale (12′ x 60′, 20′, and 10′) is located in the credential check/scale lane adjacent to the administration building. A slow-speed weigh-in-motion (SSWIM) scale used to be located in the bypass lane near the administration building but has been removed and covered with a metal plate. The two credential check booths are used during busier (higher traffic volume) times. During less busy times, POE staff checks vehicles from the window inside the administration building. At the WB POE, the only primary screening feature is a three-platform static scale (12′ x 10′, 20′, and 60′), which is operational but currently is not in use.

Truck volumes are heavy enough at times that the queue of vehicles waiting to be checked backs up to the mainline. When this occurs, EB POE staff wave through trucks along the bypass lane to reduce the queue length These "wave throughs" are typically required one or two times a week, although it varies depending on volume patterns.

The EB POE has 16 truck parking spaces upstream of the credential check booths for permits and five truck parking spaces downstream of the administration building for inspections/permits. There are three load adjustment parking spaces on the back side of the return loop. The EB POE has approximately 40 employee/visitor parking spaces, ten of which are covered (under a canopy structure that used to be a Department of Agriculture screening facility), along with one ADA-accessible parking space. The WB POE has seven truck parking spaces. Both the EB and WB POEs have a sidewalk and ramps to lead pedestrians to the administration building.

There is no enclosed inspection facility at the EB POE or the WB POE. Vehicles to be inspected utilize the five truck parking spaces downstream of the administration building or the dirt area behind the administration building. The dirt area is sloped, making it difficult for staff to properly inspect vehicles, especially heavy vehicles with low clearance.

The EB POE administration building is generally in average condition. The EB POE has a lobby area that contains seating, a restroom, a payphone, a drinking fountain, and a vending machine. There are five customer service windows although only three are typically open at a time. The employee area has restrooms, drinking fountains, storage lockers, a custodial area, a conference/break room, three offices, and six workstations. The WB POE administration building features a lobby area with a customer window and an employee area with one workstation.

The EB POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building and credential booths, site drainage, and landscaping/irrigation. Lighting at the EB POE is provided along the outside edge of the administration building, outside the parking lot, along the edge of the mainline and ramps, and on the ceiling of the canopy, but lighting conditions are considered poor at the employee/visitor parking area, ramps, and return loop. The WB POE has sewer, water, telecommunications, electricity, and heating/cooling for the administration building, site drainage, and landscape/irrigation. Lighting at the WB POE is provided along the outside edge of the administration building, parking area, and ramps.

Preliminary design work is underway on the reconstruction of the existing Ehrenberg POE facility that will have three credential check lanes/booths, one oversize truck lane, one bypass lane, two enclosed inspection pits with air conditioning, one static scale adjacent to the inspection pits, and 30 truck parking spaces. The project scope includes additional planned technology improvements along the I-10 mainline for electronic screening as well as anticipation of a new auxiliary lane to be constructed between the on-ramp for the POE and off-ramp for the existing Ehrenberg Rest Area. The preliminary construction estimate is approximately $20 million and the current 5-year STIP (FY13-FY17) includes $16 million for construction funds in FY16.

POE staff identified several issues related to the existing and planned port facility, including the following:

Physical Issues

- Interview subjects would like booths staggered so the officer-in-charge (OIC) can see what is going on at all booths from within the control room of the administration building;
- There is a need for a direct visual and audible communication link from the OIC to the credential booths;
- It is difficult to inspect heavy loads on angled dirt, thus flat paved ground is needed;
- A longer ramp would prevent common queue backup to the mainline;
- The administration building is in average physical condition.. Meanwhile, the truck parking area is in poor physical condition and is inadequate in terms of size and number of spaces provided;
- Much of the equipment and electrical lines are in poor condition; and
- Lighting is in poor condition and is inadequate in terms of coverage and location;

Technological Issues

- It would be preferable to have both a SSWIM scale and a static scale on each credential check lane;
- Thermal imaging does not exist for checking brakes and tires;
- PrePass only deals with credentials, and getting USDOT number reader cameras would provide more information on every truck;
- Auto-queuing detection technology would help manage the queues and prevent the backup onto the mainline; and
- Need WIM/PrePass violation alerts;

Other Issues

- Staff preference is to do everything for a vehicle (check credentials, weigh, inspect) in one spot rather than having various stations that the vehicle must sequentially pass; and
- Interview subjects report "serious issues" with being able to hire, train, and retain qualified staff.

Key statistics for the Ehrenberg EB POE in 2011 are listed below.

- Annual pre-cleared percentage was 78%;
- Highest inbound monthly total volumes were in January and December while the highest inbound checked volumes were in August and September;
- Highest inbound monthly total volume was 121,104 in December;
- Highest inbound monthly checked volume was 34,117 in September;
- Daily inbound operating hours averaged 16 hours January-July and 24 hours August-December;
- Highest inbound daily average total volumes were in January and December while the highest inbound daily average checked volumes were in August-December;
- Highest inbound daily average total volume was 3,907 in December;
- Highest inbound daily average checked volume was 1,137 in September;
- Highest inbound daily total volumes were generally on Tuesdays, Wednesdays and Thursdays;
- Highest inbound daily total volume was 7,114 on Saturday, January 15, 2011;
- Highest inbound daily checked volumes were generally on Tuesdays and Thursdays; and
- Highest inbound daily checked volume was 2,299 on Wednesday, September 7, 2011.

Table C.1 contains annual traffic and activity statistics for the Ehrenberg Port of Entry for 2009-2011.

Table C.1 Ehrenberg Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	7,524	1,374,413	185,750	1,186,723	1,940	1,334,021	7,579	1,130	3,017	4,550	11,546	1,258,385
	Inbound	7,524	1,374,413	185,750	1,186,723	1,940	1,334,021	7,746	1,130	3,017	-	-	-
2009	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	6,137	1,313,180	229,193	1,077,284	6,703	1,313,961	5,285	659	3,547	5,431	10,296	1,184,893
	Inbound	6,137	1,313,180	229,193	1,077,284	6,703	1,313,961	5,306	659	3,547	-	-	-
2010	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	6,952	1,359,337	296,957	1,062,188	192	1,323,423	5,589	751	4,515	3,963	9,834	1,335,193
	Inbound	6,952	1,359,337	296,957	1,062,188	192	1,323,423	5,590	751	4,515	-	-	-
2011	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.2 contains annual cost data for the Ehrenberg Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.2 Ehrenberg Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$986,408	$115,698	$1,102,106
2010	$805,471	$55,573	$861,044
2011	$640,137	$95,489	$735,626
Average	$810,672	$88,920	$899,592
Total	$2,432,016	$266,760	$2,698,776

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Ehrenberg POE facility are provided in Appendix E.

Ehrenberg Future Conditions Assessment

Overall, Ehrenberg meets some to most of the assessment criteria across categories. However, a lack of adequate inspection facilities and an inoperable WIM scale on the ramp are two technology and infrastructure conditions that need to be addressed. A reconstruction project in the year 2016 is expected to address these issues. Like all of the Arizona POEs, Ehrenberg does not have integration of technology such as WIMs, static scales, and credentialing information. Although the staffing and capacity of the port is one of the highest in Arizona, Ehrenberg is expected to see some of the highest increase in truck volumes over the next 20 years, indicating the potential need for additional investment and staffing.

Table C.3 Ehrenberg Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	6 out of 9	(3) Credential Booths (1) Oversize Truck Lane Port Ramp Improvements	8 out of 9
	Outbound	4 out of 9		4 out of 9
Facilities	Inbound	3 out of 6	(2) Enclosed Inspection Pits Administration Building Improvements	6 out of 6
	Outbound	4 out of 6		4 out of 6

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Technology and Infrastructure	Inbound	7 out of 10	Mainline Screening Improvements	9 out of 10
	Outbound	3 out of 10		3 out of 10
Staffing and Functions	Inbound / Outbound	3.5 out of 4		3.5 out of 4

Operating Statistics

Summary statistics for operations at Ehrenberg for 2011, as reported by ADOT, are found in Table C.4.

Table C.4 Ehrenberg Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)**	Operating Hours (hours/day)	Costs (per vehicle)**	Revenue (per vehicle)**
Inbound	1,359,337	22%	21%	78%	133	24/7	$.27	$.98

Source: ADOT Enforcement SVC Statistical Recap

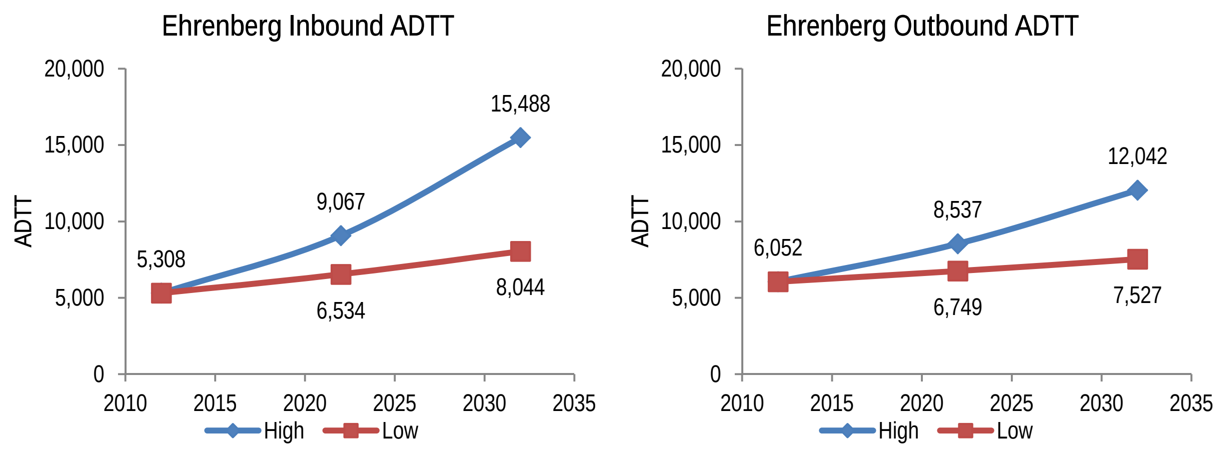
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

**Inspection, cost, and revenue data is for the Port as a whole.

Future Traffic Trends:

Eastbound traffic on I-10 is projected to grow at an average (2.1%) to a very high rate (5.5%) annually over the next 20 years. Westbound traffic is projected to grow at a low (1.1%) to high (3.5%) rate. This high level of growth is primarily attributed to increasing freight arriving through the Ports of Los Angeles and Long Beach that travel via truck through Arizona to reach US destinations. Additionally, growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state will increase the inbound and outbound truck traffic traveling along I-10. Figure C.3 shows current and future truck traffic volumes at Ehrenberg.

Figure C.3 Ehrenberg 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Truck volumes are heavy enough that the queue of vehicles sometimes backs up onto the mainline, without capacity improvements, the projected future growth will exacerbate this issue;
- Ramp length is less than adequate, contributing to the mainline backup potential;
- Functionality issues such as the non-functioning bypass lane WIM, and lack of enclosed inspection pits. Functionality is expected to increase as the planned reconstruction progresses;
- Ability to accommodate OSOW vehicles will be addressed in planned updates;
- Static scale / mainline scales often do not agree. The WB static scale is non-functioning;
- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales
- Inspection facilities and parking are currently inadequate, due to ground condition and lack of cover. The addition of two enclosed inspection pits will greatly increase inspection ability; and
- WB side has no ramp screening or circulation loop; would be unable to handle current or future traffic volumes.

Costs, Revenue, and Benefits from Screenings and Inspections[1]

- The cost to run the port in 2011 was $735,626 with staffing costs representing $640,137 and operations and maintenance costs accounting for the remainder;
- The port facility generated $1,335,193 in revenue in 2011;
- Mainline electronic screening allowed approximately 600,000 bypasses in 2012, saving approximately 240,000 gallons of fuel, 50,000 carrier hours, 530 metric tons of emissions, and $5 million dollars in carrier operating costs; and
- In 2011, staff at Ehrenberg performed 3,693 inspections, and put 1,365 drivers and 183 vehicles out of service.

[1] Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.2 Kingman

The Kingman POE is located along US 93 about two miles northwest of Kingman, Arizona and about 31 miles east of the Arizona-Nevada border. This facility serves inbound traffic coming from US 93 southbound (SB) and from SR 68 eastbound (EB) but does not serve outbound traffic coming from US 93 northbound (NB) and from SR 68 westbound (WB) traffic. The Kingman POE is managed and operated by ADOT.

Figure C.4 Kingman Port of Entry Facility

The Kingman POE site is on approximately 47 acres of land owned by the State of Arizona. The POE site is located on the southwest side of the US 93 and SR 68 interchange and includes an off-ramp from the US 93 SB mainline and the SR 68 EB mainline and an on-ramp to the US 93 SB mainline. The site is surrounded by undeveloped land that is owned by BLM. The site includes an administration building, a canopied inspection facility and two parking lots that were constructed in 1998.

The Kingman POE site layout consists of one credential check/scale lane, one bypass lane, and four inspection lanes along with one internal circulation return loop. The site circulation direction is counterclockwise and the administration building is located inside the loop.

Figure C.5 Kingman Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The Kingman POE is currently open 24 hours a day, Monday-Friday. The port is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, three sergeants, six officers, and nine CSRs. There are three 8-hour shifts per day, with staff typically working five 8-hour days per week.

The only screening features on the US 93 SB mainline and SR 68 EB mainline are PrePass antennas. After the US 93 SB/SR 68 EB off-ramps merge, there is a SSWIM scale with associated loop detectors, piezo sensor, overview camera, and PrePass antenna located approximately 950′ upstream of the administration building. Two lane control signals (LCS) approximately 590′ upstream of the administration building direct traffic to either enter or bypass the port. A three-platform static scale (12′ x 10′, 20′ and 60′) is located in the credential check/scale lane adjacent to the administration building. PrePass vehicles are not weighed at all (except those subject to random screening) as there are no WIM scales on the US 93 SB mainline and the SR 68 EB mainline.

The truck parking lot has eleven uncovered parking spaces. There are four uncovered parking spaces for out-of-service trucks within a fenced-in gravel area north of the truck parking lot. The employee/visitor parking lot has fourteen parking spaces, eight of which are covered, along with two ADA-accessible parking spaces. Sidewalks and ramps lead pedestrians from these parking lots to the administration building.

The Kingman POE has a canopied four-lane inspection facility. Three lanes are designated for simple inspections. The fourth lane includes an inspection pit, which allows an officer to inspect the truck from below for brake issues or air/oil leaks. Cameras are located around the inspection facility, as well as around the administration building, to provide security.

The administration building is generally in good condition and meets the needs of staff and the public. The administration building has a lobby area that contains seating, a restroom, a drinking fountain, and a vending machine. There are three customer service windows. The employee area has two restrooms, showers, storage lockers, a custodial area, storage rooms, a telecommunication/data room, a conference/break room, five offices (one of which is for the Department of Public Safety) and three workstations. In the backyard of the administration building there are several mechanical rooms, a well pump house, and an emergency power generator.

The Kingman POE site has sewer, water, telecommunications, electricity, and heating/cooling for the administration building, emergency power generator, site drainage, and landscaping/irrigation. Lighting is generally adequate outside the administration building, in the inspection facility, along sidewalk and pedestrian paths, in the parking lot, and along the ramps, but is not adequate between the platform scale and the administration building.

There are currently no known programmed improvement projects for the Kingman POE.

POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- The entrance ramps are not long enough;
- An uphill climb at port exit makes it difficult for trucks to get up to mainline speeds quickly;
- The only way to exit the port is southbound on US 93, this limits feasibility for traffic coming from SR 68 that wants to go north on US 93;
- LCS visibility is bad, and truck drivers sometimes cannot see it;
- Having a garage at the site has been beneficial because it has provided secure storage for POE vehicles;
- The inspection canopy is good but it could be longer;
- The inspection pit is good but the location is too close to pillars and the diverter is too tall for low-clearance vehicles;
- Interview subjects identified a need for multiple inspection pits;
- While not having a drop-ceiling gives the POE an open feel, it results in high electricity costs;
- Lighting in the inspection area could be improved;
- The heat in the inspection pit is ineffective and there is no air conditioning in the pit area;

- Parking for employees is not always adequate but truck parking is adequate at current travel volumes;
- The window glazing by the credential check area has been damaged by sun and poses difficulties for staff;
- Off-tracking around return loop curves was a problem in the past, and ADOT staff had to add asphalt patches; and
- A secure holding cell is needed;

Technological Issues

- A wider and longer static scale is needed;
- There is no way to see traffic on highways from facility except through the security cameras;
- Reports are that ADOT is considering installing WIM scales on the US 93 and SR 68 mainlines;
- Interview subjects would like to consolidate and integrate the screens and equipment from the cameras, PrePass, SSWIM scale, and platform scale; and
- Everything at the site is metric, causing occasional maintenance issues;

Other Issues

- Interviewees would like to have the port be open seven days a week but that level of staffing is currently unavailable;
- Interviewees would like an outbound facility to parallel the inbound facility; and
- There is a diversion issue, as traffic using US 93 SB to SR 68 WB and SR 68 EB to US 93 NB can easily bypass the port.

Key statistics for the Kingman POE in 2011 are listed below.

- Annual pre-cleared percentage was 30%;
- Highest inbound monthly total volumes and monthly checked volumes were in August-December;
- Highest inbound monthly total truck volume was 14,437 in November;
- Highest inbound monthly checked volume was 10,559 in September;
- Daily inbound operating hours averaged 8-10 hours January-August, and 14-16 hours September-December;
- Highest inbound average daily total volumes were in September-December
- Highest inbound average daily checked volumes were in May, September and October;
- Highest inbound average daily total volume was 617 in October;
- Highest inbound average daily checked volume was 480 in September;

- Highest inbound daily total volumes were generally on Tuesdays, Wednesdays and Fridays;
- Highest inbound daily total volume was 853 on October 3, 2011;
- Highest inbound daily checked volumes were generally on Tuesdays, Wednesdays and Fridays; and
- Highest inbound daily checked volume was 752 on October 3, 2011.

Table C.5 contains annual traffic and activity statistics for the Kingman Port of Entry for 2009-2011.

Table C.5 Kingman Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
2009	Total	1,992	42,652	16,810	25,842	-	79,823	776	21	101	127	245	100,979
	Inbound	1,992	42,652	16,810	25,842	-	79,823	778	21	101	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2010	Total	2,024	58,179	35,527	22,539	113	108,656	127	20	256	88	109	143,221
	Inbound	2,024	58,179	35,527	22,539	113	108,656	147	20	256	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	Total	3,117	120,382	84,117	35,868	397	204,184	475	80	582	88	180	214,549
	Inbound	3,117	120,382	84,117	35,868	397	204,184	483	80	582	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.6 contains annual cost data for the Kingman Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.6 Kingman Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$277,937	$86,472	$364,409
2010	$200,027	$47,360	$247,387
2011	$170,887	$60,364	$231,251
Average	$216,284	$64,732	$281,016
Total	$648,851	$194,196	$843,047

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Kingman POE facility are provided in Appendix E.

Kingman Future Conditions Assessment

Overall, Kingman meets most of the assessment criteria, with a few notable exceptions. Significant issues include the port location and orientation – lack of a northbound port, no visibility of mainline traffic from within the port, inadequate ramps from the mainline – which negatively affect port operations. Kingman also has one of the lowest inspection rates out of any Arizona POE. Port capacity is currently adequate for the near term expected traffic flow; however, the port is expected to experience double the traffic volume over the next 20 years, which may require additional investment in screening infrastructure and staffing to deal with the traffic volume.

Table C.7 Kingman Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	5 out of 9	None	5 out of 9
Facilities	Inbound	4 out of 6		4 out of 6
Technology and Infrastructure	Inbound	7.5 out of 10		7.5 out of 10
Staffing and Functions	Inbound	2 out of 4		2 out of 4

Operating Statistics

Summary statistics for operations at Kingman in 2011, as reported by ADOT, are found Table C.8.

Table C.8 Kingman Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Costs (per vehicle)	Revenue (per vehicle)
Inbound	120,382	70%	67%	30%	10	24/5	$.69	$1.78

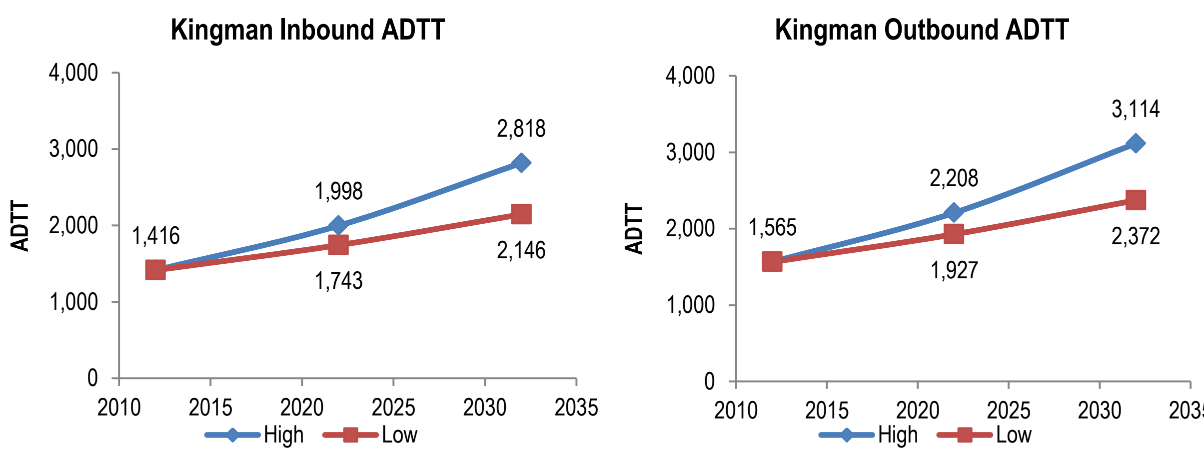
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Both inbound and outbound traffic at Kingman is projected to grow at an average (2.1%) to a high (3.5%) rate over the next 20 years. Kingman is situated on the CANAMEX trade lane, and will likely see increased traffic volumes as US-Mexico imports and exports grow. Figure C.6 shows current and future truck traffic volumes at Kingman.

Figure C.6 Kingman 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- The port is able to handle the current level of traffic flow, but this ability is expected to decrease as traffic volumes increase;
- More auto parking spaces are needed; additional truck parking spaces could be useful;
- Trucks can easily bypass the port by avoiding the eastbound interchange;
- Facility location and condition means that mainline traffic is not directly visible;
- Uphill climb at the port exit makes it difficult for trucks to get up to mainline speeds; can only exit onto US 93;

- No weight screening currently exists on the mainline; ADOT is reportedly considering adding WIM scales;
- Lack of outbound facility does not allow WB vehicles to be screened;
- Visibility of lane control signals to enter or bypass the port is reportedly poor;
- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales;
- Ability to accommodate lowboys[2] would allow for additional screening;
- Staff reports the need for a holding cell and minor administrative building maintenance;
- Lack of weight screening on the mainline and inadequate signage reduces bypass potential; and
- Integration of WIM, screening, static scale, and other equipment would increase efficiency and effectiveness of screening and compliance operations.

Costs, Revenue, and Benefits from Screening and Inspections[3]

- Mainline electronic screening allowed approximately 55,000 bypasses in 2012, saving approximately 22,000 gallons of fuel, 4,700 carrier hours, 50 metric tons of emissions, and $490,000 dollars in carrier operating costs;
- The total cost to run the port in 2011 was $231,251 with staffing costs representing $170,887 and operations and maintenance costs accounting for the remainder;
- The port facility generated $214,259 in revenue in 2011; and
- In 2011, staff at Kingman performed 88 inspections, and put 7 drivers and 7 vehicles out of service.

2 Lowboys are a type of semi-trailer with a very low deck, often used to transport farm equipment or other heavy machinery. The extremely low deck means that the undercarriage can be difficult or impossible to inspect without facilities designed to accommodate these trailers.

3 Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.3 St. George

The St. George POE is located along I-15 about one mile north of the Arizona-Utah border in St. George, Utah. St. George has mirror-image POE facilities on both sides of I-15. The inbound or southbound (SB) port is managed and operated by the Arizona Department of Transportation (ADOT) while the outbound or northbound (NB) port is managed and operated by the Utah Department of Transportation (UDOT). ADOT and UDOT have staff in both ports, with most of ADOT's staff in the SB port and most of UDOT's staff in the NB port. The SB POE was analyzed as part of this study because it is under the jurisdiction of ADOT while the NB POE was not analyzed because it is under the jurisdiction of UDOT.

Figure C.7 St. George Port of Entry Facility

The SB POE site is on approximately 27 acres of land owned by the State of Utah. The site includes both the abandoned former SB POE administration building/parking lot and the current SB POE administration building/parking lot that was constructed approximately 20 years ago.

The SB POE site layout consists of one credential check/scale lane and one bypass lane, along with one internal circulation return loop. The site circulation direction is clockwise and the administration building is located inside the loop.

The SB POE is currently open 20 hours a day (6am-2am), seven days a week. The port is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, two (and soon to be three) sergeants, three officers, and six CSRs. There are two 10-hour shifts per day, with staff typically working four 10-hour days per week.

Figure C.8 St. George Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The only screening feature on the I-15 SB mainline is a PrePass antenna. On the off-ramp to the POE, the primary screening features are a SSWIM scale with associated loop detectors, piezo sensor, overview camera, PrePass antenna, and overheight sensor located approximately 1,250′ upstream of the administration building. Two LCS approximately 900′ upstream of the administration building direct traffic to either enter or bypass the port. Farther along the ramp, a second SSWIM scale exists along with a 16′ x 16′ single platform static scale and a camera. A large overhead changeable message sign located near the administration building tells truck drivers if they can exit the port or if they need to loop around the administration building for additional screening because they are either overweight, need a permit, are randomly being subjected to further screening, or have been identified by POE staff as needing to be inspected. The SB POE employees rely on the platform scale to determine if vehicles are overweight because they do not consider the two SSWIM to be accurate. PrePass vehicles are not weighed at all (except those subject to random screening) as there is no WIM on the mainline in the SB direction. A credential check booth exists near the platform scale but it was abandoned several years ago. Credentials for trucks are not checked except for the trucks using PrePass (e-checked) and the trucks directed to park by the administration building for additional screening.

The truck parking lot has 16 parking spaces, with an additional 19 spaces in the overflow lot (the former POE site) and a large gravel area that can be used for parking. The employee/visitor parking lot has 20 parking spaces, nine of which are covered, along with one ADA-accessible parking space. Sidewalks and ramps lead pedestrians from these parking lots to the administration building.

The SB POE has a canopied two-lane inspection facility. One lane is designated for simple inspections and has a lighted deck. The second lane includes an inspection pit, which allows an officer to inspect the truck from below for brake issues or air/oil leaks. Cameras are located around the inspection facility, as well as the front of the administration building, to provide security.

The administration building is generally in good condition and meets the needs of staff and the public. The administration building has a lobby area that contains seating, restrooms, a payphone, drinking fountains, and vending machines. There are four customer service "windows" (two for ADOT and two for UDOT) although they do not have actual windows separating the public from employees. The employee area has restrooms, showers, lockers, a drinking fountain, storage lockers, a custodial area, a conference/break room, three offices for ADOT ECD staff, and one office for Utah Department of Public Safety staff.

The SB POE site has sewer, water, telecommunications, electricity, heating/cooling for the administration building, emergency power generator, site drainage, and landscaping/irrigation. Lighting is generally adequate outside the administration building, in the inspection facility, along sidewalk and pedestrian paths, in the parking lot, and along the ramps, but is not adequate between the platform scale and the administration building.

There are currently no known programmed improvement projects for the St. George SB POE facility although Utah is looking at improving the screening technology at all POEs in Utah.

ADOT POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- The overhead variable message sign by the administration building should be located 35'-40' farther south than it is so there is enough time for truckers to see the message about whether or not they need to enter the POE;
- The entrance to the truck parking lot is not clearly signed, therefore many trucks attempt to go into the employee parking lot and get stuck in the entrance to that lot;
- More lighting is needed between the platform scale and the administration building to allow POE staff to better see trucks and truck drivers which approach the administration building at night;
- Interview subjects would like to have another inspection pit at the facility;
- There is inadequate wind protection at the inspection facility;
- The phone at the inspection station does not always work; and
- Customer service desks should be turned around to face oncoming trucks.

Technological Issues

- The ramp SSWIM scales are not accurate, and as a result POE staff use only the single platform scale;
- There is no SB WIM scale, so there is no way to know if PrePass vehicles are overweight;
- There is neither a USDOT number reader nor a license plate reader at the facility;
- Many of the cameras installed several years ago do not work anymore; and
- Electronics and computers are often out of date;

Other Issues

- When Utah DOT is short-staffed at the NB POE, UDOT pulls their staff from the SB POE to cover the shortage, which then forces Arizona to carry more of the load at the SB POE;
- The maintenance agreement with Utah (Utah does the work on the SB and NB POEs and Arizona pays for the SB POE work) is perceived to be not working well because Utah often does work without making sure Arizona has the funding budgeted and available for that work. Stakeholders from both Arizona and Utah are talking about amending the maintenance agreement;
- There is inadequate staff to perform mobile details; and
- Stakeholders asserted that there should be two extra officers per shift, one each for NB and SB.

Key statistics for the St. George SB POE for 2011 are listed below.

- Annual pre-cleared percentage was 79%;
- Highest inbound monthly total volumes and checked volumes were in May-November;
- Highest inbound monthly total volume was 35,494 in July;
- Highest inbound monthly checked volume was 8,779 in July;
- Daily inbound operating hours averaged 16 hours January-June and 20 hours July-December;
- Highest inbound daily average total volumes and checked volumes were in May-November;
- Highest inbound daily average total volume was 1,145 in July;
- Highest inbound daily average checked volume was 283 in July;
- Highest inbound daily total volumes were generally on Wednesdays and Thursdays;
- Highest inbound daily total volume was 1,845 on Tuesday, November 22, 2011;
- Highest inbound daily checked volumes were generally on Mondays; and
- Highest inbound daily checked volume was 872 on Sunday, August 14, 2011.

Table C.9 contains annual traffic and activity statistics for the St. George Port of Entry for 2009-2011.

Table C.9 St. George Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	12,322	1,182,658	283,358	899,300	-	727,832	1,500	164	220	946	2,398	1,037,824
	Inbound	6,336	576,308	133,606	442,702	-	343,528	639	2	26	-	-	-
2009	*Outbound*	5,986	606,350	149,752	456,598	-	384,304	865	162	194	-	-	-
	Total	13,689	949,192	190,216	758,976	-	785,360	1,743	207	309	1,437	2,279	1,297,116
	Inbound	6,883	474,177	96,022	378,155	-	369,062	522	1	44	-	-	-
2010	*Outbound*	6,806	475,015	94,194	380,821	-	416,298	1,221	206	265	-	-	-
	Total	13,247	788,704	129,973	658,731	-	790,857	1,108	150	277	1,469	2,661	1,251,027
	Inbound	6,494	355,457	73,524	281,933	-	365,956	288	2	67	-	-	-
2011	*Outbound*	6,753	433,247	56,449	376,798	-	424,901	843	148	210	-	-	-

Source: ADOT

Table C.10 contains annual cost data for the St. George Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.10 St. George Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$708,170	$71,854	$780,024
2010	$622,205	$44,316	$666,521
2011	$615,961	$74,603	$690,564
Average	$648,779	$63,591	$712,370
Total	$1,946,336	$190,773	$2,137,109

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the St. George POE facility are provided in Appendix E.

St. George Future Conditions Assessment

Overall, St. George meets some to most of the assessment criteria. A significant challenge is integrating operations and investment with the northbound UDOT facility. Additionally, updating the screening and signage at the port would increase traffic flow efficiency. St. George has the potential to see very high traffic volume growth on I-15, which may require additional investments in infrastructure and staffing.

Table C.11 St. George Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	5 out of 9	None	5 out of 9
Facilities	Inbound	3 out of 6		3 out of 6
Technology and Infrastructure	Inbound	7 out of 10		7 out of 10
Staffing and Functions	Inbound	3 out of 4		3 out of 4

Operating Statistics

Summary statistics for operations at St. George in 2011, as reported by ADOT, are found Table C.12.

Table C.12 St. George Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Costs (per vehicle)	Revenue (per vehicle)
Inbound	355,457	21%	3%	79%	200	20/7	$.43	$1.59

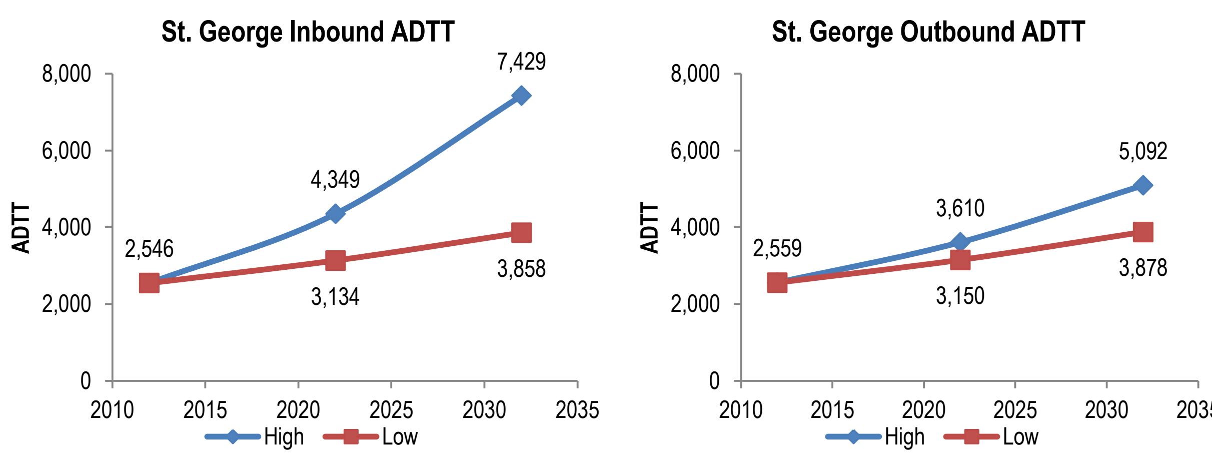
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

I-15 is projected to experience average (2.1%) to high (3.5%) or very high (5.5%) traffic growth in both the northbound and southbound directions over the next 20 years. Figure C.9 shows current and future truck traffic volumes at St. George.

Figure C.9 St. George 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Joint jurisdiction of the St. George POE sites creates barriers to both investment and operations;
- No weight screening currently exists on the mainline;
- Static scale was replaced as of 2011; however WIM scale on the ramp has reported accuracy problems;
- Mainline and ramp signage is reported to be functional. Inadequate parking facility signage. Electronic sign at the administration building is located too far upstream, causing trucks to miss instructions to pull into the facility;

- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales;
- Administrative facility needs minor upgrades;
- Lack of weight screening on the mainline and inadequate signage reduces bypass potential;
- Use of ramp screening allows for more truck flow, but trucks have issues navigating circulation loop and entrance to parking lot;
- Staffing challenges due to shared-staff responsibilities between UDOT and ADOT facilities;
- Integration of WIM, screening, static scale, and other equipment would increase efficiency and effectiveness of screening and compliance operations; and

Costs, Revenue, and Benefits from Screening and Inspections[4]

- Mainline electronic screening allowed approximately 280,000 bypasses in 2012, saving approximately 110,000 gallons of fuel, 23,000 carrier hours, 250 metric tons of emissions, and $2.5 million dollars in carrier operating costs;
- The total cost to run the port in 2011 was $690,564 with staffing costs representing $615,961 and operations and maintenance costs accounting for the remainder;
- The port facility generated $1,251,027 in revenue in 2011; and
- In 2011, staff at St. George performed 1469 inspections, and put 246 drivers and 208 vehicles out of service.

4 Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.4 Sanders

The Sanders Port of Entry is located along I-40 one mile east of Sanders, Arizona. The primary facility is the inbound or westbound port. The outbound or eastbound port is open only occasionally. The Sanders POE is located along I-40 about one mile east of Sanders, Arizona and eighteen miles west of the Arizona-New Mexico border. The primary Sanders POE facility is the inbound or westbound (WB) port. An outbound or eastbound (EB) port exists but it is only open occasionally. The POE is operated and managed by ADOT.

Figure C.10 Sanders Port of Entry Facility

The Sanders POE site is on approximately 9.03 acres of land owned by the State of Arizona. The site is adjacent to undeveloped land owned by the Navajo Indian Tribe to the north and privately owned land to the south. The site includes an administration building and a parking lot that are estimated to be 30+ years old.

The WB site layout consists of one credential check lane/static scale lane and one oversize truck credential check lane/bypass lane. The EB site layout consists of one credential check lane/static scale lane and one truck bypass lane. The site circulation for the WB POE is clockwise. The administration building is located adjacent to the static scale lane outside the return loop. There is an internal circulation loop for the EB POE. The site circulation for the EB POE is clockwise and the administration building is located outside the return loop.

Figure C.11 Sanders Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The WB POE is currently open 17 hours a day (6am-11pm), seven days a week, and is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, three sergeants, four officers, and nine CSRs. There are two 8.5-hour shifts per day, with staff typically working five 8.5-hour days per week. Whenever the EB POE is open, it is staffed with personnel from the WB POE.

The primary screening features on the I-40 WB mainline prior to reaching the Sanders WB POE are a PrePass antenna and WIM scale with associated loop detectors, piezo sensors, overview cameras, and CMS that are located approximately one-half mile upstream of the exit ramp gore to the WB POE. The CMS notify truck drivers if they need to enter the port or not. Currently the CMS is not functional. An overhead LCS is located at the off-ramp entrance to indicate whether the off-ramp is closed. A PrePass compliance antenna and another camera with associated loop detectors and piezo sensors are located just downstream of the exit ramp gore to document trucks that attempt to unlawfully bypass the port. Inside the port, a three-platform static scale (12′ x 10′, 20′, and 60′) is located in the credential check/scale lane adjacent to the administration building. A SSWIM scale is located in the bypass lane near the administration building. The one free-standing credential check booth is used during busier times. During less busy times, POE staff checks vehicles from the window inside the administration building. At the EB POE, the only primary screening feature is a three-platform static scale (12′ x 60′, 20′, and 10′), which is currently operational and used when the EB side is open.

Trucks volumes are heavy enough at times that the queue of vehicles waiting to be checked backs up to the mainline. When this occurs, POE staff wave through trucks along the bypass lane to reduce the queue length.

The WB POE has eight truck parking spaces downstream of the administration building for inspections/permits. The WB POE has approximately 30 employee/visitor spaces, five of which are covered (under a canopy structure that is used as an inspection facility), along with one ADA-accessible parking space. The EB POE has eight truck parking spaces. Both the WB and EB POEs have sidewalk adjacent to the administration building but the sidewalk is not connected to the parking lots.

The canopy structure serves as a covered inspection facility at the WB POE. Sometimes trucks are asked to loop back to enter the canopy for inspection. Inspection can take place at the truck parking lot. However, the lack of an inspection pit makes it difficult for staff to properly inspect vehicles, especially heavy vehicles with low clearance.

The WB POE administration building is generally in average condition. It has a lobby area that includes an information kiosk, restrooms, a vending machine, and four customer windows. The employee area includes supplies storage rooms, telecommunication/data room, a training/break room, restrooms, shower/locker rooms, two offices, and five workstations. The EB POE administration building was not accessible during a field review visit, so the inside features could not be documented.

The WB POE has sewer, water, telecommunications, electricity, propane gas, heating/cooling for the administration building and credential booth, site drainage, and landscaping/irrigation. Lighting at the WB POE is provided along the outside edge of the administration building, outside the parking lot, along the edge of the mainline and ramps, and on the ceiling of the canopy. The EB POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site drainage, and landscape/irrigation. Lighting at the EB POE is provided along the outside edge of the administration building, and ramps.

Preliminary design work is underway on a new port called the Chambers POE that will result in the closure of the Sanders POE and relocation of POE staff to the new Chambers POE 18 miles farther to the west along I-40.

POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- The off-ramp, which can only hold seven trucks, is too short. When trucks back up to the freeway mainline, the overhead lane control signal is still showing green. The resulting situation is confusing and dangerous to truck drivers;
- There are an insufficient number of truck parking stalls;
- An inspection bay is needed to go underneath trucks for thorough inspection;

- The port on-ramp is too close to the US 191 off-ramp, which will be resolved with the relocation of the POE to Chambers;
- The main control/scale room in the administration building has leaking problems in the roof;
- A sign to delineate the main lobby entrance would be helpful. The POE entrance was switched to the other side and some truck drivers keep going to the wrong side (adjacent to the static scale lane);
- Brighter lights are needed inside the canopy and in the truck parking lot to help inspections at night;
- There are many cracks and displacement in the concrete pavement that are a potential tripping hazard when walking across the lane from the truck parking lot to the administration building;
- Buildings are generally in poor condition; and
- Interview subjects identified off-ramp and on-ramp geometry as substandard.

Technological Issues

- High wind and heavy rain can cause PrePass and WIM to malfunction;
- The PrePass sign of "Follow Cab Signal" is too small to be seen by truck drivers; and
- The port needs two static scales, one with a wider scale pad and one normal static scale, to increase the throughput of the POE when truck demand is high;
- **Other Issues**
- There is insufficient staff to chase trucks when drivers fail to comply with PrePass/WIM;
- Truck drivers can use SR 264 via Window Rock as well as US 61 and US 191 to circumvent the port; and
- It is difficult for the port to expand due to the reservation to the north.

Key statistics for the Sanders WB POE for 2011 are listed below.

- Annual pre-cleared percentage was 69%;
- Highest inbound monthly total volumes were in March, October and November while the highest inbound monthly checked volumes were in August-November;
- Highest inbound monthly total truck volume was 126,478 in October;
- Highest inbound monthly checked volume was 44,598 in October;
- Daily inbound operating hours averaged 16-17 hours January-August, and 22-23 hours September-December;
- Highest inbound average daily total volumes were in March, October and November, and highest inbound average daily checked volumes were in August-November;

- Highest inbound average daily total volume was 4,080 in October;
- Highest inbound average daily checked volume was 1,439 in October;
- Highest inbound daily total volumes were generally on Sundays;
- Highest inbound daily total volume was 7,145 on April 17, 2011;
- Highest inbound daily checked volumes were generally on Sundays; and
- Highest inbound daily checked volume was 2,340 on October 30, 2011.

Table C.13 contains annual traffic and activity statistics for the Sanders Port of Entry for 2009-2011.

Table C.13 Sanders Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	6,419	1,339,890	369,512	968,671	1,707	1,502,794	5,883	442	802	263	1,019	971,902
	Inbound	6,403	1,297,423	369,512	926,204	1,707	1,502,794	3,059	442	802	-	-	-
2009	*Outbound*	16	42,467	-	42,467	-	-	-	-	-	-	-	-
	Total	6,481	1,075,404	384,244	689,803	1,357	1,946,461	5,331	439	1,941	284	1,156	1,097,659
	Inbound	6,481	1,075,404	384,244	689,803	1,357	1,946,461	2,590	439	1,941	-	-	-
2010	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	6,500	1,296,655	394,704	901,115	836	2,491,532	6,585	380	1,966	339	1,184	1,216,088
	Inbound	6,500	1,296,655	394,704	901,115	836	2,491,532	2,409	380	1,966	-	-	-
2011	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.14 contains annual cost data for the Sanders Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.14 Sanders Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$1,033,223	$209,900	$1,243,122
2010	$882,126	$87,710	$969,836
2011	$715,141	$79,660	$794,801
Average	$876,830	$125,757	$1,002,586
Total	$2,630,490	$377,270	$300,7759

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Sanders POE facility are provided in Appendix E.

Sanders Future Conditions Assessment

Overall, Sanders is challenged by its infrastructure and facilities to serve current traffic needs. The Port is moving to a new location near Chambers, Arizona, 18 miles to the west. The Chambers POE has been designed to address issues identified with the Sanders POE, including an enlarged site with additional parking and inspection facilities, ramps designed to handle higher traffic volumes, and updated e-screening, services, and administration facilities. An in-depth evaluation of the Chambers POE project was conducted in July, 2012 as part of the initial project assessment.[5] Table C.15 provides an overview of the assessment of current and future conditions at the Sanders POE.

Table C.15 Sanders Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition[6]	Future Conditions – Number of Criteria Met
Physical Area	Inbound	4 out of 9	Port Ramp Improvements Increased Truck Parking	7 out of 9
	Outbound	2 out of 9		2 out of 9

5 Kimley-Horn and Associates, Inc. Chambers Port of Entry Initial Project Assessment. Federal Reference No. 040-E(001). Prepared for the Arizona Department of Transportation, July, 2012.

6 Assumptions based on the planned construction of the Chambers POE documented in the Kimley-Horn and Associates document referenced above.

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition[6]	Future Conditions – Number of Criteria Met
Facilities	Inbound	3 out of 6	Administration Building Improvements Enclosed Inspection Pits	6 out of 6
	Outbound	0 out of 6		0 out of 6
Technology and Infrastructure	Inbound	7.5 out of 10	Signal and Signage Improvements Mainline Screening Improvements	8 out of 10
	Outbound	2 out of 10		2 out of 10
Staffing and Functions	Inbound / Outbound	1.5 out of 4		1.5 out of 4

Operating Statistics

Summary statistics for operations at Sanders in 2011, as reported by ADOT, are found Table C.16.

Table C.16 Sanders Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections per 10,000 vehicles)**	Operating Hours (hours/days)	Costs (per vehicle)**	Revenue (per vehicle)**
Inbound	1,296,655	30%	29%	69%	9	17/7	$.32	$.94

Source: ADOT Enforcement SVC Statistical Recap

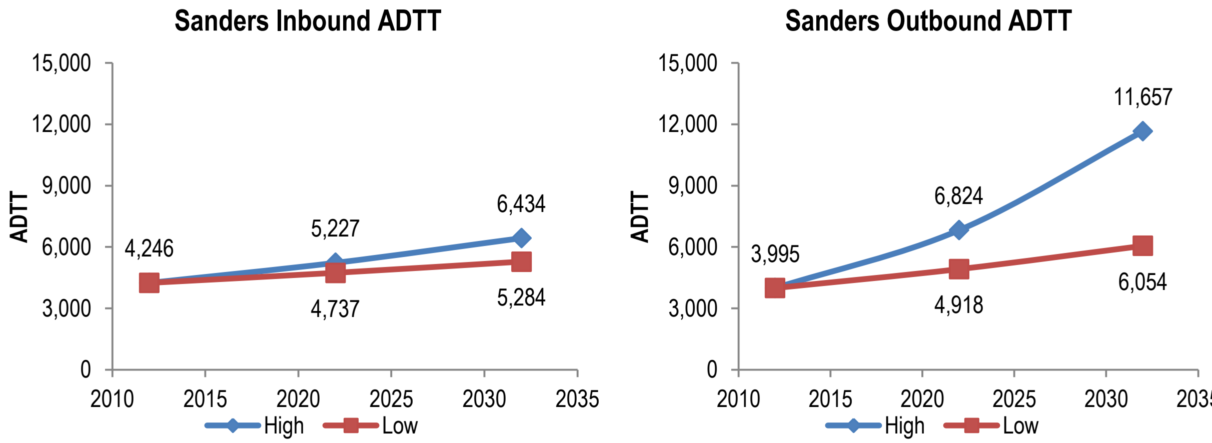
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

**Inspection, cost, and revenue data are for the Port as a whole.

Future Traffic Trends:

Sanders will likely see an average (2.1%) to a very high (5.5%) growth in traffic eastbound, due to the increases in through freight from the Ports of Los Angeles and Long Beach that travel via truck through Arizona. Growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state may also contribute to increasing outbound truck traffic traveling along I-40. Sanders is projected to see a low (1.1%) to average (2.1%) growth rate for westbound traffic. Figure C.12 shows current and future truck traffic volumes at Sanders.

Figure C.12 Sanders 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- The port is unable to handle current traffic volumes, causing queue backups on the mainline;
- Parking facilities are inadequate;
- Sanders is located adjacent to Navajo and privately owned land, which constrains expansion potential at the current site;
- Port is easily bypassed by using alternate routes (SR 264 and US 61 to US 191);
- The ramp is too close to the US 191 off ramp and the length is inadequate, causing backups onto the mainline;
- Mainline electronic credential and WIM exist on the mainline, but have been reported to malfunction in high wind and rain;
- Mainline CMS is reported to be nonfunctional, and does not tell drivers to bypass when the port is full;
- Static scale on the westbound side is not adequate to process current traffic volumes, and reportedly does not match with the WIM. Functioning static scale is also present on the eastbound side;
- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales;
- Oversized trucks can be accommodated in the bypass lane only;
- Port does not have an inspection facility;
- Administrative facility needs increased signage, and some repairs to the building and sidewalks; and

- Staffing levels are insufficient to run both inbound and outbound POEs.

Costs, Revenue, and Benefits from Screening and Inspections[7]

- Mainline electronic screening allowed approximately 430,000 bypasses in 2012, saving approximately 170,000 gallons of fuel, 36,000 carrier hours, 380 metric tons of emissions, and $3.7 million dollars in carrier operating costs;
- The total cost to run the port in 2011 was $794,801 with staffing costs representing $715,141 and operations and maintenance costs accounting for the remainder;
- The port facility generated $1,216,088 in revenue in 2011; and
- In 2011, staff at Sanders conducted 339 inspections, and put 163 vehicles and 59 drivers out of service.

7 Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.5 San Simon

The San Simon POE is located along I-10 about three miles east of San Simon, Arizona and 8 miles west of the Arizona-New Mexico border. The primary San Simon POE facility is the inbound or westbound (WB) port. An outbound or eastbound (EB) port exists but it is only open occasionally. The POE is operated and managed by ADOT.

Figure C.13 San Simon Port of Entry Facility

The San Simon POE site is on approximately 23.5 acres of land owned by the State of Arizona. The site is adjacent to farmland that is privately owned. The site includes an administration building and a parking lot that were initially constructed in 1954.

The WB site layout consists of one credential check lane/static scale lane and one oversize truck credential check lane/bypass lane. The EB site layout consists of one credential check lane/static scale lane and one truck bypass lane. There is no internal circulation loop for the WB POE. The site circulation for the WB POE is counterclockwise when the canopy is used as an inspection facility. The administration building is located adjacent to the canopy and static scale lane. There is no internal circulation loop for the EB POE. Trucks can park or drive straight through.

Figure C.14 San Simon Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The WB POE is currently open 24 hours a day, seven days a week, and is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, three sergeants, nine officers, and six CSRs. There are three 8-hour shifts per day, with staff typically working five 8-hour days per week. Whenever the EB POE is open, it is staffed with personnel from the WB POE.

The primary screening features on the I-10 WB mainline prior to reaching the San Simon WB POE are a PrePass antenna and WIM scale with associated loop detectors, piezo sensors, overview cameras, and CMS that are located approximately one-half mile upstream of the exit ramp gore to the WB POE. The CMS notify truck drivers on if they need to enter the port or not. A PrePass compliance antenna and another camera with associated loop detectors and piezo sensors are located just downstream of the exit ramp gore to document trucks that attempt to unlawfully bypass the port. Inside the port, a single-platform static scale (11′ x 10′) is located in the credential check/scale lane adjacent to the administration building. The one free-standing credential check booth is used during busier times. During less busy times, POE staff checks vehicles from the window inside the administration building. At the EB POE, the only primary screening feature is a three-platform static scale (12′ x 10′, 20′, and 60′), which is not currently operational and is in need of replacement.

Because of the long off-ramp, truck queues do not back up to the mainline very often. During winter time, more trucks shift to I-10 to avoid traffic congestion on I-40 due to inclement weather, which can cause queuing issues on the off-ramp. When this occurs, POE staff waves through trucks along the bypass lane to reduce the queue length.

The WB POE has 15 truck parking spaces downstream of the administration building for inspections/permits. The WB POE has approximately 22 employee/visitor spaces, ten of which are covered (under a canopy structure that is used as an inspection facility), along with one ADA-accessible parking space. The EB POE has seven truck parking spaces. Both the WB and EB POEs have a sidewalk and ramps to lead pedestrians to the administration building.

The canopy structure serves as a covered inspection facility at the WB POE. Sometimes trucks are asked to loop back to enter the canopy for inspection. Inspection can take place on the truck parking lot. However, the lack of an inspection pit makes it difficult for staff to properly inspect vehicles, especially heavy vehicles with low clearance.

The WB POE administration building is generally in average condition. It has a lobby area that includes an information kiosk, restrooms, vending machines, and five customer windows. The employee area includes file storage lockers, supplies storage rooms, a training/meeting room, restrooms, shower/locker rooms, an interview room, two offices, six workstations, and a break room. The EB POE administration building features a lobby area with one customer window and an employee area with one workstation.

The WB POE has sewer, water, telecommunications, electricity, natural gas, heating/cooling for the administration building and credential booth, fire protection, site drainage, and landscaping/irrigation. Lighting at the WB POE is provided along the outside edge of the administration building, outside the parking lot, along the edge of the mainline and ramps, and on the ceiling of the canopy. The EB POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site drainage, and landscape/irrigation. Lighting at the EB POE is provided along the outside edge of the administration building, parking area, and ramps.

There are currently plans to reconstruct the POE in a two-phase project with a “Final Location Design Concept Report” having been published in April of 2010. At this time there are no construction funds programmed in the 5-year STIP (FY13-FY17) but there are $3.6 million of funds programmed in FY16 to begin the design documentation and obtain the necessary clearances for this project.

POE staff identified several issues related to the existing and planned port facility, including the following:

Physical Issues

- The curvature of the I-10 WB mainline at the port has created issues when truck drivers try to maneuver through the curve;
- There is no return loop and trucks have to go through the area underneath the canopy south of the administration building to go back to the static scale lane;
- Inspections are currently conducted under the canopy or in the parking lot. An inspection bay with an inspection pit is needed;
- The port has no hazmat leaky load area;

- While truck queues rarely extend to the freeway mainline, the situation does arise during inclement weather;
- The inbound port on-ramp merge is too close to the off-ramp to I-10 Business Route;
- The port has limited land to expand due to the railroad immediately to the north; and
- The interview room is located in a building next to the main administration building, which interview subjects identified as a potential security issue;

Technological Issues

- There is only one static scale platform (11'x 10'), so each axle has to be weighed separately with the truck moving in slow motion;
- The facility does not have a SSWIM scale on the off-ramp;
- The port needs two static scales, one with a wider scale pad and one normal static scale, to increase the throughput of the POE when truck demand is high; and
- The accuracy of WIM on the mainline is affected by dust storms or inclement weather;

Other Issues

- The port is busier between September and March, especially when I-15 and I-40 are affected by snow storms and trucks use I-10 instead;
- Truck drivers can circumvent the current POE via two routes: through US 70 where the Duncan POE is currently closed; and on SR 80 and US 191 after the Douglas POE has closed for the day (3-4pm). Some trucks were observed to bypass the port at milepost 391 via Cavot Road, which is a dirt road;
- Interviewees want to operate the outbound port but assert that there is not sufficient staff; It was asserted that a staff level of 25 people should be maintained to keep the POE operating effectively;
- The administration building has flooding concerns at the door step during heavy rain; and
- The nearest police station is 16 miles away, which was asserted to be a potential safety problem.

Key statistics for the San Simon WB POE for 2011 are listed below.

- Annual pre-cleared percentage was 47%;
- Highest inbound monthly total volumes were in August, October and December, and highest inbound monthly checked volumes were in May, August and December;
- Highest inbound monthly total volume was 77,145 in December;
- Highest inbound monthly checked volume was 41,327 in May;
- Daily inbound operating hours averaged 18 hours January-April and 24 hours May-December;

- Highest inbound average daily total volumes were in August, October and December, and highest inbound average daily checked volumes were in May, August and December;
- Highest inbound average daily total volume was 2,572 in December;
- Highest inbound average daily checked volume was 1,333 in May;
- Highest inbound daily total volumes were generally on Wednesdays and Sundays;
- Highest inbound daily total volume was 3,991 on December 4, 2011;
- Highest inbound daily checked volumes were generally on Wednesdays and Sundays; and
- Highest inbound daily checked volume was 1,987 on December 4, 2011.

Table C.17 contains annual traffic and activity statistics for the San Simon Port of Entry for 2009-2011.

Table C.17 San Simon Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	8,489	814,720	389,577	424,162	981	385,936	3,323	349	719	1,194	6,449	1,311,030
	Inbound	8,485	814,151	389,008	424,162	981	385,936	3,354	349	717	-	-	-
2009	*Outbound*	4	569	569	-	-	-	-	-	2	-	-	-
	Total	6,244	715,919	376,241	333,635	6,043	853,754	3,816	363	1,861	2,918	16,887	1,284,902
	Inbound	6,244	715,919	376,241	333,635	6,043	853,754	3,850	363	1,861	-	-	-
2010	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	7,935	806,595	425,762	377,622	3,211	1,298,387	4,763	480	5,718	1,576	5,626	1,474,615
	Inbound	7,935	806,595	425,762	377,622	3,211	1,298,387	4,814	480	5,718	-	-	-
2011	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.18 contains annual cost data for the San Simon Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.18 San Simon Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$987,929	$81,107	$1,069,036
2010	$883,597	$32,567	$916,164
2011	$829,720	$53,728	$883,448
Average	$900,415	$55,801	$956,216
Total	$2,701,246	$167,402	$2,868,648

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the San Simon POE facility are provided in Appendix E.

San Simon Future Conditions Assessment

Overall, San Simon meets some of the assessment criteria. In particular, the inbound facility meets most of the physical area and infrastructure criteria, with electronic signaling, primary and secondary screening, an inspection area, and other amenities which are currently lacking or in poor condition at the outbound facility. The port's infrastructure is deteriorating, however. The layout, which does not include a return loop, will make it difficult to handle projected future traffic volumes. A plan to reconstruct the POE is in development, with final design documents expected to be published in 2016.[8]

Table C.19 San Simon Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	5 out of 9	Site Recirculation Loop	6 out of 9
	Outbound	2 out of 9		2 out of 9
Facilities	Inbound	3 out of 6	Administration Building Improvements Enclosed Inspection Pits	6 out of 6

[8] Huitt-Zollars, Inc. San Simon Port of Entry: Final Location Design Concept Report. Prepared for the Arizona Department of Transportation, April, 2010.

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
	Outbound	2 out of 6		2 out of 6
Technology and Infrastructure	Inbound	7 out of 10	Static Scale Upgrade	8 out of 10
	Outbound	2.5 out of 10		2.5 out of 10
Staffing and Functions	Inbound / Outbound	1.5 out of 4		1.5 out of 10

Operating Statistics

Summary statistics for operations at San Simon, as reported by ADOT, are found in Table C.20.

Table C.20 San Simon Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)**	Operating Hours (hours/days)	Cost (per vehicle)**	Revenue (per vehicle)**
Inbound	806,595	53%	52%	47%	37	24/7	$.39	$1.83

Source: ADOT Enforcement SVC Statistical Recap

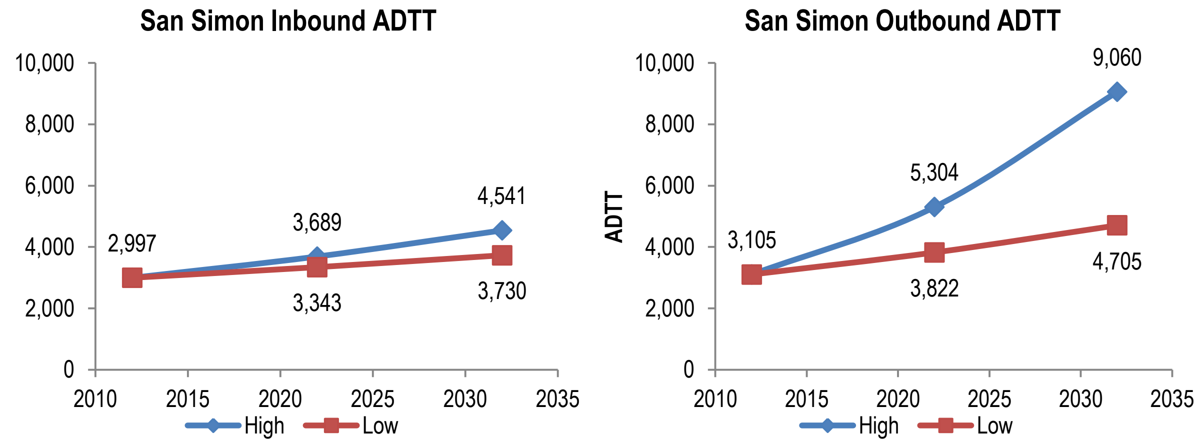
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

**Inspection, cost, and revenue data is for the Port as a whole.

Future Traffic Trends

San Simon eastbound traffic is expected to grow at an average (2.1%) to a very high rate (5.5%), partially due to container freight volumes moving from the Ports of Los Angeles and Long Beach to US destinations. Growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state will also increase the inbound and outbound truck traffic traveling along I-10. Westbound traffic is projected to grow at a low (1.1%) to average (2.1%) rate. Figure C.15 shows current and future truck traffic volumes at San Simon.

Figure C.15 San Simon 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Without ramp screening capabilities and a larger static scale, it will be difficult for San Simon to handle large increases in traffic volume;
- San Simon can be bypassed by travelling on US 70, through the Duncan POE, which is currently closed, on SR 80, or on a nearby dirt road;
- A CMS is used to communicate with drivers on the mainline;
- Neither the eastbound or westbound POE has a return loop, which means that trucks cannot easily return to the administration building from the inspection area or parking;
- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales;
- Port does not have pit inspection facility;
- The scale on the eastbound side is a single axle scale, which is inadequate for current or future traffic volumes. The westbound scale has a three platform scale, which is currently out of service;
- Administrative facility needs repairs and upgrades. Potential safety hazards exist due to remoteness of the facility, and separation between the main facility and interview room;
- Staffing levels are insufficient to run both inbound and outbound POEs; and
- Integration of WIM, screening, static scale, and other equipment would increase efficiency and effectiveness of screening and compliance operations.

Costs, Revenue, and Benefits from Screening and Inspections[9]

- Mainline electronic screening allowed approximately 400,000 bypasses in 2012, saving approximately 160,000 gallons of fuel, 34,000 carrier hours, 360 metric tons of emissions, and $3.5 million dollars in carrier operating costs;
- The total cost to run the port in 2011 was $883,448 with staffing costs representing $829,720 and operations and maintenance costs accounting for the remainder;
- The port facility generated $1,474,615 in revenue in 2011; and
- Staff at San Simon conducted 1576 inspections in 2011, putting 252 drivers and 180 vehicles out of service.

[9] Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.6 Topock

The Topock POE is located along I-40 about nine miles southeast of Topock, Arizona and about three miles east of the Arizona-California border. The primary Topock POE facility is the inbound or eastbound (EB) port. An outbound or westbound (WB) port exists but it is only open occasionally. The Topock POE is managed and operated by ADOT.

Figure C.16 Topock Port of Entry Facility

The Topock POE site is on approximately 29.89 acres of land owned by the State of Arizona. The site is adjacent to undeveloped land that is owned by the Bureau of Land Management. The site contains an administration building and a parking lot that were initially constructed 30+ years ago. A tunnel exists between the EB POE and WB POE that is used occasionally when the WB POE is open.

The EB site layout consists of one credential check/static scale lane, one oversize truck credential check/bypass lane, and an internal circulation return loop. The site circulation for the EB POE is clockwise. The administration building is located adjacent to the static scale lane outside the return loop. The WB site layout consists of one credential check lane/static scale lane and one truck bypass lane. The WB static scale is currently blocked by concrete barrier and is not functional. There is no internal circulation loop for the WB POE.

Figure C.17 Topock Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The EB POE is currently open 24 hours a day, Monday-Friday, and is typically closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, three sergeants, six officers, and six CSRs. There are three 8-hour shifts per day, with staff typically working five 8-hour days per week. Whenever the WB POE is open, it is staffed with personnel from the EB POE.

The primary screening features on the I-40 EB mainline prior to reaching the Topock EB POE are a PrePass antenna and WIM scale with associated loop detectors, piezo sensors, overview cameras, and CMS that are located approximately one-half mile upstream of the exit ramp gore to the EB POE. The CMS notify truck drivers if they need to enter the port or not. A PrePass compliance antenna and another camera with associated loop detectors and piezo sensors are located just downstream of the exit ramp gore to document trucks that attempt to unlawfully bypass the port. Inside the EB POE, a three-platform static scale (12′ x 10′, 20′, and 60′) is located in the credential check/scale lane adjacent to the administration building. POE staff checks vehicles from a booth that is partially connected to the administration building. At the WB POE, the only primary screening feature is a three-platform static scale (12′ x 10′, 20′, and 60′), which is currently non-operational and is in need of replacement.

Trucks volumes are heavy enough at times that the queue of vehicles waiting to be checked backs up to the mainline. When this occurs, POE staff wave through trucks along the bypass lane to reduce the queue length.

The EB POE has thirteen truck parking spaces downstream of the administration building for inspections/permits. The EB POE has six visitor parking spaces east of the administration building with one ADA-accessible parking space and a fenced-in employee parking dirt lot across the credential lane that has room for at least six parking spaces. There are no covered parking spaces at the EB POE. The WB POE has room on the right shoulder of the bypass lane for at least four truck parking spaces. The EB POE has a sidewalk and ramps to lead pedestrians to the administration building while the WB POE has a sidewalk only on the south side of the administration building.

There is no enclosed inspection facility at the EB POE or the WB POE. Vehicles to be inspected utilize the truck parking spaces downstream of the administration building. The lack of an inspection pit makes it difficult for staff to properly inspect vehicles, especially heavy vehicles with low clearance.

The EB POE administration building is generally in poor condition. The EB POE has a lobby area that contains a drinking fountain and a vending machine. There is no public restroom in the lobby area although there is a port-a-potty in the dirt within the return loop. There are three customer service windows although only two are typically open at a time. The employee area has restrooms, drinking fountains, storage lockers, a custodial area, three offices, and three workstations. The WB POE administration building features a lobby area with a customer window and an employee area with one workstation and a restroom.

The EB POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site drainage, and landscaping. Lighting at the EB POE is provided along the outside edge of the administration building, outside the parking lot, and along the edge of the mainline and ramps, but lighting conditions are considered poor outside the administration building, at the employee/visitor parking lot and at the truck parking lot. The WB POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site drainage, and landscaping. Lighting at the WB POE is provided along the outside edge of the administration building, and ramps. There is a generator located at the WB POE which provides emergency power for both EB and WB POEs.

Planning efforts are just commencing for the reconstruction of the existing port facility. A Project Assessment document will be prepared with the intent of documenting a scope and budget for a new facility. There are currently no funds programmed for construction in the current 5-year STIP (FY13-FY17).

POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- Interviewees indicated a desire for there to be three to five shaded inspection bays;
- Currently staff perform more inspections in the winter than in the summer because there is no shade;
- The physical buildings are inadequate in many ways. Examples cited include:

- Not enough counters for permit transactions;
- No space for drivers to wait and no chairs;
- No secure holding cell;
- Not enough employee lockers;
- No public restrooms in administration building – drivers have to use a port-a-potty;
- No break room; and
- Only one desk/office for the three sergeants to share;
- Roadway lighting is inadequate, while the lighting in the administration building is too bright, making it hard to see out at night;
- The ramp configuration is thought by some interviewees to be "not ideal;"
- There are no hazardous materials disposal area for leaky loads; and
- The WB POE ramps are not long enough to keep it open regularly as traffic backs up onto the highway;

Technological Issues

- The WB POE scale is not working;
- The weight that is shown on the WIM is often not accurate and there are lots of system errors;
- Need to change the WIM random call-ins;
- Would like to be able to issue e-citations – right now it is all handwritten tickets;
- The EB POE static scale is in the right place right next to the administration building but it is in poor condition;
- Telecommunications lines at the facility are unreliable;
- The facility needs more and better computers; and
- There are not enough enforcement vehicles equipped with laptops for officers.

Other Issues

- The WB POE is generally only open when needed as a reliever for the Kingman POE if that port closes for a power outage or other reason, in which case Kingman POE staff come and staff the Topock WB POE;
- The POE is closed Saturday/Sunday right now, but would like to operate the port around the clock if had the staff resources; and
- Interviewees reported that the water at the POE "tastes really bad;"

Key statistics for the Topock EB POE for 2011 are listed below.

- Annual pre-cleared percentage was 62%;
- Highest inbound monthly total volumes were in October and November, and highest inbound monthly checked volumes were in August, October and November;
- Highest inbound monthly total truck volume was 77,955 in October;
- Highest inbound monthly checked volume was 23,238 in October;
- Daily inbound operating hours averaged 16 hours throughout year;
- Monthly inbound total operating hours are highest in August and October-December;
- Highest inbound average daily total volumes were in September, October and November, and highest inbound average daily checked volumes were in April, September and October;
- Highest inbound average daily total volume was 2,515 in October;
- Highest inbound average daily checked volume was 750 in October;
- Highest inbound daily total volumes were generally on Tuesdays, Fridays and Saturdays;
- Highest inbound daily total volume was 3,540 on November 12, 2011;
- Highest inbound daily checked volumes were generally on Tuesdays and Thursdays; and
- Highest inbound daily checked volume was 1,051 on December 30, 2011.

Table C.21 contains annual traffic and activity statistics for the Topock Port of Entry for 2009-2011.

Table C.21 Topock Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
2009	Total	4,132	439,718	194,192	245,264	262	704,595	1,727	194	2,004	293	406	389,828
	Inbound	4,132	439,718	194,192	245,264	262	704,595	1,750	194	2,004	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2010	Total	4,065	428,064	185,003	242,154	907	708,614	1,566	184	2,521	872	1,269	391,874
	Inbound	4,063	427,874	184,813	242,154	907	708,614	1,560	184	2,521	-	-	-
	Outbound	2	190	190	-	-	-	-	-	-	-	-	-
2011	Total	4,655	557,936	209,368	346,905	1,663	747,830	2,765	242	1,778	703	739	430,643
	Inbound	4,650	557,351	208,873	346,905	1,573	747,830	2,765	242	1,767	-	-	-
	Outbound	5	585	495	-	90	-	-	-	11	-	-	-

Source: ADOT

Table C.22 contains annual cost data for the Topock Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.22 Topock Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$628,278	$78,087	$706,365
2010	$576,971	$48,154	$625,126
2011	$515,026	$58,619	$573,645
Average	$573,425	$61,620	$635,045
Total	$1,720,275	$184,860	$1,905,136

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Topock POE facility are provided in Appendix E.

Topock Future Conditions Assessment

Overall, Topock meets most to some of the assessment criteria, with the exception of the facilities category, in which it meets few criteria. The screening and scale infrastructure is in good condition, however the port lacks adequate inspection facilities and ramp screening capability. The Port administration facilities are in poor condition, reducing the ability of staff to perform Port functions. The significant growth in traffic volumes expected at Topock will exacerbate current problems. A preliminary design is commencing on a reconstructed port facility, but there is no funding currently programmed for construction.[10]

Table C.23 Topock Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	7 out of 9		7 out of 9
	Outbound	4 out of 9		4 out of 9
Facilities	Inbound	1 out of 6	Administration Building Improvements Enclosed Inspection Pits	6 out of 6
	Outbound	1 out of 6		1 out of 6

10 Statement of Qualifications Package: Topock Port of Entry Facility. Contract Number: 2012-027. Arizona Department of Transportation, July 2012.

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Technology and Infrastructure	Inbound	6 out of 10	Signal and Signage Improvements	7 out of 10
	Outbound	1.5 out of 10		1.5 out of 10
Staffing and Functions	Inbound / Outbound	1.5 out of 4		1.5 out of 10

Operating Statistics

Summary statistics for operations at Topock for 2011, as reported by ADOT, are found Table C.24.

Table C.24 Topock Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)**	Operating Hours (hours/days)	Cost (per vehicle)**	Revenue (per vehicle)**
Inbound	557,351	37%	37%	62%	34	24/5	$.58	$.77

Source: ADOT Enforcement SVC Statistical Recap

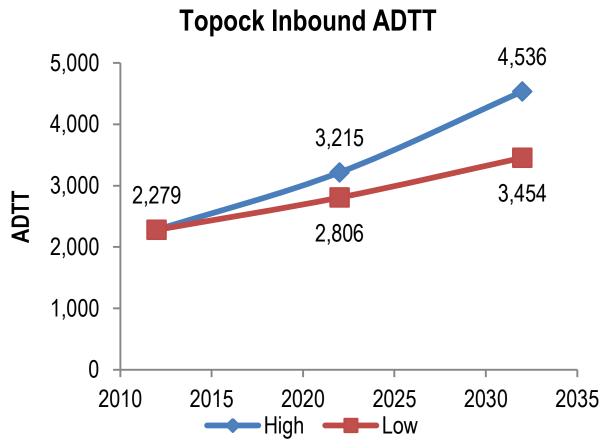
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

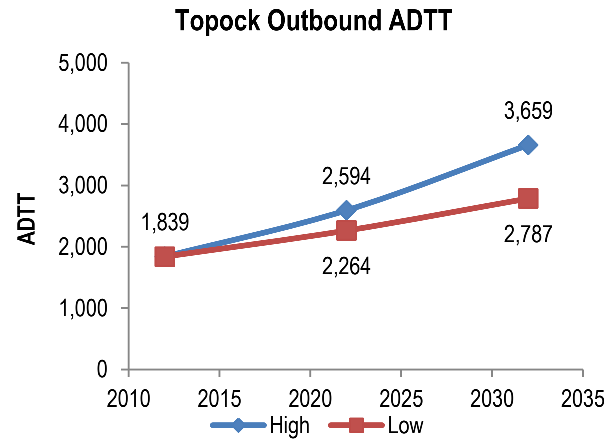
** Inspection, cost, and revenue data is for the Port as a whole.

Future Traffic Trends

Both inbound and outbound traffic at Topock are projected to grow at an average (2.1%) to a high (3.5%) rate over the next 20 years. Although more of the freight traffic growth is expected to concentrate on I-10, truck traffic on I-40 is also expected to experience growth from the increases of freight arriving through the Ports of Los Angeles and Long Beach. Growth in trade with Mexico, and an increased focus in developing warehousing and distribution centers within the state may also contribute to increasing outbound truck traffic traveling along I-40. Figure C.18 shows current and future truck traffic volumes at Topock.

Figure C.18 Topock 2012, 2022, and 2032 Truck Traffic





Deficiencies and Needs

- Truck queues back up on the mainline due to an inadequate ramp and screening capacity on both the inbound and outbound facilities;
- Consolidation and integration is needed for technology systems, including user interfaces, cameras, mainline electronic screening, SSWIM, and platform scales;
- No dedicated inspection facility. On the eastbound side, trucks are inspected in parking spaces. On the westbound side, trucks are inspected on the shoulder (four trucks can fit). Both sites are asphalt or dirt, and there is no sun or elements protection;
- Static scale on the westbound facility is out of service;
- Administrative facility is in poor condition and is functionally outdated. Facility and technology needs updating or replacement; and
- Minimal technology, unreliable or unavailable electronic and telecommunications technology.

Costs, Revenue, Benefits from Screening and Inspections[11]

- Mainline electronic screening allowed approximately 300,000 bypasses in 2012, saving approximately 120,000 gallons of fuel, 25,000 carrier hours, 260 metric tons of emissions, and $2.6 million dollars in carrier operating costs;
- The total cost to run the port in 2011 was $573,645 with staffing costs representing $515,026 and operations and maintenance costs accounting for the remainder;

[11] Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

- The port facility generated $430,643 in revenue in 2011; and
- In 2011, staff at Topock conducted 703 inspections, and put 17 drivers and 68 vehicles out of service.

C.7 Yuma I-8

The I-8 Yuma POE is located along I-8 about one mile southeast of the Arizona-California border in Yuma, Arizona. The primary I-8 Yuma POE facility is the inbound or eastbound (EB) port. An outbound or westbound (WB) port exists that is open less frequently than the EB port. The I-8 Yuma POE is managed and operated by ADOT.

Figure C.19 Yuma (I-8) Port of Entry Facility

The I-8 Yuma EB POE site is on approximately 6.9 acres of land owned by the State of Arizona that is sandwiched between the I-8 mainline and the Redondo Center Drive on-ramp to I-8. The I-8 Yuma WB POE site is on approximately 4.6 acres of land owned by the State of Arizona that is adjacent to undeveloped land that is privately owned. Both I-8 Yuma POE sites contain an administration building and two parking lots that were initially constructed in the 1970s.

The I-8 Yuma EB POE site layout consists of one credential check/scale lane and one oversize truck credential check lane on the west side of the administration building and one truck bypass lane on the east side of the administration building. The oversize lane is often blocked off with barrels or cones. There is no internal circulation return loop. Vehicles needing to be re-weighed must back up through the bypass lane to access the credential check/scale lane again. The I-8 Yuma WB POE site layout is similar, with one credential check/scale lane and one oversize truck credential check lane (also often blocked off) on the east side of the administration building, one truck bypass lane on the west side of the administration building, and no internal circulation return loop.

Figure C.20 Yuma (I-8) Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The EB POE is currently open 16 hours a day, seven days a week, and is typically only closed on Thanksgiving Day and Christmas Day. Current staffing consists of three sergeants, six officers, and seven CSRs. There are two 8-hour shifts per day, with staff typically working five 8-hour days per week. When the WB POE is open, it is typically staffed with one officer and one CSR from the EB POE. The lieutenant based in the Business 8 (B-8)/4th Avenue Yuma POE oversees the I-8 Yuma EB and WB POEs.

The primary screening feature on the I-8 EB mainline prior to reaching the I-8 Yuma EB POE is a PrePass antenna located approximately one mile upstream of the administration building. Inside the EB POE, a single-platform static scale (12′ x 10′) is located in the credential check/scale lane adjacent to the administration building. POE staff utilizes a loudspeaker and a red/green signal light to notify EB truck drivers after they are weighed whether they are clear to exit the POE or if they need to park for additional screening. There is no PrePass antenna or other screening feature on the I-8 WB mainline. The WB POE has a single-platform static scale (12′ x 10′), loudspeaker, and red/green signal light, similar to the EB POE.

Truck volumes are heavy enough at times that the queue of vehicles waiting to be checked at both the I-8 EB and I-8 WB POEs occasionally backs up to the I-8 mainline. When this occurs, POE staff has to wave through trucks to reduce the queue length.

The EB POE has 13 truck parking spaces upstream of the administration building and two out-of-service parking spaces downstream of the administration building. The EB POE has nine employee/visitor parking spaces, along with one ADA-accessible parking space, all of which are uncovered. The WB POE does not have any truck parking spaces but does have five employee/visitor parking spaces, along with one ADA-accessible parking space, all of which are uncovered. Both the EB and WB POEs have sidewalk around the administration building and ADA-accessible ramps to the parking lots.

The WB POE is different from the EB POE in that it has a stop sign and additional signage instructing all drivers to stop their vehicle when they reach the front of the credential check/scale lane line and bring credential documentation into the administration building for checking by POE staff. Because there are no truck parking spaces in advance of the WB POE administration building, truck drivers needing a permit have no choice but to “park” at the front of the credential check/scale lane line. Remaining vehicles in line have to wait for the first truck’s driver to complete the credential check and any necessary permit transactions before the line can move forward.

There is no inspection facility of any kind at the EB POE or the WB POE. Vehicles to be inspected pull off onto the shoulder somewhere, or in the case of the EB POE, back up through the bypass lane and park in one of the permit parking spaces.

The EB POE administration building is generally in average condition. The EB POE has a lobby area that contains seating, a drinking fountain, and a vending machine. There are three customer service windows. The employee area has restrooms, storage lockers, a custodial area, a closet that is used as a break room, three offices, and seven workstations. The WB POE administration building is in below average condition, is much smaller than the EB POE administration building, and features a lobby area with two customer windows and an employee area with restrooms, a storage room, and three workstations. The WB POE is oriented such that CSRs have their backs to oncoming vehicles when they are helping someone at the customer window.

The EB and WB POEs have sewer, water, telecommunications, electricity, heating/cooling for the administration building, site lighting, and landscaping/irrigation. Lighting at the EB and WB POEs is primarily provided along the outside edges of the administration building. The EB POE has two additional lights, one at the front and one at the back of the administration building, to help light the parking lot. EB and WB POE staff indicated they consider the existing lighting conditions at night to be poor.

Planning efforts are just commencing for an expansion of, and improvements to, the existing port facility. A Site Location Study and Project Assessment document will be prepared with the intent of identifying the best facility location along the I-8 corridor along the Arizona California border and to document a scope and budget for the project. At this time there are no construction funds programmed in the 5-year STIP (FY13-FY17) but there are $2.5 million of funds programmed in FY17 to begin the design documentation and obtain the necessary clearances for this project.

Interim improvements that are planned include the installation of a WIM scale in advance of the I-8 WB POE, replacement of the counter swing gate at the I-8 EB POE with a security door, and installation of additional exterior lights at the EB administration building.

The I-8 Yuma EB and WB POE staff identified several issues related to the existing port facilities, including the following:

Physical Issues

- Trucks have to back up through the bypass lane to be re-weighed, as there is no return loop;
- Parking was identified as a major issue:
- There are currently 13 spaces at the EB POE but estimates are that capacity should be 40+ truck parking spaces;
- There are not enough employee/visitor parking spaces at the EB POE; and
- There is no truck parking at all at the WB POE, forcing trucks in line to have to wait for the first truck to complete the required credential check and any necessary permit transactions;
- The swing gate in the EB POE administration building is asserted by interviewees to be a security issue that needs to be addressed;
- Lighting at both POEs is considered by interviewees to be inadequate for inspections at night and for security;
- There is no formal break room for CSRs;
- There are many skid marks near the I-8 WB off-ramp to the WB POE, possibly because of one or more of the following factors:
- The exit sign to the WB POE is partially hidden by a tree,
- The weaving segment with the I-8 WB on-ramp at 16th St is short, and
- The WB POE queue backs up to the I-8 mainline at times;
- The I-8 on-ramp at Redondo Center Dr is separated from the EB POE oversize lane only by a concrete curb and chain link fence. An interviewee stated that a car from the on-ramp once went over the curb and through the fence and hit a tanker truck. Thus, a stronger concrete barrier between the two facilities is needed;
- Need more room inside the POE administration buildings for the staff; and
- The WB POE administration building interior is oriented the wrong way and needs to be repositioned so that CSRs face the oncoming trucks.

Technological Issues

- There is no WIM scale on either EB I-8 or WB I-8. There is not really a good place to put a WIM scale for EB I-8 due to the proximity of the bridge over the Colorado River and California; and
- There is no sign with flashing beacons indicating when the port is open and closed. Today, staff must drive out to the static signs to flip the open/closed plaque;

Other Issues

- Bypass routes exist in the area whereby truckers can avoid the I-8 POEs, including Quechan Rd, Redondo Center Dr, 16th St/US 95, and Giss Pkwy;

Key statistics for the I-8 Yuma EB POE for 2011 are listed below.

- Annual pre-cleared percentage was 51%;
- Highest inbound monthly total volumes and monthly checked volumes were in December;
- Highest inbound monthly total volume was 31,048 in December;
- Highest inbound monthly checked volume was 14,110 in December;
- Daily inbound operating hours averaged 8 hours from January to November and 13 hours in December;
- Monthly inbound total operating hours were lower in the first half of 2011 than the second half of 2011;
- Highest inbound average daily total volumes and average daily checked volumes were in December;
- Highest inbound average daily total volume was 1,035 in December;
- Highest inbound average daily checked volume was 470 in December;
- Highest inbound daily total volumes were generally on Tuesdays, Thursdays and Fridays;
- Highest inbound daily total volume was 1,668 on December 13, 2011;
- Highest inbound daily checked volumes were generally on Tuesdays, Thursdays and Fridays; and
- Highest inbound daily checked volume was 739 on December 27, 2011.

Table C.25 contains annual traffic and activity statistics for the I-8 Yuma Port of Entry for 2009-2011

Table C.25 Yuma I-8 Avenue Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
2009	Total	4,167	234,075	111,006	123,069	-	135,656	772	43	170	388	1,181	906,543
	Inbound	4,167	234,075	111,006	123,069	-	135,656	781	43	170	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2010	Total	2,145	115,392	51,775	63,617	-	70,340	407	14	44	467	1,623	697,753
	Inbound	2,145	115,392	51,775	63,617	-	70,340	407	14	44	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	Total	3,691	181,878	112,609	69,009	260	123,798	931	72	668	342	983	866,175
	Inbound	2,585	133,915	65,531	68,340	44	76,310	791	65	408	-	-	-
	Outbound	1,106	47,963	47,078	669	216	47,488	148	7	260	-	-	-

Source: ADOT

Table C.26 contains annual cost data for the both Yuma (I-8 and B-8) Port of Entry facilities for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.26 Yuma (I-8 and B-8) Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$651,950	$69,817	$721,767
2010	$460,777	$38,604	$499,380
2011	$335,031	$36,008	$371,039
Average	$482,586	$48,143	$530,729
Total	$1,447,758	$144,429	$1,592,186

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Yuma (I-8) POE facility are provided in Appendix E.

Yuma I-8 Future Conditions Assessment

Overall, Yuma I-8 meets few of the assessment criteria of physical area or facilities, and some criteria in technology and staffing. The capacity of the port is not adequate to handle current or future traffic volumes, and the site location limits expansion potential. The Port relies on a single axle static scale to weigh trucks, and does not utilize WIM or ramp screening technology, and does not have technology in place to monitor trucks that bypass the Port. There are no designated inspection facilities, and staff have reported concerns with the security and condition of the administration facilities. Preliminary design work is underway to reconstruct the Yuma I-8 port, including a WIM scale, and lighting and security improvements at the eastbound administration building.

Table C.27 Yuma I-8 Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition[12]	Future Conditions – Number of Criteria Met
Physical Area	Inbound	3 out of 9	Port Ramp Improvements Site Recirculation Loop Increased Truck Parking Increased Regular Parking	7 out of 9

[12] Improvements included are assumed based on information available to CS

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition[12]	Future Conditions – Number of Criteria Met
	Outbound	3 out of 9		3 out of 9
Facilities	Inbound	1 out of 6	Administration Building Improvements Enclosed Inspection Pits	6 out of 6
	Outbound	0 out of 6		0 out of 6
Technology and Infrastructure	Inbound	3 out of 10	Mainline Screening Improvements Static Scale Upgrade Signal and Signage Improvements Mainline Bypass Camera	7 out of 10
	Outbound	2 out of 10		2 out of 10
Staffing and Functions	Inbound / Outbound	1.5 out of 4		1.5 out of 4

Operating Statistics

Summary statistics for operations at Yuma I-8, as reported by ADOT, are found Table C.28.

Table C.28 Yuma I-8 Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)**	Revenue (per vehicle)**
Inbound	133,915	68%	42%	38%	NA	16/7	NA	NA
Outbound	47,963	98%	99%	1%	NA	NA	NA	NA
Total	181,878	76%	57%	28%	52	NA	$.32	$4.71

Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

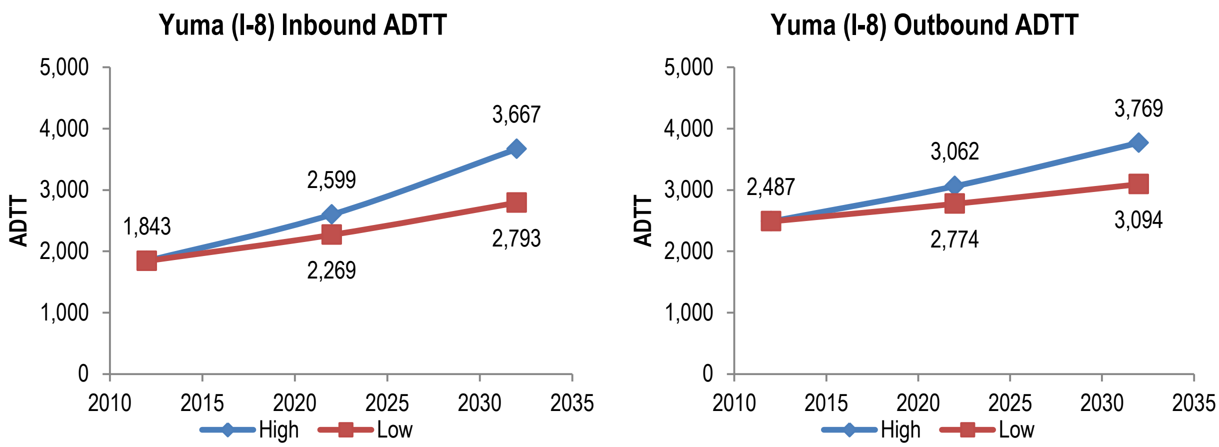
** Costs and revenue data for Yuma I-8 and Yuma B-8 are aggregated

Future Traffic Trends

Traffic volumes at Yuma I-8 are projected to grow at an average (2.1%) to a high (3.5%) rate eastbound over the next 20 years, partially due to increasing freight traffic arriving at the Port of San Diego. Westbound traffic volumes are expected to grow at a low (1.1%) to an average (2.1%)

rate over the next 20 years. Figure C.21 shows current and future truck traffic volumes at Yuma I-8.

Figure C.21 Yuma I-8 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Port is situated between the I-8 mainline and the EB on-ramp from Redondo Center Drive in a way that does not allow expansion of the port without affecting either the mainline or the ramp;
- Lack of ramp screening, return loops, and electronic signage limits ability to handle additional traffic volumes;
- Parking facilities are inadequate;
- Site is easily bypassed by travelling on alternate routes through the city of Yuma;
- Ramp is too short for current traffic volumes, causing backups on the mainline;
- Both east and westbound facilities only have single axle scales;
- No WIM technology, and mainline electronic screening on the eastbound side only. 2017 program funds have been allocated for upgrades to include installation of a WIM scale on the westbound lane, allowing for trucks to be screened for weight on the mainline. Due to the proximity of the bridge over the Colorado River, a EB mainline WIM may not be possible;
- No bypass lanes or return loops; requiring trucks to back up to park or receive inspections;
- No inspection facilities or covered parking spaces;
- Lack of parking facilities at the westbound port is a major concern, as trucks must park at the administration building to receive inspections or permits, causing delays for all following trucks;
- Lack of a barrier between I-8 onramp and EB POE;

- Administration building is in fair condition, but has poor lighting and security concerns. 2017 program upgrades to improve lighting and install a security door will improve administration building condition; and
- Staff at the westbound facility interior is oriented so that CSRs cannot view oncoming trucks.

Costs, Revenue, and Benefits from Screening and Inspections[13]

- Mainline electronic screening allowed approximately 90,000 bypasses in 2012, saving approximately 36,000 gallons of fuel, 7,500 carrier hours, 80 metric tons of emissions, and $800,000 dollars in carrier operating costs;
- Costs and revenue are aggregated between Yuma I-8 and Yuma B-8. The total cost to run the ports in 2011 was $371,039 with staffing costs representing $335,031 and operations and maintenance costs accounting for the remainder;
- The port facilities generated $981,182 in revenue in 2011; and
- In 2011, staff at Yuma I-8 conducted 342 inspections, and put 73 drivers and 47 trucks out of service.

13 Cost, revenue, and inspection data were provided by ADOT. Electronic screening information was sourced from PrePass™

C.8 Page

The Page POE is located along US 89 about six miles south of the Arizona-Utah border just northwest of Page, Arizona. This facility serves both inbound (southbound (SB)) traffic and outbound (northbound (NB)) traffic. The site is located on the west side of the highway and includes an off-ramp and on-ramp for SB traffic. NB truck traffic has to park on the east side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The Page POE is managed and operated by ADOT. The facility is shared between POE and Motor Vehicle Division (MVD) customer service center staff, with POE staff and functions primarily located on the south half of the site and MVD staff and functions primarily located on the north half of the site.

The Page POE site is on approximately 2.3 acres of land owned by the State of Arizona. The site is adjacent to a Department of Public Safety office and is surrounded by the Glen Canyon National Recreation Area, which is managed by the National Park Service. The site includes an administration building originally built in 1986, a POE parking lot south of the administration building, and an MVD parking lot and driver testing area north of the administration building.

The Page POE site layout consists of one credential check/scale lane and one inspection/bypass lane in the SB direction, and two permit parking lanes in the NB direction. NB trucks in need of being weighed or inspected have to complete a tight left turn (essentially a U-turn) to enter the SB ramp into the facility. There is no return loop for either direction of travel.

Figure C.22 Page Port of Entry Facility

The Page POE is currently open 8 hours a day (8am-4pm), Monday-Friday. The port is typically closed on Thanksgiving Day and Christmas Day. Current staffing consists of one officer and two CSRs. POE staff typically works five 8-hour days per week. The lieutenant and sergeants stationed at the St. George POE oversee the Page POE and periodically visit the Page POE. Mobile details are periodically done at night in Page with help from staff from the St. George POE.

Figure C.2 3 Page Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The only screening feature at the Page POE is a 12′ x 10′ single platform static scale for weighing SB vehicles. POE staff utilizes a loudspeaker and a red/green signal light to notify SB truck drivers after they are weighed whether they are clear to exit the POE or if they need to park for additional screening. All NB truck drivers are directed by signage to park in the NB permit parking lanes and bring credential documentation into the administration building for checking by POE staff.

The SB truck parking lot has four parking spaces. Approximately six trucks in total can park in the two NB permit parking lanes. There are thirteen employee/visitor and two ADA-accessible parking spaces south of the administration building and seven employee/visitor parking spaces north of the administration building. There are two parallel parking spaces adjacent to the east side of the administration building reserved for official POE vehicles. None of the parking at the Page POE is covered. Ramps from the parking lots connect to sidewalk along the east side of the administration building where the entrance doors are located.

The crosswalk between the NB permit parking lanes and the administration building has ladder-style striping across the US 89 travel lanes and is approximately fifteen feet wide. Advance warning signs with solar-powered flashing yellow beacons placed approximately 800 feet in advance of the crosswalk advise drivers of the potential presence of pedestrians. NB truck drivers regularly complain to POE staff that they do not feel safe while crossing the crosswalk and request additional roadway improvements to help slow down oncoming traffic.

There is no inspection facility at the Page POE. Vehicles to be inspected must park in the bypass lane or the truck parking lot. There is no canopy to provide shade during the hot summer months.

A raised concrete median separates the SB credential check/scale lane from the inspection/bypass lane. Oversize vehicles and low-clearance vehicles cannot fit in the credential check/scale lane and have to instead be weighed using portable scales.

The administration building is generally in good condition but is crowded with both POE and MVD staff and customers using it. The administration building has a shared POE/MVD lobby area that contains seating, restrooms, and drinking fountains, with vending machines and benches outside the building. There are four customer service "windows" for MVD and two "windows" with counter space for POE staff, although there are not actual windows separating the public from employees. The employee area has restrooms, storage lockers, a custodial area, two supply rooms, a small break room, an MVD supervisor office, two POE workstations, three MVD workstations, and a shared POE/MVD office. The administration building is equipped with security cameras inside the facility but there are no exterior cameras.

The Page POE site has sewer, water, telecommunications, electricity, and heating/cooling for the administration building. Lighting around the facility is generally adequate, and is located outside the administration building, above the sidewalk, in the parking lot, and on the ramps.

There are currently no known programmed improvement projects for the Page POE facility.

The Page POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- The concrete median divider between the credential check/scale lane and the inspection/bypass lane should be removed so oversize trucks can still use the scale;
- A scale on the NB side would enable staff to be able to weigh NB trucks without requesting that the trucks make a U-turn on US 89 to use the SB scale;
- The dirt hill on the northeast side of road could be moved back and leveled out for extra space for NB trucks to turn around into the SB POE weighing area more easily;
- There is no inspection pit with a canopy;
- Pedestrian safety is an issue at the existing crosswalk for NB drivers. There have been several near-misses and NB truck drivers consistently complain about how unsafe the crosswalk is because of how busy the road is and how fast some of the cars are driving. There are many tourists on the road in this area and they often are not paying attention to signage and pedestrians at the crosswalk; and

- The POE is located in a low spot below the roadway and nearby hill, resulting in flooding and erosion issues when there is rain.
- **Technological Issues**
- There are no remote-controlled flashing lights to indicate when the POE is open and closed. Currently, staff have to go out to the signs and manually flip a sign; and
- The red/green signal for trucks at the scale should be pushed back further south;
- **Other Issues**
- The enforcement vehicle is old and has maintenance issues, so it needs to be replaced;
- There is a perception that there is an inherent truck-car conflict by having a co-located MVD office with the POE;
- MVD may be better served relocating to another facility closer to their customers; and
- The POE has historically had issues maintaining adequate and qualified staff – interviewees would like to go to being open 16 hours or 24 hours a day if the staff resources are available;

Key statistics for the Page POE for 2011 are listed below.

- Annual pre-cleared percentage was 0%;
- Both inbound and outbound traffic was checked at the POE and total annual outbound checked volumes were approximately 37% higher than total annual inbound checked volumes;
- Highest inbound monthly total volumes and monthly checked volumes were in August, October and December;
- Highest inbound monthly total volume and monthly checked volume were both 1,173 in August;
- Daily POE operating hours averaged 8 hours throughout the year;
- Highest inbound average daily total volumes and average daily checked volumes were in August, October and December;
- Highest inbound average daily total volume and average daily checked volume were both 53 in October;
- Highest inbound daily total volumes and daily checked volumes were generally on Tuesdays, Wednesdays and Thursdays;
- Highest inbound daily total volume and daily checked volume were 87 on October 6, 2011;

Table C.29 contains annual traffic and activity statistics for the Page Port of Entry for 2009-2011.

Table C.29 Page Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	5,278	49,650	43,652	5,996	2	28,126	98	42	190	103	281	128,070
	Inbound	2,649	24,896	21,707	3,187	2	24,800	63	19	38	-	-	-
2009	*Outbound*	2,629	24,754	21,945	2,809	-	3,326	40	23	152	-	-	-
	Total	2,147	20,178	17,594	2,583	1	15,246	56	9	42	40	83	57,117
	Inbound	1,094	8,860	7,636	1,223	1	10,760	38	7	7	-	-	-
2010	*Outbound*	1,053	11,318	9,958	1,360	-	4,486	8	2	35	-	-	-
	Total	3,789	18,529	18,529	-	-	33,243	114	30	67	33	104	148,072
	Inbound	1,972	7,804	7,804	-	-	16,765	79	9	25	-	-	-
2011	*Outbound*	1,817	10,725	10,725	-	-	16,478	39	21	42	-	-	-

Source: ADOT

Table C.30 contains annual cost data for the Page Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.30 Page Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$161,823	$48,304	$210,127
2010	$160,722	$22,208	$182,930
2011	$36,161	$22,094	$58,255
Average	$119,569	$30,869	$150,437
Total	$358,706	$92,606	$451,312

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Page POE facility are provided in Appendix E.

Page Future Conditions Assessment

Overall, Page is found to meet most to some of the assessment criteria. The physical area is found to be adequate, however the fact that northbound trucks have to make a tight U-turn to enter the ramp causes safety concerns. The port lacks inspection facilities or any sort of screening technology, except a single platform static scale. Although Page sees lower traffic volumes than the primary Arizona POEs, it is expected to see increasing traffic over the next 20 years, which may require additional investment in technology and infrastructure.

Table C.31 Page Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Both	5 out of 9	None	5 out of 9
Facilities	Both	2 out of 6		2 out of 6
Technology and Infrastructure	Both	2 out of 10		2 out of 10
Staffing and Functions	Both	0 out of 4		0 out of 4

Operating Statistics

Summary statistics for operations at Page in 2011, as reported by ADOT, are found Table C.32.

Table C.32 Page Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)	Revenue (per vehicle)
Inbound	7,804	100%	32%	-	NA	NA	NA	NA
Outbound	10,725	100%	9%	-	NA	NA	NA	NA
Total	18,529	100%	19%	-	42	8/5	$.37	$7.99

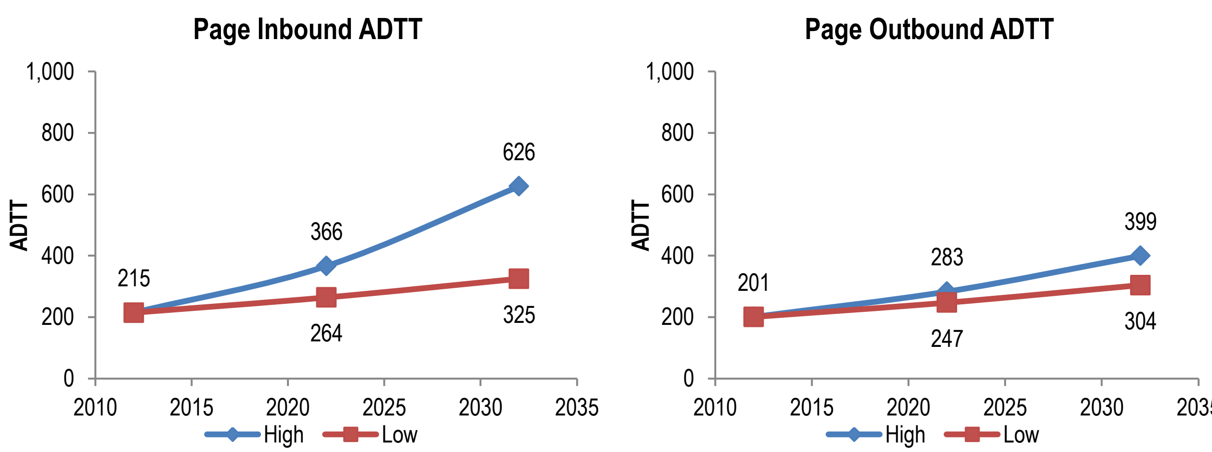
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Although traffic volumes overall will remain low, southbound traffic into Arizona through Page is expected to grow at an average (2.1%) to a very high (5.5%) rate, tripling the number of freight trucks moving through the port by 2032. Similarly northbound traffic at Page is expected to grow at an average (2.1%) to a high (3.5%) rate, doubling by 2032. Figure C.24 shows current and future truck traffic volumes at Page.

Figure C.24 Page 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Surrounded by the Glen Canyon National Recreation Area, limiting expansion options beyond existing right of way;
- Existing bypass route would require vehicles to pass through national forest entrance booths;
- Site currently has no mainline or ramp screening technology;

- Facility unable to weigh/accommodate OSOW traffic;
- Static scale is an older single platform scale that has exceeded its service life expectancy;
- Site has a manual sign to indicate whether the port is open or closed, instead of an electronic system that can be operated from within the facility;
- Facility does not have any dedicated inspection facilities. Vehicles are inspected in the parking lots, limiting the type of vehicles that can be inspected;
- Facility has no internal circulation, NB drivers must perform a difficult U-turn to enter the SB port to be weighed; and
- Pedestrian safety concerns when NB traffic forced to park vehicles and cross road to SB facility;

Costs, Revenue, and Benefits from Screening and Inspections[14]

- The total cost to run the port in 2011 was $58,255 with staffing costs representing $36,161 and operations and maintenance costs accounting for the remainder;
- The port facility generated $148,072 in revenue in 2011; and
- In 2011, staff at Page conducted 33 inspections, and put 13 drivers and 30 vehicles out of service.

[14] Cost, revenue, and inspection data were provided by ADOT.

C.9 Teec Nos Pos

The Teec Nos Pos (pronounced *teez noss poss*) POE is located along US 160 about five miles west of the Arizona-New Mexico border in Teec Nos Pos, Arizona. This facility serves both inbound (westbound (WB)) traffic and outbound (eastbound (EB)) traffic. The site is located on the north side of the highway and includes an off-ramp and on-ramp for WB traffic. EB truck traffic has to park on the south side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The Teec Nos Pos POE is managed and operated by ADOT. The facility serves as a Motor Vehicle Division (MVD) customer service center, with POE staff carrying out duties normally reserved for MVD staff.

Figure C.25 Teec Nos Pos Port of Entry Facility

The Teec Nos Pos POE serves as the POE for truck traffic on US 64, which joins US 160 approximately 1,000 feet southeast of the POE. Signs on WB US 64 and southbound US 160 approaching the US 64/US 160 junction direct trucks to proceed to the nearby POE.

The Teec Nos Pos POE site is on approximately 1.8 acres of land owned by the State of Arizona. The site is surrounded by undeveloped land that is part of the Navajo Indian Reservation. The site includes an administration building that is estimated to be 20+ years old, a parking lot west of the administration building, a driver testing area north of the administration building, one permit parking lane in the WB direction, one permit parking lane in the EB direction, and three mobile homes owned by ADOT for use by staff at the POE.

Figure C.26 Teec Nos Pos Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The Teec Nos Pos POE site is on approximately 1.8 acres of land owned by the State of Arizona. The site is surrounded by undeveloped land that is part of the Navajo Indian Reservation. The site includes an administration building that is estimated to be 20+ years old, a parking lot west of the administration building, a driver testing area north of the administration building, one permit parking lane in the WB direction, one permit parking lane in the EB direction, and three mobile homes owned by ADOT for use by staff at the POE.

The Teec Nos Pos POE is currently open 10 hours a day (7am-5pm), Monday-Friday. The port is typically closed on Thanksgiving Day and Christmas Day. Current staffing consists of three officers, with no CSRs. The staff members typically work one 8-hour shift per day. The lieutenant and sergeants stationed at the Sanders POE oversee the Teec Nos Pos POE and periodically visit the facility.

The only screening feature at the Teec Nos Pos POE is a set of portable scales that is typically placed in the WB permit parking lane but only used occasionally. All WB and EB truck drivers are directed by signage to park in the permit parking lanes and bring credential documentation into the administration building for checking by POE staff unless the truck drivers have been pre-cleared by POE staff.

The parking lot northwest of the administration building has three truck parking spaces and four employee/visitor parking spaces. There are three additional employee parking spaces southeast of the administration building. Approximately five trucks can park in the WB permit parking lane and approximately four trucks can park in the EB permit parking lane. None of the parking at the Teec Nos Pos POE is covered. An ADA-accessible ramp goes from the northwest parking lot to the entrance doors to the administration building.

The crosswalk between the EB permit parking lane and the administration building has ladder-style striping across the US 160 travel lanes and is approximately fifteen feet wide. Advance warning signs placed approximately 200 feet in advance of the crosswalk advise drivers of the potential presence of pedestrians. Pedestrian safety at the crosswalk is an issue of concern for POE staff because vehicles regularly fail to slow down as they approach the crosswalk.

There is no inspection facility at the Teec Nos Pos POE. Vehicles to be inspected must park in one of the permit parking lanes or the truck parking lot.

The administration building is generally in average condition but is crowded in the employee area because staff has materials and equipment associated with both the POE functions and the MVD functions. The administration building has a shared POE/MVD lobby area that contains seating, restrooms, a driver's license testing area, and drinking fountains. There is one customer service "window" for MVD activities and two "windows" with counter space for POE activities, although there are not actual windows separating the public from employees. The employee area has a restroom, storage lockers, a custodial area, a supply room, a Department of Public Safety (DPS) Highway Patrol office, two POE workstations, and one MVD workstation. The administration building is equipped with motion sensors but not security cameras.

The Teec Nos Pos POE site has sewer, water, telecommunications, electricity, and heating/cooling for the administration building. Lighting exists around the facility and at the crosswalk but it is generally considered inadequate by POE staff. There are currently no known programmed improvement projects for the Teec Nos Pos POE facility.

The Teec Nos Pos POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- Interviewees requested a platform scale and a credential check lane constructed on the northeast side of the administration building with a drive-up window in the administration building;
- The reflective signs are wearing out and need to be replaced;
- Truck parking is not considered adequate to accommodate demand;
- The dirt road leading to the driver test area may need to be re-graded as there is a large dip there now;
- The railings and ADA ramp on the outside of the building need maintenance;
- Additional lights need to be installed around the building and at the crosswalk;

- Additional improvements are needed to help slow traffic down at the crosswalk so EB truck drivers can safely cross the crosswalk; and
- The signage at the US 160/US 64 intersection regarding the Teec Nos Pos POE needs to be revised to indicate which way vehicles need to go to reach the POE.
- **Technological Issues**
- There are no remote-controlled flashing lights to indicate when the POE is open and closed. Currently staff have to go out to the signs and manually flip a sign; and
- There is no pre-screening infrastructure, such as PrePass;
- **Other Issues**
- There are times when there is only one staff person at the POE; and
- More mobile details would be effective for the port;

Key statistics for the Teec Nos Pos POE for 2011 are listed below.

- Annual inbound pre-cleared percentage was 15%;
- Outbound credential checked volumes were consistently lower than inbound checked volumes and vice versa for pre-cleared volumes;
- Highest inbound monthly total volumes and monthly checked volumes were in June, August and September;
- Highest inbound monthly total volume was 1,275 in September;
- Highest inbound monthly checked volume was 1,138 in September;
- Daily inbound operating hours averaged 13-14 hours in January-October and 11-12 hours in November-December;
- Highest inbound average daily total volumes and average daily checked volumes were in June, August and September;
- Highest inbound average daily total volume was 58 in September;
- Highest inbound average daily checked volume was 52 in September;
- Highest inbound daily total volumes were generally on Mondays, Wednesdays, and Thursdays;
- Highest inbound daily total volume was 118 on June 13, 2011;
- Highest inbound daily checked volumes were generally on Mondays and Wednesdays; and
- Highest inbound daily checked volume was 98 on June 15, 2011.

Table C.33 contains annual traffic and activity statistics for the Teec Nos Pos Port of Entry for 2009-2011.

Table C.33 Teec Nos Pos Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	3,374	18,302	13,277	5,025	-	5,904	87	33	44	62	118	56,554
	Inbound	3,374	8,892	7,667	1,225	-	5,831	55	24	26	-	-	-
2009	*Outbound*	-	9,410	5,610	3,800	-	73	9	9	18	-	-	-
	Total	3,854	30,162	21,169	8,993	-	2,551	82	20	186	89	133	84,767
	Inbound	3,854	16,447	13,757	2,690	-	2,519	63	16	121	-	-	-
2010	*Outbound*	-	13,715	7,412	6,303	-	32	4	4	65	-	-	-
	Total	3,404	20,847	15,841	5,006	-	4,575	152	33	203	155	175	169,292
	Inbound	3,404	12,158	10,390	1,768	-	4,555	115	32	127	-	-	-
2011	*Outbound*	-	8,689	5,451	3,238	-	20	4	1	76	-	-	-

Source: ADOT

Table C.34 contains annual cost data for the Teec Nos Pos Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.34 Teec Nos Pos Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$175,421	$35,047	$210,467
2010	$220,744	$27,094	$247,838
2011	$223,344	$30,067	$253,411
Average	$206,503	$30,736	$237,239
Total	$619,509	$92,208	$711,716

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Teec Nos Pos POE facility are provided in Appendix E.

Teec Nos Pos Future Conditions Assessment

Overall, Teec Nos Pos reaches few to none of the assessment criteria. Teec Nos Pos operates using portable scales only, which reduce the number of trucks that can be weighed versus a static scale. The very low traffic volumes, however, allow for more flexibility to operate the port without mainline or ramp screening technologies, as the average traffic volume is expected to remain well under 300 trucks per day. Pedestrian safety is a concern at Teec Nos Pos, as reports are that vehicles regularly fail to slow down for the Port crosswalk.

Table C.35 Teec Nos Pos Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	3 out of 9	None	3 out of 9
Facilities	Inbound	1 out of 6		1 out of 6
Technology and Infrastructure	Inbound	0 out of 10		0 out of 10
Staffing and Functions	Inbound	1 out of 4		1 out of 4

Operating Statistics

Summary statistics for operations at Teec Nos Pos in 2011, as reported by ADOT, are found in Table C.36.

Table C.36 Teec Nos Pos Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)	Revenue (per vehicle)
Inbound	12,158	85%	-	15%	NA	NA	NA	NA
Outbound	8,689	63%	-	37%	NA	NA	NA	NA
Total	20,847	76%	-	24%	149	10/5	$1.40	$8.12

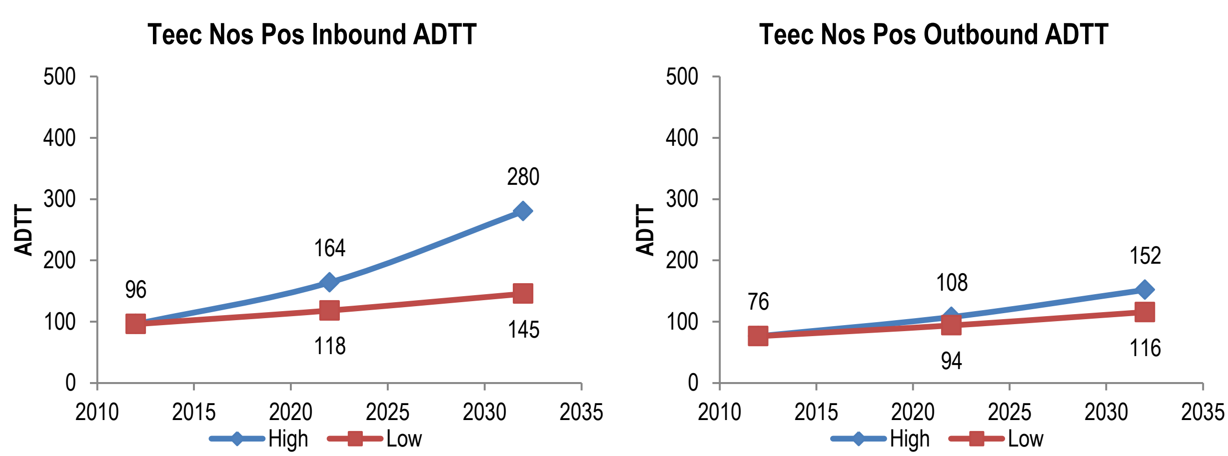
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Although traffic volumes at Teec Nos Pos will remain very low, inbound traffic is expected to grow at an average (2.1%) to a very high (5.5%) rate, and outbound volumes are expected to grow at an average (2.1%) to a high rate (3.5%), more than doubling traffic by 2032. Figure C.27 shows current and future truck traffic volumes at Teec Nos Pos.

Figure C.27 Teec Nos Pos 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site is located on 1.9 acres that is surrounded by Navajo Reservation Land;
- Site currently has no mainline or ramp screening technology;
- Site has no static scale, only weighing technology is a set of portable scales frequently used at the site;

- Facility does not have any dedicated inspection facilities. Vehicles are inspected in the parking spaces and credential check lanes;
- Administration building is in average condition but is crowded due to the need for sharing space with MVD staff;
- Facility has no internal circulation; and
- Pedestrian safety concerns when EB traffic forced to park vehicles and cross highway to WB facility.

Costs, Revenue, and Benefits from Screening and Inspections[15]

- The total cost to run the port in 2011 was $253,401 with staffing costs representing $223,334 and operations and maintenance costs accounting for the remainder;
- The port facility generated $169,292 in revenue in 2011; and
- In 2011, staff at Teec Nos Pos conducted 155 inspections, putting 6 drivers and 7 vehicles out of service.

[15] Cost, revenue, and inspection data were provided by ADOT.

C.10 Yuma B-8

The B-8 Yuma POE is located along Business 8 (B-8), known as 4th Avenue, less than one mile south of the Arizona-California border in Yuma, Arizona. The B-8 Yuma POE facility is an inbound (southbound (SB)) port only. An outbound (northbound (NB)) port used to be open many years ago but it has long since been closed and abandoned. The B-8 Yuma POE is managed and operated by ADOT.

Figure C.28 Yuma (B-8) Port of Entry Facility

The B-8 Yuma POE site is on approximately 1.3 acres of land owned by the State of Arizona. The site is adjacent to a park and undeveloped land owned by the Bureau of Land Management. The site contains an administration building and parking areas that are estimated to be 40+ years old.

The B-8 Yuma POE site layout consists of one credential check/scale lane, one truck bypass lane, and one truck permit parking lane on the west side of the administration building and one employee/visitor parking lane on the east side of the administration building. The truck bypass lane is often blocked off with cones. There is no internal circulation return loop. Vehicles needing to be re-weighed must back up through the bypass or parking lane to access the credential check/scale lane again.

Figure C.29 Yuma (B-8) Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The B-8 Yuma POE is currently open 16 hours a day, Monday-Friday. The port is typically closed on Thanksgiving Day and Christmas Day. Current staffing consists of one lieutenant, two officers, and two CSRs. There are two 8-hour shifts per day, with staff typically working five 8-hour days per week. The lieutenant oversees the nearby I-8 Yuma POE.

The only screening feature at the B-8 Yuma POE is a 12′ x 10′ single platform static scale. POE staff utilizes a loudspeaker and a red/green signal light to notify SB truck drivers after they are weighed whether they are clear to exit the POE or if they need to park for additional screening. Truck volumes are heavy enough at times (particularly during the winter agricultural season) that the queue of vehicles waiting to be checked at the B-8 Yuma POE occasionally backs up to B-8/4th Avenue. When this occurs, POE staff has to wave through trucks to reduce the queue length.

An estimated three trucks can park in the B-8 Yuma POE truck permit parking lane. An estimated five automobiles can park in the employee/visitor parking lane. There is one ADA-accessible parking space. All of the parking areas are uncovered. The B-8 Yuma POE has sidewalk around the administration building with an ADA-accessible ramp to the ADA-accessible parking space.

There is no inspection facility of any kind at the B-8 Yuma POE. Vehicles to be inspected typically park in the truck permit parking lane.

The B-8 Yuma POE administration building is generally in below average condition. The building has issues with termites. The lobby area in the administration building contains seating, a drinking fountain, and a vending machine. There are two customer service windows. The employee area has restrooms, storage lockers, a custodial area, one office, and three workstations. The restrooms and office have exterior doors and are not accessible from the interior of the rest of the administration building.

The B-8 Yuma POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site lighting, and landscaping/irrigation. Lighting at the POE is provided along the outside edges of the administration building and along the curb of the truck permit parking lane. POE staff indicated they consider the existing lighting conditions at night to be poor.

Inspection officers from the B-8 Yuma POE typically spend two days a week at the Yuma MVD building on Gila Ridge Road doing inspections on salvaged vehicles. To increase how often the inspection officers are at the B-8 Yuma POE, there are plans to install a concrete pad and vehicle lift south of the administration building so that they can do their MVD vehicle inspections on-site.

Before the end of 2012, the lieutenant's office is expected to be subdivided into two offices to create an office for the inspection officers.

There are no additional programmed improvements to infrastructure at the B-8 Yuma POE, but there are several impending projects in the vicinity of the POE. ADOT and the City of Yuma in 2013 will be designing a 4th Avenue Gateway project to improve aesthetics on 4th Avenue between I-8 and 1st Street. There are plans to mill and overlay the asphalt pavement on 4th Avenue and improve the railroad tracks where they cross 4th Avenue.

The B-8 Yuma POE staff identified several issues related to the existing port facility, including the following:

Physical Issues

- Crushed drainage pipe results in pooling of water on east side of building;
- Because there is no return loop, trucks have to back up on 4th Avenue (or go the wrong way for a short distance) to be re-weighed;
- There is inadequate lighting, both for inspections at night and for overall security;
- There is no a break room for CSR and officers; and
- The bathrooms in the administrative building for employees are only accessible from the outside of the building.

Technological Issues

- There are no remote-controlled flashing lights to indicate when the POE is open and closed. Currently staff have to go out to the signs and manually flip a sign; and
- The computer programs and Internet do not operate at a high speed.

Other Issues

- Interviewees wish to do mobile details, but there are insufficient staff resources;
- The administration building has a termite problem; and
- Interviewees state that water quality at the facility is poor.

Key statistics for the B-8 Yuma POE for 2011 are listed below.

- Annual pre-cleared percentage was 7%;
- Highest inbound monthly total volumes and monthly checked volumes were in December;
- Highest inbound monthly total truck volume was 5,326 in December;
- Highest inbound monthly checked volume was 5,326 in December;
- POE was not open in the month of March;
- Daily inbound operating hours averaged 5 hours in February, 13 hours in December, and 8 hours for the rest of year;
- Monthly inbound total operating hours were gradually increasing throughout the year;
- Highest inbound average daily total volumes and average daily checked volumes were in December;
- Highest inbound average daily total volume was 184 in December;
- Highest inbound average daily checked volume was 184 in December;
- Highest inbound daily total volumes were generally on Wednesdays, Thursdays and Fridays;
- Highest inbound daily total volume was 315 on December 29, 2011;
- Highest inbound daily checked volumes were generally on Mondays, Thursdays and Fridays; and
- Highest inbound daily checked volume was 315 on December 29, 2011.

Table C.37 contains annual traffic and activity statistics for the Yuma (B-8) Port of Entry for 2009-2011.

Table C.37 Yuma (B-8) Avenue Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	2,832	36,534	27,736	8,798	-	36,570	200	4	54	32	194	94,641
	Inbound	2,832	36,534	27,736	8,798	-	36,570	202	4	54	-	-	-
2009	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	983	10,192	8,295	1,897	-	10,090	44	1	24	180	731	51,691
	Inbound	983	10,192	8,295	1,897	-	10,090	44	1	24	-	-	-
2010	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	1,936	26,574	24,594	1,980	-	24,834	175	20	99	46	112	115,007
	Inbound	1,936	26,574	24,594	1,980	-	24,834	180	20	99	-	-	-
2011	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Cost data for Yuma (B-8) is included with the cost data for Yuma (I-8) in Section C.7.

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Yuma (B-8) POE facility are provided in Appendix E.

Yuma B-8 Future Conditions Assessment

Overall, Yuma B-8 meets some of the assessment criteria. The site does have an internal bypass lane, although it is often blocked off because trucks need to backup to return to the scales or parking, due to the lack of a circulation ramp. Yuma B-8 does have a single platform static scale, but no mainline or secondary screening. Traffic is expected to double in the next 20 years, reducing the ability of the port staff to adequately perform port functions without screening technology. The port does not have any dedicated inspection facilities and suffers for a lack of truck parking and from an outdated administration facility.

Table C.38 Yuma B-8 Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	4 out of 9	None	4 out of 9
Facilities	Inbound	0 out of 6		0 out of 6
Technology and Infrastructure	Inbound	2 out of 10		2 out of 10
Staffing and Functions	Inbound	1 out of 4		1 out of 4

Operating Statistics

Summary statistics for operations at Yuma B-8 in 2011, as reported by ADOT, are found in Table C.39.

Table C.39 Yuma B-8 Operating Statistics

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)**	Revenue (per vehicle)**
Inbound	26,574	93%	93%	7%	19	16/5	$.32	$4.71

Source: ADOT Enforcement SVC Statistical Recap

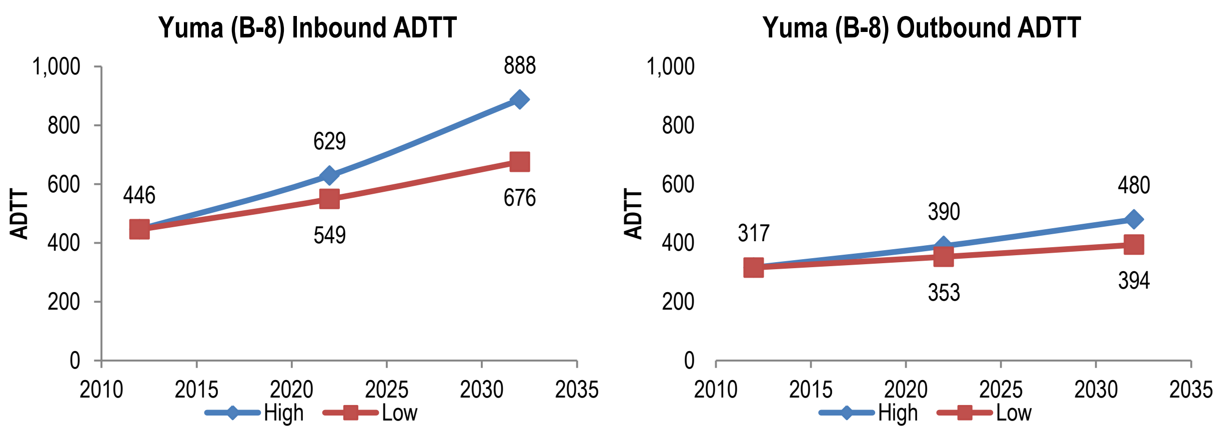
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

** Cost and revenue data is aggregated for Yuma I-8 and Yuma B-8

Future Traffic Trends

Although expected to remain moderately low overall, traffic volumes inbound at Yuma B-8 are expected to grow at an average (2.1%) to a high (3.5%) rate, doubling the amount of truck traffic by 2032. Outbound growth is expected to be lower, with low (1.1%) to average (2.1%) growth rates over the next 20 years. Figure C.30 shows current and future truck traffic volumes at Yuma B-8.

Figure C.30 Yuma B-8 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site has railroad tracks going across its inbound approach;
- No mainline or ramp screening and the static scale is a single axle only;
- Facility does not have any inspection facilities;
- Administration building is in below average condition;
- Site has a manual sign to indicate whether the port is open or closed, instead of an electronic system that can be operated from within the facility; and
- No return loop, which means trucks have to back up on 4th Avenue (or go the wrong way for a short distance) to be re-weighed.

Costs, Revenue, and Benefits from Screening and Inspections[16]

- Costs and revenue are aggregated between Yuma I-8 and Yuma B-8. The total cost to run the ports in 2011 was $371,039 with staffing costs representing $335,031 and operations and maintenance costs accounting for the remainder; and

16 Cost, revenue, and inspection data were provided by ADOT.

- In 2011, staff at Yuma B-8 conducted 342 inspections, and put 73 drivers and 47 vehicles out of service.

C.11 Duncan

The Duncan POE is located along US 70 about five miles east of Duncan, Arizona and one mile west of the Arizona-New Mexico border. The facility serves both inbound (westbound (WB)) traffic and outbound (eastbound (EB)) traffic although it is currently closed (and has been closed since 2009). The site is located on the north side of the highway and includes an off-ramp and on-ramp for both WB and EB traffic. The Duncan POE is managed and operated by ADOT.

Figure C.31 Duncan Port of Entry Facility

The Duncan POE site is on approximately 4.2 acres of land owned by the State of Arizona. The site is adjacent to undeveloped State Trust land owned by the Arizona State Land Department as well some privately owned parcels. The site includes an administration building that is estimated to be 30+ years old and a couple of storage buildings.

The site layout consists of one bi-directional credential check/static scale lane, one WB truck bypass lane, and one EB credential check lane. The bi-directional credential check/static scale lane is primarily oriented for WB traffic, but existing signage directs loaded EB truck traffic to utilize the bi-directional credential check/static scale lane, waiting as needed for the scale to clear of WB traffic. The administration building is located between the bi-directional credential check/static scale lane and the EB credential check lane. There is no internal circulation loop, although traffic could potentially back up through one of the lanes if it was not in use.

Figure C.32 Duncan Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

When the Duncan POE was last open in 2009, it was typically open 8-20 hours a day, Monday-Friday, although some weeks it was closed all week or only open a day or two. It is unknown what the staffing levels were in 2009, but it is supposed that they consisted of one to two officers and one to three CSRs that worked one to three shifts, depending on how many hours a day and days a week the facility was open. The lieutenant and sergeants stationed at the San Simon POE would oversee the Duncan POE if it were reopened.

There are no screening features on US 70 prior to reaching the Duncan POE. Inside the port, a single-platform static scale (12′ x 10′) used to be located in the bi-directional credential check/scale lane adjacent to the administration building. This scale was removed but is in the process of being re-installed at the site. There is a LCS facing WB traffic at the west end of the scale pad and a LCS facing EB traffic at the east end of the scale pad.

The Duncan POE does not have any marked parking spaces for trucks and automobiles, but there is room for trucks to park on the shoulder and for automobiles to park in the gravel area outside the administration building. There is a pedestrian ramp on the south side of the administration building and a crosswalk over the EB credential check lane.

The Duncan POE does not currently have any inspection facilities.

A raised concrete median separates the bidirectional credential check/static scale lane from the WB bypass lane. Oversize vehicles and low-clearance vehicles cannot fit in the credential check/static scale lane due to the presence of the raised concrete median.

The Duncan POE administration building is in average condition. The administration building has two exterior doors and several windows that are currently boarded up. The Duncan POE has sewer, water, telecommunications, electricity, heating/cooling for the administration building, site drainage, and landscaping/irrigation. Lighting is provided along the outside edge of the administration building and along the edge of the ramps.

ADOT is currently in the process of replacing the windows and doors at this facility so that the site can be operated as an unmanned mobile enforcement supported facility. Aside from these minor maintenance items, there are currently no known programmed improvement projects for the Duncan POE facility. It was suggested by the lieutenant at the San Simon POE that the Duncan POE be reopened to capture truck traffic that is bypassing the San Simon POE on I-10 via US 70.

Because the Duncan POE is currently closed, no POE staff was available to discuss existing issues at the site.

Key statistics for the Duncan POE for 2009 are listed below.

- Annual inbound pre-cleared percentage was 24%;
- The Duncan POE was closed in June, July, October and December and rarely open after April;
- Outbound credential checked volumes and pre-cleared volumes were consistently higher than inbound volumes;
- Highest inbound monthly total volumes and monthly checked volumes were in January, February and March, which is when the POE was open the most;
- Highest inbound monthly total truck volume was 1,662 in January;
- Highest inbound monthly checked volume was 1,326 in January;
- Daily inbound operating hours averaged 11-14 hours from January to April, and 8 hours for the rest of year when the POE was open;
- Highest inbound average daily total volumes were in January and highest inbound average daily checked volumes were in November;
- Highest inbound average daily total volume was 83 in January;
- Highest inbound average daily checked volume was 79 in November;
- Highest inbound daily total volumes were generally on Mondays, Wednesdays and Thursdays;
- Highest inbound daily total volume was 152 on February 18, 2009;

- Highest inbound daily checked volumes were generally on Mondays, Wednesdays and Thursdays; and
- Highest inbound daily checked volume was 117 on February 18, 2009.

Table C.40 contains annual traffic and activity statistics for the Duncan Port of Entry for 2009-2011.

Table C.40 Duncan Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
2009	Total	1,048	12,234	9,104	3,129	1	7,630	91	3	1	-	-	-
	Inbound	1,014	5,599	4,263	1,336	-	3,519	32	-	1	-	-	-
	Outbound	34	6,635	4,841	1,793	1	4,111	58	3	-	-	-	-
2010	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	Total	36	154	154	-	-	141	2	-	22	45	161	327
	Inbound	18	83	83	-	-	75	2	-	22	-	-	-
	Outbound	18	71	71	-	-	66	-	-	-	-	-	-

Source: ADOT

Table C.41 contains annual cost data for the Duncan Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.41 Duncan Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$164,076	$15,809	$179,885
2010	$57,079	$4,431	$61,510
2011	$2,108	$1,146	$3,253
Average	$74,421	$7,129	$81,549
Total	$223,263	$21,386	$244,648

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Duncan POE facility are provided in Appendix E.

Duncan Future Conditions Assessment

Overall, Duncan meets few to none of the assessment criteria. The port does not have any inspection facilities, or dedicated parking facilities. However, the very low traffic volumes allow for more flexibility to operate the port without mainline or ramp screening technologies, as the average traffic volume is expected to remain well under 200 trucks per day.

Table C.42 Duncan Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition[17]	Future Conditions – Number of Criteria Met
Physical Area	Inbound	3 out of 9	Currently Closed	3 out of 9
Facilities	Inbound	1 out of 6	Minor Safety and Security Upgrades	2 out of 6
Technology and Infrastructure	Inbound	1 out of 10		1 out of 10
Staffing and Functions	Inbound	0 out of 4		0 out of 4

[17] Improvements assumed based on information available to CS

Operating Statistics

Summary statistics for operations at Duncan, as reported by ADOT, are found in Table C.43. Year 2009 values are reported as the Duncan POE is currently closed.

Table C.43 Duncan Operating Statistics (2009)

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)	Revenue (per vehicle)
Inbound	5,599	76%	63%	24%	NA	NA	NA	NA
Outbound	6,635	73%	62%	27%	NA	NA	NA	NA
Total	12,234	74%	62%	26%	28	8-20/5	$14.59	$.55

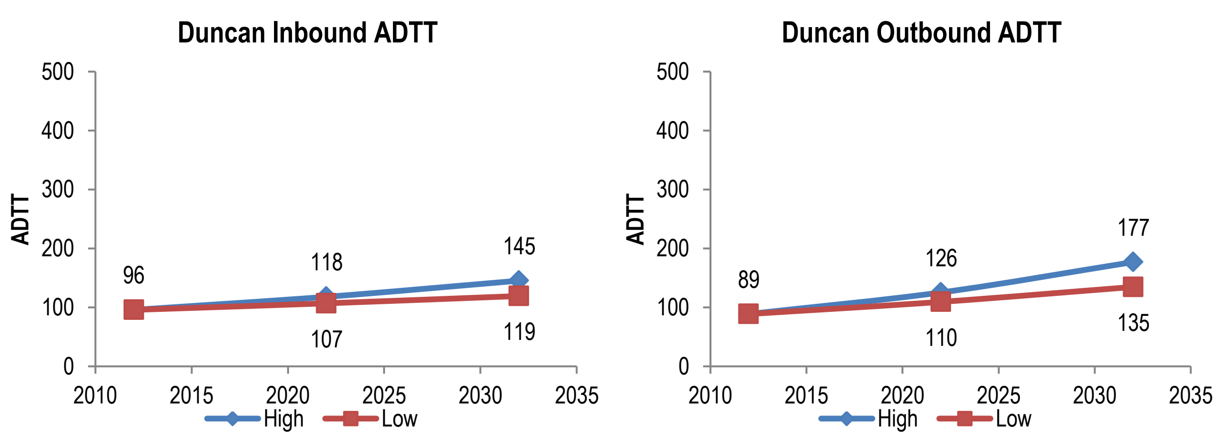
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Duncan sees some of the lowest volumes of any Arizona POE, and is expected to see only a low (1.1%) to an average (2.1%) growth rate of inbound trucks and an average (2.1%) to a high (3.5%) growth rate for outbound trucks, resulting in a potential doubling by 2032. Figure C.33 shows current and future truck traffic volumes at Duncan.

Figure C.33 Duncan 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site has a bypass route without a truck restriction;
- No mainline or secondary screening. Static scale equipment was removed from the site;
- Facility is unable to accommodate OSOW traffic;

- No inspection facilities;
- Administration building is in need of repairs before it can be staffed;
- No truck parking, vehicles must park in the credential lanes or along the shoulder;
- Operations were unable to be assessed, due to the facility being closed;

Costs, Revenue, and Benefits from Screening and Inspections[18]

- The total cost to run the port in 2009 was $179,885 with staffing costs representing $164,076 and operations and maintenance costs accounting for the remainder;
- The port facility generated $6,733 in revenue in 2009; and
- In 2009, staff at Duncan conducted 12 inspections, and put 1 driver and 1 vehicle out of service.

[18] Cost, revenue, and inspection data were provided by ADOT.

C.12 Fredonia

The Fredonia POE is located along US 89A about three miles south of the Arizona-Utah border in the town of Fredonia, Arizona. This facility serves both inbound (southbound (SB)) traffic and outbound (northbound (NB)) traffic although it is currently closed (and has been closed since 2009). The site is located on the west side of the highway and includes an off-ramp and on-ramp for SB traffic. When the POE is open, NB truck traffic parks on the east side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The Fredonia POE is managed and operated by ADOT.

Figure C.34 Fredonia Port of Entry Facility

The Fredonia POE serves as the POE for truck traffic on State Route (SR) 389, which joins US 89A just south of the POE. Signs on eastbound SR 389 and NB US 89A approaching the SR 389/US 89A junction direct trucks to proceed north along US 89A to the Fredonia POE.

The Fredonia POE site is on approximately 1.3 acres of land owned by the State of Arizona. The site is surrounded by privately owned land that is undeveloped. The site includes an administration building that is estimated to be 30+ years old, two SB permit parking lanes, one NB permit parking lane, and a gravel loop around the back of the administration building that serves as an employee/visitor parking lot.

Figure C.35 Fredonia Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

There are currently no screening features of any kind at the Fredonia POE. The existing signage directs drivers to park in the permit parking lanes and bring credential documentation into the administration building for checking by POE staff. A red/green signal light and loudspeaker are mounted on the administration building that presumably were used by POE staff to notify truck drivers if they needed to stop and park or if they could proceed through without stopping.

There is no truck parking lot, but approximately four trucks in total can park in the SB permit parking lanes with four additional trucks in the NB permit parking lane. There are no pavement markings for parking spaces in the gravel area, with the exception of worn-out pavement markings for the one ADA-accessible parking space, but there is enough space in the gravel area on the west side of the building to accommodate at least four employee/visitor parking spaces. None of the parking at the Fredonia POE is covered.

There is a crosswalk between the NB permit parking lanes and the administration building that has ladder-style striping across the US 89A travel lanes and that is approximately fifteen feet wide. There are no advance warning signs in advance of the crosswalk advising drivers of the potential presence of pedestrians. When pedestrians reach the west end of the crosswalk, they have to walk on the edge of the SB permit parking lane to go around a section of guardrail that provides a protection barrier for the POE in order to access the sidewalk that surrounds the administration building. The sidewalk includes ADA-accessible ramps at the front and back of the building.

The Fredonia POE does not currently have any inspection facilities.

The Fredonia POE administration building is in average condition but is not currently being used. The building has three exterior doors and several windows that are currently boarded up. The Fredonia POE site has sewer, water, telecommunications, electricity, natural gas, and heating/cooling infrastructure for the administration building. There is lighting around the administration building and along the sidewalks. The only maintenance needed to support on-site staffing would be to replace the customer counters inside the building.

There are currently no known programmed improvement projects for the Fredonia POE facility. ADOT is currently using the site to support mobile enforcement and inspections.

Because the Fredonia POE is not staffed full time, no POE personnel were available to discuss existing issues at the site.

Key statistics for the Fredonia POE for 2009 are listed below.

- Annual inbound pre-cleared percentage was 19%;
- Inbound and outbound monthly credential checked volumes were generally comparable and the outbound direction had more pre-cleared volumes than the inbound direction;
- Highest inbound monthly total volumes and monthly checked volumes were in July and August;
- Highest inbound monthly total volume was 784 in August;
- Highest inbound monthly checked volume was 639 in August;
- Daily inbound operating hours averaged 9 hours from January to November and 6 hours in December;
- Highest inbound average daily total volumes were in June and highest inbound average daily checked volumes were in August;
- Highest inbound average daily total volume was 53 in June;
- Highest inbound average daily checked volume was 43 in August;
- Highest inbound daily total volumes were generally on Wednesdays, Thursdays and Fridays;
- Highest inbound daily total volume was 69 on March 19, 2009 and August 14, 2009;
- Highest inbound daily checked volumes were generally on Tuesdays and Thursdays; and
- Highest inbound daily checked volume was 55 on August 14, 2009.

Table C.44 contains annual traffic and activity statistics for the Fredonia Port of Entry for 2009-2011.

Table C.44 Fredonia Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
2009	Total	1,991	11,607	9,234	2,373	-	182	1	1	6	133	168	31,124
	Inbound	999	5,434	4,393	1,041	-	130	1	1	3	-	-	-
	Outbound	992	6,173	4,841	1,332	-	52	-	-	3	-	-	-
2010	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.45 contains annual cost data for the Fredonia Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.45 Fredonia Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$58,631	$13,049	$71,681
2010	$42,503	$12,082	$54,586
2011	$690	$504	$1,193
Average	$33,941	$8,545	$42,487
Total	$101,824	$25,635	$127,460

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Fredonia POE facility are provided in Appendix E.

Fredonia Current Conditions Assessment

Overall, Fredonia meets few to none of the assessment criteria. There are no screening facilities of any kind, and the port lacks designated truck parking and inspection facilities. Pedestrian safety is an issue, as there are no crosswalk warning signs and the sidewalks are not continuous. Fredonia is expected to see an increase in traffic as freight volumes increase on US 89. Although volumes will remain relatively low, if the port is reopened it will be increasingly difficult to serve future traffic volumes without investment in screening technology.

Table C.46 Fredonia Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	2 out of 9	Currently Closed	2 out of 9
Facilities	Inbound	2 out of 6		2 out of 6
Technology and Infrastructure	Inbound	1 out of 10		1 out of 10
Staffing and Functions	Inbound	1 out of 4		1 out of 4

Operating Statistics

Summary statistics for operations at Fredonia, as reported by ADOT, are found in Table C.47. 2009 statistics are reported as Fredonia is currently closed.

Table C.47 Fredonia Operating Statistics (2009)

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections (per 10,000 vehicles)	Operating Hours (hours/days)	Cost (per vehicle)	Revenue (per vehicle)
Inbound	5,434	81%	-	19%	NA	NA	NA	NA
Outbound	6,173	78%	-	22%	NA	NA	NA	NA
Total	11,607	79%	-	21%	303	9-10/4	$1.96	$2.68

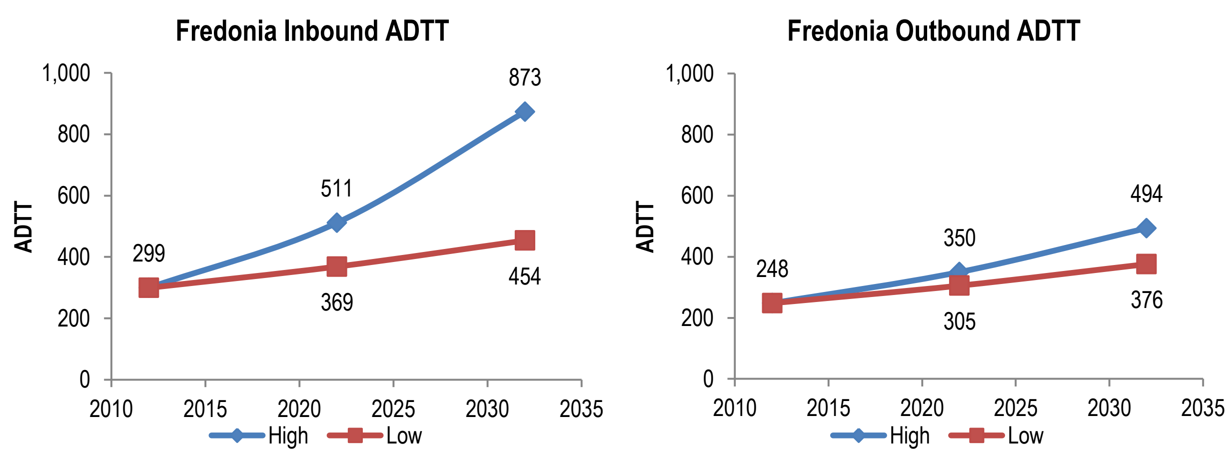
Source: ADOT Enforcement SVC Statistical Recap

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Fredonia is expected to see average (2.1%) to very high (5.5%) growth for inbound traffic, and average (2.1%) to high (3.5%) growth for outbound traffic over the next 20 years. This is in part due to increased freight flows moving north – south within the region. Figure C.36 shows current and future truck traffic volumes at Fredonia.

Figure C.36 Fredonia 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site currently has no screening technology of any kind and no scales of any kind;
- There is no inspection facilities and minimal truck parking;
- Operations were unable to be assessed, due to the facility being closed; and
- Pedestrian safety concerns when NB traffic forced to park vehicles and cross road to SB facility.

Costs, Revenue, and Benefits from Screening and Inspections[19]

- The total cost to run the port in 2009 was $71,680 with staffing costs representing $58,631 and operations and maintenance costs accounting for the remainder;
- The port facility generated $31,124 in revenue in 2009; and
- In 2009, staff at Fredonia conducted 133 inspections, and put 5 drivers and 8 vehicles out of service.

[19] Cost, revenue, and inspection data were provided by ADOT.

C.13 Parker

The Parker POE is located along State Route 95 Spur (SR 95S), known as California Avenue, less than one mile southeast of the Arizona-California border in Parker, Arizona. This facility serves both inbound (eastbound (EB)) traffic and outbound (westbound (WB)) traffic although it is currently closed (and has been closed since 2009). The site is located on the southwest side of SR 95S and includes an off-ramp and an on-ramp for EB traffic. When the POE is open, WB truck traffic parks on the northeast side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The Parker POE is managed and operated by ADOT.

Figure C.37 Parker Port of Entry Facility

The Parker POE site is on approximately 2.0 acres of land owned by the State of Arizona. The site is surrounded by privately owned land with commercial and industrial land uses. The site includes an administration building, a canopied inspection facility, and a parking lot that were constructed in 1957. The Parker POE site includes one EB credential check/scale lane, two EB inspection lanes, and two WB permit parking lanes.

When the Parker POE was last open in 2009, it was typically open 8 hours a day, Monday-Friday. It is unknown what the staffing levels were in 2009, but it is supposed that they consisted of one officer and one or two CSRs that worked however many hours a week the facility was open. The lieutenant and sergeants stationed at the Ehrenberg POE would oversee the Parker POE if it were reopened.

Figure C.38 Parker Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

The only screening feature at the POE is a single-platform static scale (10′ x 10′) which is located adjacent to the administration building. This scale is operational but as the facility is closed it is not currently in use. Due to the age of the scale, however, it is insufficient for weighing most vehicles. A red/green signal light and loudspeaker are present downstream of the scale that presumably were used by POE staff to notify truck drivers if they needed to stop and park or if they could proceed through without stopping.

The truck parking lot has three uncovered parking spaces while the inspection lanes have covered space for an estimated total of four trucks. The employee/visitor parking lot has four uncovered parking spaces along with one ADA-accessible uncovered parking space. Sidewalks around the administration building and under the inspection canopy lead pedestrians from the parking areas to the administration building. Approximately six trucks can park in the two WB permit parking lanes along SR 95S.

There is a ten-foot-wide crosswalk between the WB permit parking lanes and the administration building that crosses SR 95S. There are overhead advance warning signs and flashing beacons advising drivers of the potential presence of pedestrians.

The Parker POE has a canopied two-lane inspection facility. Both lanes are designated for simple inspections and have lighted decks. The lack of an inspection pit makes it difficult for staff to properly inspect vehicles, especially heavy vehicles with low clearance.

The Parker POE administration building is in below average condition. The administration building has two exterior doors, several windows, and two restrooms. The Parker POE site has sewer, water, telecommunications, electricity, and heating/cooling infrastructure for the administration building. There is lighting along the outside of the administration building, parking lot, and inspection facility.

ADOT is currently in the process of converting the Parker POE into an unmanned screening site to be supported by mobile enforcement. There are currently no known programmed improvement projects for the Parker POE facility beyond this conversion.

Because the Parker POE is used intermittently by mobile enforcement, no personnel were available to discuss existing issues at the site.

Key statistics for the Parker SB POE for 2009 are listed below.

- Annual inbound pre-cleared percentage was 1%;
- POE was closed for the entire month of December;
- Highest inbound monthly total volumes and monthly checked volumes were in June, July and October;
- Highest inbound monthly total truck volume was 3,197 in June;
- Highest inbound monthly checked volume was 3,155 in June;
- Daily inbound operating hours averaged 8 hours in January-October and 7 hours in November;
- Highest inbound average daily total volumes and average daily checked volumes were in June;
- Highest inbound average daily total volume was 152 in June;
- Highest inbound average daily checked volume was 150 in June;
- Highest inbound daily total volumes were generally on Wednesdays and Thursdays;
- Highest inbound daily total volume was 284 on October 15, 2009;
- Highest inbound daily checked volumes were generally on Wednesdays and Thursdays; and
- Highest inbound daily checked volume was 282 on October 15, 2009.

Table C.48 contains annual traffic and activity statistics for the Parker Port of Entry for 2009-2011.

Table C.48 Parker Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/Vehicle)	Total Revenue
2009	Total	1,710	30,127	29,726	391	10	30,117	632	38	49	31	52	46,671
	Inbound	1,710	30,127	29,726	391	10	30,117	632	38	49	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2010	Total	-	-	-	-	-	-	-	-	-	-	-	50
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
	Outbound	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.49 contains annual cost data for the Parker Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.49 Parker Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$114,213	$24,834	$139,047
2010	-	-	-
2011	-	-	-
Average	$114,213	$24,834	$139,047
Total	$114,213	$24,834	$139,047

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Parker POE facility are provided in Appendix E.

Parker Future Conditions Assessment

Parker was found to meet some to most of the criteria for facilities and infrastructure. Although Parker does not have any screening facilities beyond a single platform static scale, it does have a covered inspection area and an administration building that appears to be functional, although the inside of the facility was unable to be assessed. Parker is expected to see increasing truck volumes as an alternative entry point to I-40 and I-10 as inbound freight flows from the California ports increase. Physical layout issues, such as the lack of a bypass lane or recirculation loop, in addition to the lack of screening technology, will make it increasingly difficult to serve the increasing traffic volumes if the port is reopened.

Table C.50 Parker Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	3 out of 9	Currently Closed	2 out of 9
Facilities	Inbound	4 out of 6		2 out of 6
Technology and Infrastructure	Inbound	2 out of 10		1 out of 10
Staffing and Functions	Inbound	0 out of 4		1 out of 4

Operating Statistics

Summary statistics for operations at Parker, as reported by ADOT, are found in Table C.51. Data was available for inbound traffic only. Year 2009 statistics are reported as Parker is currently closed.

Table C.51 Parker Operating Statistics (2009)

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections per 10,000 vehicles**	Operating Hours (hours/days)	Cost (per vehicle)**	Revenue (per vehicle)**
Inbound	30,127	99%	100%	1%	10	8/5	$1.81	$1.55

Source: ADOT Enforcement SVC Statistical Recap

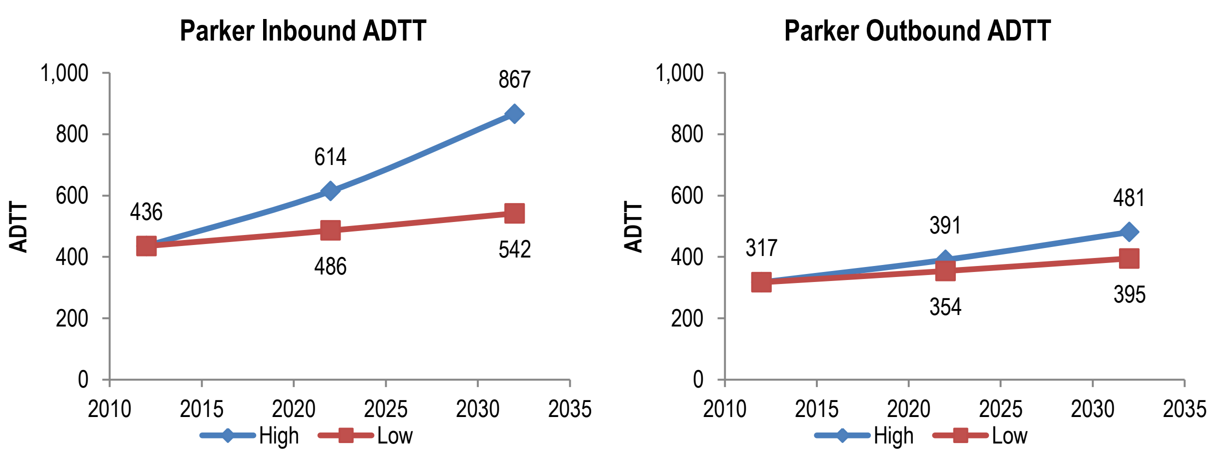
*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

**Inspection, cost, and revenue data is for the Port as a whole.

Future Traffic Trends

Parker is expected to see average (2.1%) to high (3.5%) growth inbound, and low (1.1%) to average (2.1%) growth for outbound traffic over the next 20 years. These trends are in part attributed to increasing freight flows from the west coast ports, as SR-95 can be used as an alternative entry point to I-40 and I-10. Figure C.39 shows current and future truck traffic volumes at Parker.

Figure C.39 Parker 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site ramp is very short and the mainline prior to the facility has a significant grade making it unsuitable for screening technology;

- Site currently has no mainline or ramp screening technology;
- Facility unable to weigh/accommodate OSOW traffic due to scales proximity to the administration building;
- Static scale is an older single platform scale;
- Site has a manual sign to indicate whether the port is open or closed, instead of an electronic system that can be operated from within the facility;
- Truck parking is limited;
- Facility has no internal circulation, NB drivers must perform a difficult U-turn to enter the SB port to be weighed;
- Operations were unable to be assessed, due to the facility being closed; and
- Pedestrian safety concerns were identified when NB traffic forced to park vehicles and cross road to SB facility.

Costs, Revenue, and Benefits from Screening and Inspections[20]

- The total cost to run the port in 2009 was $139,047 with staffing costs representing $114,213;
- The port facility generated $46,671 in revenue in 2009; and
- In 2009, staff at Parker conducted 31 inspections, and put 15 drivers out of service.

[20] Cost, revenue, and inspection data were provided by ADOT.

C.14 Springerville

The Springerville POE is located along US 60 about one mile northwest of Springerville, Arizona and about sixteen miles west of the Arizona-New Mexico border. The facility serves both inbound (westbound (WB)) traffic and outbound (eastbound (EB)) traffic although it is currently closed (and has been closed since 2009). The site is located on the northeast side of the highway and includes an off-ramp and on-ramp for WB traffic. When the POE is open, EB truck traffic parks on the southwest side of the highway, with truck drivers then being required to exit their vehicles and walk across the highway to reach the POE facility. The Springerville POE is managed and operated by ADOT. The facility used to serve as a MVD customer service center, although it is unclear if there were MVD staff stationed at the POE or if the POE staff carried out duties normally reserved for MVD staff.

Figure C.40 Springerville Port of Entry Facility

The Springerville POE site is on approximately 1.9 acres of land owned by the State of Arizona. The site is surrounded by privately owned land that is undeveloped on the northeast side of the highway and developed on the southwest side of the highway. The site includes an administration building that is estimated to be 30+ years old, one WB credential check lane with a wide paved shoulder, one WB truck bypass lane, one EB permit parking lane, an employee/visitor parking lot, and a truck parking lot.

When the Springerville POE was last open in 2009, it was typically open 8 hours a day, Monday-Friday. It is unknown what the staffing levels were in 2009, but it is supposed that they consisted of one officer and one or two CSRs that worked however many hours a week the facility was open. The lieutenants and sergeants stationed at the Sanders POE would oversee the Springerville POE if it were reopened.

Figure C.41 Springerville Port of Entry Satellite View

Note: Image is oriented with North at the top of the image

There are currently no screening features of any kind at the Springerville POE. The WB credential check lane that goes to the northeast of the administration building has a concrete pad adjacent to the administration building in the location where a platform static scale would typically go, but there is no evidence of a scale there currently. There is no existing WB signage that tells inbound truck drivers in the WB credential check lane if or where they need to park. The existing EB signage directs outbound truck drivers to park in the EB permit parking lane and bring credential documentation into the administration building for checking by POE staff.

The WB truck parking lot northwest of the administration building has three parking spaces, with additional space for parking available on the shoulder. Approximately five trucks in total can park in the EB permit parking lane. There are seven employee/visitor parking spaces and one ADA-accessible parking space southeast of the administration building. None of the parking at the Springerville POE is covered. There is a driver testing area between the southwest side of the administration building and the WB truck bypass lane.

There is a crosswalk between the EB permit parking lane and the administration building that has ladder-style striping across the US 60 travel lanes and that is approximately fourteen feet wide. Advance warning signs placed approximately 900 feet (WB) and 1100 feet (EB) in advance of the crosswalk advise drivers of the potential presence of pedestrians. There is sidewalk on three sides of the administration building. There are no ADA-accessible ramps on the site.

The Springerville POE does not currently have any inspection facilities.

The Springerville POE administration building is currently in very poor condition. The entire roof and under structure needs replacement. The windows, doors, entryways, and counters need complete remodeling and replacement. The heating and cooling systems also need replacement. The structure will need to undergo major remodeling be functional. The Springerville POE site has sewer, water, telecommunications, electricity. There is lighting around the administration building and in the truck and employee/visitor parking lots.

There are currently no known programmed improvement projects for the Springerville POE facility. ADOT has indicated the Springerville POE could potentially be converted into a virtual port in the future.

Because the Springerville POE is closed, no current POE staff was available to discuss existing issues at the site.

Key statistics for the Springerville POE for 2009 are listed below.

- Annual inbound pre-cleared percentage was 0%;
- The Springerville POE was closed from May to December in 2009;
- During the four months when the POE was open, inbound and outbound truck volumes were comparable;
- Highest inbound monthly total volume and monthly checked volume was 930 in March;
- Daily operating hours averaged 8 hours from January to April, with the POE closed the remainder of the year;
- Highest inbound average daily total volume and average daily checked volume was 45 in February;
- Highest inbound daily total volumes and daily checked volumes were generally on Tuesdays and Thursdays; and
- Highest inbound daily total volume and daily checked volume was 60 on January 15, 2009 and February 17, 2009.

Table C.52 contains annual traffic and activity statistics for the Springerville Port of Entry for 2009-2011.

Table C.52 Springerville Port of Entry Annual Statistics 2009-2011

Year	Direction	Total Hours of Operation	Total Traffic	Credentials Checked	Pre-Cleared	Wave-Throughs	Vehicles Weighed	Vehicles Overweight	Citations Written (Weight)	Citations Written (Non-weight)	CVSA Inspections	Violations Found (Driver/ Vehicle)	Total Revenue
	Total	648	7,107	7,107	-	-	2,384	172	13	48	58	284	12,594
	Inbound	648	3,528	3,528	-	-	2,384	64	13	48	-	-	-
2009	*Outbound*	-	3,579	3,579	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
2010	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-	-	-	-
	Inbound	-	-	-	-	-	-	-	-	-	-	-	-
2011	*Outbound*	-	-	-	-	-	-	-	-	-	-	-	-

Source: ADOT

Table C.53 contains annual cost data for the Springerville Port of Entry for 2009-2011. Staffing costs include both salary and benefits. Operations and Maintenance include all other costs associated with operating the port facility.

Table C.53 Springerville Port of Entry Annual Cost Data 2009-2011

Year	Staffing Cost	Operations and Maintenance	Total
2009	$110,590	$12,443	$123,033
2010	-	$3,047	$3,047
2011	-	$957	$957
Average	$110,590	$5,482	$42,345
Total	$110,590	$16,477	$127,037

Source: ADOT

The site assessment form containing further detail on the facility features is provided in Appendix D. Additional photographs of the Springerville POE facility are provided in Appendix E.

Springerville Future Conditions Assessment

Overall, Springerville meets few to some of the assessment criteria, with the exception of the physical area, where it meets most of the criteria due to its adequate parking facilities, ramp length, and bypass lane. The port does not have any screening or scale features, or inspection facilities. However, the very low traffic volumes allow for more flexibility to operate the port without mainline or ramp screening technologies, as the average traffic volume is expected to remain well under 100 trucks per day. The facility also lacks signage directing vehicles to enter or through the port on the westbound side.

Table C.54 Springerville Port of Entry Assessment

Category	Direction	Current Conditions – Number of Criteria Met	Planned / Programmed Improvements Affecting Condition	Future Conditions – Number of Criteria Met
Physical Area	Inbound	5 out of 9	Currently closed	5 out of 9
Facilities	Inbound	1 out of 6		1 out of 6
Technology and Infrastructure	Inbound	0 out of 10		0 out of 10
Staffing and Functions	Inbound	1 out of 4		1 out of 4

Operating Statistics

Summary statistics for operations at Springerville, as reported by ADOT, are found in Table C.55. Year 2009 statistics are reported as Springerville is currently closed.

Table C.55 Springerville Operating Statistics (2009)

Direction	Traffic	Credentials Checked (%)	Weighed (Static Scale, %)	Pre-Cleared (%)*	Inspections per 10,000 vehicles	Operating Hours (hours/days)	Cost (per vehicle)	Revenue (per vehicle)
Inbound	3,528	100%	-	-	NA	NA	NA	NA
Outbound	3,579	100%	-	-	NA	NA	NA	NA
Total	7,107	100%	-	-	164	8/5	$7.64	$1.77

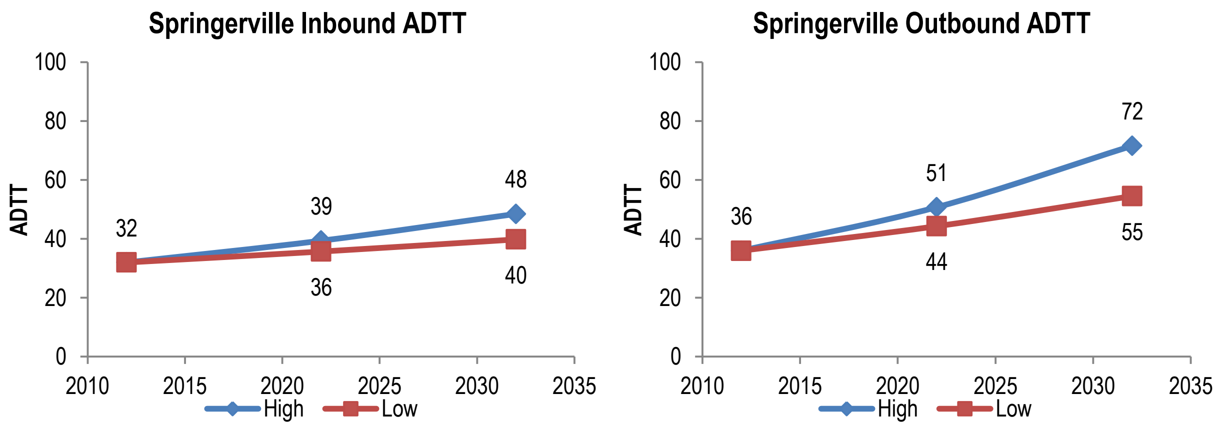
Source: ADOT Enforcement SVC Statistical Recap Future Traffic Trends

*Pre-Cleared refers to vehicles who do not receive credential checks for reasons including (but not limited to) the following: vehicles directed to bypass by mainline electronic screening, vehicles manually bypassed by port staff, or vehicles that do not enter the port illegally (port runners).

Future Traffic Trends

Springerville is expected to see low (1.1%) to average (2.1%) growth inbound, and average (2.1%) to high (3.5%) growth outbound. Figure C.42 shows current and future truck traffic volumes at Springerville.

Figure C.42 Springerville 2012, 2022, and 2032 Truck Traffic



Deficiencies and Needs

- Site has no screening technology of any kind and does not have a scale;
- Site has a manual sign to indicate whether the port is open or closed, instead of an electronic system that can be operated from within the facility;
- Facility does not have any dedicated inspection facilities. Vehicles are inspected in the parking lots, limiting the type of vehicles that can be inspected;
- Truck parking is limited and can accommodate up to 5 vehicles;
- Operations were unable to be assessed, due to the facility being closed; and

- Pedestrian safety concerns for NB traffic because users must cross the street to the SB side.

Costs, Revenue, and Benefits from Screening and Inspections[21]

- The total cost to run the port in 2009 was $123,033 with staffing costs representing $110,590 and operations and maintenance costs accounting for the remainder;
- The port facility generated $12,584 in revenue in 2009; and
- In 2009, staff at Springerville conducted 58 inspections, and put 5 drivers and 37 vehicles out of service.

[21] Cost, revenue, and inspection data were provided by ADOT.

Appendix D: Port of Entry Daily Traffic Count Data

This section contains daily and monthly traffic data for each of the port facilities. The data is presented in the following order:

- Duncan……………………………………………………………………………………...D-2
- Ehrenberg……………………………………………………………………………D-9
- Fredonia……………………………………………………………………………...D-16
- Kingman……………………………………………………………………………..D-23
- Page…………………………………………………………………………………..D-30
- Parker…………………………………………………………………………..…..D-34
- St. George……………………………………………………………………..…..D-41
- San Simon……………………………………………………………………………D-48
- Sanders……………………………………………………………………………….D-55
- Springerville…………………………………………………………………………D-62
- Teec Nos Pos…………………………………………………………………...……D-66
- Topock………………………………………………………………………………..…D-73
- Yuma B-8…………………………………………………………………………….....D-80
- Yuma I-8…………………………………………………………………..…………. D-87

D.1 Duncan

Table D.1 Duncan POE Monthly Total Volumes 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	282	0	1,662	1,326	1,639	2,965	336	580	916	0	0	0	0
February	210	0	1,293	989	1,091	2,080	304	463	767	0	0	0	0
March	276	0	1,457	1,104	1,317	2,421	353	455	808	0	0	0	0
April	129	34	691	473	507	980	218	186	404	0	0	0	0
May	24	0	99	19	37	56	80	67	147	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0
August	48	0	119	97	134	231	22	20	42	0	0	0	0
September	30	0	120	97	116	213	23	22	45	0	0	1	1
October	0	0	0	0	0	0	0	0	0	0	0	0	0
November	15	0	158	158	0	158	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.2 Duncan POE Daily Average Volumes by Month 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
January	14	0	83	66	82	148	17	29	46	0	0	0	0
February	11	0	68	52	57	109	16	24	40	0	0	0	0
March	13	0	66	50	60	110	16	21	37	0	0	0	0
April	11	3	58	39	42	82	18	16	34	0	0	0	0
May	8	0	33	6	12	19	27	22	49	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0
August	8	0	20	16	22	39	4	3	7	0	0	0	0
September	8	0	30	24	29	53	6	6	11	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0
November	8	0	79	79	0	79	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.3 Duncan POE Peak Daily Total Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
3	1/14/2009	19	0	148	114	152	266	34	59	93	0	0	0	0
3	2/18/2009	16	0	152	117	117	234	35	43	78	0	0	0	0
4	3/5/2009	20	0	115	86	100	186	29	51	80	0	0	0	0
1	4/13/2009	12	0	88	58	57	115	30	18	48	0	0	0	0
1	5/4/2009	8	0	40	11	1	12	29	22	51	0	0	0	0
-	6/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	7/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4	8/27/2009	8	0	28	28	21	49	0	0	0	0	0	0	0
2	9/1/2009	8	0	39	23	31	54	16	7	23	0	0	0	0
-	10/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
1	11/9/2009	7	0	90	90	0	90	0	0	0	0	0	0	0
-	12/2009	0	0	0	0	0	0	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.4 Duncan POE Peak Daily Checked Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
3	1/14/2009	19	0	148	114	152	266	34	59	93	0	0	0	0
3	2/18/2009	16	0	152	117	117	234	35	43	78	0	0	0	0
2	3/3/2009	17	0	107	86	108	194	21	38	59	0	0	0	0
3	4/15/2009	24	6	83	64	47	111	19	15	34	0	0	0	0
1	5/4/2009	8	0	40	11	1	12	29	22	51	0	0	0	0
-	6/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	7/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4	8/27/2009	8	0	28	28	21	49	0	0	0	0	0	0	0
4	9/3/2009	8	0	30	30	37	67	0	6	6	0	0	0	0
-	10/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
1	11/9/2009	7	0	90	90	0	90	0	0	0	0	0	0	0
-	12/2009	0	0	0	0	0	0	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.1 Duncan POE Inbound Daily Total Volumes 2009

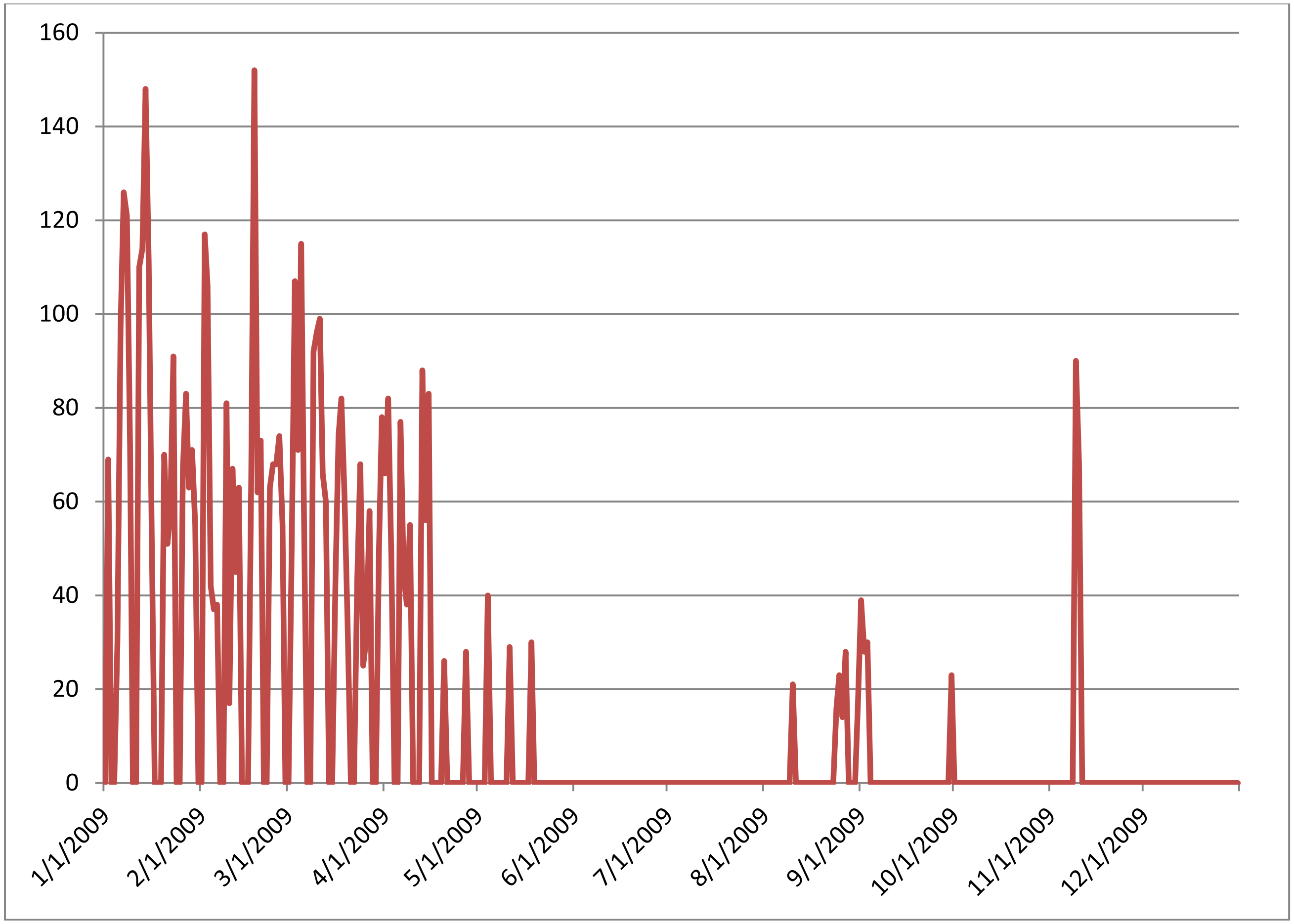


Figure D.2 Duncan POE Inbound Daily Credential Checked Volumes 2009

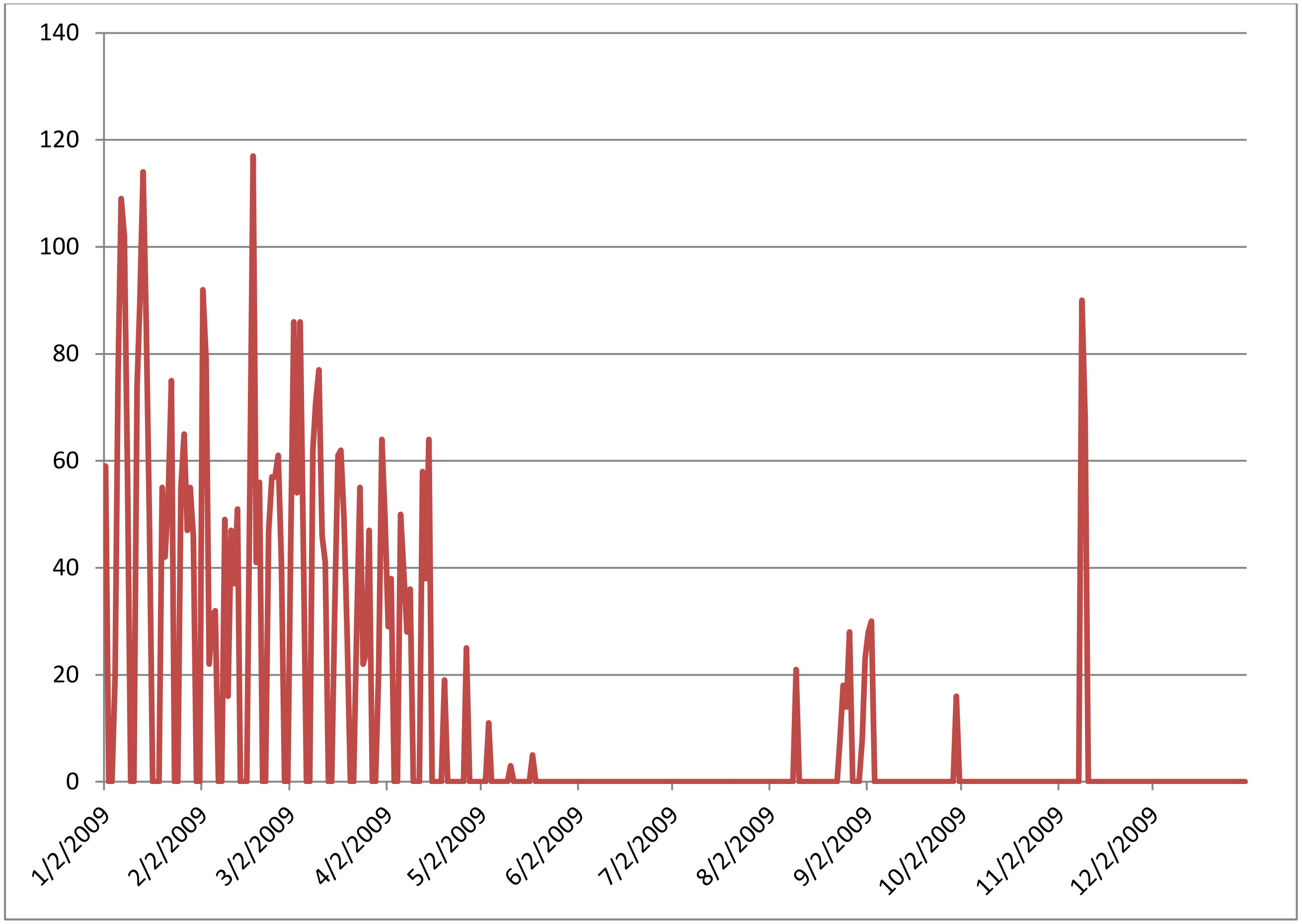
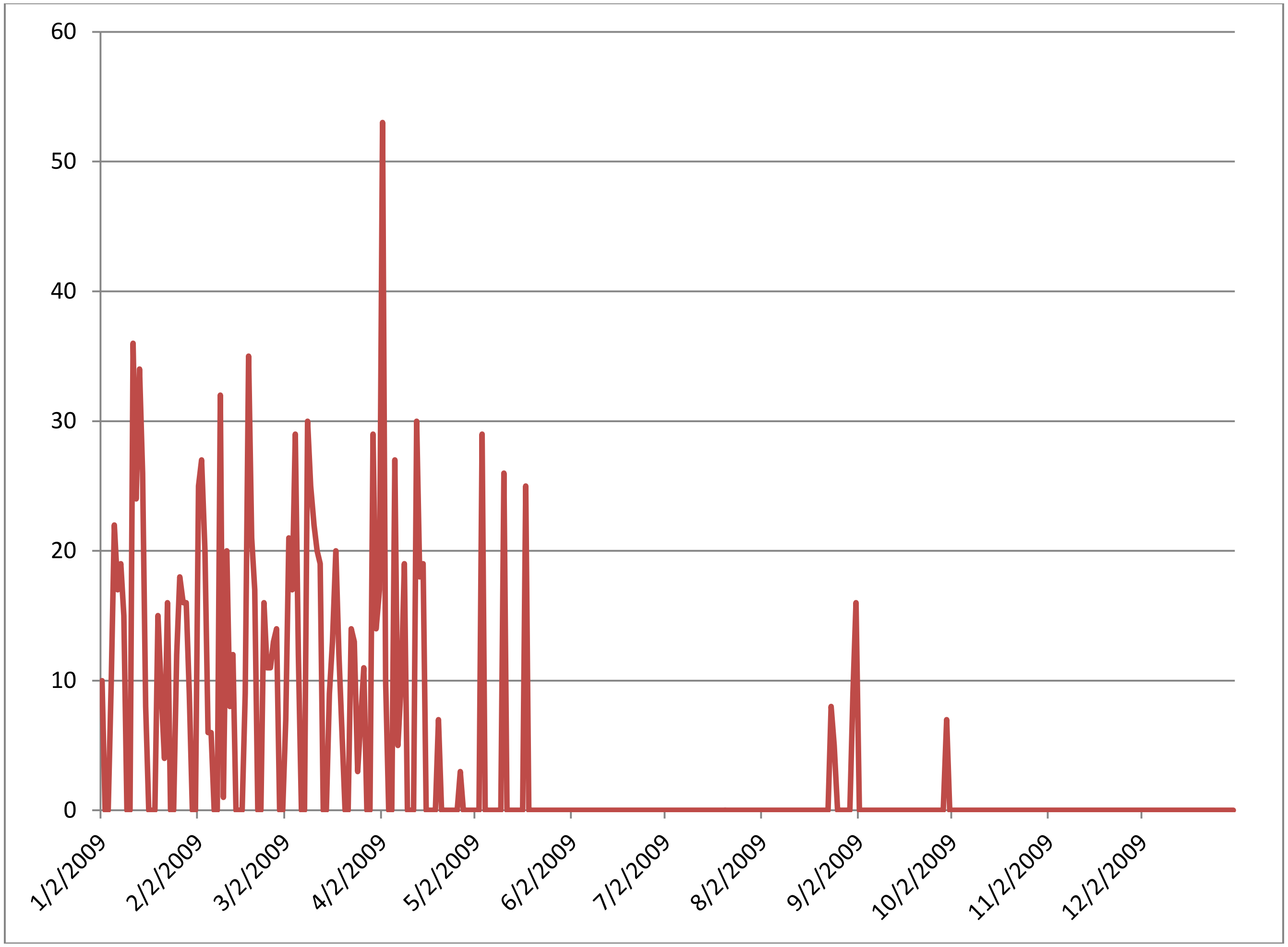


Figure D.3 Duncan POE Inbound Daily Pre-cleared Volumes 2009



D.2 Ehrenberg

Table D.5 Ehrenberg POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	496	0	121,075	16,458	0	16,458	104,617	0	104,617	0	0	0	0
February	448	0	100,205	13,787	0	13,787	86,418	0	86,418	0	0	0	0
March	496	0	112,626	16,498	0	16,498	96,128	0	96,128	0	0	0	0
April	480	0	112,793	17,451	0	17,451	95,252	0	95,252	0	0	0	0
May	496	0	102,537	21,580	0	21,580	80,855	0	80,855	0	102	0	102
June	480	0	109,980	21,750	0	21,750	88,230	0	88,230	0	0	0	0
July	496	0	104,911	22,564	0	22,564	82,347	0	82,347	0	0	0	0
August	704	0	112,175	32,530	0	32,530	79,555	0	79,555	0	90	0	90
September	720	0	108,660	34,117	0	34,117	74,543	0	74,543	0	0	0	0
October	744	0	111,416	29,253	0	29,253	82,163	0	82,163	0	0	0	0
November	694	0	111,855	29,748	0	29,748	82,107	0	82,107	0	0	0	0
December	714	0	121,104	31,131	0	31,131	89,973	0	89,973	0	0	0	0

Table D.6 Ehrenberg POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	16	0	3,906	531	0	531	3,375	0	3,375	0	0	0	0
February	16	0	3,579	492	0	492	3,086	0	3,086	0	0	0	0
March	16	0	3,633	532	0	532	3,101	0	3,101	0	0	0	0
April	16	0	3,760	585	0	585	3,175	0	3,175	0	0	0	0
May	16	0	3,308	696	0	696	2,608	0	2,608	0	3	0	3
June	16	0	3,666	725	0	725	2,941	0	2,941	0	0	0	0
July	16	0	3,384	728	0	728	2,656	0	2,656	0	0	0	0
August	23	0	3,619	1,049	0	1,049	2,566	0	2,566	0	3	0	3
September	24	0	3,622	1,137	0	1,137	2,485	0	2,485	0	0	0	0
October	24	0	3,594	944	0	944	2,650	0	2,650	0	0	0	0
November	24	0	3,729	1,026	0	1,026	2,737	0	2,737	0	0	0	0
December	24	0	3,907	1,038	0	1,038	2,902	0	2,902	0	0	0	0

Table D.7 Ehrenberg POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
6	1/15/2011	16	0	7,114	473	0	473	6,641	0	6,641	0	0	0	0
2	2/22/2011	16	0	6,184	473	0	473	5,711	0	5,711	0	0	0	0
2	3/1/2011	16	0	5,357	789	0	789	4,568	0	4,568	0	0	0	0
2	4/12/2011	16	0	5,973	935	0	935	5,038	0	5,038	0	0	0	0
3	5/4/2011	16	0	5,180	1,148	0	1,148	4,032	0	4,032	0	0	0	0
3	6/1/2011	16	0	4,835	982	0	982	3,853	0	3,853	0	0	0	0
4	7/28/2011	16	0	5,134	1,453	0	1,453	3,681	0	3,681	0	0	0	0
4	8/4/2011	16	0	6,121	1,199	0	1,199	4,922	0	4,922	0	0	0	0
3	9/7/2011	24	0	5,652	2,299	0	2,299	3,353	0	3,353	0	0	0	0
2	10/4/2011	24	0	4,732	1,207	0	1,207	3,525	0	3,525	0	0	0	0
2	11/29/2011	24	0	4,937	960	0	960	3,977	0	3,977	0	0	0	0
2	12/20/2011	24	0	5,966	1,255	0	1,255	4,711	0	4,711	0	0	0	0

* 1- Monday, 7 - Sunday

Table D.8 Ehrenberg POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
6	1/15/2011	16	0	7,048	887	0	887	6,161	0	6,161	0	0	0	0
2	2/22/2011	16	0	4,642	649	0	649	3,993	0	3,993	0	0	0	0
2	3/1/2011	16	0	5,357	789	0	789	4,568	0	4,568	0	0	0	0
2	4/12/2011	16	0	5,973	935	0	935	5,038	0	5,038	0	0	0	0
3	5/4/2011	16	0	5,180	1,148	0	1,148	4,032	0	4,032	0	0	0	0
3	6/1/2011	16	0	2,906	1,002	0	1,002	1,904	0	1,904	0	0	0	0
4	7/28/2011	16	0	5,134	1,453	0	1,453	3,681	0	3,681	0	0	0	0
4	8/4/2011	24	0	3,293	1,337	0	1,337	1,866	0	1,866	0	90	0	90
3	9/7/2011	24	0	5,652	2,299	0	2,299	3,353	0	3,353	0	0	0	0
2	10/4/2011	24	0	4,732	1,207	0	1,207	3,525	0	3,525	0	0	0	0
2	11/29/2011	24	0	4,676	1,458	0	1,458	3,218	0	3,218	0	0	0	0
2	12/20/2011	24	0	4,792	1,323	0	1,323	3,469	0	3,469	0	0	0	0

* 1- Monday, 7 - Sunday

Figure D.4 Ehrenberg POE Inbound Daily Total Volumes 2011

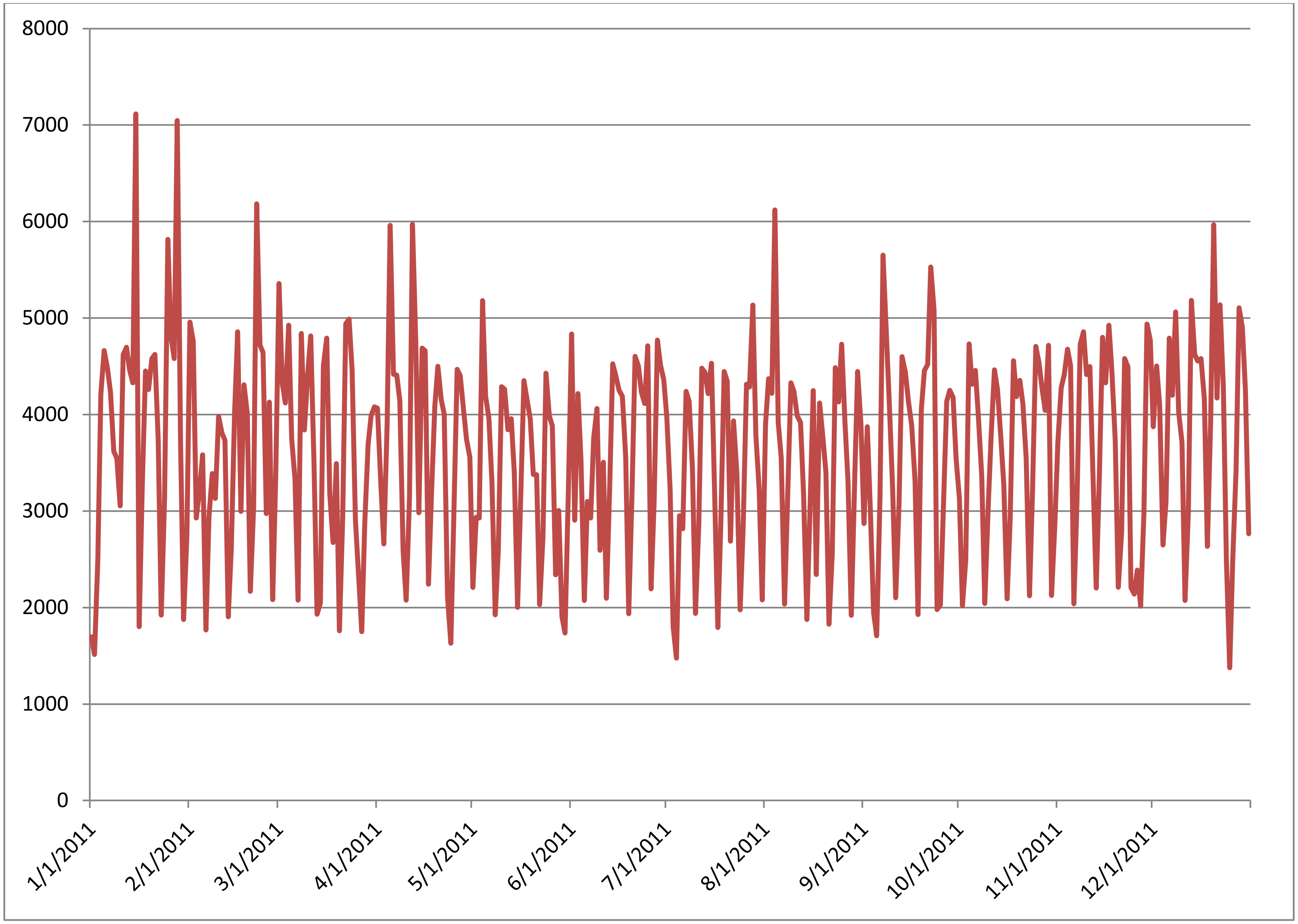


Figure D.5 Ehrenberg POE Inbound Daily Credential Checked Volumes 2011

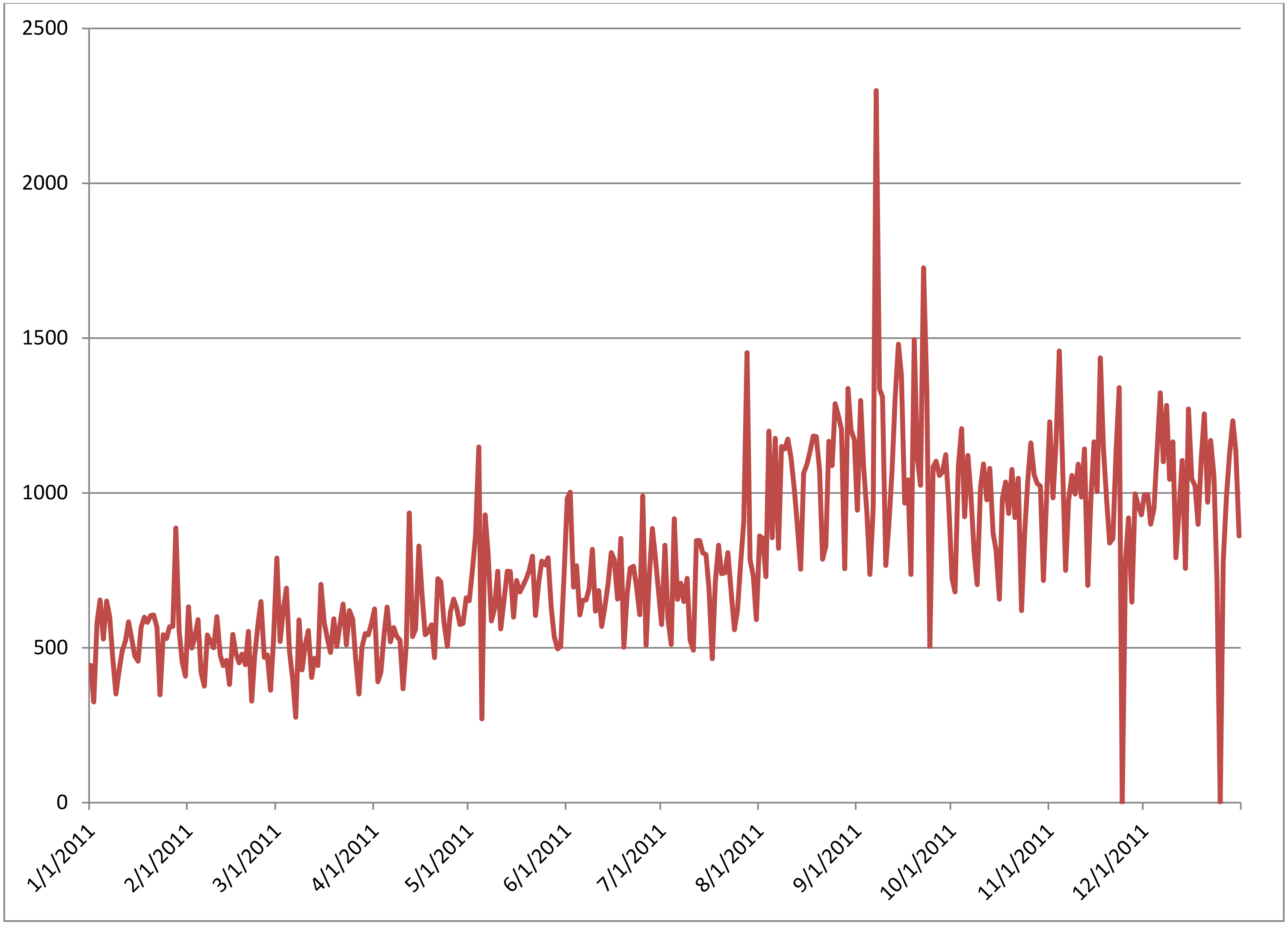
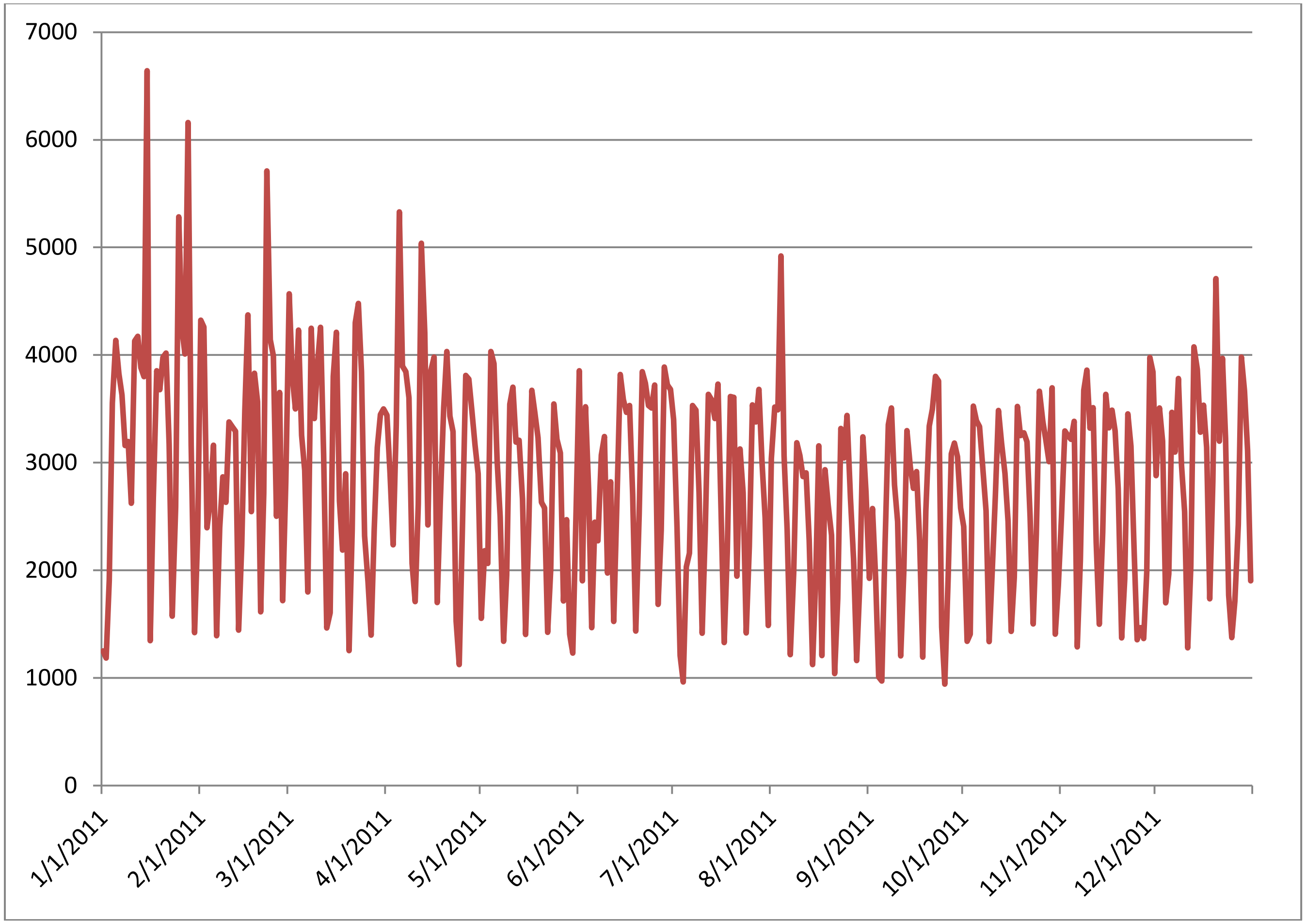


Figure D.6 Ehrenberg POE Inbound Daily Pre-cleared Volumes 2011



D.3 Fredonia

Table D.9 Fredonia POE Monthly Total Volumes 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	97	97	507	390	408	798	117	137	254	0	0	0	0
February	72	72	345	264	320	584	81	97	178	0	0	0	0
March	57	57	317	249	271	520	68	82	150	0	0	0	0
April	98	98	499	405	460	865	94	137	231	0	0	0	0
May	97	90	468	383	428	811	85	112	197	0	0	0	0
June	76	76	423	333	358	691	90	97	187	0	0	0	0
July	138	138	757	598	657	1255	159	199	358	0	0	0	0
August	132	132	784	639	680	1319	145	181	326	0	0	0	0
September	88	88	517	441	481	922	76	105	181	0	0	0	0
October	54	54	297	251	281	532	46	67	113	0	0	0	0
November	78	78	444	374	422	796	70	100	170	0	0	0	0
December	12	12	76	66	75	141	10	18	28	0	0	0	0

Table D.10 Fredonia POE Daily Average Volumes by Month 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	9	9	46	35	37	73	11	12	23	0	0	0	0
February	9	9	43	33	40	73	10	12	22	0	0	0	0
March	8	8	45	36	39	74	10	12	21	0	0	0	0
April	10	10	50	41	46	87	9	14	23	0	0	0	0
May	8	8	39	32	39	68	7	10	16	0	0	0	0
June	10	10	53	42	45	86	11	12	23	0	0	0	0
July	9	9	50	40	44	84	11	13	24	0	0	0	0
August	9	9	52	43	45	88	10	12	22	0	0	0	0
September	8	8	47	40	44	84	7	10	16	0	0	0	0
October	8	8	42	36	40	76	7	10	16	0	0	0	0
November	9	9	49	42	47	88	8	11	19	0	0	0	0
December	6	6	38	33	38	71	5	9	14	0	0	0	0

Table D.11 Fredonia POE Peak Daily Total Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
5	1/9/2009	9	9	62	46	40	86	16	11	27	0	0	0	0
4	2/19/2009	10	10	53	38	47	85	15	16	31	0	0	0	0
4	3/19/2009	11	11	69	51	47	98	18	16	34	0	0	0	0
3	4/1/2009	11	11	62	50	43	93	12	14	26	0	0	0	0
4	5/7/2009	10	10	58	45	41	86	13	11	24	0	0	0	0
3	6/10/2009	10	10	59	40	35	75	19	9	28	0	0	0	0
2	7/21/2009	10	10	62	53	44	97	9	14	23	0	0	0	0
5	8/14/2009	9	9	69	55	48	103	14	16	30	0	0	0	0
5	9/11/2009	9	9	64	48	41	89	16	14	30	0	0	0	0
5	10/30/2009	10	10	55	46	37	83	9	7	16	0	0	0	0
3	11/18/2009	9	9	66	54	44	98	12	9	21	0	0	0	0
4	12/3/2009	9	9	52	45	51	96	7	13	20	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.12 Fredonia POE Peak Daily Checked Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
5	1/9/2009	9	9	62	46	40	86	16	11	27	0	0	0	0
2	2/24/2009	10	10	50	40	44	84	10	11	21	0	0	0	0
4	3/19/2009	11	11	69	51	47	98	18	16	34	0	0	0	0
3	4/1/2009	11	11	62	50	43	93	12	14	26	0	0	0	0
4	5/7/2009	10	10	58	45	41	86	13	11	24	0	0	0	0
1	6/29/2009	9	9	57	48	53	101	9	14	23	0	0	0	0
2	7/21/2009	10	10	62	53	44	97	9	14	23	0	0	0	0
5	8/14/2009	9	9	69	55	48	103	14	16	30	0	0	0	0
2	9/29/2009	10	10	59	54	60	114	5	9	14	0	0	0	0
2	10/20/2009	10	10	54	47	60	107	7	14	21	0	0	0	0
3	11/18/2009	9	9	66	54	44	98	12	9	21	0	0	0	0
4	12/3/2009	9	9	52	45	51	96	7	13	20	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.7 Fredonia POE Inbound Daily Total Volumes 2009

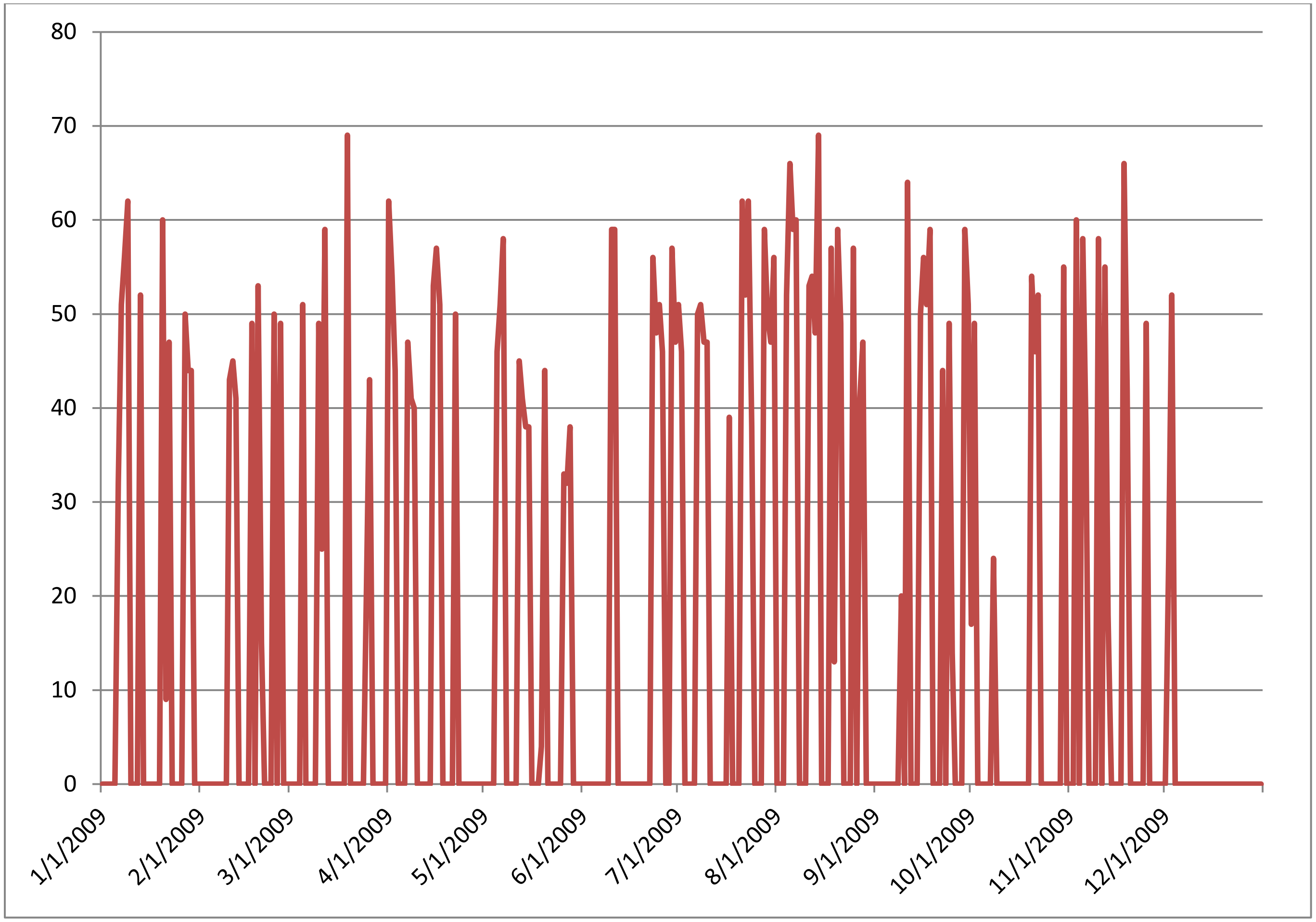


Figure D.8 Fredonia POE Inbound Daily Credential Checked Volumes 2009

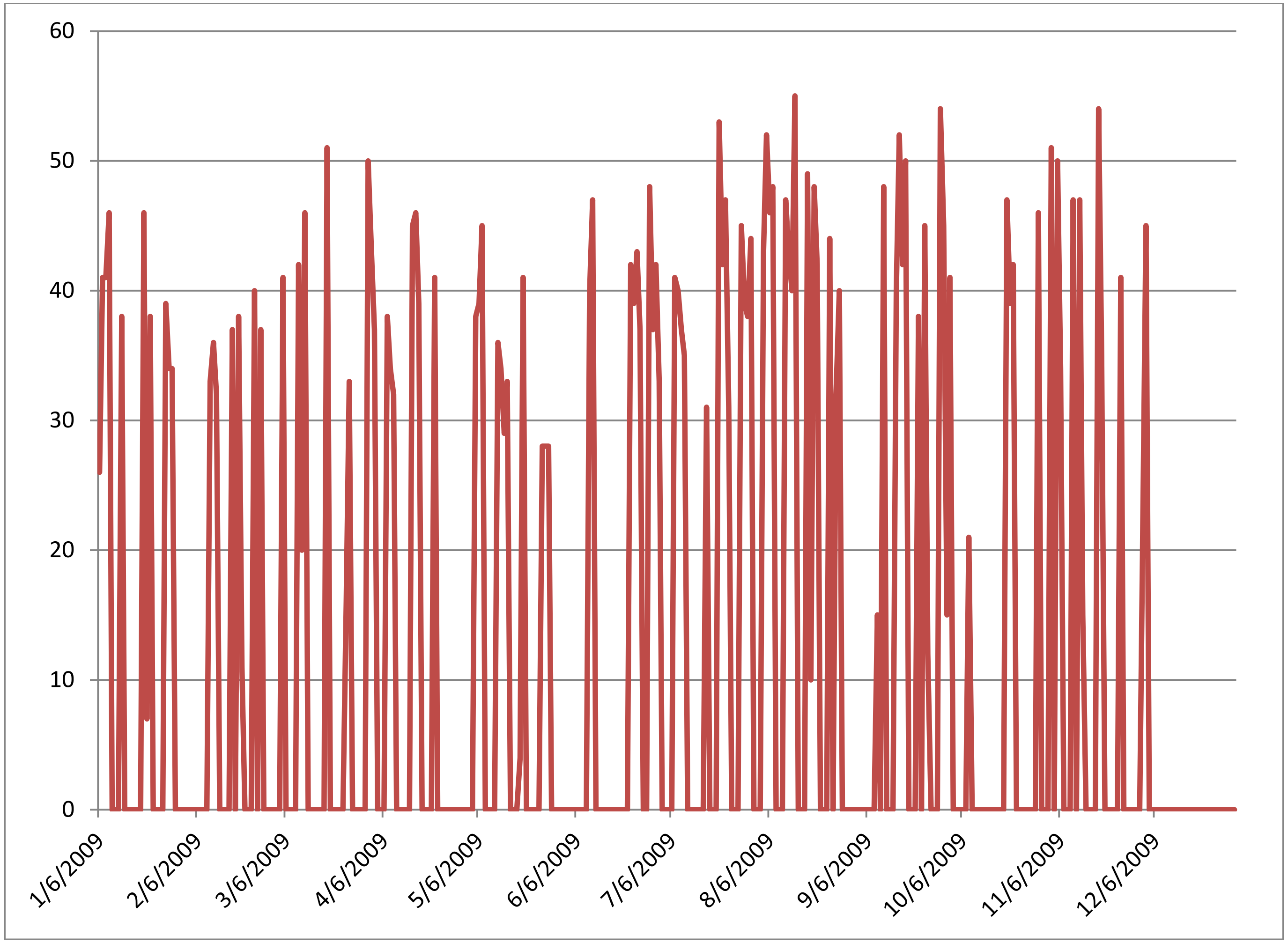
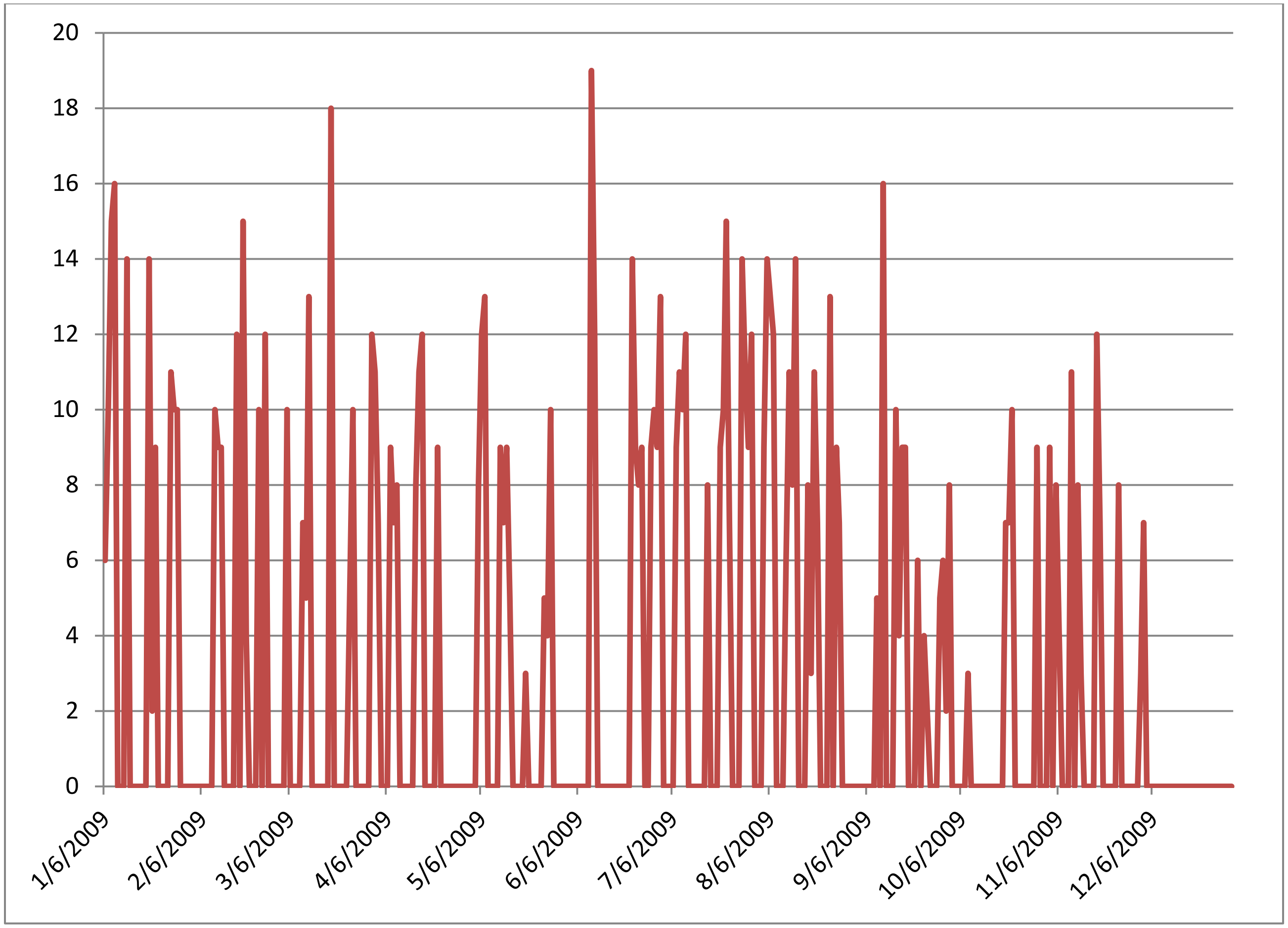


Figure D.9 Fredonia POE Inbound Daily Pre-cleared Volumes 2009



D.4 Kingman

Table D.13 Kingman POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
January	159	0	4,776	2,497	0	2,497	2,279	0	2,279	0	0	0	0
February	160	0	4,919	2,506	0	2,506	2,413	0	2,413	0	0	0	0
March	184	0	7,463	4,691	0	4,691	2,764	0	2,764	0	8	0	8
April	168	0	6,498	4,240	0	4,240	2,258	0	2,258	0	0	0	0
May	176	0	8,872	7,366	0	7,366	1,447	0	1,447	0	59	0	59
June	176	0	8,773	6,403	0	6,403	2,337	0	2,337	0	33	0	33
July	308	0	11,422	8,254	0	8,254	3,146	0	3,146	0	22	0	22
August	286	0	12,652	9,149	0	9,149	3,356	0	3,356	0	147	0	147
September	332	0	13,459	10,559	0	10,559	2,890	0	2,890	0	10	0	10
October	328	0	12,953	9,809	0	9,809	3,144	0	3,144	0	0	0	0
November	454	0	14,437	9,192	0	9,192	5,157	0	5,157	0	88	0	88
December	386	0	14,158	9,451	0	9,451	4,677	0	4,677	0	30	0	30

Table D.14 Kingman POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	8	0	239	125	0	125	114	0	114	0	0	0	0
February	8	0	246	125	0	125	121	0	121	0	0	0	0
March	8	0	324	204	0	204	120	0	120	0	0	0	0
April	8	0	325	212	0	212	113	0	113	0	0	0	0
May	8	0	403	335	0	335	66	0	66	0	3	0	3
June	8	0	399	291	0	291	106	0	106	0	2	0	2
July	10	0	368	266	0	266	101	0	101	0	1	0	1
August	9	0	408	295	0	295	108	0	108	0	5	0	5
September	15	0	612	480	0	480	131	0	131	0	0	0	0
October	16	0	617	467	0	467	150	0	150	0	0	0	0
November	16	0	498	317	0	317	178	0	178	0	3	0	3
December	14	0	506	338	0	338	167	0	167	0	1	0	1

Table D.15 Kingman POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
3	1/19/2011	8	0	414	294	0	294	120	0	120	0	0	0	0
3	2/2/2011	8	0	349	288	0	288	61	0	61	0	0	0	0
3	3/9/2011	8	0	492	349	0	349	143	0	143	0	0	0	0
5	4/29/2011	8	0	469	319	0	319	150	0	150	0	0	0	0
5	5/6/2011	8	0	737	614	0	614	123	0	123	0	0	0	0
3	6/29/2011	8	0	482	382	0	382	81	0	81	0	19	0	19
3	7/27/2011	10	0	562	403	0	403	159	0	159	0	0	0	0
2	8/16/2011	10	0	568	409	0	409	159	0	159	0	0	0	0
4	9/15/2011	16	0	746	583	0	583	163	0	163	0	0	0	0
1	10/3/2011	16	0	853	752	0	752	101	0	101	0	0	0	0
2	11/29/2011	16	0	790	486	0	486	304	0	304	0	0	0	0
3	12/21/2011	16	0	751	521	0	521	230	0	230	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.16 Kingman POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
3	1/19/2011	8	0	414	294	0	294	120	0	120	0	0	0	0
3	2/2/2011	8	0	349	288	0	288	61	0	61	0	0	0	0
3	3/9/2011	8	0	492	349	0	349	143	0	143	0	0	0	0
5	4/29/2011	8	0	469	319	0	319	150	0	150	0	0	0	0
5	5/6/2011	8	0	737	614	0	614	123	0	123	0	0	0	0
3	6/29/2011	8	0	482	382	0	382	81	0	81	0	19	0	19
2	7/5/2011	10	0	471	464	0	464	1	0	1	0	6	0	6
2	8/2/2011	10	0	517	479	0	479	38	0	38	0	0	0	0
3	9/21/2011	16	0	744	616	0	616	128	0	128	0	0	0	0
1	10/3/2011	16	0	853	752	0	752	101	0	101	0	0	0	0
2	11/29/2011	16	0	790	486	0	486	304	0	304	0	0	0	0
3	12/21/2011	16	0	751	521	0	521	230	0	230	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.10 Kingman POE Inbound Daily Total Volumes 2011

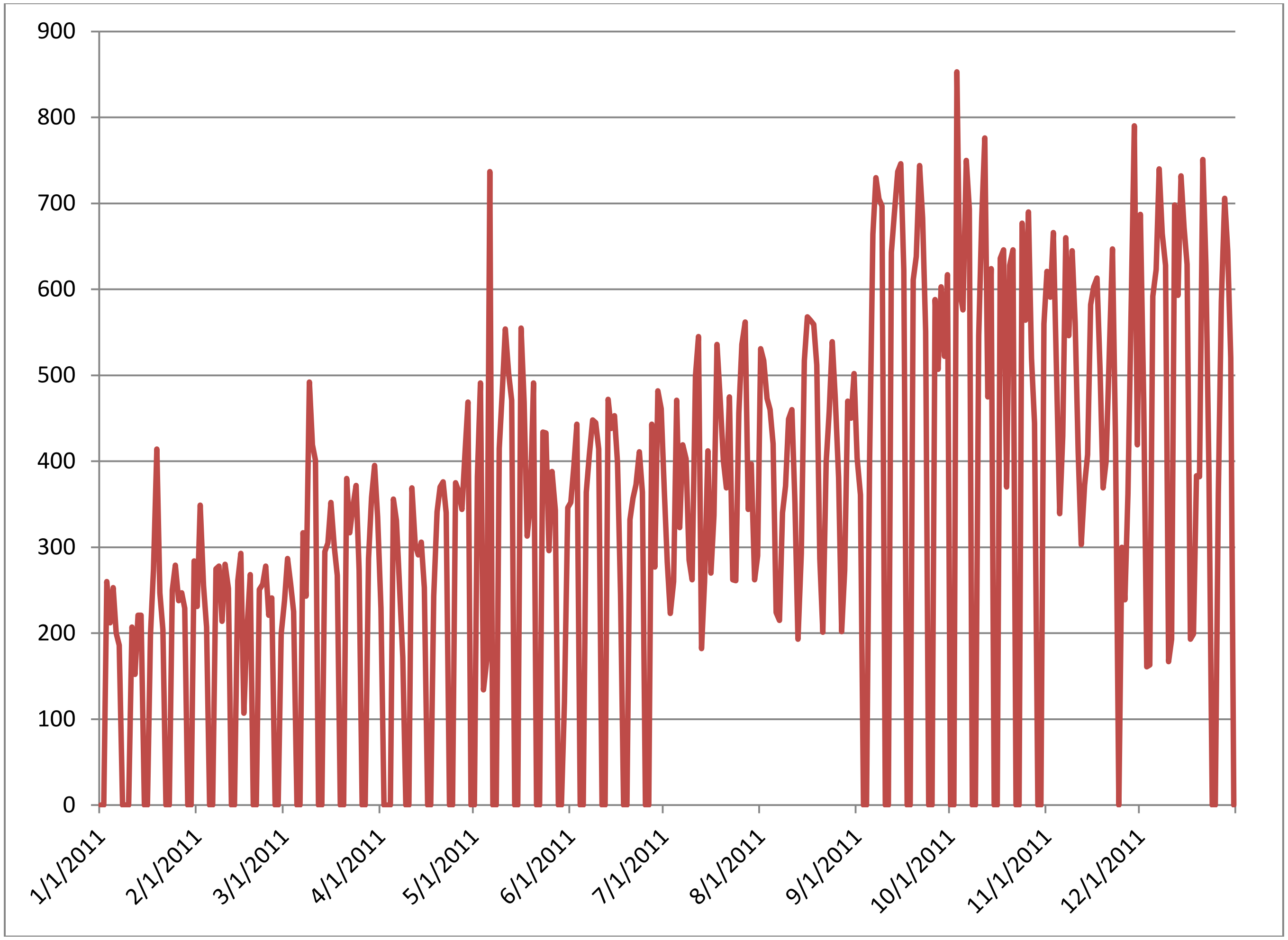


Figure D.11 Kingman POE Inbound Daily Credential Checked Volumes 2011

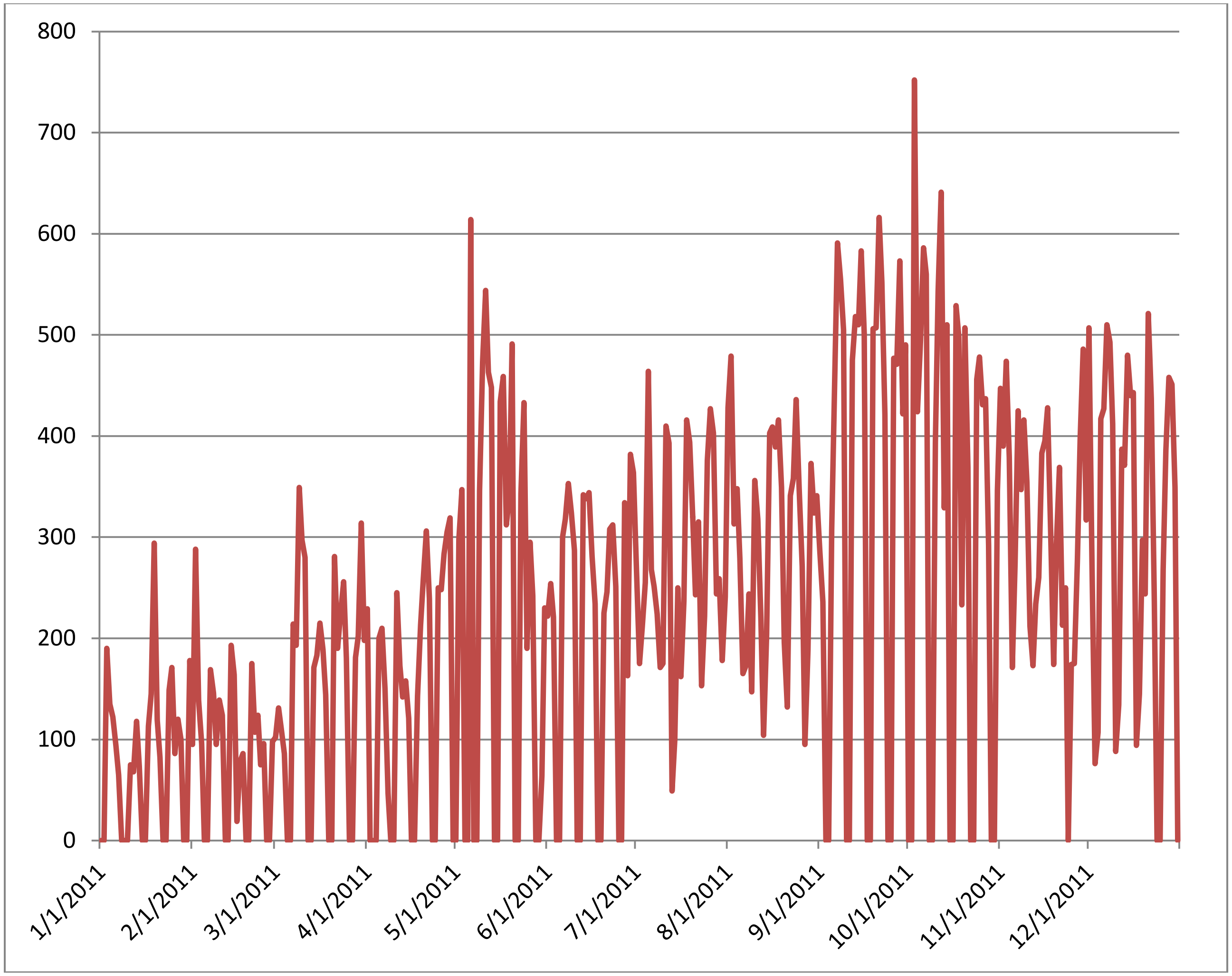
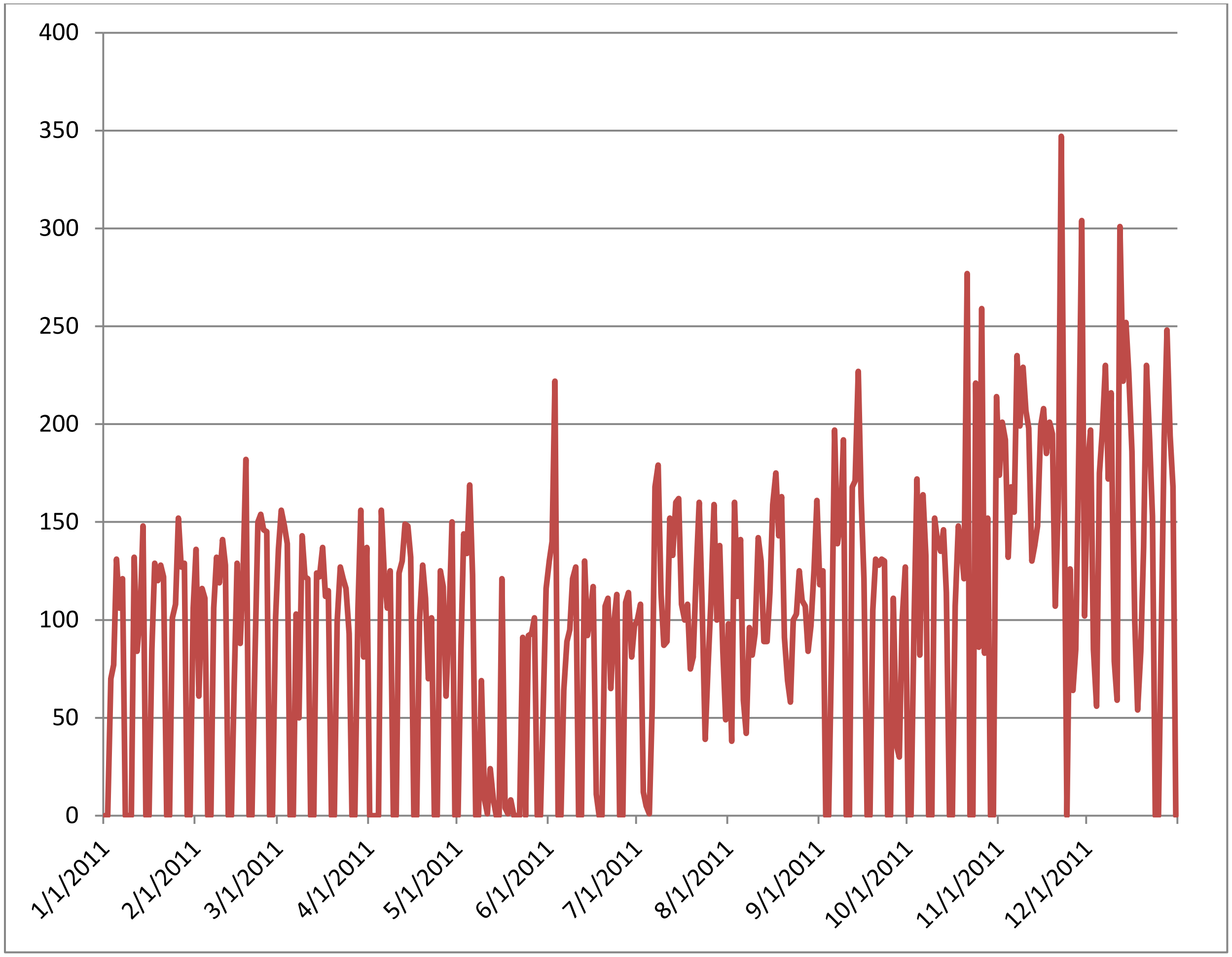


Figure D.12 Kingman POE Inbound Daily Pre-cleared Volumes 2011



D.5 Page

Table D.17 Page POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	159	159	106	106	718	824	0	0	0	0	0	0	0
February	151	151	146	146	622	768	0	0	0	0	0	0	0
March	172	169	358	358	745	1,103	0	0	0	0	0	0	0
April	166	166	201	201	823	1,024	0	0	0	0	0	0	0
May	138	138	472	472	868	1,340	0	0	0	0	0	0	0
June	139	64	621	621	510	1,131	0	0	0	0	0	0	0
July	151	70	839	839	468	1,307	0	0	0	0	0	0	0
August	195	195	1,173	1,173	1,230	2,403	0	0	0	0	0	0	0
September	177	177	932	932	1,076	2,008	0	0	0	0	0	0	0
October	169	173	1,112	1,112	1,313	2,425	0	0	0	0	0	0	0
November	179	179	825	825	1,096	1,921	0	0	0	0	0	0	0
December	176	176	1,019	1,019	1,256	2,275	0	0	0	0	0	0	0

Table D.18 Page POE Daily Average Volumes by Month 2011

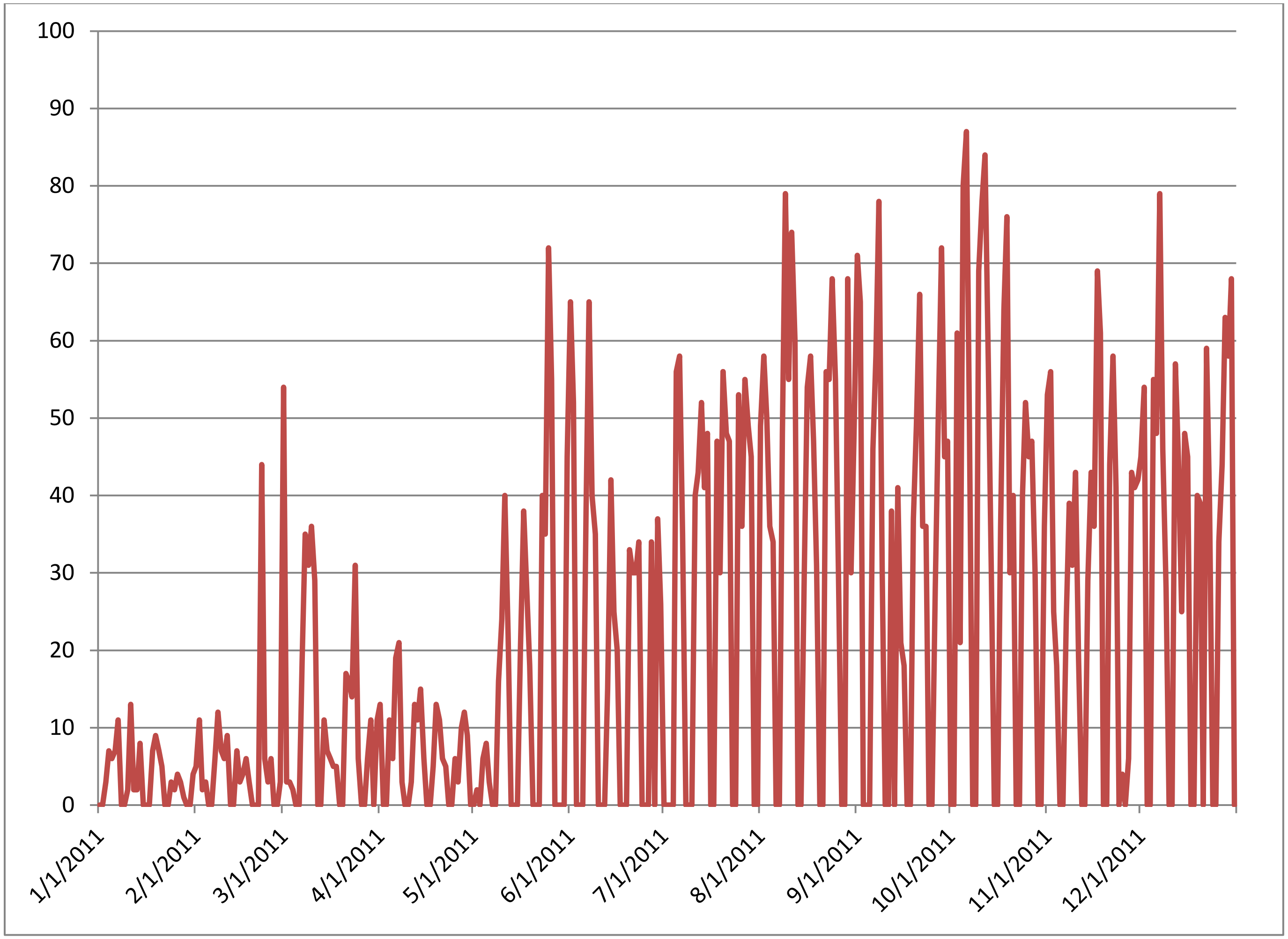
Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	8	8	5	5	36	41	0	0	0	0	0	0	0
February	8	8	8	8	33	40	0	0	0	0	0	0	0
March	8	8	16	16	34	50	0	0	0	0	0	0	0
April	8	8	10	10	39	49	0	0	0	0	0	0	0
May	8	8	28	28	51	79	0	0	0	0	0	0	0
June	8	8	37	37	64	67	0	0	0	0	0	0	0
July	8	7	47	47	47	73	0	0	0	0	0	0	0
August	8	8	51	51	53	104	0	0	0	0	0	0	0
September	8	8	47	47	51	96	0	0	0	0	0	0	0
October	8	8	53	53	63	115	0	0	0	0	0	0	0
November	8	8	38	38	50	87	0	0	0	0	0	0	0
December	8	8	49	49	60	108	0	0	0	0	0	0	0

Table D.19 Page POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
2	1/11/2011	8	8	13	13	61	74	0	0	0	0	0	0	0
2	2/22/2011	8	8	44	44	11	55	0	0	0	0	0	0	0
2	3/1/2011	8	8	54	54	54	108	0	0	0	0	0	0	0
4	4/7/2011	8	8	21	21	56	77	0	0	0	0	0	0	0
3	5/25/2011	8	8	72	72	58	130	0	0	0	0	0	0	0
3	6/1/2011	9	9	65	65	81	146	0	0	0	0	0	0	0
3	7/6/2011	8	0	58	58	0	58	0	0	0	0	0	0	0
2	8/9/2011	9	9	79	79	96	175	0	0	0	0	0	0	0
4	9/8/2011	8	8	78	78	76	154	0	0	0	0	0	0	0
4	10/6/2011	8	8	87	87	103	190	0	0	0	0	0	0	0
4	11/17/2011	8	8	69	69	56	125	0	0	0	0	0	0	0
3	12/7/2011	8	8	79	79	84	163	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.13 Page POE Inbound Daily Checked Volumes 2011



D.6 Parker

Table D.20 Parker POE Monthly Total Volumes 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	160	0	2,734	2,699	0	2,699	35	0	35	0	0	0	0
February	144	0	2,672	2,635	0	2,635	37	0	37	0	0	0	0
March	160	0	2,867	2,830	0	2,830	37	0	37	0	0	0	0
April	160	0	2,736	2,699	0	2,699	37	0	37	0	0	0	0
May	136	0	2,507	2,474	0	2,474	33	0	33	0	0	0	0
June	168	0	3,197	3,155	0	3,155	42	0	42	0	0	0	0
July	176	0	3,085	3,044	0	3,044	41	0	41	0	0	0	0
August	168	0	2,737	2,699	0	2,699	38	0	38	0	0	0	0
September	160	0	2,733	2,699	0	2,699	34	0	34	0	0	0	0
October	166	0	2,997	2,959	0	2,959	38	0	38	0	0	0	0
November	112	0	1,862	1,833	0	1,833	19	0	19	0	10	0	10
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.21 Parker POE Daily Average Volumes by Month 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	8	0	137	135	0	135	2	0	2	0	0	0	0
February	8	0	148	146	0	146	2	0	2	0	0	0	0
March	8	0	143	142	0	142	2	0	2	0	0	0	0
April	8	0	137	135	0	135	2	0	2	0	0	0	0
May	8	0	147	146	0	146	2	0	2	0	0	0	0
June	8	0	152	150	0	150	2	0	2	0	0	0	0
July	8	0	140	138	0	138	2	0	2	0	0	0	0
August	8	0	130	129	0	129	2	0	2	0	0	0	0
September	8	0	137	135	0	135	2	0	2	0	0	0	0
October	8	0	150	148	0	148	2	0	2	0	0	0	0
November	7	0	124	122	0	122	1	0	1	0	1	0	1
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.22 Parker POE Peak Daily Total Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
3	1/28/2009	8	0	167	165	0	165	2	0	2	0	0	0	0
4	2/26/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
3	3/4/2009	8	0	181	179	0	179	2	0	2	0	0	0	0
3	4/15/2009	8	0	181	179	0	179	2	0	2	0	0	0	0
3	5/20/2009	8	0	192	190	0	190	2	0	2	0	0	0	0
3	6/24/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
3	7/8/2009	8	0	194	191	0	191	3	0	3	0	0	0	0
4	8/13/2009	8	0	178	176	0	176	2	0	2	0	0	0	0
2	9/15/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
4	10/15/2009	14	0	284	282	0	282	2	0	2	0	0	0	0
4	11/5/2009	8	0	197	195	0	195	2	0	2	0	0	0	0
-	12/2009	0	0	0	0	0	0	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.23 Parker POE Peak Daily Checked Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
3	1/28/2009	8	0	167	165	0	165	2	0	2	0	0	0	0
4	2/26/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
3	3/4/2009	8	0	181	179	0	179	2	0	2	0	0	0	0
3	4/15/2009	8	0	181	179	0	179	2	0	2	0	0	0	0
3	5/20/2009	8	0	192	190	0	190	2	0	2	0	0	0	0
3	6/24/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
3	7/8/2009	8	0	194	191	0	191	3	0	3	0	0	0	0
4	8/13/2009	8	0	178	176	0	176	2	0	2	0	0	0	0
2	9/15/2009	8	0	186	183	0	183	3	0	3	0	0	0	0
4	10/15/2009	14	0	284	282	0	282	2	0	2	0	0	0	0
4	11/5/2009	8	0	197	195	0	195	2	0	2	0	0	0	0
-	12/2009	0	0	0	0	0	0	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.14 Parker POE Inbound Daily Total Volumes 2009

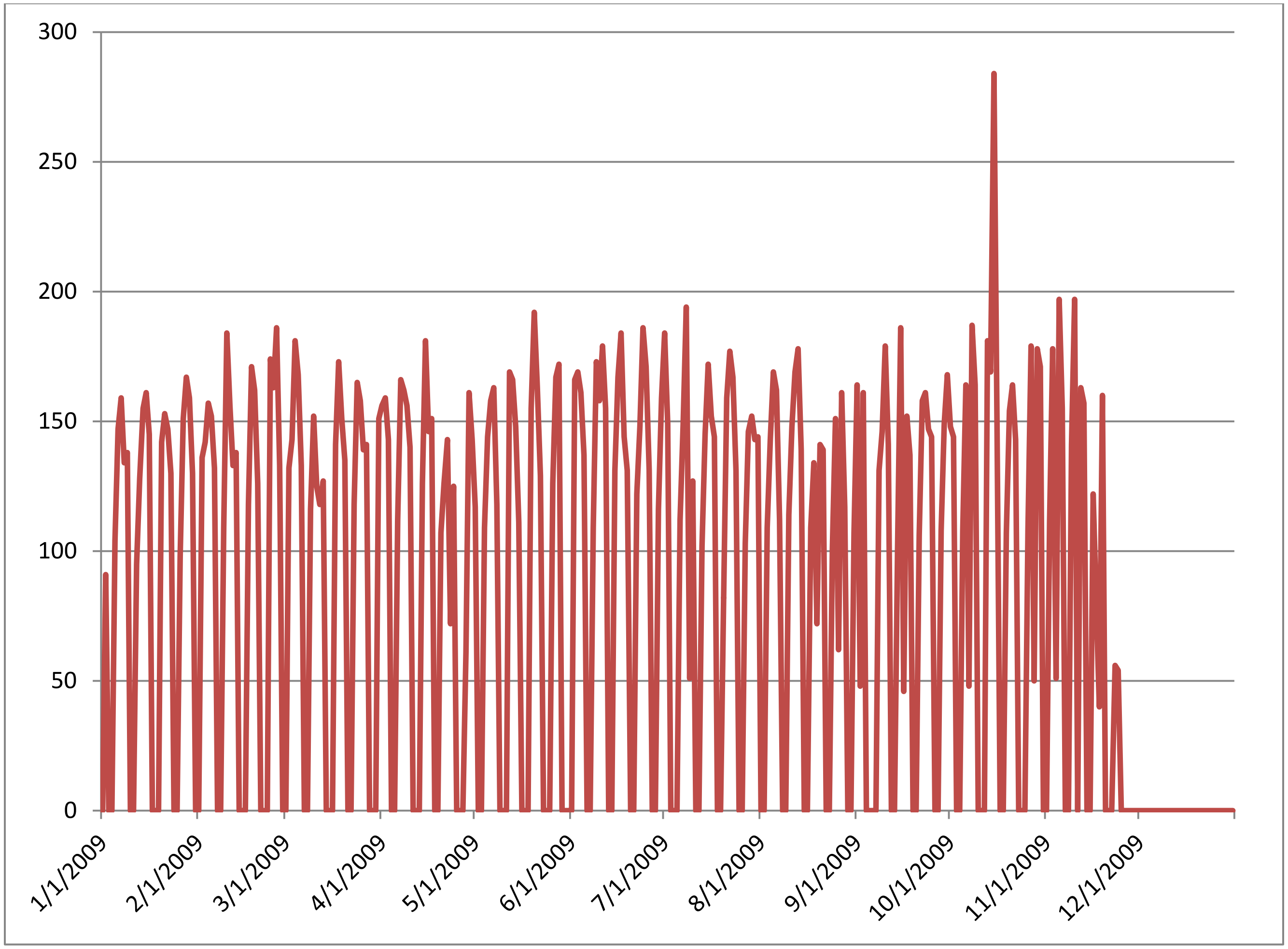


Figure D.15 Parker POE Inbound Daily Credential Checked Volumes 2009

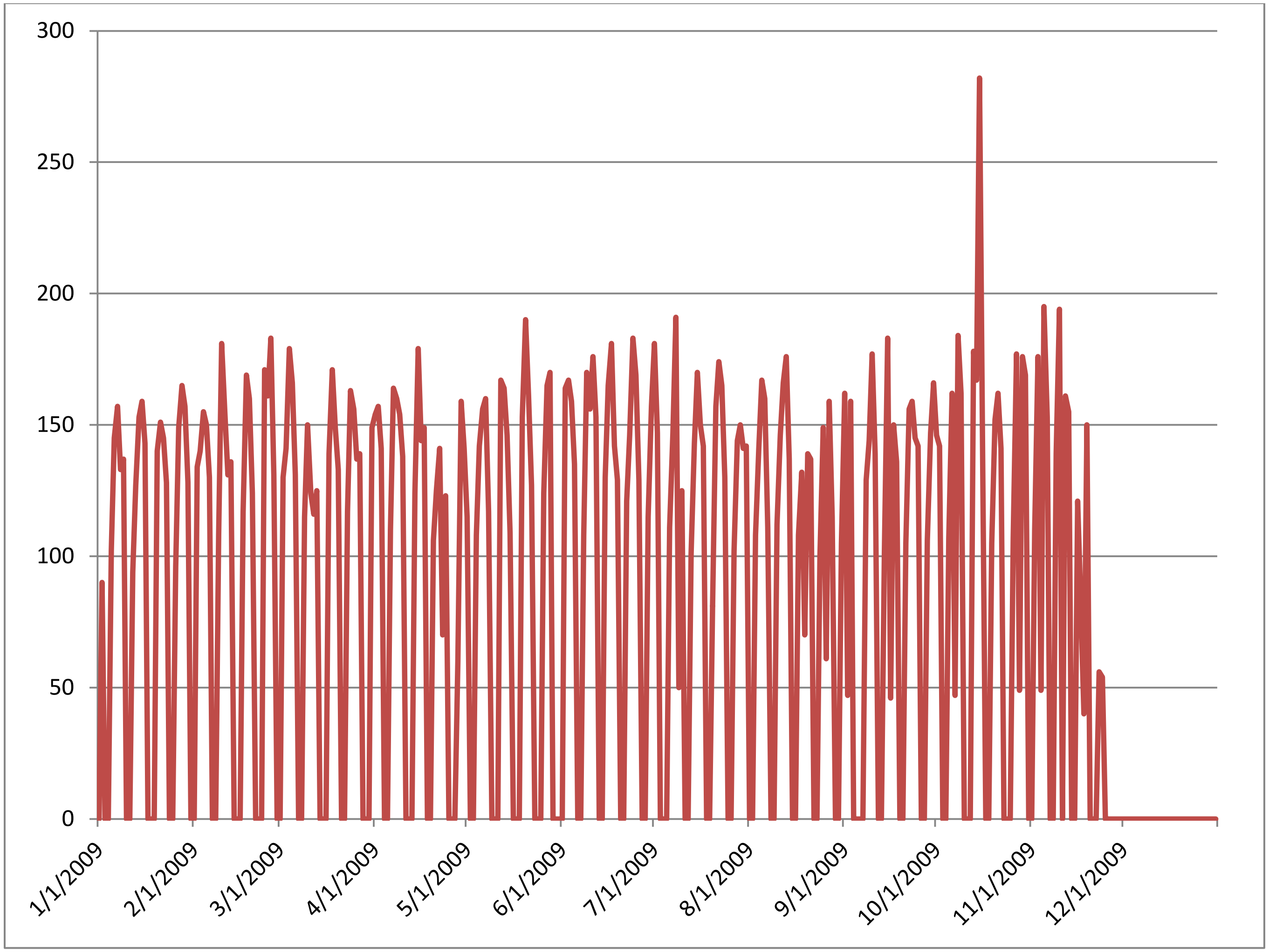
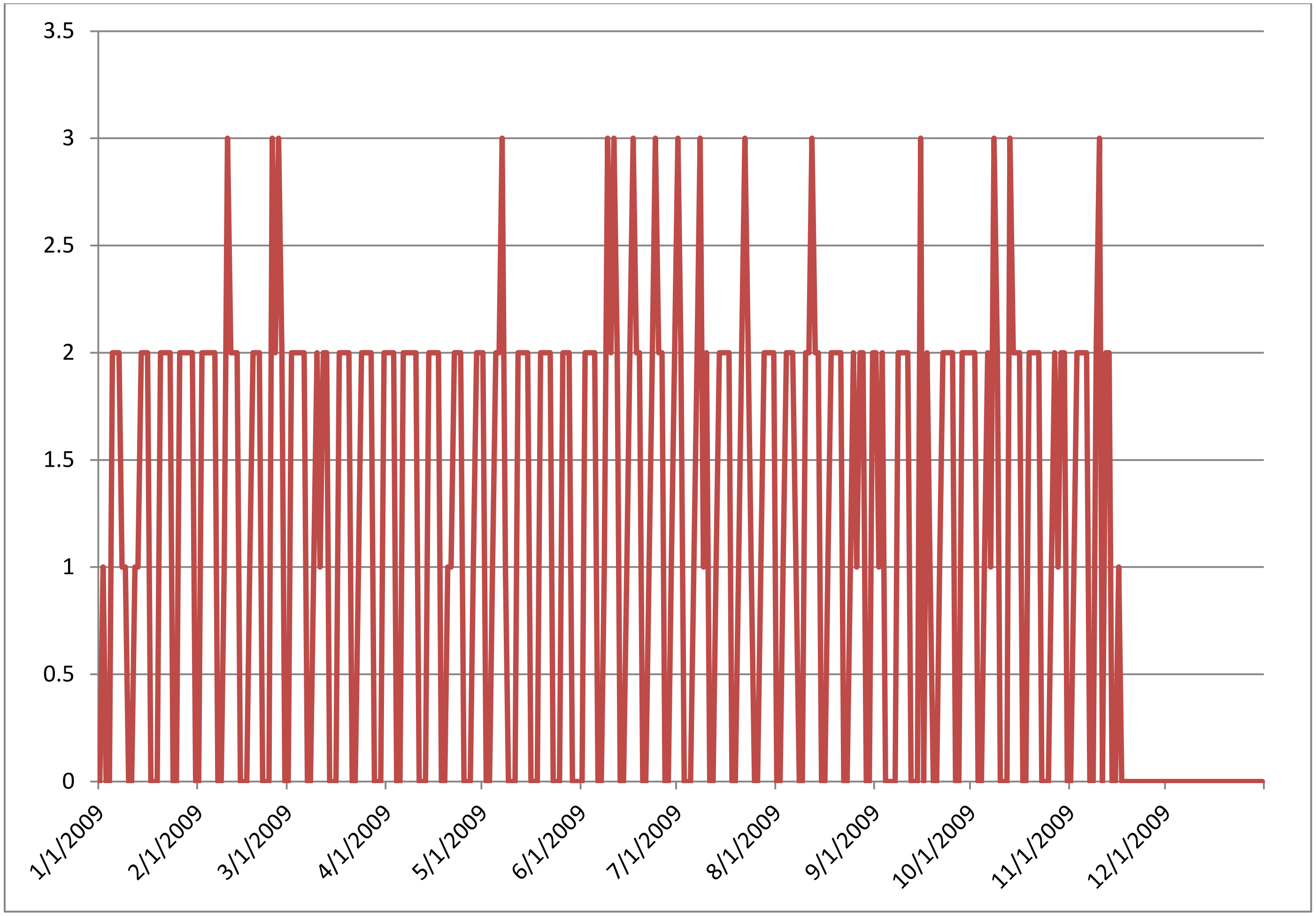


Figure D.16 Parker POE Inbound Daily Pre-cleared Volumes 2009



D.7 St. George

Table D.24 St. George POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	575	587	23,909	3,280	2,694	5,974	20,629	20,175	40,804	0	0	0	0
February	456	439	21,913	3,177	2,254	5,431	18,736	17,999	36,735	0	0	0	0
March	486	494	27,428	4,642	3,253	7,895	22,786	21,008	43,794	0	0	0	0
April	480	462	25,316	4,443	3,869	8,312	20,873	19,831	40,704	0	0	0	0
May	480	496	30,419	7,733	6,001	13,734	22,686	20,925	43,611	0	0	0	0
June	480	480	33,303	8,403	5,826	14,229	24,900	25,729	50,629	0	0	0	0
July	620	637	35,494	8,779	8,479	17,258	26,715	40,606	67,321	0	0	0	0
August	584	641	33,729	7,494	5,866	13,360	26,235	39,614	65,849	0	0	0	0
September	604	656	33,978	6,503	4,834	11,337	27,475	48,086	75,561	0	0	0	0
October	548	656	30,366	6,746	4,954	11,700	23,620	44,446	68,066	0	0	0	0
November	561	595	30,553	6,584	4,330	10,914	23,969	38,032	62,001	0	0	0	0
December	620	610	29,049	5,740	4,089	9,829	23,309	40,347	63,656	0	0	0	0

Table D.25 St. George POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles				Waved-Thru		
	Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
January	19	19	771	106	87	193	665	651	1,316	0	0	0	0
February	16	16	783	113	81	194	669	643	1,312	0	0	0	0
March	16	16	885	150	105	255	735	678	1,413	0	0	0	0
April	16	15	844	148	129	277	696	661	1,357	0	0	0	0
May	15	16	981	249	194	443	732	675	1,407	0	0	0	0
June	16	16	1,110	280	194	474	830	858	1,688	0	0	0	0
July	20	21	1,145	283	274	557	862	1310	2,172	0	0	0	0
August	19	21	1,088	242	189	431	846	1278	2,124	0	0	0	0
September	20	22	1,133	217	161	378	916	1603	2,519	0	0	0	0
October	18	21	980	218	160	377	762	1434	2,196	0	0	0	0
November	19	20	1,018	219	144	364	799	1268	2,067	0	0	0	0
December	21	20	968	191	136	328	777	1345	2,122	0	0	0	0

Table D.26 St. George POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
3	1/26/2011	20	20	1,101	164	127	291	937	871	1,808	0	0	0	0
4	2/10/2011	16	16	1,035	91	80	171	944	712	1,656	0	0	0	0
3	3/2/2011	16	16	1,125	271	103	374	854	218	1,072	0	0	0	0
4	4/7/2011	16	16	1,076	172	156	328	904	789	1,693	0	0	0	0
4	5/5/2011	16	16	1,395	438	199	637	957	760	1,717	0	0	0	0
4	6/2/2011	16	16	1,490	487	222	709	1,003	835	1,838	0	0	0	0
3	7/13/2011	24	24	1,623	517	351	868	1,106	2,484	3,590	0	0	0	0
4	8/4/2011	18	24	1,406	314	259	573	1,092	1,028	2,120	0	0	0	0
4	9/8/2011	24	24	1,763	118	192	310	1,645	2,386	4,031	0	0	0	0
4	10/6/2011	18	24	1,517	440	200	640	1,077	2,381	3,458	0	0	0	0
2	11/22/2011	24	24	1,845	418	220	638	1,427	2,303	3,730	0	0	0	0
4	12/8/2011	24	24	1,409	250	191	441	1,159	2,300	3,459	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.27 St. George POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
1	1/31/2011	20	20	925	205	77	282	720	484	1,204	0	0	0	0
1	2/28/2011	16	16	903	243	36	279	660	514	1,174	0	0	0	0
3	3/2/2011	16	16	1,125	271	103	374	854	218	1,072	0	0	0	0
1	4/18/2011	16	16	1,058	380	151	531	678	456	1,134	0	0	0	0
1	5/2/2011	16	16	1,158	458	129	587	700	425	1,125	0	0	0	0
4	6/2/2011	16	16	1,490	487	222	709	1,003	835	1,838	0	0	0	0
2	7/12/2011	24	24	1,126	554	321	875	572	2588	3,160	0	0	0	0
7	8/14/2011	16	16	1,110	872	89	961	238	543	781	0	0	0	0
1	9/26/2011	18	24	1,407	353	158	511	1,054	677	1,731	0	0	0	0
4	10/6/2011	18	24	1,517	440	200	640	1,077	2381	3,458	0	0	0	0
2	11/22/2011	24	24	1,845	418	220	638	1,427	2303	3,730	0	0	0	0
1	12/5/2011	24	24	1,188	327	114	441	861	1532	2,393	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.17 St. George POE Inbound Daily Total Volumes 2011

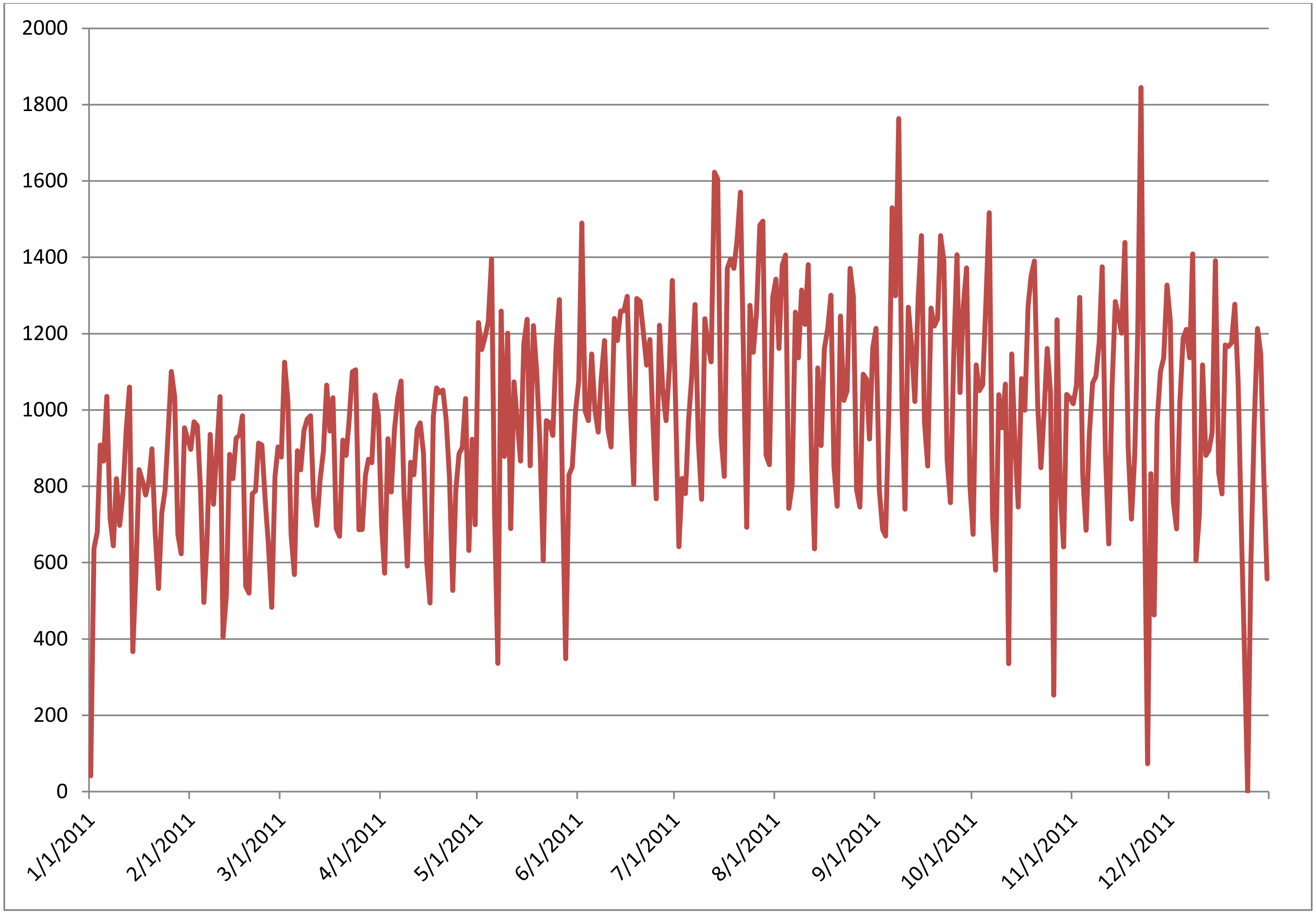


Figure D.18 St. George POE Inbound Daily Credential Checked Volumes 2011

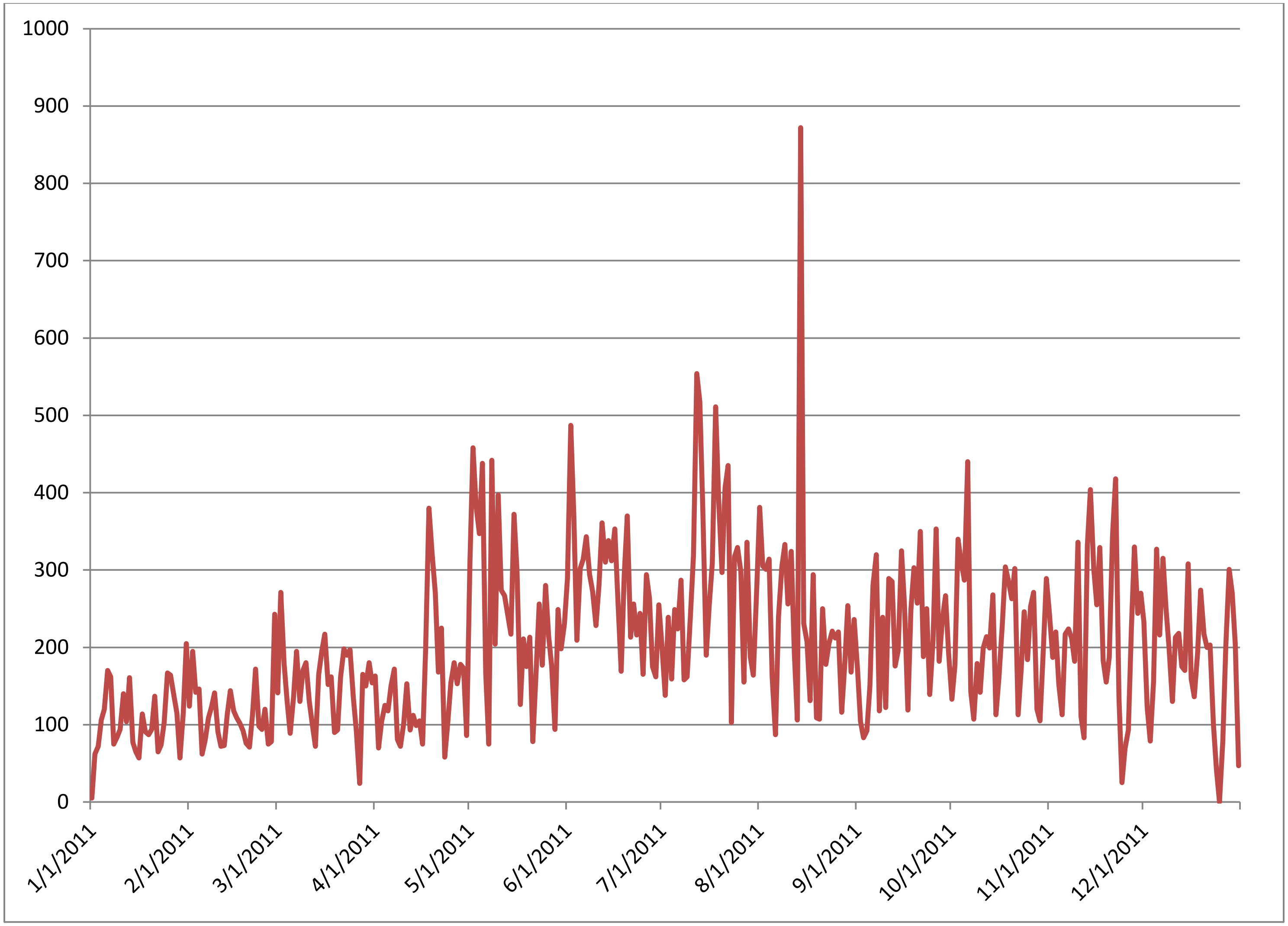
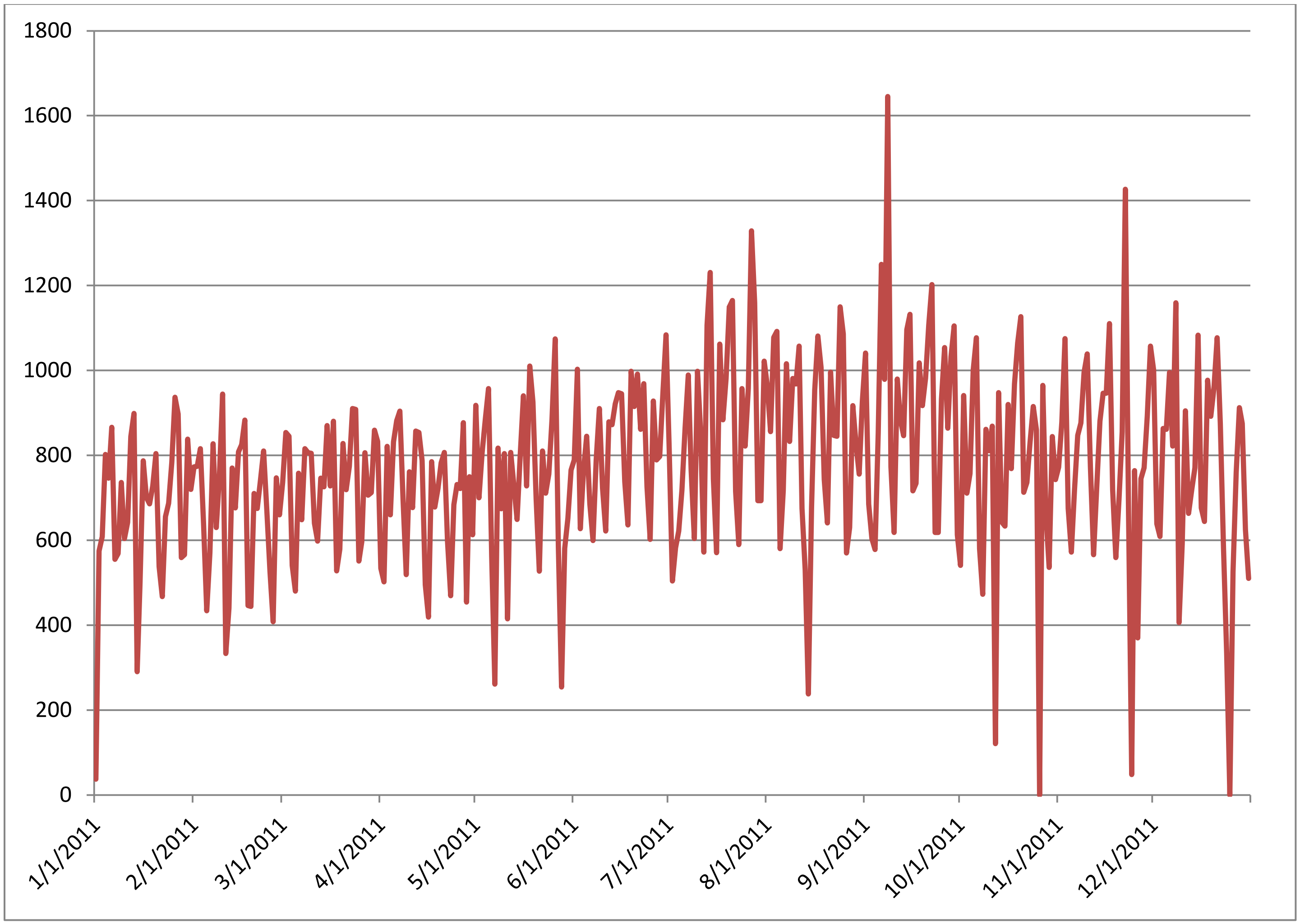


Figure D.19 St. George POE Inbound Daily Pre-cleared Volumes 2011



D.8 San Simon

Table D.28 San Simon POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	558	0	62,454	31,635	0	31,635	30,678	0	30,678	0	141	0	141
February	504	0	60,464	30,916	0	30,916	29,244	0	29,244	0	304	0	304
March	580	0	64,515	34,991	0	34,991	29,500	0	29,500	0	24	0	24
April	496	0	54,388	28,945	0	28,945	25,369	0	25,369	0	74	0	74
May	717	0	67,911	41,327	0	41,327	26,296	0	26,296	0	288	0	288
June	712	0	70,270	36,064	0	36,064	32,298	0	32,298	0	1,908	0	1,908
July	744	0	67,295	37,152	0	37,152	30,116	0	30,116	0	27	0	27
August	744	0	74,222	38,295	0	38,295	35,809	0	35,809	0	118	0	118
September	720	0	66,871	35,182	0	35,182	31,604	0	31,604	0	85	0	85
October	744	0	72,663	36,945	0	36,945	35,686	0	35,686	0	32	0	32
November	696	0	68,397	34,944	0	34,944	33,443	0	33,443	0	10	0	10
December	720	0	77,145	39,366	0	39,366	37,579	0	37,579	0	200	0	200

Table D.29 San Simon POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	18	0	2,015	1,020	0	1,020	990	0	990	0	5	0	5
February	18	0	2,159	1,104	0	1,104	1,044	0	1,044	0	11	0	11
March	19	0	2,081	1,129	0	1,129	952	0	952	0	1	0	1
April	17	0	1,813	965	0	965	846	0	846	0	2	0	2
May	23	0	2,191	1,333	0	1,333	848	0	848	0	9	0	9
June	24	0	2,342	1,202	0	1,202	1,077	0	1,077	0	64	0	64
July	24	0	2,171	1,198	0	1,198	971	0	971	0	1	0	1
August	24	0	2,394	1,235	0	1,235	1,155	0	1,155	0	4	0	4
September	24	0	2,229	1,173	0	1,173	1,053	0	1,053	0	3	0	3
October	24	0	2,344	1,192	0	1,192	1,151	0	1,151	0	1	0	1
November	23	0	2,280	1,165	0	1,165	1,115	0	1,115	0	0	0	0
December	24	0	2,572	1,312	0	1,312	1,253	0	1,253	0	6	0	6

Table D.30 San Simon POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
7	1/9/2011	20	0	2,883	1,357	0	1,357	1,488	0	1,488	0	38	0	38
7	2/27/2011	20	0	3,621	1,624	0	1,624	1,888	0	1,888	0	109	0	109
7	3/20/2011	20	0	2,710	1,238	0	1,238	1,472	0	1,472	0	0	0	0
7	4/10/2011	16	0	2,414	1,307	0	1,307	1,107	0	1,107	0	0	0	0
4	5/26/2011	24	0	2,765	1,335	0	1,335	1,430	0	1,430	0	0	0	0
3	6/26/2011	24	0	2,987	1,548	0	1,548	1,439	0	1,439	0	0	0	0
3	7/27/2011	24	0	2,733	1,645	0	1,645	1,088	0	1,088	0	0	0	0
3	8/31/2011	24	0	2,959	1,544	0	1,544	1,415	0	1,415	0	0	0	0
7	9/25/2011	24	0	2,956	1,376	0	1,376	1,580	0	1,580	0	0	0	0
7	10/2/2011	24	0	2,846	1,309	0	1,309	1,537	0	1,537	0	0	0	0
7	11/20/2011	24	0	3,182	1,508	0	1,508	1,664	0	1,664	0	10	0	10
7	12/4/2011	24	0	3,991	1,987	0	1,987	1,972	0	1,972	0	32	0	32

* 1- Monday, 7 – Sunday

Table D.31 San Simon POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
7	1/30/2011	20	0	2,874	1,391	0	1,391	1,483	0	1,483	0	0	0	0
7	2/20/2011	20	0	3,252	1,654	0	1,654	1,598	0	1,598	0	0	0	0
4	3/10/2011	20	0	2,306	1,773	0	1,773	533	0	533	0	0	0	0
3	4/13/2011	16	0	2,267	1,473	0	1,473	794	0	794	0	0	0	0
3	5/11/2011	24	0	2,736	1,857	0	1,857	879	0	879	0	0	0	0
3	6/29/2011	24	0	2,987	1,548	0	1,548	1,439	0	1,439	0	0	0	0
3	7/27/2011	24	0	2,733	1,645	0	1,645	1,088	0	1,088	0	0	0	0
3	8/17/2011	24	0	2,916	1,565	0	1,565	1,351	0	1,351	0	0	0	0
3	9/14/2011	24	0	2,824	1,543	0	1,543	1,281	0	1,281	0	0	0	0
3	10/26/2011	24	0	2,838	1,586	0	1,586	1,252	0	1,252	0	0	0	0
3	11/9/2011	24	0	2,951	1,623	0	1,623	1,328	0	1,328	0	0	0	0
7	12/4/2011	24	0	3,991	1,987	0	1,987	1,972	0	1,972	0	32	0	32

* 1- Monday, 7 – Sunday

Figure D.20 San Simon POE Inbound Daily Total Volumes 2011

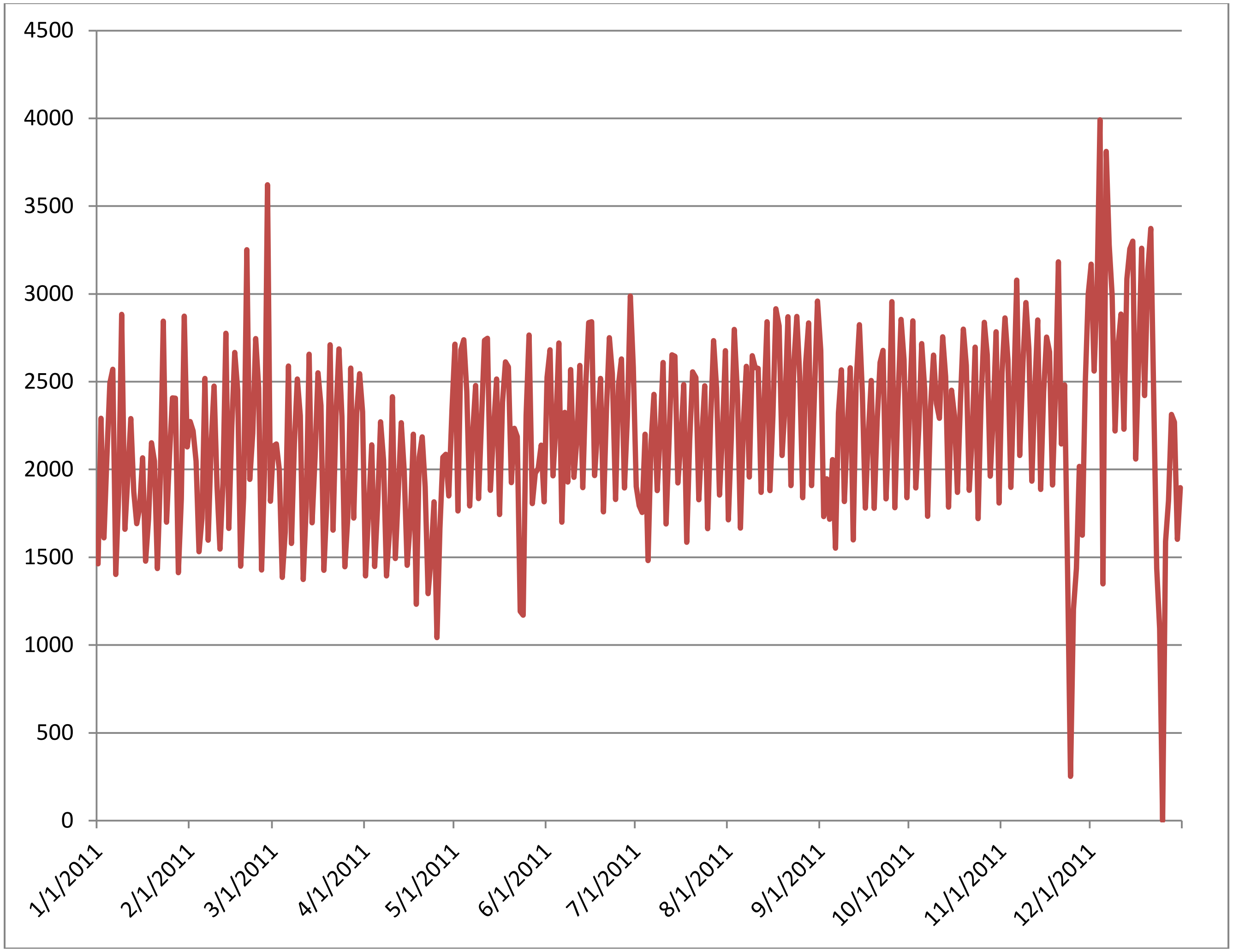


Figure D.21 San Simon POE Inbound Daily Credential Checked Volumes 2011

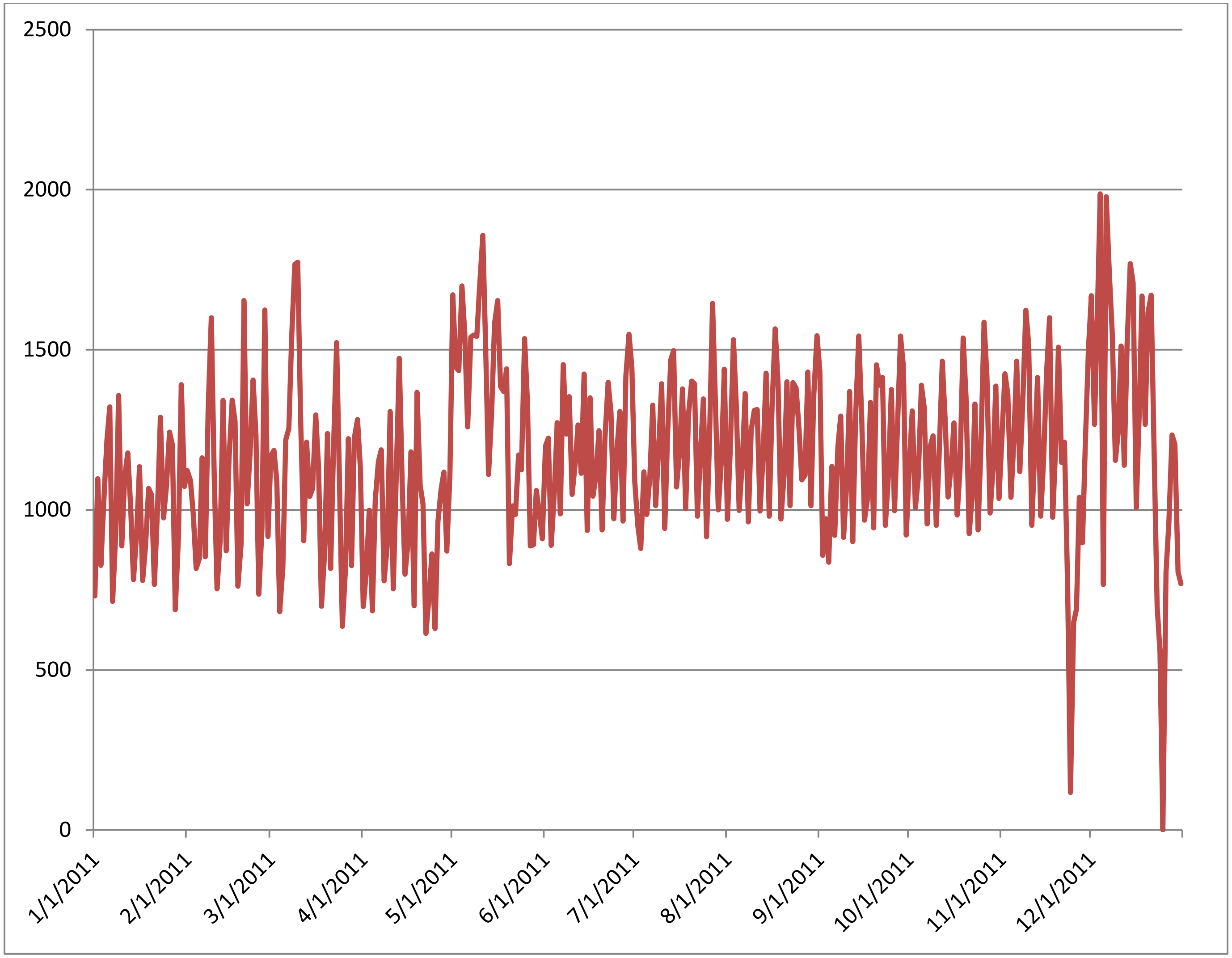
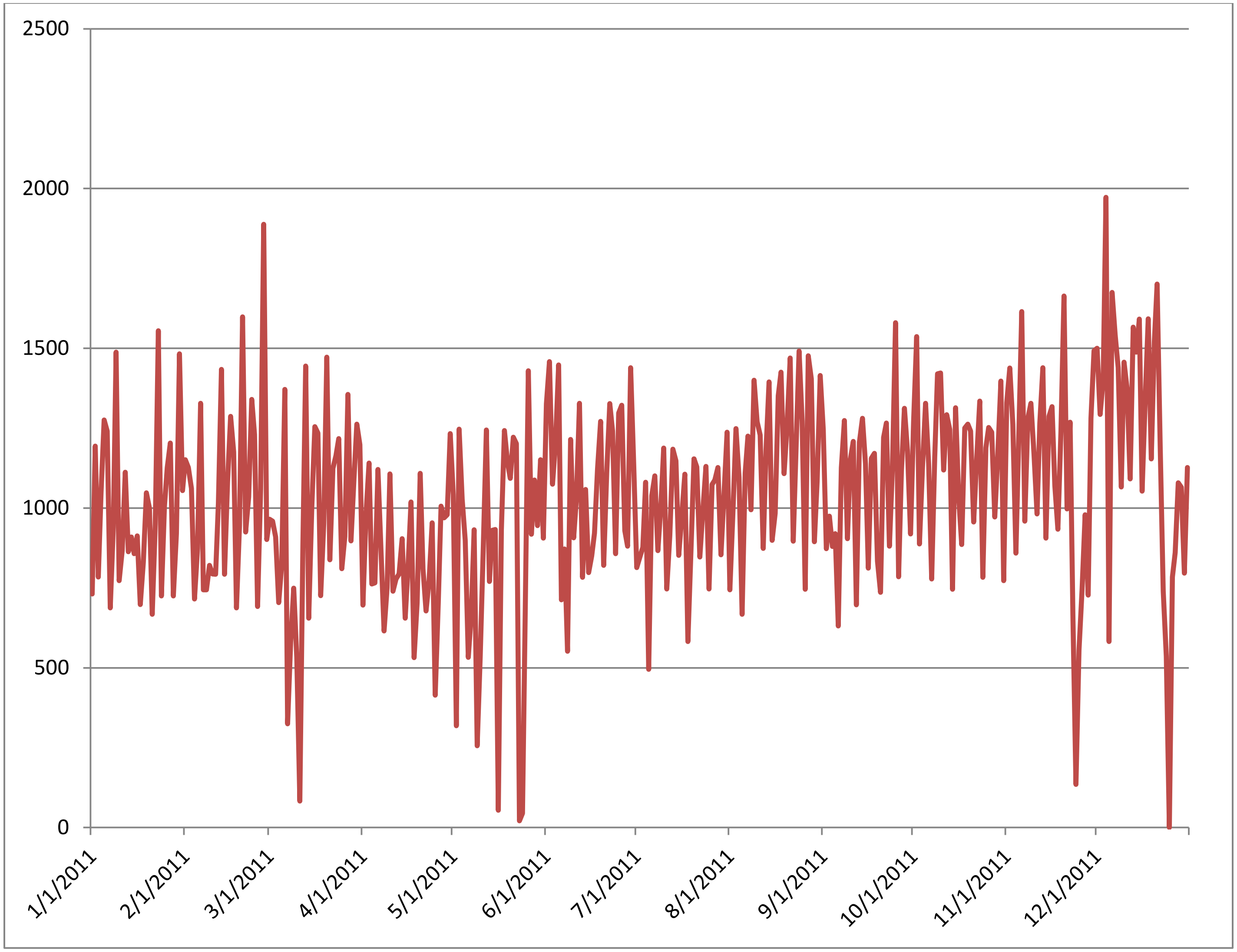


Figure D.22 San Simon POE Inbound Daily Pre-cleared Volumes 2011



D.9 Sanders

Table D.32 Sanders POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	478	0	107,593	26,185	0	26,185	81,047	0	81,047	0	361	0	361
February	446	0	95,845	23,590	0	23,590	72,222	0	72,222	0	33	0	33
March	490	0	115,818	31,365	0	31,365	84,373	0	84,373	0	80	0	80
April	472	0	105,645	26,396	0	26,396	79,238	0	79,238	0	11	0	11
May	492	0	106,535	29,081	0	29,081	77,411	0	77,411	0	43	0	43
June	478	0	110,726	29,114	0	29,114	81,612	0	81,612	0	0	0	0
July	492	0	99,833	31,416	0	31,416	68,417	0	68,417	0	0	0	0
August	523	0	109,927	39,570	0	39,570	70,308	0	70,308	0	49	0	49
September	657	0	109,010	40,478	0	40,478	68,516	0	68,516	0	16	0	16
October	667	0	126,478	44,598	0	44,598	81,841	0	81,841	0	39	0	39
November	630	0	113,316	38,697	0	38,697	74,619	0	74,619	0	0	0	0
December	675	0	95,929	34,214	0	34,214	61,511	0	61,511	0	204	0	204

Table D.33 Sanders POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	16	0	3,586	873	0	873	2,702	0	2,702	0	12	0	12
February	16	0	3,423	843	0	843	2,579	0	2,579	0	1	0	1
March	16	0	3,736	1,012	0	1,012	2,722	0	2,722	0	3	0	3
April	16	0	3,522	880	0	880	2,641	0	2,641	0	0	0	0
May	16	0	3,437	938	0	938	2,497	0	2,497	0	1	0	1
June	16	0	3,691	970	0	970	2,720	0	2,720	0	0	0	0
July	16	0	3,220	1,013	0	1,013	2,207	0	2,207	0	0	0	0
August	17	0	3,546	1,276	0	1,276	2,268	0	2,268	0	2	0	2
September	22	0	3,634	1,349	0	1,349	2,284	0	2,284	0	1	0	1
October	22	0	4,080	1,439	0	1,439	2,640	0	2,640	0	1	0	1
November	22	0	3,907	1,334	0	1,334	2,573	0	2,573	0	0	0	0
December	23	0	3,198	1,140	0	1,140	2,050	0	2,050	0	7	0	7

Table D.34 Sanders POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
7	1/2/2011	16	0	5,418	870	0	870	4,548	0	4,548	0	0	0	0
7	2/13/2011	16	0	5,131	1,115	0	1,115	4,016	0	4,016	0	0	0	0
7	3/27/2011	16	0	6,192	1,090	0	1,090	5,095	0	5,095	0	7	0	7
7	4/17/2011	16	0	7,145	959	0	959	6,186	0	6,186	0	0	0	0
7	5/1/2011	16	0	5,016	1,111	0	1,111	3,905	0	3,905	0	0	0	0
7	6/19/2011	16	0	4,769	1,031	0	1,031	3,738	0	3,738	0	0	0	0
7	7/10/2011	16	0	5,144	1,303	0	1,303	3,841	0	3,841	0	0	0	0
7	8/14/2011	17	0	6,511	1,536	0	1,536	4,975	0	4,975	0	0	0	0
7	9/18/2011	17	0	4,941	985	0	985	3,956	0	3,956	0	0	0	0
7	10/30/2011	17	0	5,715	2,340	0	2,340	3,375	0	3,375	0	0	0	0
7	11/20/2011	24	0	5,512	1,488	0	1,488	4,024	0	4,024	0	0	0	0
1	12/26/2011	16	0	5,287	695	0	695	4,592	0	4,592	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.35 Sanders POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
7	1/30/2011	16	0	5,185	1,166	0	1,166	4,011	0	4,011	0	8	0	8
7	2/13/2011	16	0	5,131	1,115	0	1,115	4,016	0	4,016	0	0	0	0
6	3/5/2011	16	0	3,872	1,780	0	1,780	2,092	0	2,092	0	0	0	0
7	4/10/2011	16	0	5,046	1,162	0	1,162	3,884	0	3,884	0	0	0	0
7	5/15/2011	16	0	4,738	1,193	0	1,193	3,545	0	3,545	0	0	0	0
3	6/29/2011	16	0	4,119	1,432	0	1,432	2,687	0	2,687	0	0	0	0
4	7/14/2011	16	0	4,614	1,773	0	1,773	2,841	0	2,841	0	0	0	0
7	8/21/2011	17	0	4,696	1,838	0	1,838	2,858	0	2,858	0	0	0	0
3	9/28/2011	24	0	3,771	1,968	0	1,968	1,803	0	1,803	0	0	0	0
7	10/30/2011	17	0	5,715	2,340	0	2,340	3,375	0	3,375	0	0	0	0
2	11/8/2011	24	0	3,349	1,951	0	1,951	1,398	0	1,398	0	0	0	0
7	12/4/2011	24	0	3,022	1,601	0	1,601	1,237	0	1,237	0	184	0	184

* 1- Monday, 7 – Sunday

Figure D.23 Sanders POE Inbound Daily Total Volumes 2011

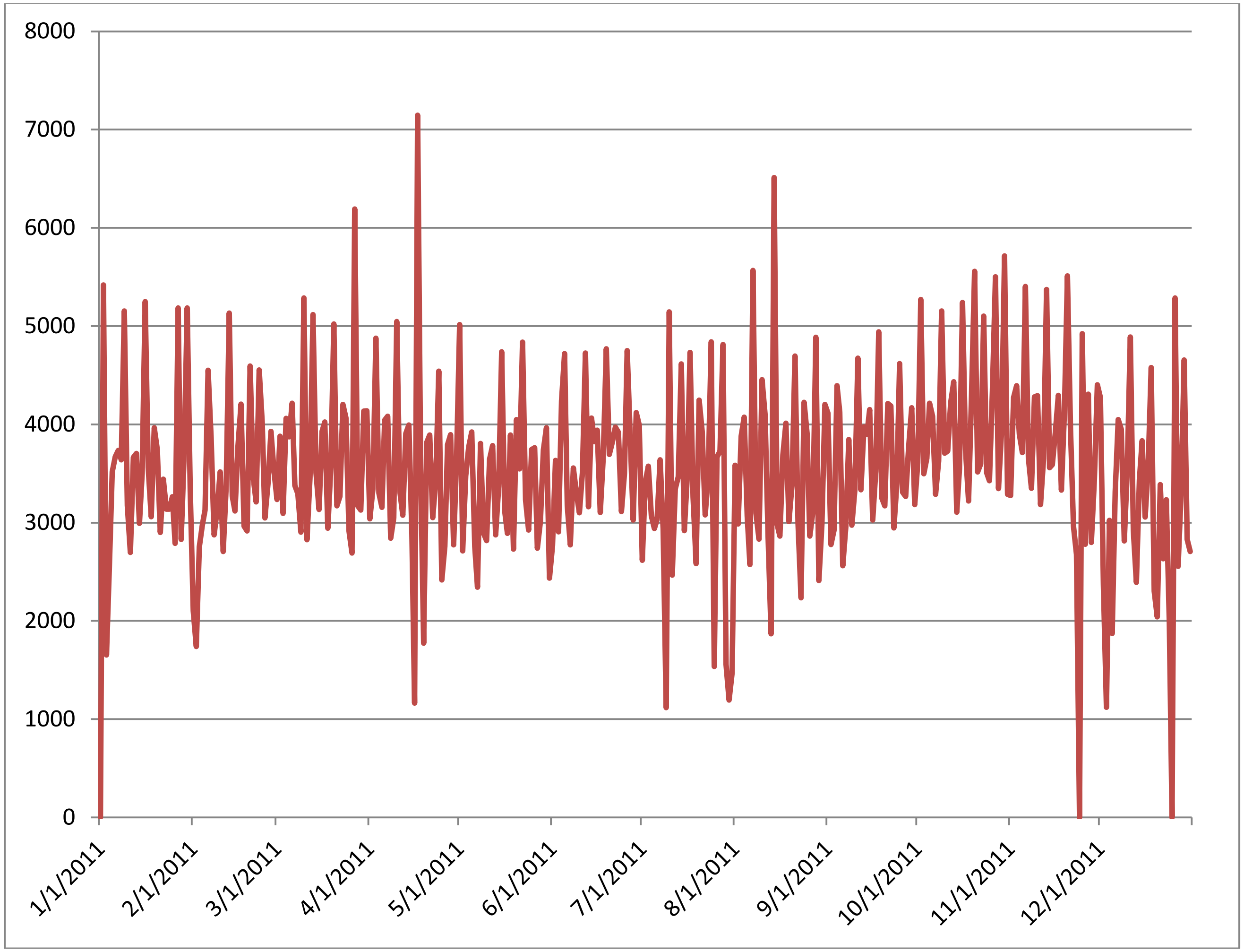


Figure D.24 Sanders POE Inbound Daily Credential Checked Volumes 2011

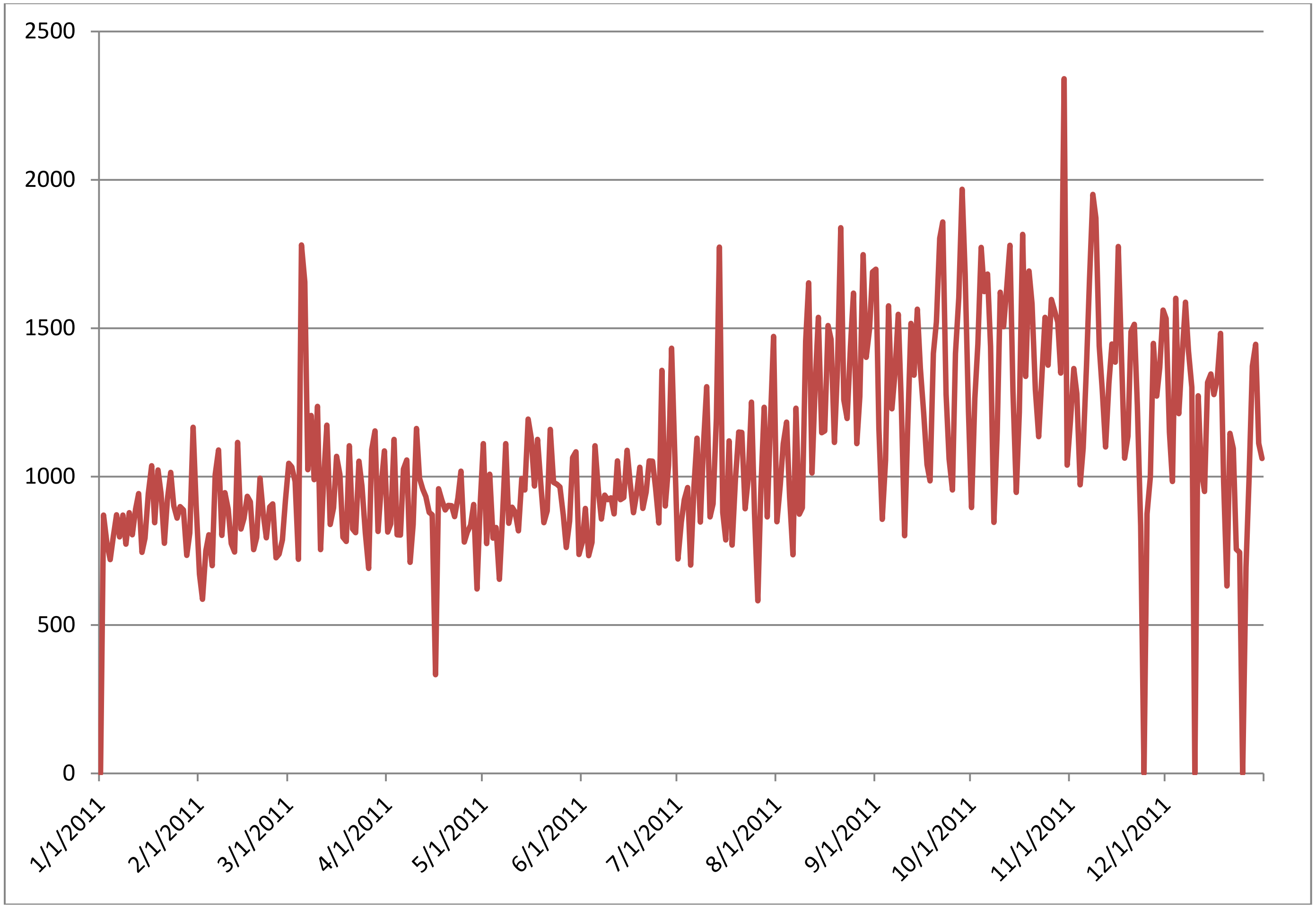
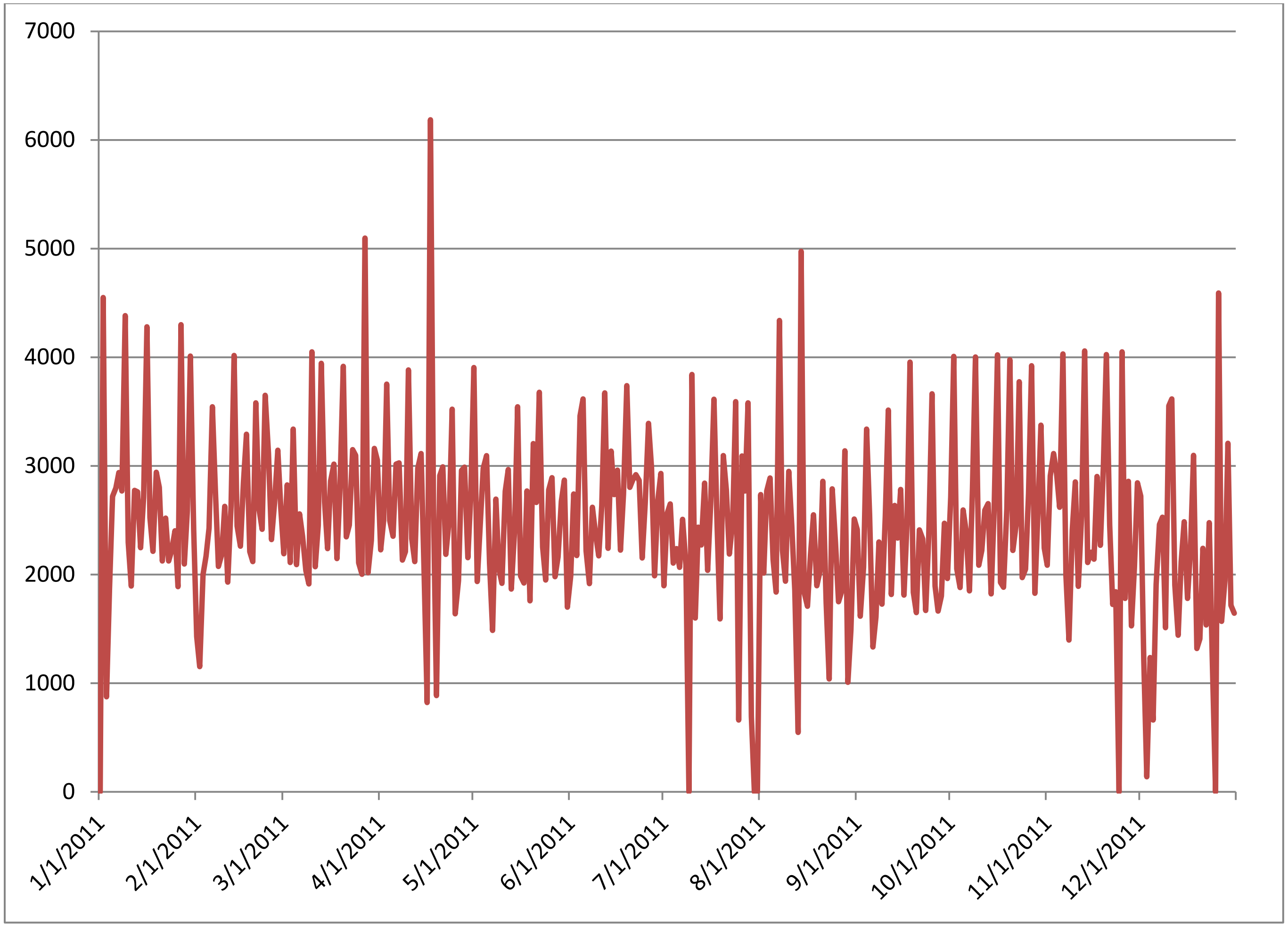


Figure D.25 Sanders POE Inbound Daily Pre-cleared Volumes 2011



D.10 Springerville

Table D.36 Springerville POE Monthly Total Volumes 2009

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	160	0	878	878	867	1,745	0	0	0	0	0	0	0
February	152	0	849	849	879	1,728	0	0	0	0	0	0	0
March	176	0	930	930	955	1,885	0	0	0	0	0	0	0
April	160	0	871	871	878	1,749	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.37 Springerville POE Daily Average Volumes by Month 2009

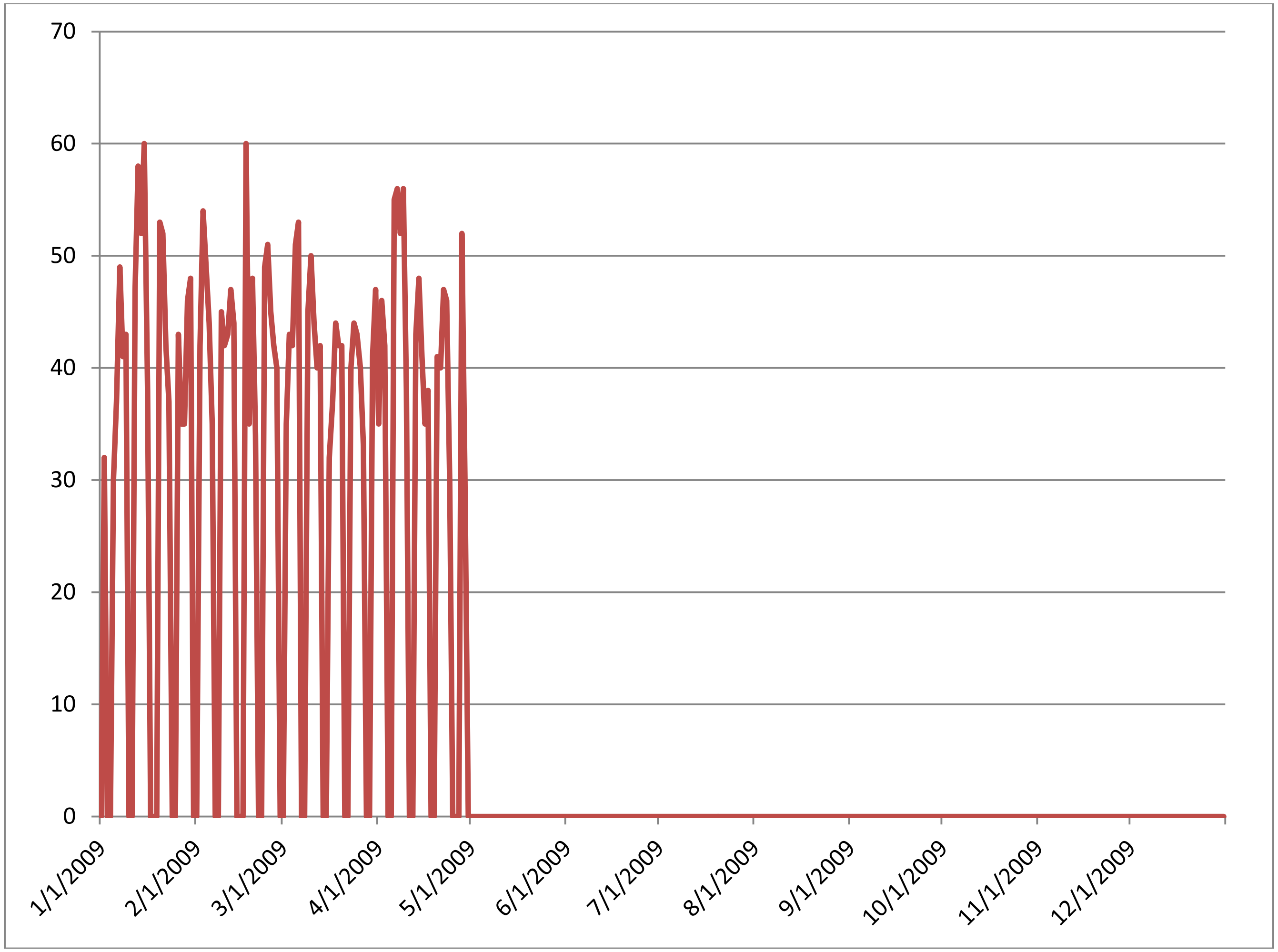
Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	8	0	44	44	43	87	0	0	0	0	0	0	0
February	8	0	45	45	46	91	0	0	0	0	0	0	0
March	8	0	42	42	43	86	0	0	0	0	0	0	0
April	8	0	44	44	44	87	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0

Table D.38 Springerville POE Peak Daily Checked Volumes by Month 2009

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
4	1/15/2009	8	0	60	60	56	116	0	0	0	0	0	0	0
2	2/17/2009	8	0	60	60	57	117	0	0	0	0	0	0	0
5	3/6/2009	8	0	53	53	47	100	0	0	0	0	0	0	0
2	4/7/2009	8	0	56	56	60	116	0	0	0	0	0	0	0
-	5/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	6/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	7/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	8/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	9/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	10/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	11/2009	0	0	0	0	0	0	0	0	0	0	0	0	0
-	12/2009	0	0	0	0	0	0	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.26 Springerville POE Inbound Daily Checked Volumes 2009



D.11 Teec Nos Pos

Table D.39 Teec Nos Pos POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	290	0	859	752	455	1,207	107	213	320	0	0	0	0
February	273	0	881	696	447	1,143	185	218	403	0	0	0	0
March	312	0	1,061	860	461	1,321	201	337	538	0	0	0	0
April	287	0	951	759	482	1,241	192	296	488	0	0	0	0
May	295	0	1,003	870	455	1,325	133	264	397	0	0	0	0
June	292	0	1,201	1,056	493	1,549	145	228	373	0	0	0	0
July	285	0	1,019	938	464	1,402	81	255	336	0	0	0	0
August	298	0	1,198	1,044	446	1,490	154	286	440	0	0	0	0
September	297	0	1,275	1,138	505	1,643	137	253	390	0	0	0	0
October	269	0	974	832	466	1,298	142	294	436	0	0	0	0
November	255	0	944	811	410	1,221	133	280	413	0	0	0	0
December	251	0	792	634	367	1,001	158	314	472	0	0	0	0

Table D.40 Teec Nos Pos POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	14	0	41	36	22	57	5	10	15	0	0	0	0
February	13	0	42	33	21	54	9	11	20	0	0	0	0
March	14	0	46	37	20	57	9	15	23	0	0	0	0
April	14	0	45	36	23	59	9	14	23	0	0	0	0
May	13	0	46	40	21	60	6	12	18	0	0	0	0
June	13	0	55	48	22	70	7	10	17	0	0	0	0
July	14	0	49	45	22	67	4	12	16	0	0	0	0
August	13	0	52	45	19	65	7	12	19	0	0	0	0
September	14	0	58	52	23	75	6	12	18	0	0	0	0
October	13	0	46	40	22	62	7	14	21	0	0	0	0
November	12	0	45	39	20	58	6	13	20	0	0	0	0
December	11	0	36	29	17	46	7	14	21	0	0	0	0

Table D.41 Teec Nos Pos POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	*Hours Open*								*PrePass*			
		Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
1	1/17/2011	14	0	65	59	18	77	6	4	10	0	0	0	0
4	2/24/2011	12	0	83	38	28	66	45	6	51	0	0	0	0
3	3/23/2011	15	0	70	58	27	85	12	14	26	0	0	0	0
2	4/19/2011	15	0	72	42	9	51	30	11	41	0	0	0	0
3	5/25/2011	12	0	89	78	3	81	11	10	21	0	0	0	0
1	6/13/2011	15	0	118	77	2	79	41	8	49	0	0	0	0
3	7/27/2011	14	0	71	68	19	87	3	15	18	0	0	0	0
3	8/24/2011	14	0	77	68	19	87	9	14	23	0	0	0	0
4	9/8/2011	14	0	90	87	17	104	3	6	9	0	0	0	0
2	10/11/2011	14	0	78	73	26	99	5	15	20	0	0	0	0
3	11/9/2011	12	0	71	65	23	88	6	8	14	0	0	0	0
4	12/15/2011	12	0	53	42	18	60	11	30	41	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.42 Teec Nos Pos POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
1	1/17/2011	14	0	65	59	18	77	6	4	10	0	0	0	0
3	2/16/2011	14	0	72	60	32	92	12	15	27	0	0	0	0
3	3/23/2011	15	0	70	58	27	85	12	14	26	0	0	0	0
3	4/6/2011	14	0	66	61	27	88	5	16	21	0	0	0	0
3	5/25/2011	12	0	89	78	3	81	11	10	21	0	0	0	0
3	6/15/2011	14	0	105	98	29	127	7	14	21	0	0	0	0
3	7/27/2011	14	0	71	68	19	87	3	15	18	0	0	0	0
1	8/22/2011	14	0	73	68	17	85	5	5	10	0	0	0	0
4	9/8/2011	14	0	90	87	17	104	3	6	9	0	0	0	0
2	10/11/2011	14	0	78	73	26	99	5	15	20	0	0	0	0
3	11/9/2011	12	0	71	65	23	88	6	8	14	0	0	0	0
3	12/21/2011	12	0	53	46	30	76	7	17	24	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.27 Teec Nos Pos POE Inbound Daily Total Volumes 2011

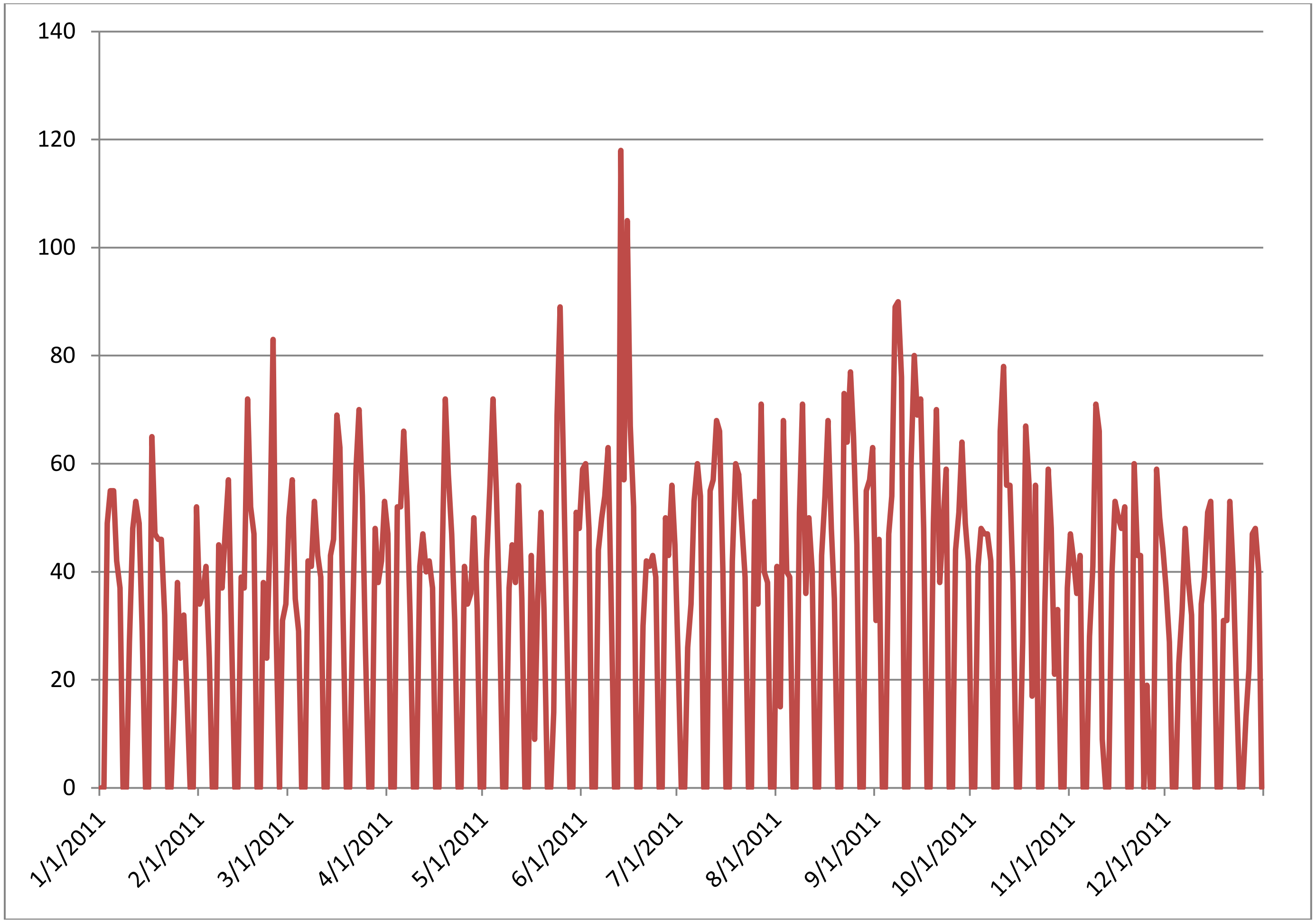


Figure D.28 Teec Nos Pos POE Inbound Daily Credential Checked Volumes 2011

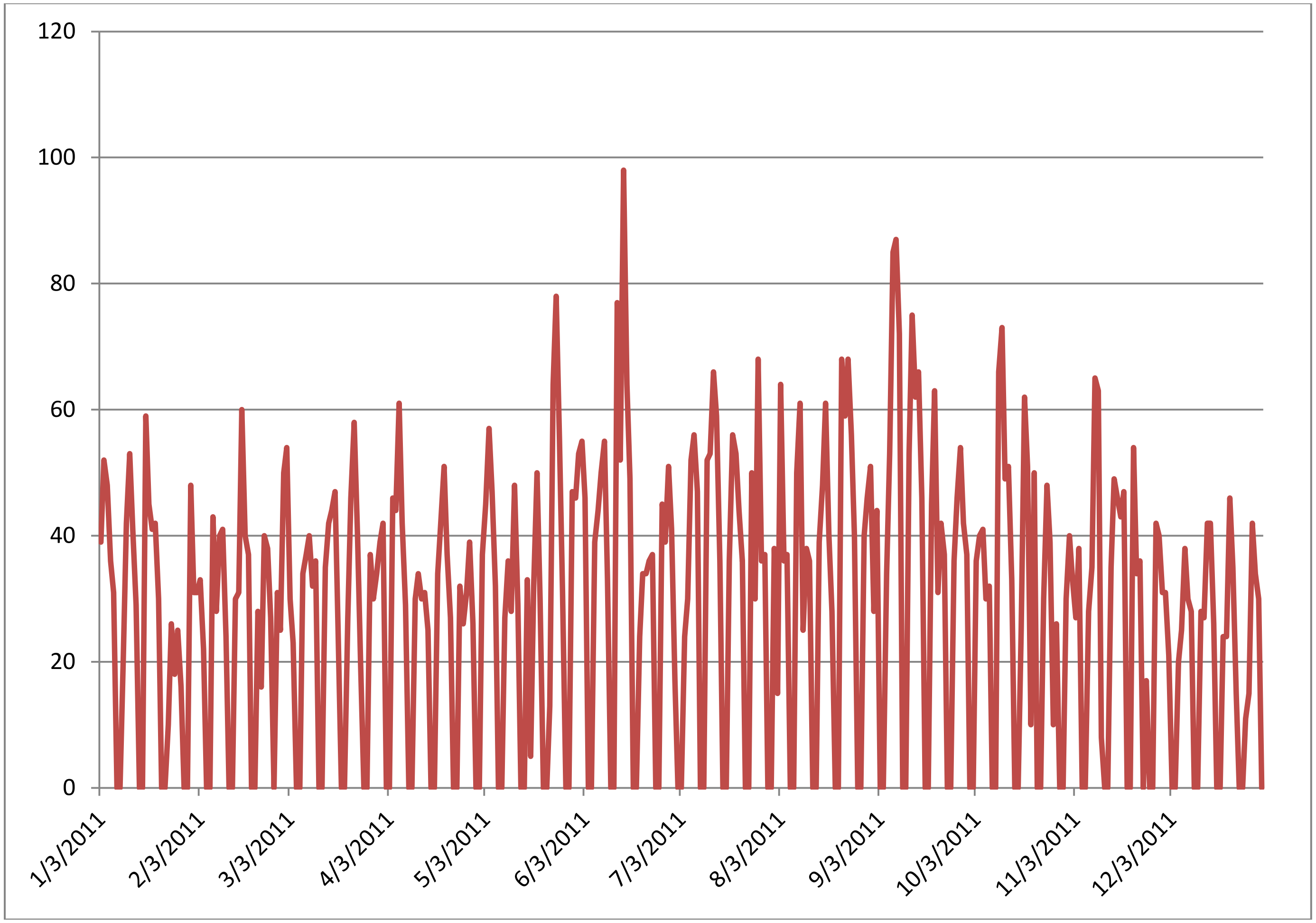
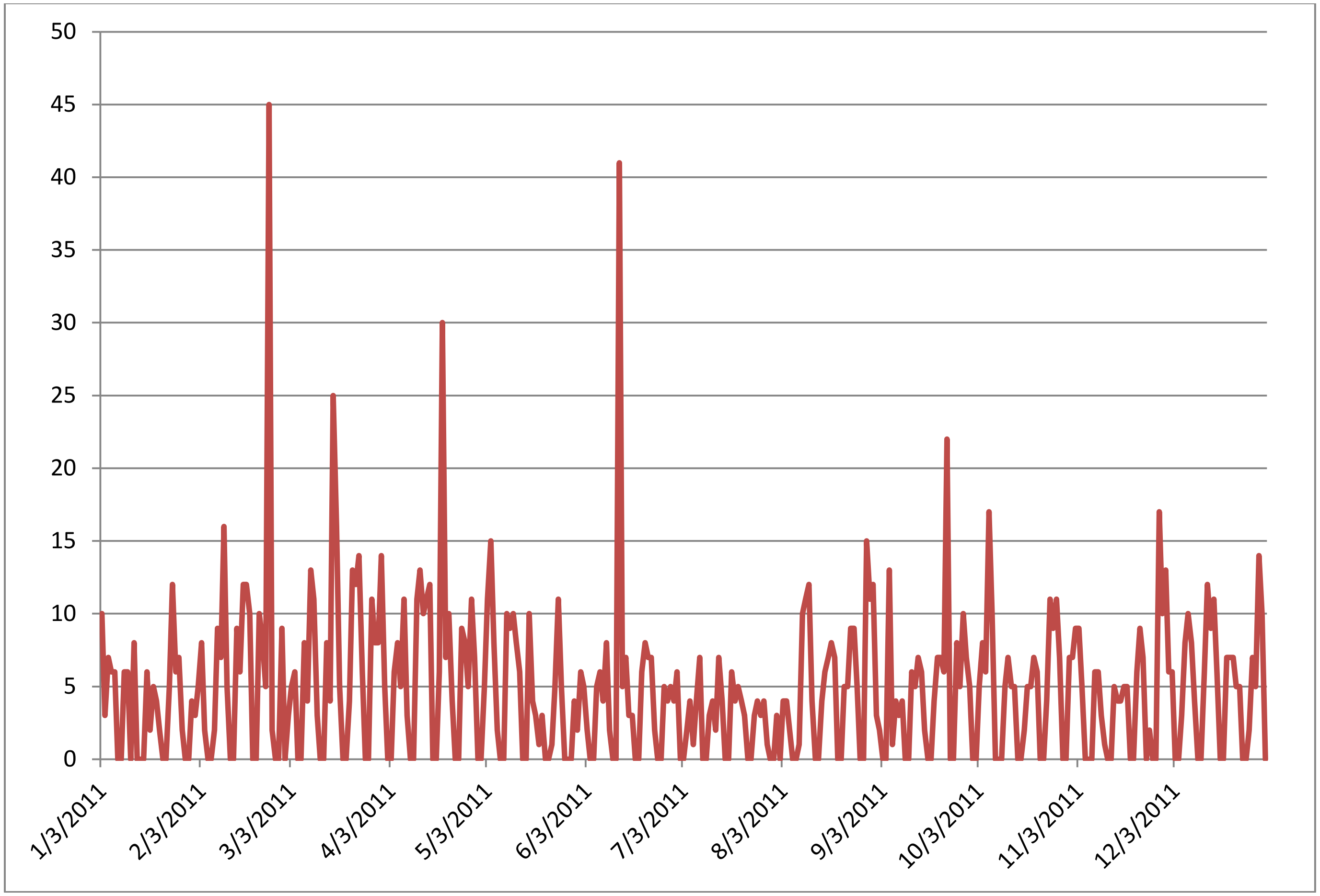


Figure D.29 Teec Nos Pos POE Inbound Daily Pre-cleared Volumes 2011



D.12 Topock

Table D.43 Topock POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open Inbound	*Hours Open Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*PrePass Only*	*Inbound*	*Outbound*	*Total*
January	336	0	30,427	13,864	0	13,864	16,547	0	16,547	0	16	0	16
February	320	0	29,948	14,243	0	14,243	15,705	0	15,705	0	0	0	0
March	367	0	36,342	16,037	0	16,037	20,275	0	20,275	0	30	0	30
April	336	0	36,824	15,659	0	15,659	21,143	0	21,143	0	22	0	22
May	336	0	34,914	15,451	0	15,451	19,394	0	19,394	0	69	0	69
June	344	0	36,291	15,946	0	15,946	20,248	0	20,248	0	97	0	97
July	365	0	37,408	16,851	0	16,851	20,404	0	20,404	0	153	0	153
August	496	0	57,328	21,996	0	21,996	34,967	0	34,967	0	365	0	365
September	352	0	54,649	16,485	0	16,485	37,807	0	37,807	0	357	0	357
October	488	5	77,955	23,238	495	23,733	54,487	0	54,487	0	230	90	320
November	448	0	69,490	20,384	0	20,384	48,922	0	48,922	0	184	0	184
December	462	0	55,775	18,719	0	18,719	37,006	0	37,006	0	50	0	50

Table D.44 Topock POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
January	16	0	1,449	660	0	660	788	0	788	0	1	0	1
February	16	0	1,497	712	0	712	785	0	785	0	0	0	0
March	16	0	1,580	697	0	697	882	0	882	0	1	0	1
April	16	0	1,754	746	0	746	1,007	0	1,007	0	1	0	1
May	15	0	1,587	702	0	702	882	0	882	0	3	0	3
June	16	0	1,650	725	0	725	920	0	920	0	4	0	4
July	16	0	1,626	733	0	733	887	0	887	0	7	0	7
August	16	0	1,849	710	0	710	1,128	0	1,128	0	12	0	12
September	16	0	2,484	749	0	749	1,719	0	1,719	0	16	0	16
October	16	0	2,515	750	16	766	1,758	0	1,758	0	7	3	10
November	15	0	2,396	703	0	703	1,687	0	1,687	0	6	0	6
December	17	0	1,992	669	0	669	1,322	0	1,322	0	2	0	2

Table D.45 Topock POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
5	1/14/2011	16	0	1,905	859	0	859	1,046	0	1,046	0	0	0	0
5	2/25/2011	16	0	1,906	871	0	871	1,035	0	1,035	0	0	0	0
5	3/25/2011	16	0	1,930	731	0	731	1,199	0	1,199	0	0	0	0
2	4/19/2011	16	0	2,116	827	0	827	1,289	0	1,289	0	0	0	0
2	5/10/2011	16	0	2,185	968	0	968	1,186	0	1,186	0	31	0	31
2	6/28/2011	16	0	2,121	895	0	895	1,212	0	1,212	0	14	0	14
6	7/30/2011	16	0	2,140	865	0	865	1,268	0	1,268	0	7	0	7
2	8/30/2011	16	0	3,222	816	0	816	2,391	0	2,391	0	15	0	15
2	9/27/2011	16	0	3,347	883	0	883	2,455	0	2,455	0	9	0	9
6	10/1/2011	16	0	3,508	800	0	800	2,699	0	2,699	0	9	0	9
6	11/12/2011	16	0	3,540	907	0	907	2,621	0	2,621	0	12	0	12
6	12/10/2011	16	0	2,925	822	0	822	2,100	0	2,100	0	3	0	3

* 1- Monday, 7 – Sunday

Table D.46 Topock POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
5	1/14/2011	16	0	1,905	859	0	859	1,046	0	1,046	0	0	0	0
4	2/24/2011	16	0	1,851	873	0	873	978	0	978	0	0	0	0
4	3/3/2011	16	0	1,654	814	0	814	840	0	840	0	0	0	0
2	4/5/2011	16	0	2,012	879	0	879	1,121	0	1,121	0	12	0	12
2	5/10/2011	16	0	2,185	968	0	968	1,186	0	1,186	0	31	0	31
2	6/28/2011	16	0	2,121	895	0	895	1,212	0	1,212	0	14	0	14
3	7/6/2011	16	0	1,981	877	0	877	1,104	0	1,104	0	0	0	0
6	8/13/2011	16	0	2,422	944	0	944	1,452	0	1,452	0	26	0	26
4	9/15/2011	16	0	2,132	887	0	887	1,171	0	1,171	0	74	0	74
6	10/15/2011	16	0	3,416	949	0	949	2,353	0	2,353	0	114	0	114
2	11/29/2011	16	0	3,043	914	0	914	2,114	0	2,114	0	15	0	15
5	12/30/2011	24	0	2,896	1,051	0	1,051	1,845	0	1,845	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.30 Topock POE Inbound Daily Total Volumes 2011

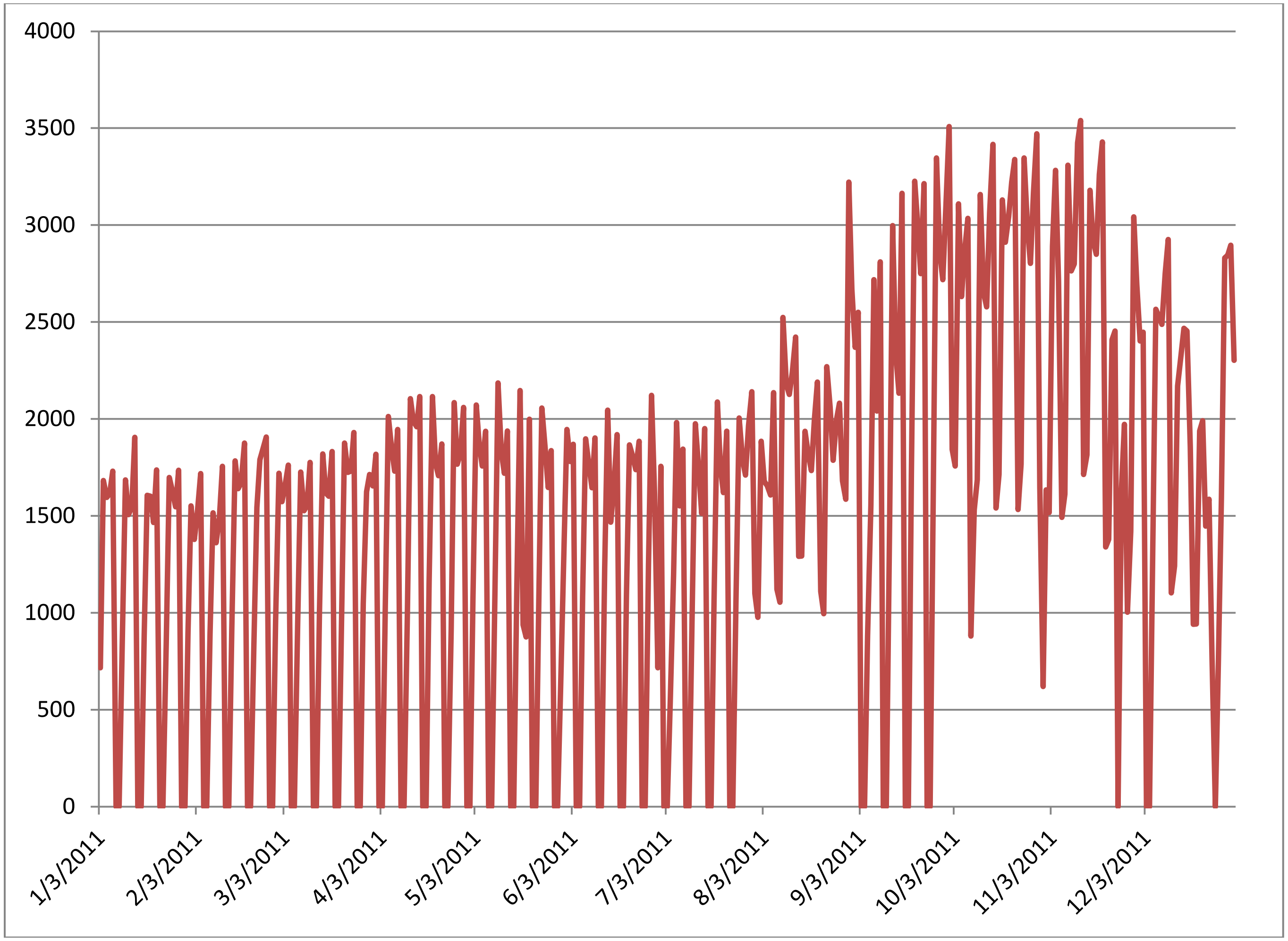


Figure D.31 Topock POE Inbound Daily Credential Checked Volumes 2011

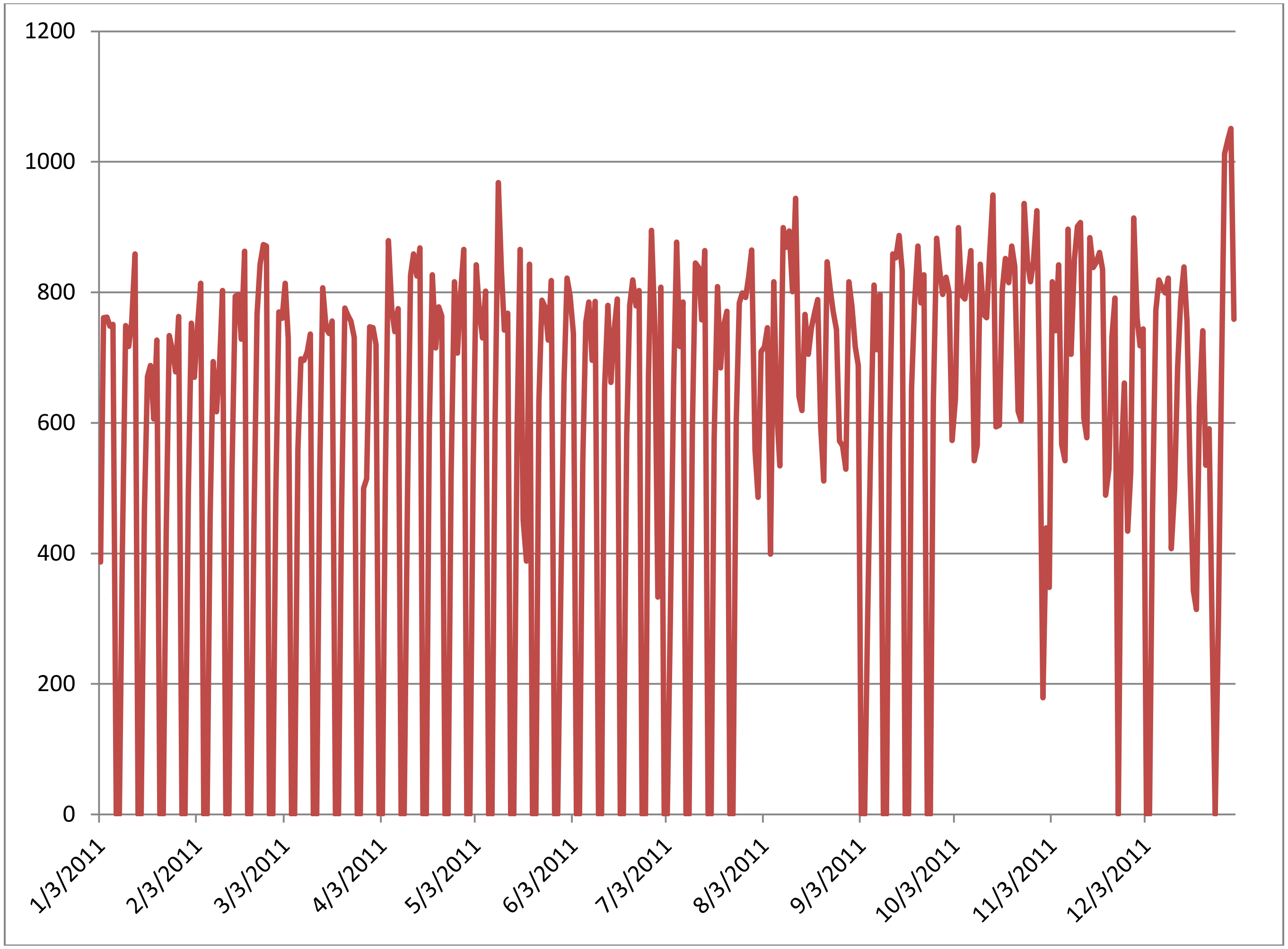
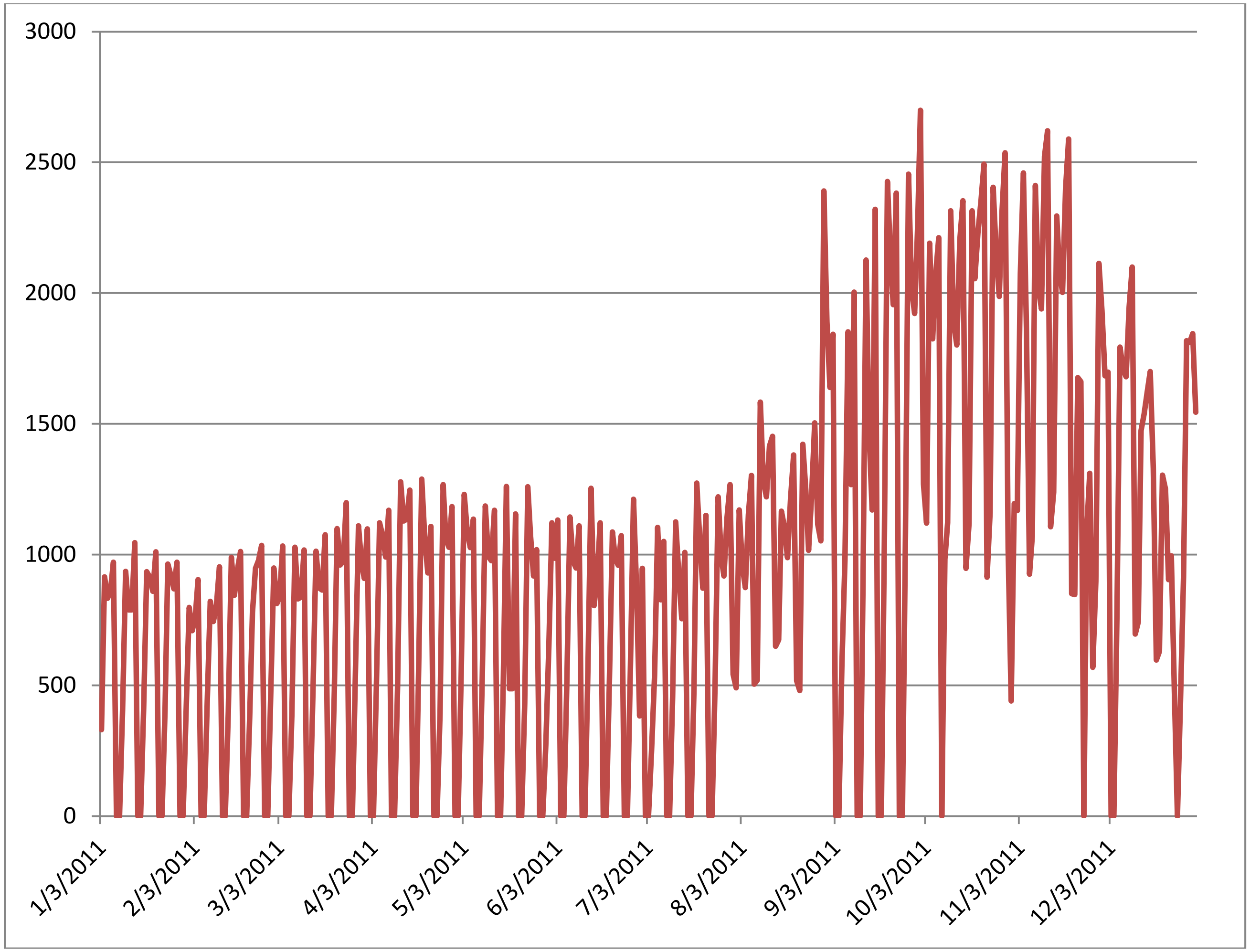


Figure D.32 Topock POE Inbound Daily Pre-cleared Volumes 2011



D.13 Yuma (B-8)

Table D.47 B-8 Yuma POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	40	0	668	448	0	448	220	0	220	0	0	0	0
February	59	0	1,156	757	0	757	399	0	399	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0
April	24	0	263	233	0	233	30	0	30	0	0	0	0
May	148	0	1,737	1,531	0	1,531	206	0	206	0	0	0	0
June	176	0	2,682	2,369	0	2,369	313	0	313	0	0	0	0
July	184	0	2,711	2,549	0	2,549	162	0	162	0	0	0	0
August	240	0	3,057	2,417	0	2,417	640	0	640	0	0	0	0
September	240	0	2,949	2,949	0	2,949	0	0	0	0	0	0	0
October	248	0	3,058	3,048	0	3,048	10	0	10	0	0	0	0
November	208	0	2,967	2,967	0	2,967	0	0	0	0	0	0	0
December	369	0	5,326	5,326	0	5,326	0	0	0	0	0	0	0

Table D.48 B-8 Yuma POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	8	0	134	90	0	90	44	0	44	0	0	0	0
February	5	0	105	69	0	69	36	0	36	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0
April	8	0	88	78	0	78	10	0	10	0	0	0	0
May	8	0	91	81	0	81	11	0	11	0	0	0	0
June	8	0	122	108	0	108	14	0	14	0	0	0	0
July	8	0	118	111	0	111	7	0	7	0	0	0	0
August	8	0	102	81	0	81	21	0	21	0	0	0	0
September	8	0	98	98	0	98	0	0	0	0	0	0	0
October	8	0	99	98	0	98	0	0	0	0	0	0	0
November	8	0	114	114	0	114	0	0	0	0	0	0	0
December	13	0	184	184	0	184	0	0	0	0	0	0	0

Table D.49 B-8 Yuma POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
4	1/6/2011	8	0	158	106	0	106	52	0	52	0	0	0	0
4	2/10/2011	7	0	196	154	0	154	42	0	42	0	0	0	0
-	-	0	0	0	0	0	0	0	0	0	0	0	0	0
3	4/27/2011	8	0	94	79	0	79	15	0	15	0	0	0	0
2	5/24/2011	8	0	114	114	0	114	0	0	0	0	0	0	0
3	6/29/2011	8	0	174	174	0	174	0	0	0	0	0	0	0
4	7/14/2011	8	0	164	164	0	164	0	0	0	0	0	0	0
5	8/5/2011	8	0	135	135	0	135	0	0	0	0	0	0	0
1	9/26/2011	8	0	150	150	0	150	0	0	0	0	0	0	0
4	10/6/2011	8	0	163	163	0	163	0	0	0	0	0	0	0
5	11/18/2011	8	0	171	171	0	171	0	0	0	0	0	0	0
4	12/29/2011	16	0	315	315	0	315	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.50 B-8 Yuma POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
4	1/6/2011	8	0	158	106	0	106	52	0	52	0	0	0	0
4	2/10/2011	7	0	196	154	0	154	42	0	42	0	0	0	0
-	-	0	0	0	0	0	0	0	0	0	0	0	0	0
1	4/25/2011	8	0	80	80	0	80	0	0	0	0	0	0	0
2	5/24/2011	8	0	114	114	0	114	0	0	0	0	0	0	0
3	6/29/2011	8	0	174	174	0	174	0	0	0	0	0	0	0
4	7/14/2011	8	0	164	164	0	164	0	0	0	0	0	0	0
5	8/5/2011	8	0	135	135	0	135	0	0	0	0	0	0	0
1	9/26/2011	8	0	150	150	0	150	0	0	0	0	0	0	0
4	10/6/2011	8	0	163	163	0	163	0	0	0	0	0	0	0
5	11/18/2011	8	0	171	171	0	171	0	0	0	0	0	0	0
4	12/29/2011	16	0	315	315	0	315	0	0	0	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.33 B-8 Yuma POE Inbound Daily Total Volumes 2011

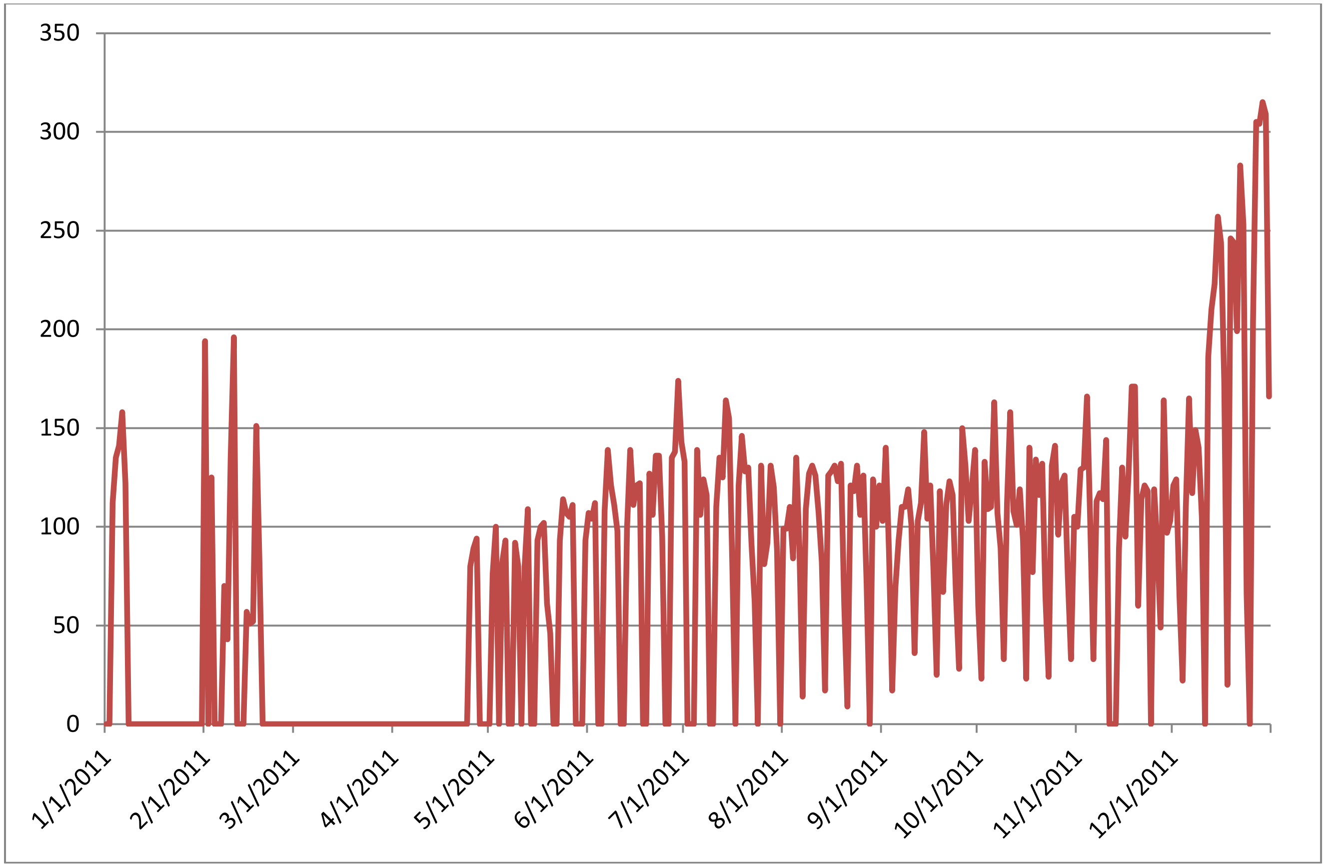


Figure D.34 B-8 Yuma POE Inbound Daily Credential Checked Volumes 2011

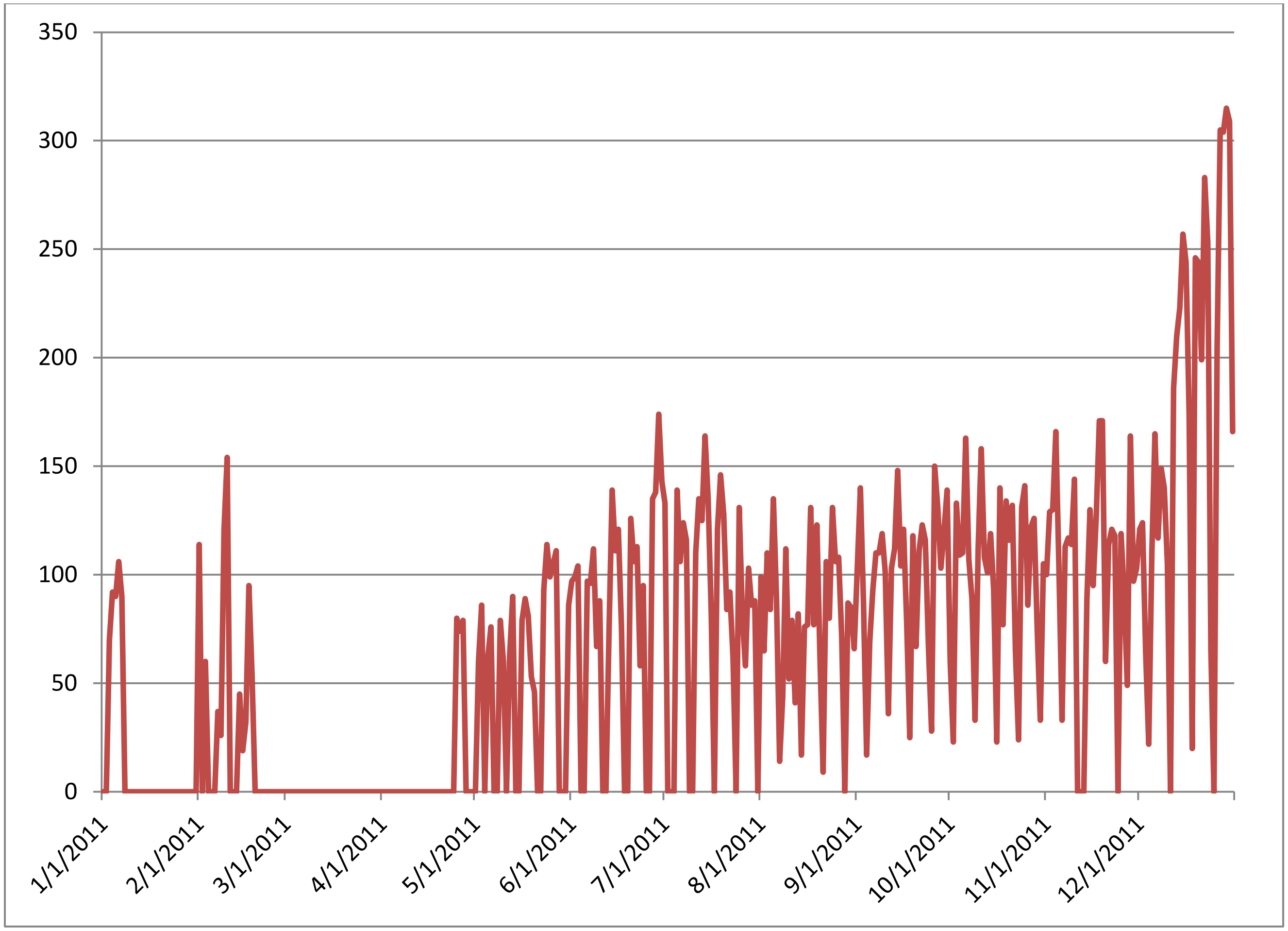
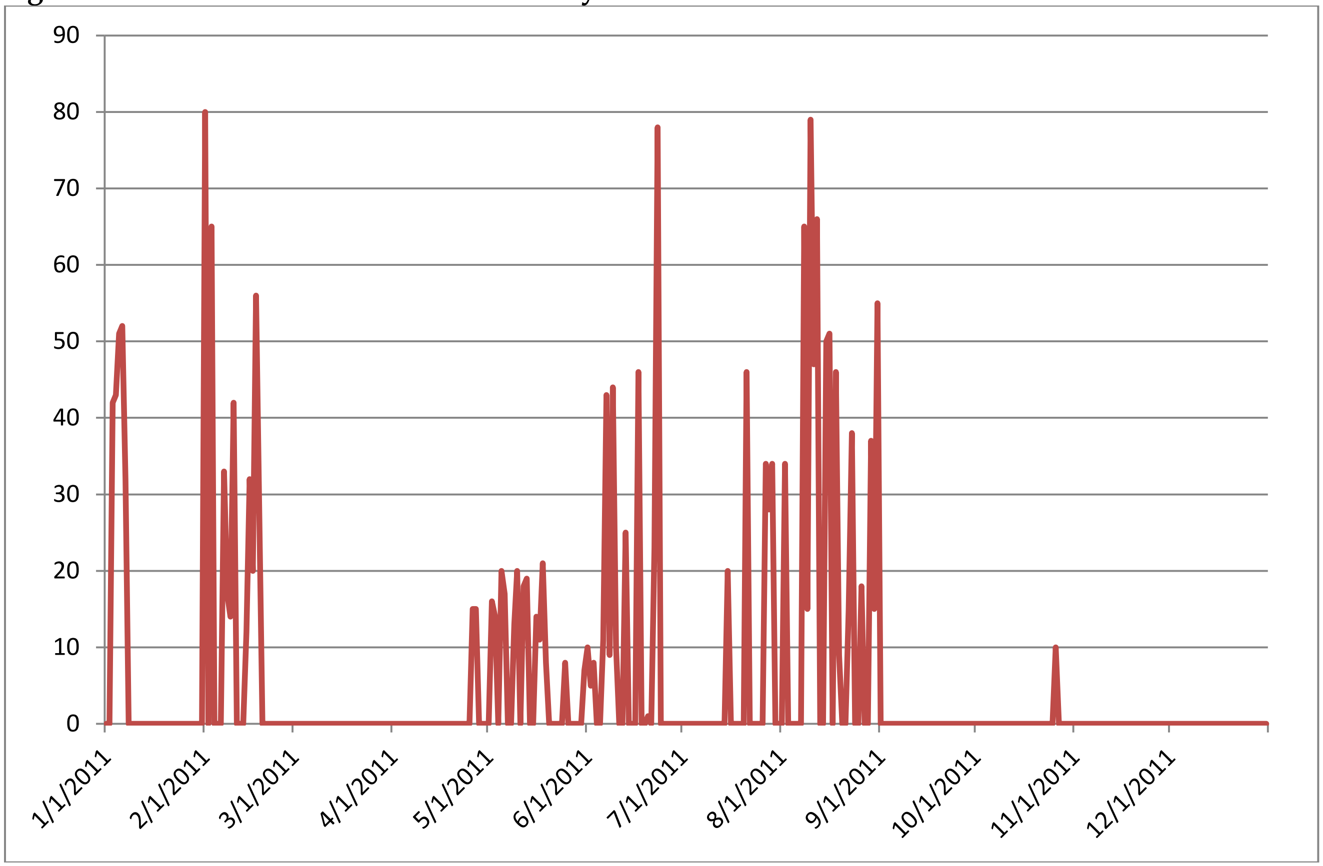


Figure D.35 B-8 Yuma POE Inbound Daily Pre-cleared Volumes 2011



D.14 Yuma (I-8)

Table D.51 I-8 Yuma POE Monthly Total Volumes 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	*Hours Open*								*PrePass*			
	Inbound	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Inbound*	*Outbound*	*Total*	*Only*	*Inbound*	*Outbound*	*Total*
January	168	0	14,154	5,879	0	5,879	8,275	0	8,275	0	0	0	0
February	160	0	13,442	5,845	0	5,845	7,581	0	7,581	0	16	0	16
March	179	0	12,653	5,941	0	5,941	6,686	0	6,686	0	26	0	26
April	160	0	6,382	3,395	0	3,395	2,987	0	2,987	0	0	0	0
May	160	48	7,341	2,972	1,308	4,280	3,106	196	3,302	0	0	0	0
June	176	168	5,908	3,595	6,179	9,774	3,744	62	3,806	0	2	0	2
July	216	172	7,642	3,060	5,579	8,639	2,848	0	2,848	0	0	216	216
August	248	146	7,563	4,018	5,561	9,579	3,624	344	3,968	0	0	0	0
September	247	172	8,100	4,452	9,140	13,592	3,111	0	3,111	0	0	0	0
October	248	160	13,604	4,662	7,624	12,286	3,438	67	3,505	0	0	0	0
November	236	184	31,048	7,602	8,397	15,999	6,002	0	6,002	0	0	0	0
December	387	56		14,110	3,290	17,400	16,938	0	16,938	0	0	0	0

Table D.52 I-8 Yuma POE Daily Average Volumes by Month 2011

Month	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
	Hours Open	Hours Open								PrePass			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
January	8	0	674	280	0	280	394	0	394	0	0	0	0
February	8	0	672	292	0	292	379	0	379	0	1	0	1
March	8	0	550	258	0	258	291	0	291	0	1	0	1
April	8	0	319	170	0	170	149	0	149	0	0	0	0
May	8	2	276	135	59	195	141	9	150	0	0	0	0
June	8	8	334	163	281	444	170	3	173	0	1	0	1
July	8	6	219	113	207	320	105	0	105	0	0	8	8
August	8	5	247	130	179	309	117	11	128	0	0	0	0
September	8	6	252	148	305	453	104	0	104	0	0	0	0
October	8	5	261	150	246	396	111	2	113	0	0	0	0
November	8	6	469	262	290	552	207	0	207	0	0	0	0
December	13	2	1,035	470	110	580	565	0	565	0	0	0	0

Table D.53 I-8 Yuma POE Peak Daily Total Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open	Hours Open								PrePass			
		Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Only	Inbound	Outbound	Total
2	1/25/2011	8	0	804	338	0	338	466	0	466	0	0	0	0
5	2/18/2011	8	0	826	522	0	622	304	0	304	0	0	0	0
4	3/10/2011	8	0	727	315	0	315	412	0	412	0	0	0	0
5	4/1/2011	8	0	570	284	0	284	286	0	286	0	0	0	0
2	5/24/2011	8	8	376	168	195	363	208	50	258	0	0	0	0
2	6/7/2011	8	8	442	221	232	453	221	26	247	0	0	0	0
4	7/7/2011	8	8	310	145	235	380	165	0	165	0	0	0	0
3	8/24/2011	8	8	378	211	325	536	167	0	167	0	0	0	0
5	9/30/2011	8	8	561	271	432	703	290	0	290	0	0	0	0
5	10/21/2011	8	8	394	384	261	645	10	0	10	0	0	0	0
2	11/22/2011	12	8	1,164	735	467	1,202	429	0	429	0	0	0	0
2	12/13/2011	16	0	1,668	714	0	714	954	0	954	0	0	0	0

* 1- Monday, 7 – Sunday

Table D.54 I-8 Yuma POE Peak Daily Checked Volumes by Month 2011

Day of Week*	Date	Hours of Operation		Inbound Traffic	Credentials Checked			Pre-Cleared Vehicles			Waved-Thru			
		Hours Open Inbound	Hours Open Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	PrePass Only	Inbound	Outbound	Total
2	1/25/2011	8	0	804	338	0	338	466	0	466	0	0	0	0
5	2/18/2011	8	0	826	552	0	552	304	0	304	0	0	0	0
4	3/17/2011	8	0	570	445	0	445	99	0	99	0	0	0	0
2	4/12/2011	8	0	307	289	0	289	18	0	18	0	0	0	0
4	5/19/2011	8	0	332	215	0	215	117	0	117	0	0	0	0
4	6/9/2011	8	8	413	230	262	492	183	36	219	0	0	0	0
5	7/22/2011	8	8	309	209	265	474	100	0	100	0	0	0	0
3	8/24/2011	8	8	378	211	325	536	167	0	167	0	0	0	0
4	9/22/2011	10	10	338	305	406	711	33	0	33	0	0	0	0
5	10/21/2011	8	8	394	384	261	645	10	0	10	0	0	0	0
2	11/22/2011	12	8	1,164	735	467	1,202	429	0	429	0	0	0	0
2	12/27/2011	16	0	1,543	739	0	739	804	0	804	0	0	0	0

* 1- Monday, 7 – Sunday

Figure D.36 Yuma I-8 POE Inbound Daily Total Volumes 2011

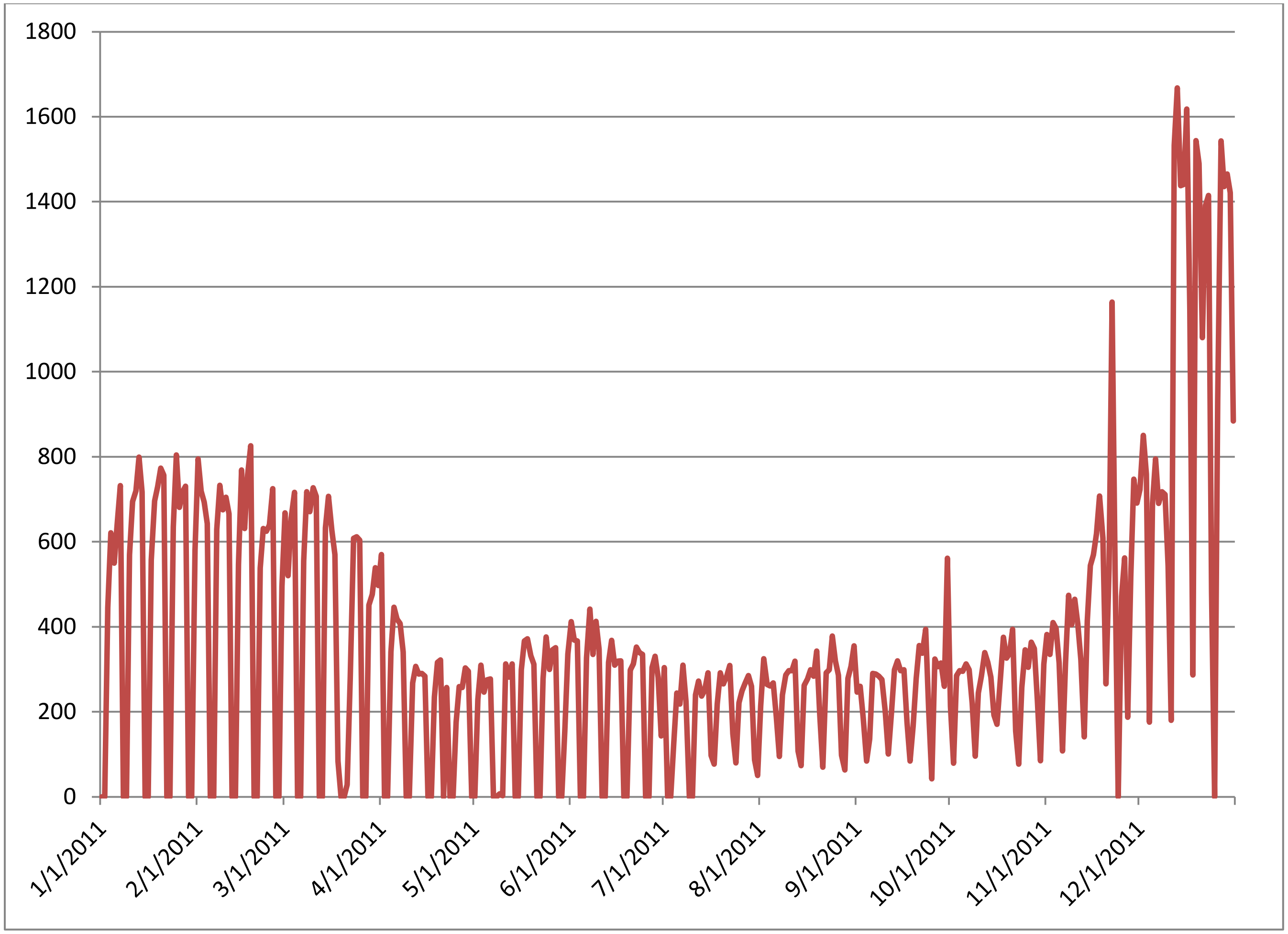


Figure D.37 Yuma I-8 POE Inbound Daily Credential Checked Volumes 2011

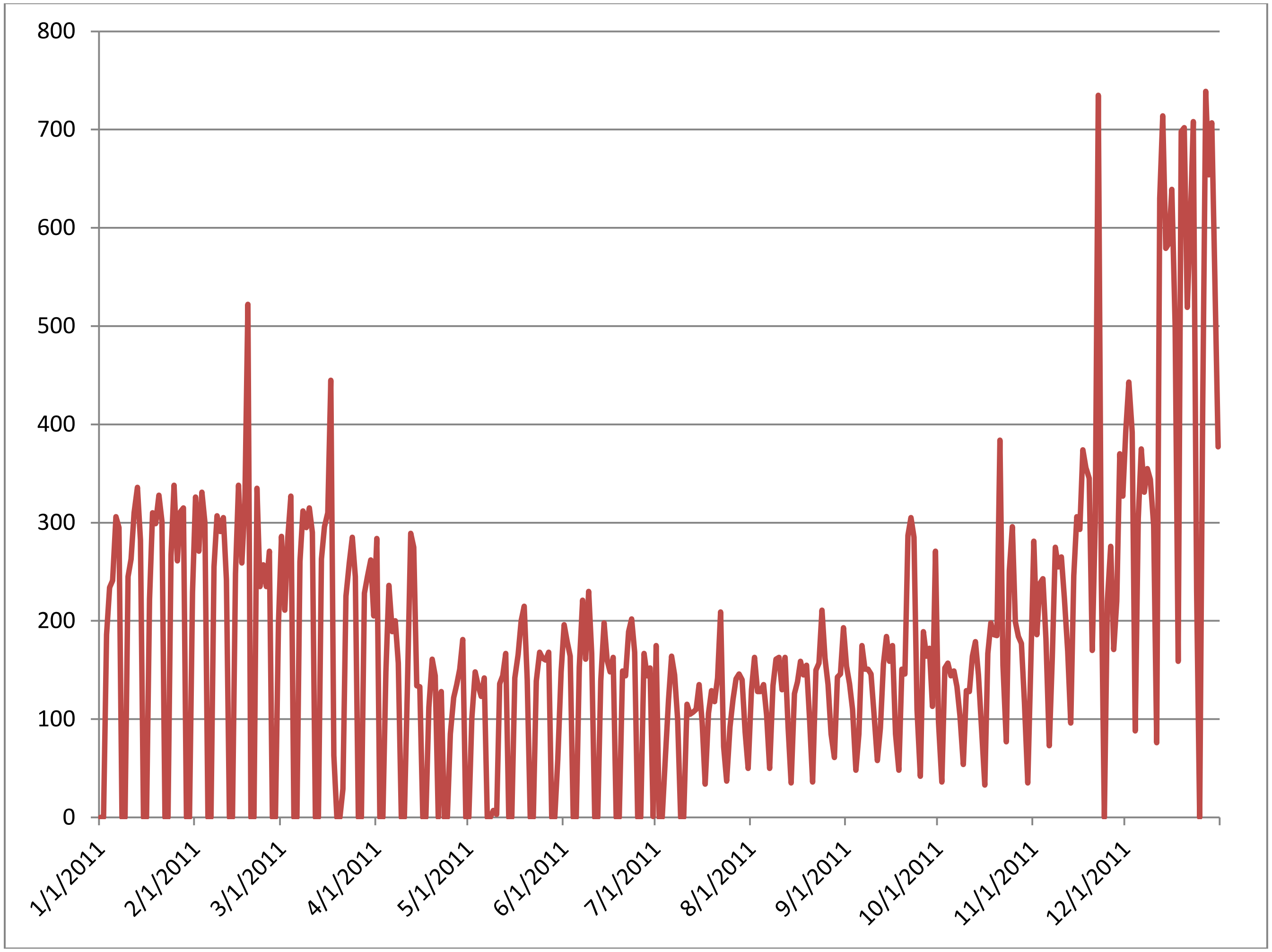
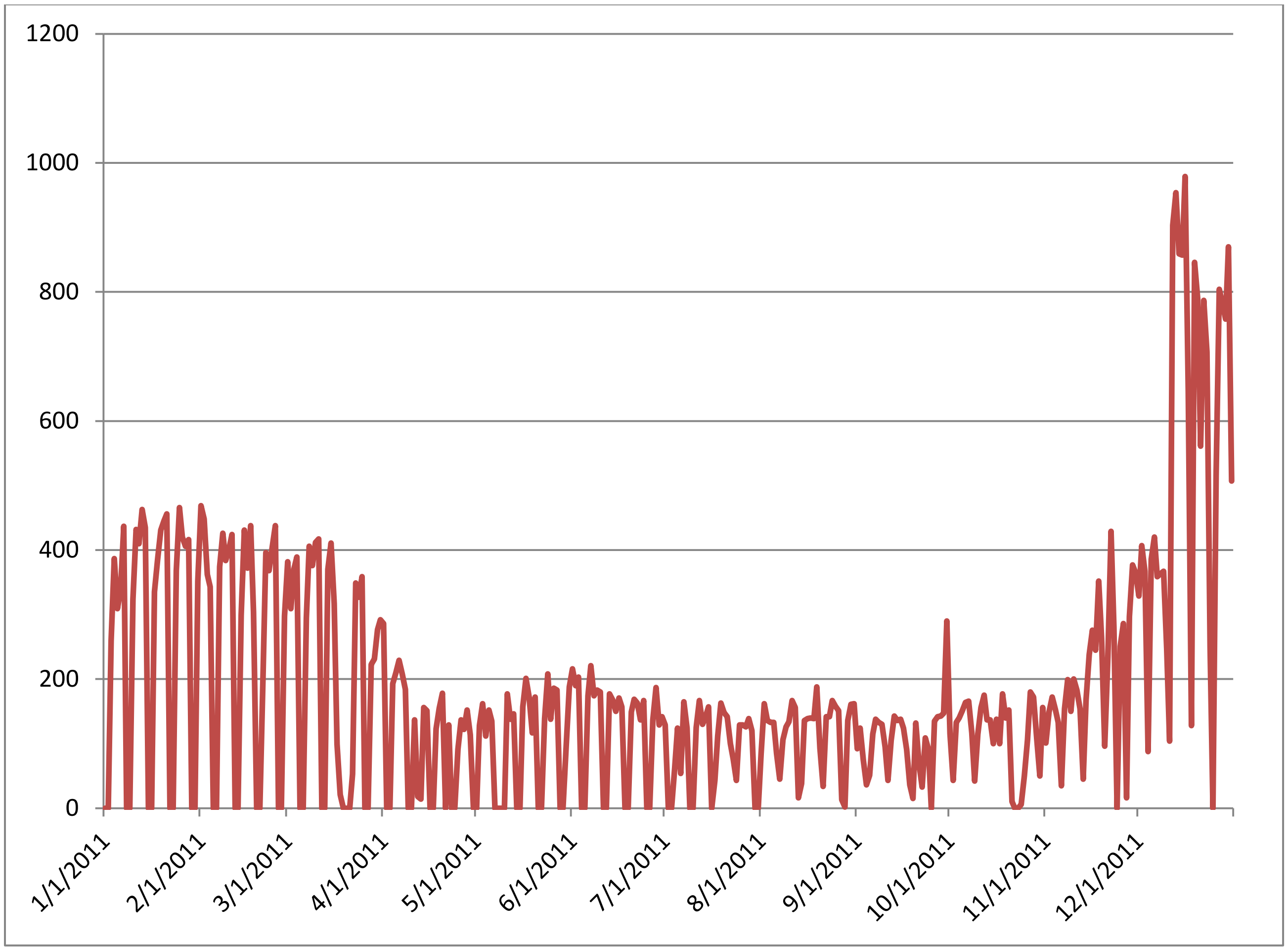


Figure D.38 Yuma I-8 POE Inbound Daily Pre-cleared Volumes 2011



Appendix E: Interview Questionnaires and Site Assessment Forms

As part of our data collection efforts the study team conducted a series of stakeholder interviews in order to obtain a high-quality understanding of current practices and enforcement efforts at the existing POE's. This section contains the two questionnaire that were developed and used as part of this process.

E.1 POE Personnel Questionnaire

POE on-site staff will be asked the following questions for POE's about which they possess direct working knowledge. Non-POE site staff will be asked to answer questions generally or for all POE's of which they possess direct working knowledge.

POE Location

Are the existing POE facilities in effective locations ? Why or why not?

Can driver's easily bypass them on nearby routes?

If yes, what routes do trucks use to bypass existing facilities?

Are these designated truck routes? (Y/N)

How many trucks per day bypass existing port facilities?

Is there a specific time of day that these bypass routes are more frequently used?

Is there a more ideal location for any of the facilities?

If so, why?

What areas do you see as increasing potential for truck traffic and/or violations in the future? (20yr)

Are additional POE's needed?

If so, why and where?

What features and technologies should they have?

POE Responsibilities/Operations

What operational functions are performed to process trucks and/or drivers through the horizontal and vertical limits of the POE's?

Which responsibilities are the most time consuming per truck and/or driver?

Which responsibilities have the least efficient process per truck and/or driver for port staff? For drivers?

Which have the most efficient process for port staff? For drivers?

How could these processes be altered to increase the efficiency in which they are performed?

What are the most common violations discovered at port facilities and for what classification of trucks?

What are the least common violations discovered at port facilities and for what classification of trucks?

What are the current hours of operations for the POE's? What are the ideal hours of operation for the POE's? Why?

What are your peak traffic periods? What are the traffic volumes during these periods?

Do officers perform roadside inspections or do they only perform inspections at POE's?

POE Capacity

Do the existing facilities have available capacity during periods of peak traffic volume?

What operational functions are the first few to fall behind demand at the POE facilities?

Are current staffing levels adequate to address current demand for truck and driver processing at the facilities?

As traffic volume increases, will ADOT be able to add additional staff and/or hours of operation if needed?

What do you think is the maximum volume of trucks per hour that these POE can safely and effectively process? What infrastructure, or other facility characteristic, prevents higher traffic volumes?

As traffic volume increases, will staff or the facility infrastructure reach capacity first? Why?

What is the mean peak volume and what is the average queue it produces?

Are there bottlenecks that prohibit uninhibited flow of commercial vehicles through the facility? If so, what are they?

Do the facilities have any infrastructure or layout deficiencies in the horizontal or vertical limits that create a bottleneck and thus limit capacity of truck and/or driver processing by port staff?

Is there adequate truck parking at the facilities?

What are the sizes and number of parking spots for each POE location?

POE Equipment/Amenities

How old are the existing port facilities?

Rate the condition of the existing port facilities. (Please note any facilities not already listed below.)

Equipment/Amenity	Poor Condition	Below Average Condition	Average Condition	Good Condition	Brand New
Static Scale System					
Ramp/Queue Area					
Scale house External					
Scale house Internal					
Inspection Area					
Parking Area					

The current port facilities are adequate for handling the various functions required. (Please note any facilities not already listed below.)

Equipment/Amenity	Strongly Disagree	Disagree	Somewhat	Agree	Strongly Disagree
Static Scale System					
Ramp/Queue Area					
Scale house External					
Scale house Internal					
Inspection Area					
Parking Area					

For any facilities that you feel are inadequate, can you please elaborate as to why?

What areas if any do you feel the existing facilities are deficient for staff and/or drivers? Why?

What additional equipment would increase the efficiency and/or effectiveness of the ports?

What is the POE staff protocol for communicating facility issues so that they can be addressed?

POE Technology

Do mobile enforcement units have internet access?

What technology is currently employed by mobile enforcement units?

What technology is scheduled to be provided to mobile enforcement in the near future? (5yrs)

Do POE's currently have internet access?

Do POE's currently possess transponders, License Plate Reader/DOT Reader technology?

Do these tools access FMCSA data automatically?

From what database do they gather data?

Please rate the following technology applications in terms of how it helps port staff perform their duties in an efficient manner. (Please list any technology that is currently in place that is not listed below.)

Technology Application	Not Helpful	Moderately Helpful	Very Helpful
Screening and Sorting System			
Weigh in Motion			
Computers/Instruments			
Safety Databases			
Static Scales			

Can you explain the basis for your rating in terms of complexity, efficiency, required effort, etc?

What technologies currently in place do you find most helpful to port staff and drivers?

What technology currently in place do you find least helpful to port staff and drivers?

If you could implement new technology not currently being employed at the ports, what would you choose to add? To address what need?

Is there data from the port facilities that would be useful to other parts of the agency?

Is this data currently collected and shared with other parts of the agency?

If no, is there technology that could be implemented to collect and share this data?

Future Plans

What technology improvements are planned for the port facilities in the near future?

What technology applications, if any, are being examined for long term implementation at the port facilities?

What expansion plans, if any, are in place for existing facilities in the next 20 years?

Are there any plans in place to relocate existing or add new port facilities in the next 20 years?

What facility updates, if any, are planned for existing facilities in the next 20 years?

Open Discussion

Are there any questions we have not asked that would be valuable for us to ask and know the answer to?

E.2 Executive Level Vision Questionnaire

Executive Level Visioning Questionnaire

Describe your ideal *VISION* of ADOT POE programs and operations 10 and 20 years from now.

Describe what you *EXPECT* the ADOT POE programs and operations will be like 10 and 20 years from now.

If *EXPECTATIONS* are not aligned with the *VISION*, what is the reason for the difference?

Do you anticipate being able to add additional staff as needed over the next 10 to 20 years? If no, are there concerns for maintaining current staff volume?

Do you anticipate being able to secure adequate program funding over the next 10 to 20 years? If no, what estimate amount may be programmed over the next 10 to 20 years?

What role do you feel technology will play in addressing any staffing and funding shortfalls in the next 10 to 20 years? How/Why?

What state laws and administrative codes may need to be modified or added to for the vision and needed technology to be fully effective?

What is the most useful information, if any, that could be gained by reaching out to industry as part of this effort?

E.3 Site Assessment Forms

In combination with stakeholder interviews, the study team inventoried the current conditions at the various POE's by conducting in depth on-site POE reviews. These reviews were conducted in September and October of 2012. Photographs and videos of each site were taken as part of this effort. Photographs from the sites are included in Appendix F while the videos The completed site assessment forms for each POE are presented in this section, in the following order:

- Duncan……………………………………………………………………………………...E-8
- Ehrenberg…………………………………………………………………………………E-13
- Fredonia…………………………………………………………………………………...E-26
- Kingman…………………………………………………………………………………..E-32
- Page………………………………………………………………………………………..E-40
- Parker……………………………………………………………………………….……..E-47
- St. George……………………………………………………………………...…..E-53
- San Simon…………………………………………………………………………………E-61
- Sanders…………………………………………………………………………………….E-73
- Springerville………………………………………………………………………………E-85
- Teec Nos Pos…………………………………………………………………...……E-90
- Topock…………………………………………………………………………………..…E-96
- Yuma B-8…………………………………………………………………………………....E-107
- Yuma I-8……………………………………………………………………..…………. E-114

Duncan

Facility Location

Roadway name: US 70

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 384.27, Credential check stop line: MP 384.16, On-ramp pavement gore: MP 384.10, Stateline: MP 385

County: Greenlee County

Nearest town or city: Name: Duncan, Distance away: 4.67 miles to the Northwest

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 1,638, K Factor: 9%, T Factor: 7.6%, D Factor: 59%

POE Operations

Hours of operation: Currently closed, but when last open in 2009, typically open 8-20 hours a day, Monday-Friday, although some weeks it was closed all week or only open a day or two, Days open: N/A
Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles
Inspection and enforcement activities taking place: None
Other agencies/entities sharing facilities: None

2009 Annual Operations (last year open)

Total inbound vehicles: 5,599, Total outbound vehicles: 6,635, Checked inbound vehicles: 4,263, Checked outbound vehicles: 4,841, Pre-cleared inbound vehicles: 1,336, Pre-cleared outbound vehicles: 1,793

Total inspected vehicles: 12, Total permits issued: 152, Weight citations: 3, Credential citations: 1

POE Improvements

Available as-builts (projects, type of work, year of construction):

-F-88 (8), construction of roadway, 1954

-STP-070-B(003)/H614401C, mill and replace overlay, 2009

Programmed/impending improvements (projects, costs): None

Desired improvements per POE staff input (projects, costs): Re-open POE

Site Vicinity

Mainline: Functional classification: Minor Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: SR 92 (New Mexico), Distance from painted gore to centerline of cross-street: 5.18 miles, Weaving distance: N/A, Cross-street functional classification: Principal Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: Thunderbird Rd, Distance from painted gore to centerline of cross-street: 1.30 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Driveway, Distance away: Across highway from western access point to POE

Distance to State line: 1.10 miles to the east

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: SR 92 in New Mexico enters Arizona through Virden, NM and connects to Duncan, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 4.2

Adjacent land use and ownership: Undeveloped, owned primarily by Arizona State Land Department and a little portion privately owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
2 LCS associated with former scale	At each end of former scale location, facing each other	N

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☐ or Flip sign ☒ Location: Approximately 700′-800′ upstream of the admin building in both directions, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Vehicles must back up

Mainline and Ramps

Mainline: Directional number of lanes: 1, Gradient: N/A, Width: 12′, Length (between off- and on-ramp): 883′, Shoulder Width: 16-20′, Pavement type: Asphalt, Posted speed: 65 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 238′, Stopping sight distance: 238′ Total length: 238′, Number of lanes: 1, Width: 32′, Shoulder Width: 8-15′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 42′, Total length: 224′, Number of lanes: 1, Width: 16′, Shoulder Width: 0-6′, Pavement type: Asphalt, Ramp gradient: 0.32%, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Bidirectional credential check/static scale lane	1	518	12	518	Asphalt	N/A	Y
Truck bypass lane	1	546	16-22	546	Asphalt	N/A	Y
Outbound credential check lane	1	636	16	636	Asphalt	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight through ☒

Sidewalk: Existing (Y/N): Y, Location: Along static scale pad and between admin building and gravel parking area, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Pedestrian ramp: outside existing building on the south side; crosswalk: across outbound credential check lane, Functional (Y/N): Y, ADA-compliant (Y/N): N

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: N, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck inspection/permit	N/A	N/A	Room for trucks to park on the shoulder	Y
Automobile (employee/visitor)	N/A	N/A	Room for automobiles in gravel areas adjacent to the admin building	N

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chain link fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration building: Existing (Y/N): Y, Estimated facility age: 30+ years, Building features: Building was closed during on-site visit. ADOT reports the facility as being in fair condition needing only window and door repairs to be functional.

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	-	
Water/ground well	Y	-	

Telephone communication	Y	-	
Data communication	Y	-	
Electric	Y	-	
Natural gas	N	-	
Heating/cooling – admin building	Y	-	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	-	
Site lighting	Y	-	
Ramp and roadway lighting	Y	-	
Landscaping/irrigation	Y/N	-	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	2	Immediately east and west of existing building	N/A
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	N	-	-	N/A
Parking lot	N/A	-	-	-
Ramps	Y	5	Along the northern edge of ramps	N/A

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): N/A, Type: N/A

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: 0, Location: N/A, Functional (Y/N): N/A

Ehrenberg

I-10 Ehrenberg Inbound (Eastbound) Port of Entry

Facility Location

Roadway name: I-10

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 3.13, Credential check stop line: MP 3.48, On-ramp pavement gore: MP 3.82, Stateline: MP 0

County: La Paz County

Nearest town or city: Name: Ehrenberg, Distance away: 2.81 miles to the west

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 21,452, K Factor: 12%, T Factor: 37.9%, D Factor: 51%

POE Operations

Hours of operation: 24 hours, Days open: All days except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	3	3
Officer	6	3
Customer Service Rep.	10	3

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 240 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: None at this time

2011 Annual Operations

Total inbound vehicles: 1,359,337, , Checked inbound vehicles: 296,957, Pre-cleared inbound vehicles: 1,062,188

Total inspected vehicles: 3,963, Total permits issued: 26,694, Weight citations: 751, Credential citations: 4,515

POE Improvements

Available as-builts (projects, type of work, year of construction):

-I-10-1 (53), construction of agricultural inspection station, 1979

-I-10-1 (54), sign rehabilitation, 1981

-IR-10-1 (69), construction of SSWIM, reconstruction of scale, and pavement markings for immigration_ inspection, 1987

-IR-10-8(2) 010 SW 000, construction of demonstration project ramp WIM and AVI for PrePass, 1992_

-I-10-1-511 010 LA 003, reconstruction of scale and relocation of camera, 1996

-I-10-A-502 010 LA 003, construction of mainline WIM and AVI for PrePass, 2002

-AC-IM-010-A-(005)N 010 LA 001, pavement rehabilitation on I-10, 2003

Programmed/impending improvements (projects, costs): Complete reconstruction of POE planned - $16 million programmed in FY 2016; design underway

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Juneau Ave, Distance from painted gore to centerline of cross-street: 2.40 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Tom Wells Rd, Distance from painted gore to centerline of cross-street: 1.87 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Rest area off-ramp, Distance away: 0.48 miles downstream

Distance to State line: 3.11 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Ehrenberg Poston Highway and SR-72, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 30.6

Adjacent land use and ownership: Undeveloped, owned by BLM

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Topography – small hill inside return loop

Site Geometry and Features

Screening Features

Screening Feature	Location	Year Installed	Functional (Y/N)
Weigh-in-motion (WIM) scale with 2 loop detectors and 1 piezo sensor	Mainline outside lane, MP 2.64	2002	Y
Automatic Vehicle Classifier (AVC) with 2 loop detectors and 2 piezo sensors	Mainline inside lane, MP 2.64	2002; loops and piezos redone in 2003	Y
Automatic Vehicle Identification (AVI) advance antenna	Mainline outside lane, MP 2.64	2002	Y
Overview Camera	Mainline median, MP 2.65	2002	Y
Changeable message sign (CMS)	Mainline right shoulder, MP 2.77	2002	Y
Overview Camera	Mainline right shoulder, MP 2.77	2002	Y
CMS	Mainline right shoulder, MP 2.79	2002	Y
3 loop detectors associated with CMS	Mainline outside lane, MP 2.75, MP 2.77, & MP 2.79	2002; redone in 2003	Y
AVI In-Cab Notification antenna	Mainline outside lane, MP 2.79	2002	Y
WIM scale	Off-ramp to POE, MP 3.23	1992; appears to have been removed	N
AVC with 2 loop detectors and 2 piezo sensors	Off-ramp to POE, MP 3.23	1992; redone in 2002	Y
Overview Camera	Off-ramp to POE, MP 3.23	1996	Y
2 loop detectors	Off-ramp to POE, MP 3.27	1992	Y
AVC with 2 loop detectors and 2 piezo sensors	Mainline both lanes, MP 3.29	2002; loops and piezos redone in 2003	Y
2 AVI compliance antennas	Mainline both lanes, MP 3.29	2002	Y
Overview Camera	Mainline right shoulder, MP 3.30	2002	Y
2 Lane Control Signals (LCS)	Mounted on the credential booth, MP 3.30	1992; left lane LCS has been removed	Y

2 loop detectors associated with return loop	Return loop gore, MP 3.48	1987	Y
2 credential check booths with lane control signal on each booth	Right and center lane of off-ramp to POE, MP 3.48	-	Y
2 LCS on former agricultural inspection canopy	Mounted on the top entry face of canopy, MP 3.53	1979; canopy has been reduced from 5 to 2 lanes	N
Three-platform static scale (12' x 60', 20', and 10')	Adjacent to admin building, MP 3.54	Redone in 1987	Y
2 LCS associated with static scale	Adjacent to admin building, MP 3.54	-	Y
Slow-speed WIM (SSWIM) scale	Right lane of off-ramp, MP 3.54	1987; no longer in use	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☒ or Flip sign ☐ Location: Near off-ramp gore, Functional (Y/N): Y

Port running provisions: Existing (Y/N): Y, Mainline ☒ or Ramp ☐, Type: AVC, AVI, camera, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Return loop

If this station has both a WIM system and a static scale system, is there a difference between truck weight accuracy? ☒ Yes ☐ No ☐ N/A If yes, describe below:

Accuracy Issue Description: Sometime the WIM is off by 4,000 lbs; hot weather is a factor affecting the accuracy of WIM.

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: 1.38%, Width: 25′, Length (between off- and on-ramp): 3,749′, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 65 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 1,138′, Stopping sight distance: 1,138′ Total length: 1,205′, Number of lanes: 1, Width: 12.5′, Shoulder Width: 2.5′, Pavement type: Asphalt, Ramp gradient: +0.62%, Posted speed: 40 mph

Mainline on-ramp: Entrance type: Taper, Acceleration length: 2,035′, Total length: 2,190′, Number of lanes: 1, Width: 14′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: 0.32%, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane	1	1,140	12	N/A	Concrete	-	Y
Credential check lane	1	1,000	12-16	1,000	Asphalt	-	Y
Oversize truck credential check lane	1	178	18	178	Concrete	-	Y
Static scale lane	1	317	12-15	-	Asphalt	5	Y
Truck bypass lane	1	317	10-14	-	Asphalt	-	Y
Internal circulation lane	1	1,400	18	-	Concrete	-	Y

Site Layout

Credential check booth: Number: 2, Location: Detached from admin building, Functional (Y/N): Y, Features: Stairs, windows on two sides, air conditioning

Administration building location: Inside loop ☐ or Outside loop ☒, Adjacent to static scale (Y/N): Y,

Site circulation direction: Clockwise ☒ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Along credential check/static scale lane outside admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from credential check/static scale lane to employee parking lot, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): Y, Location: From outbound side to median, Functional (Y/N): N

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole, rain gauge

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	16	75' x 13'	On both sides of credential check lanes	Y
Truck inspection/permit	5	75' x 13'	Adjacent to return loop and CA inspection building	Y

Automobile (employee/visitor)	~40	N/A	Former immigration inspection canopy area and east of admin building	Y
Covered parking (included in auto parking)	10	N/A	Former immigration inspection canopy	Y
ADA parking	1	20' x 16'	East of admin building	Y
Load adjustment parking	0	N/A	-	-
Parking out of service	3	300' x 13' (continuous)	On back side of return loop	Y
Truck rest area	0	N/A	-	-

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	Along southern R/W boundary (~2,500' perimeter flare for POE)	Y
Chain link fence	Y	-	In median for 1,800' between EB and WB port facilities	Y
Concrete barriers	Y	8	At credential booth corners	Y
Sand barrels	Y	12	At edge of canopy	Y
Flexible tubes	Y	25	In advance of canopy in EB direction	Y
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1979

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	N	-	-	
Restroom (Men/Women)	Y	1/1	Y	
Drinking fountain	Y	1	Y	
Payphone	Y	1	Y	
Seating	Y	6	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Vending machine	Y	1	Y	
Customer window	Y	5	Y	
Employee Area				
File Storage Lockers	Y	1	Y	
Evidence Custodial Area	Y	1	Y	
Secure Equipment/Parts Storage Room	N	-	-	
Supplies Storage Room	N	-	-	
Maintenance Storage Space/Janitor's Room	N	-	-	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	Y	1	Y	
Drinking fountain	Y	2	Y	
Restroom (Men/Women)	Y	3/2	Y	
Shower/Locker Room	N	-	-	
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	3	Y	
Workstations	Y	6	Y	
Mail/Copy/Fax Area	Y	1	Y	
Telecommunication/Data Room	N	-	-	
Electrical Room	N	-	-	
Mechanical Room	N	-	-	
Break Room	Y	1	Y	
Emergency Generator	N	-	-	
Fire Protection Sprinklers	Y			

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	

Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	Y	Y	
Emergency power	N	-	
Fire protection	N	N	
Site drainage	Y	Y	Rain gauge located outside admin building
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	6	Attached to the upper perimeter of building	Y
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	N	-	-	-
Parking lot	Y	2	In front of uncovered employee parking lot	Poor
Ramps	Y	14	Along outside edge of mainline and ramp	Poor
Internal circulation lane	Y	6	Along outside edge of return loop	Poor

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 2, Location: Adjacent to static scale; attached to northeast corner of building, Functional (Y/N): Y

I-10 Ehrenberg Outbound (Westbound) Port of Entry

(only showing data not already included in the I-10 Ehrenberg Inbound (Eastbound) Port of Entry Site Assessment Form)

Facility Location

Roadway name: I-10

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 3.88, Credential check stop line: N/A, On-ramp pavement gore: MP 3.32, Stateline: MP 0

POE Operations

Hours of operation: Only open occasionally, Days open: Only open occasionally

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Varies

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total outbound vehicles: 0, Checked outbound vehicles: 0, Pre-cleared outbound vehicles: 0

Site Vicinity

Nearest cross-street or traffic interchange upstream of POE entrance: Name:_Tom Wells Rd, Distance from painted off-ramp gore to centerline of cross-street: 1.97 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name:_Juneau Ave, Distance from painted on-ramp gore to centerline of cross-street: 2.60 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Rest area on-ramp, Distance away: 0.96 miles upstream

Size of site right-of-way (acres): 12.9

Adjacent land use and ownership: Undeveloped, owned by BLM

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

Screening Feature	Location	Year Installed	Functional (Y/N)
Three-platform static scale (12’ x 10’, 20’, and 60’)	Credential check/static scale lane, MP 3.63	1992	Y
LCS associated with static scale	Left edge of credential check/static scale lane, MP 3.63	1992	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable Message Sign (CMS) ☐ or Flip sign ☒ Location: Near off-ramp gore, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): None

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: -0.32%, Width: 25′, Length (between off- and on-ramp): 2977′, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 1138′, Stopping sight distance: 1138′ Total length: 1205′, Number of lanes: 1, Width: 14′-26′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: -1.10%, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 2035′, Total length: 2190′, Number of lanes: 1, Width: 14′-26′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: -1.44%, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/static scale lane	1	340	12	-	Concrete	10	Y
Truck bypass lane	1	340	20	-	Concrete	10	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features:

Administration building location: Adjacent to static scale (Y/N): Y,

Site circulation: Existing (Y/N): N/A,

Sidewalk: Existing (Y/N): Y, Location: Adjacent to static scale; north side of on-ramp after merge of static scale land and truck bypass lane, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A, ADA-compliant (Y/N): N/A

Tunnel: Existing (Y/N): Y, Location: from outbound side to median, Functional (Y/N): N

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Swing gate

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck inspection/permit	7	75' x 13'	Adjacent to bypass lane	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	Along northern R/W boundary (~2,500' perimeter flare for POE)	Y
Chain link fence	Y	-	In median for 1,800' between EB and WB port facilities	Y

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1979

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Customer window	Y	1	Y	
Employee Area				
Restroom (Men/Women)	Y	1	Y	
Workstations	Y	1	Y	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Heating/cooling – admin building	Y	Y	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	1	Attached to north side of the building	-
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	Y	2	Along sidewalk northwest of existing building	-
Credential check/static scale lane	Y	4	Along outside edge of truck bypass lane	-
Ramps	Y	6	Along outside edge of mainline, ramp	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: N/A, Location: N/A, Functional (Y/N): N/A

Fredonia

Facility Location

Roadway name: US 89A

Direction of travel: Southbound

Milepost: Off-ramp pavement gore: MP 610.18, Credential check stop line: N/A, On-ramp pavement gore: MP 610.25, Stateline: MP 613

County: Coconino County

Nearest town or city: Name: Fredonia, Distance away: within City limits

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 5,047, K Factor: 9%, T Factor: 15.7%, D Factor: 57%

POE Operations

Hours of operation: Currently closed, but when last open in 2009, typically open 9-10 hours a day, Monday-Thursday, although some weeks it was closed all week or only open a day or two, Days open: N/A

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: None

Other agencies/entities sharing facilities: None

2009 Annual Operations (last year open)

Total inbound vehicles: 5,434, Total outbound vehicles: 6,173, Checked inbound vehicles: 4,393, Checked outbound vehicles: 4,841, Pre-cleared inbound vehicles: 1,041, Pre-cleared outbound vehicles: 1,332

Total inspected vehicles: 133, Total permits issued: 672, Weight citations: 1, Credential citations: 6

POE Improvements

Available as-builts (project number, type of work, year of construction):

-F-037-3-504 89-CO-600, asphaltic concrete overlay, 1981

-F-037-3-502 89-CO-609, survey and construction of roadway, 1986

-F-037-3-516 089 CN 609, irrigation work, 2000

-STP-037-3(15)P 89A CN 612, reconstruct box and rest area access, 2000

Programmed/impending improvements (projects, costs): Shoulder widening from McKinney St. to the Utah border, $5.2 Million in FY 2013

Site Vicinity

Mainline: Functional classification: Major Collector

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Cowboy Dr, Distance from painted gore to centerline of cross-street: 0.06 miles, Weaving distance: 0.06 miles, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: McKinney St, Distance from painted gore to centerline of cross-street: 0.11 miles, Weaving distance: 0.11 miles, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Pat Dr, Distance away: Connects to US89A from the east across from the POE

Distance to State line: 2.79 miles to the north

Alternate route around POE (truck usage to bypass port) (Y/N): N, Bypass route names: SR 389 east to US 89A south and US89A north to SR 389 west, Truck restrictions on the bypass routes (Y/N): Y – signage at US89A/SR 389 junction directs all trucks to POE,

Size of site right-of-way (acres): 1.3

Adjacent land use and ownership: Residential development to the east, undeveloped to the west, privately owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc): Creek to the west of the POE

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

None

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: Approximately 650 feet north of and 150 feet south of the admin building, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A_, Functional (Y/N): N/A

Outbound traffic monitoring provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): N/A

Mainline and Ramps

Mainline: Directional number of lanes: 1, Gradient: N/A, Width: 12′, Length (between off- and on-ramp): 574′, Shoulder Width: 18′, Pavement type: Asphalt, Posted speed: 35 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 157′, Stopping sight distance: 348′ Total length: 348′, Number of lanes: 1, Width: 14′, Shoulder Width: 0-14′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 78′, Total length: 78′, Number of lanes: 1, Width: 22′, Shoulder Width: 0-28′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane (SB)	2	333	12-18	-	Asphalt	35	Y
Permit parking lane (NB)	1	400	14-18	-	Asphalt	35	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): N/A, Adjacent to inspection bay (Y/N): N/A

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight through ☒

Sidewalk: Existing (Y/N): Y, Location: Around the admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Crosswalk for crossing US 89A to get from the admin building to the outbound permit parking lane, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: N, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit (SB)	~4	N/A	In permit parking lanes	Y
Truck permit (NB)	~4	N/A	In permit parking lane	Y
Automobile (employee/visitor)	~4 (not marked)	N/A	Around the admin building	Gravel in poor condition
ADA parking	1	N/A	North of the admin building	Gravel in poor condition

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chainlink fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-
Metal pole	N	-	-	-
Guard rail	Y	-	East side of building next to sidewalk	Y

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration building: Existing (Y/N): Y, Estimated facility age: 30+ years, Building features Building was closed during on-site visit. ADOT reports the facility as being in fair condition needing only new customer counters and minor security items to be functional.

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	-	-
Water/ground well	Y	-	-
Telephone communication	Y	-	-
Data communication	Y	-	Radio tower/building on south side
Electric	Y	-	-
Natural gas	Y	-	AmeriGas tanks behind/west side
Heating/cooling – admin building	Y	-	-
Heating/cooling – inspection building	N/A	-	-
Heating/cooling – credential booth	N/A	-	-
Emergency power	N	-	-
Fire protection	N	-	-
Site drainage	N	-	-
Site lighting	Y	-	-
Ramp and roadway lighting	Y	-	-
Landscaping/irrigation	N	-	-
Renewable energy features	N	-	-

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	4	Mounted on admin building	N/A
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	Y	2	Streetlights above sidewalk	N/A
Parking lot	Y	1	Streetlight behind admin building	N/A
Ramps	N	-	-	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): N/A, Type: N/A

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: 0, Location: N/A, Functional (Y/N): N/A

Kingman

Facility Location

Roadway name: US 93

Direction of travel: Southbound

Milepost: Off-ramp pavement gore: MP 66.59, Credential check stop line: MP 67.46, On-ramp pavement gore: MP 67.75, Stateline: MP 0

County: Mohave County

Nearest town or city: Name: Kingman, Distance away: 2.31 miles

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 28,209, K Factor: 8%, T Factor: 9.9%, D Factor: 51%

POE Operations

Hours of operation: 24 hours, Days open: Monday-Friday except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	3	3
Officer	6	3
Customer Service Rep.	9	3

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: DPS

2011 Annual Operations

Total inbound vehicles: 120,382, Total outbound vehicles: 0, Checked inbound vehicles: 84,117, Checked outbound vehicles: 0, Pre-cleared inbound vehicles: 35,868, Pre-cleared outbound vehicles: 0

Total inspected vehicles: 88, Total permits issued: 4,631, Weight citations: 80, Credential citations: 582

POE Improvements

Programmed/impending improvements (projects, costs): None

Site Vicinity

Mainline: Functional classification: Principal Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: US 68, Distance from painted gore to centerline of cross-street: 2.40 miles, Weaving distance: N/A, Cross-street functional classification: Minor Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: Tom Wells Rd, Distance from painted gore to centerline of cross-street: 0.43 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: I-40 Interchange, Distance away: 0.48 miles downstream

Distance to State line: 31 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Oatman-Topock Hwy / Co Hwy 10, EB SR 68 to NB US 93, SB US 93 to WB SR 68, Truck restrictions on the bypass routes (Y/N): N/A,

Size of site right-of-way (acres): 47.06

Adjacent land use and ownership: Undeveloped, owned by BLM

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): Wash

Known constraints to potential future expansion of site: Topography, wash

Site Geometry and Features

Screening Features

Screening Feature	Location	Year Installed	Functional (Y/N)
Automatic Vehicle Identification (AVI) antenna	US 93 MP 66.37, Mainline outside lane	1998	Y

AVI antenna	SR 68 MP 26.38, Mainline outside lane	1998	Y
Overview Camera	US 93 MP 67.44, Mainline right shoulder	1998	Y
AVI In-Cab Notification antenna	Off-ramp right shoulder, right before merge with return loop	1998	Y
Overview Camera	Off-ramp right shoulder, right before merge with return loop	1998	Y
SSWIM	On off-ramp, right before merge with return loop	1998	Y
Overhead LCS	Over static scale and truck bypass lane, 590' upstream of credential stop line	1998	Y
Three-platform static scale (12' x 10', 20', and 60')	Adjacent to admin building	Upgraded 2012	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): N, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☐ Location: N/A, Functional (Y/N): N

Port running provisions: Existing (Y/N): Y, Mainline ☒ or Ramp ☒, Type: AVI, SSWIM Camera, Functional (Y/N): Y

Provision for vehicles that fail credential check or inspection (return traffic): Return loop

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 36′, Length (between off- and on-ramp): 6,249′, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 65 mph

Mainline off-ramp: Exit type: Taper, Deceleration lane length: 1,055′, Stopping sight distance: 1,055′ Number of lanes: 1, Ramp gradient: N/A, Width: 25′ - 32′, Length: 3,544′, Shoulder Width: 8′, Pavement type: Asphalt/Concrete, Posted speed: 45 mph

Mainline on-ramp: Entrance type: Taper, Acceleration lane length: 1,164′, Ramp gradient: N/A, Number of lanes: 1, Width: 22′, Length: 2,190′, Shoulder Width: 8′, Pavement type: Asphalt, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/static scale lane	1	916	12	906	Concrete	20	Y
Truck bypass lane	1	916	12	906	Concrete	20	Y
Internal circulation lane	1	3065	14	-	Concrete	20	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☒ or Outside loop ☐, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☒ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Along inspection canopy and in front of employee parking lot, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from inspection bay to employee parking lot, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpoles

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	11	130'x13'	Northwest of admin building and inspection canopy	Y
Truck inspection	4	118'x15'	Inside canopy	Y
Automobile (employee/visitor)	14	18'x9'	East of administration building	Y
Covered parking (included in auto parking)	8	18'x9'	East side of parking lot	Y
ADA parking	2	20'x10'	Northwest corner of parking lot	Y
Load adjustment parking	0	-	-	-

Parking out of service	4	-	Fence area inside return loop	Y

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chain link fence	N	-	-	-
Concrete barriers	Y	-	Both sides of off-ramps from SR 68 and US 93	Y
Sand barrels	N	-	-	-
Flexible tubes	Y	~30	Between return loop and truck bypass lane, between static scale lane and truck bypass lane, outside edge of return loop curvature	Y
Cone	Y	6	Between internal circulation and truck bypass lane	Y
Razor wire fence	Y	-	Served as fence for out-of-service truck paring inside return loop	Y
Cattle guard	N	-	-	-
Guardrail	Y	-	Right side of on-ramp	Y
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection lane: Number: 4, Width: 14′, Length: 118′, Vertical clearance: N/A, Pavement type: Concrete, Location: Adjacent to administration building, Functional (Y/N): Y

Other Inspection Features	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Scale pit	Y	Y
Sump pump	Y	Y
Weighmaster room	Y	Y
General inspection storage	Y	Y
Electrical charging station	Y	Y
Eyewash or emergency showers	Y	Y
Fire suppression equipment	Y	Y

Inspection building: Existing (Y/N): Y, Enclosed ☐ or Roofed shelter ☒, Estimated facility age: 1998

Feature	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Enclosed inspection booth	N	-
Paved surface slope for drainage	Y	Y
Additional steel/concrete barrier/pillar protection	Y	Y
Pavement markings	Y	Y

Overhead signage	N	-

Inspection Pit

Existing (Y/N): Y, Inspection pit ☒ or Lighted deck ☐

Inspection bay: Number: 1, Number with pits: 1, Width: 14', Length: 55', Depth: Unknown, Pavement type: Concrete, Location: Outside lane in canopy, Functional (Y/N): Y, Access: Stairway, Railing near bay (Y/N): N

Pit covers: Existing (Y/N): Y, Functional (Y/N): Y, Type: Metal gate

Electrical services (lighting/electrical outlets): Existing (Y/N): Y, Functional (Y/N): Y

Mechanical/ventilation: Existing (Y/N): Y, Functional (Y/N): Y

Storage: Existing (Y/N): N/A, Functional (Y/N): N/A

Hazardous materials basin: Existing (Y/N): N/A, Functional (Y/N): N/A

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1998

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	N	-	-	
Restroom	Y	1	Y	
Drinking fountain	Y	1	Y	
Payphone	N	0	-	
Seating	Y	12	Y	
Vending machine	Y	1	Y	
Customer window	Y	3	Y	
Employee Area				
File Storage Lockers	Y	1	Y	
Evidence Custodial Area	Y	1	Y	
Secure Equipment/Parts Storage Room	Y	1	Y	
Supplies Storage Room	Y	1	Y	
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	Y	1	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Drinking fountain	N	-	-	
Restroom (Men/Women)	Y	2	Y	
Shower/Locker Room	Y	1	Y	
Prisoner Cell	N	-	-	
Interview Room	N	0	-	
Offices	Y	5	Y	1 office for DPS
Workstations	Y	3	Y	
Mail/Copy/Fax Area	Y	2	Y	
Telecommunication/Data Room	Y	1	Y	
Electrical Room	Y	1	Y	Same as telecom/data room
Mechanical Room	Y	2	Y	Well pump and fire riser room
Break Room	Y	1	Y	Same as training room
Emergency Generator	Y	1	Y	
Fire Protection Sprinklers	Y	4	Y	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	Y/N	N/N	
Heating/cooling – credential booth	N/A	-	
Emergency power	Y	Y	
Fire protection	Y	Y	
Site drainage	Y	Y	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	Weed control needed
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	11	Attached to the perimeter of admin building	Y
Outside inspection building	Y	16	Attached to canopy roof	Y
Parking lot	Y	3	East of employee parking lot, on both sides of truck parking area	Y
Ramps	Y	7	Along outside edge of right shoulders of ramps and truck bypass lane	Y
Internal circulation lane	Y	4	Inside internal circulation loop	Y

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 4, Location: Front yard of admin building, side exit, on overhead LCS post, corner of inspection canopy, Functional (Y/N): Y

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Facility Location

Roadway name: US 89

Direction of travel: Southbound

Milepost: Off-ramp pavement gore: MP 551.41, Credential check stop line: MP 551.31, On-ramp pavement gore: MP 551.23, Stateline: MP 556

County: Coconino County

Nearest town or city: Name: Page, Distance away: 2.79 miles to the southeast

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 4,126, K Factor: 10%, T Factor: 15.7%, D Factor: 65%

POE Operations

Hours of operation: 8 hours, Days open: Monday-Friday except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	0	0
Sergeant	0	0
Officer	1	1
Customer Service Rep.	2	1

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: ADOT MVD

2011 Annual Operations

Total inbound vehicles: 7,804, Total outbound vehicles: 10,725, Checked inbound vehicles: 7,804, Checked outbound vehicles: 10,725, Pre-cleared inbound vehicles: 0, Pre-cleared outbound vehicles: 0

Total inspected vehicles: 33, Total permits issued: 2,355, Weight citations: 30, Credential citations: 67

POE Improvements

Available as-builts (project number, type of work, year of construction):

-Non F041-1(60)A, construction of roadway, 1960

-F-041-1-506 089 CN 550, pavement treatment, 1992

-NH-041-1(4)P 089 CN 549, pavement preservation, 2000

Programmed/impending improvements (projects, costs): None

Site Vicinity

Mainline: Functional classification: Rural Principal Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Wahweap Blvd, Distance from painted gore to centerline of cross-street: 2.50 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Wahweap Blvd., Distance from painted gore to centerline of cross-street: 0.74 miles, Weaving distance: 0.74, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Unnamed neighborhood street, Distance away: 0.07 miles downstream

Distance to State line: 5.69 miles to the north

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Wahweap Blvd. circles east to the north and south of the POE, but Glen Canyon National Recreation Entry booths would have to be passed through, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 2.3

Adjacent land use and ownership: DPS office to the west, surrounded by Glen Canyon National Recreation Area (owned by the National Park Service)

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc): None

Known constraints to potential future expansion of site: Topography

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Single-platform static scale (12' x 10')	In lane next to admin building, by window	Y
Green/red control light associated with static scale	Just past admin building at end of lane	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: Approximately 700 feet from the admin building in both directions, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Outbound traffic monitoring provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): U-turn

Mainline and Ramps

Mainline: Directional number of lanes: 1, Gradient: %, Width: 12', Length (between off- and on-ramp): 969', Shoulder Width: 14', Pavement type: Asphalt, Posted speed: 35 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 467', Stopping sight distance: 467' Total length: 657', Number of lanes: 1, Width: 15', Shoulder Width: 0-5', Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 246', Total length: 263', Number of lanes: 1, Width: 12-14', Shoulder Width: 0-5', Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane (NB)	2	500	12	500	Asphalt	35	Y
Credential check/scale lane (SB)	1	800	12	600	Concrete	5	Y
Truck bypass/ inspection lane (SB)	1	300	14	300	Asphalt	5	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☒ or Outside loop ☐, Adjacent to static scale (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☒ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Around the admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Crossing US 89 to get from the admin building to the outbound side, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: Y, Location: South of the building parking lot, Functional (Y/N): Y

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit (NB)	6	N/A	East side of US 89	
Truck inspection (SB)	4	60' x 15'-110' x 15'	South of the admin building	Y
Automobile (employee/visitor)	20	24' x 9'	Adjacent to admin building on the north and south sides	Y
ADA parking	2	24' x 10'	Adjacent to admin building on the south side	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chainlink fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-
Metal pole	N	-	-	-

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration building: Existing (Y/N): Y, Estimated facility age: 1986

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	1	Y	
Restroom (Men/Women)	Y	1 shared	Y	
Drinking fountain	Y	1	Y	
Payphone	N	N/A	N/A	
Seating	Y	19	Y	4 for POE; 1 computer area; 2 benches outside
Vending machine	Y	1	Y	
Customer window	Y	6	Y	2 for POE, 4 for MVD
Employee Area				
File Storage Lockers	Y	1	Y	Would like to expand storage room
Evidence Custodial Area	N	-	-	Would like to reconfigure storage room to create this
Secure Equipment/Parts Storage Room	Y	1	Y	
Supplies Storage Room	Y	1	Y	
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	N	-	-	
Drinking fountain (Men/Women)	N	-	-	Large container of water for employees
Restroom (Men/Women)	Y	1	Y	
Shower/Locker Room		-	-	
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	1	Y	
Workstations	Y	6		2 for POE, 4 for MVD
Mail/Copy/Fax Area	Y	-	-	
Telecommunication/Data Room		-	-	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Electrical Room		-	-	
Mechanical Room		-	-	
Break Room	Y	1		
Emergency Generator		-	-	
Fire Protection Sprinklers	N	-	-	Fire extinguishers only

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection facility	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	N	
Site drainage	N	-	Drainage issue at crosswalk
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	N	-	
Renewable energy features	Y	Y	Solar panels at crosswalk signs

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	4	-	-
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	Y	4	Same as outside admin building	-

Parking lot	Y	2	-	-
Ramps	Y	5	Along edge of ramp and bypass lane	-

Communication methodology to off-site screening features: Copper wire in conduits

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 2, Location: Inside admin building, Functional (Y/N): Y

Parker

Facility Location

Roadway name: State Route (SR) 95 Spur

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 144.48, Credential check stop line: MP 144.4, On-ramp pavement gore: MP 144.38, Stateline: MP 144.85

County: La Paz

Nearest town or city: Name: Parker, Distance away: within City limits

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 7,862, K Factor: 11%, T Factor: 9.7%, D Factor: 52%

POE Operations

Hours of operation: Currently closed, but when last open in 2009, typically open 6-8 hours a day, Monday-Thursday, Days open: N/A

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: None

Other agencies/entities sharing facilities: None

2009 Annual Operations (last year open)

Total inbound vehicles: 30,127, Total outbound vehicles: 0, Checked inbound vehicles: 29,726, Checked outbound vehicles: 0, Pre-cleared inbound vehicles: 391, Pre-cleared outbound vehicles: 0

Total inspected vehicles: 31, Total permits issued: 1,256, Weight citations: 38, Credential citations: 49

POE Improvements

Available as-builts (projects, type of work, year of construction):

-S-265(5), SR 95 Spur roadway construction, 1957

-F-063-2-515 095 LA 143, pavement rehabilitation on SR 95 Spur, 1995

Programmed/impending improvements (projects, costs): None

Site Vicinity

Mainline: Functional classification: Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: W 3rd Street, Distance from painted gore to centerline of cross-street: 35', Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: W 4th Street, Distance from painted gore to centerline of cross-street: N/A, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 0.5 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Along Parker Dam Road and SR 95, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 1.97

Adjacent land use and ownership: Residential

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Residential area and railroad track nearby

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Single-platform static scale (10' x 10')	Adjacent to admin building	Y
Green/red control light associated with static scale	SE of admin building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: Upstream of POE off-ramp in both directions, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): None

Mainline and Ramps

Mainline: Directional number of lanes: 1-2, Gradient: N/A, Width: 36′, Length (between off- and on-ramp): 490′, Shoulder Width: 6′, Pavement type: Asphalt, Posted speed: 35 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 223′, Stopping sight distance: 223′ Total length: 239′, Number of lanes: 1, Width: 14′-22′, Shoulder Width: 0′-8′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: N/A, Total length: 160′, Number of lanes: 1, Width: 14′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane (WB)	2	270	12	270	Asphalt	N/A	Y
Credential check/static scale lane (EB)	1	150	10-12	100	Concrete	N/A	Y
Inspection lane (EB)	2	150	11	100	Asphalt	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight through ☒

Sidewalk: Existing (Y/N): Y, Location: Around admin building and along inspection bay, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Crosswalk across SR 95S from EB parking bays to admin building, ramp from admin building to ADA-accessible parking space, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: N, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit (EB)	3	70'x15'	SE of admin building	Y
Truck permit (WB)	6	Varies	In WB permit parking lanes	Y
Truck inspection	4	90'x11'	On truck inspection lane and inside canopy	Y
Automobile (employee/visitor)	4	18'x10'	Along NW and SE sides of the admin building	Y
Covered parking (included in auto parking)	0	-	-	-
ADA parking	1	18'x10'	Along SE side of the admin building	Y
Load adjustment parking	0	-	-	-
Parking out of service	0	-	-	-
Truck rest area	0	-	-	-

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chain link fence	N	-	-	-
Concrete barriers	N	-	-	-
Cones	Y	12	Along outside edge of EB off-ramp	Y
Sand barrels	N	-	-	-
Flexible tubes	Y	~30	Along outside edge of EB on-ramp, along inside edge of EB off-ramp and static scale lane	Y
Cattle guard	N	-	-	-
Railroad tracks	Y	-	Along SR 95S northeast of site	Y

Inspection Facilities

Inspection lane: Number: 2, Width: 11', Length: 150', Vertical clearance: N/A, Pavement type: Concrete, Location: Adjacent to admin building, Functional (Y/N): Y

Inspection building: Existing (Y/N): Y, Enclosed ☐ or Roofed shelter ☒, Estimated facility age: 1957

Roofed Shelter

Feature	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Enclosed inspection booth	N	-
Paved surface slope for drainage	N	-
Additional steel/concrete barrier/pillar protection	Y	Y
Pavement markings	Y – 2 lanes	Y
Overhead signage	Y	Y

Inspection Pit

None

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1957

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Restroom (Men/Women)	Y	1/1	N/A	Narrow doorways
Payphone	Y	1	N	
Customer window	Y	1	Y	
Employee Area				
Workstations	Y	1	N	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	-	
Water/ground well	Y	-	
Telephone communication	Y	-	
Data communication	Y	-	
Electric	Y	-	
Natural gas	N	-	
Heating/cooling – admin building	Y	-	
Heating/cooling – inspection facility	N	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	

Fire protection	N	-	
Site drainage	Y	-	
Site lighting	Y	-	
Ramp and roadway lighting	Y	-	
Landscaping/irrigation	N	-	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	5	Attached to the perimeter of admin building	-
Outside inspection facility	Y	6	On the ceiling of canopy, overhead lighting at entrance of canopy	-
Sidewalk/pedestrian path	N	-	-	-
Parking lot	Y	1	At the corner of canopy	-
Ramps	N	-	-	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): N/A, Type: N/A

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: 0, Location: N/A, Functional (Y/N): N/A

St. George

Facility Location

Roadway name: I-15

Direction of travel: Southbound

Milepost: Off-ramp pavement gore: MP 1.42, Credential check stop line: MP 0.94, On-ramp pavement gore: MP 0.73, Stateline: MP 0

County: Washington County, Utah

Nearest town or city: Name: St. George, Distance away: within City limits

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 19,411, K Factor: 11%, T Factor: 23.0%, D Factor: 56%

POE Operations

Hours of operation: 20 hours, Days open: All days except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	2	2
Officer	3	2
Customer Service Rep.	6	2

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, height, CVSA inspection

Other agencies/entities sharing facilities: Utah DOT, Utah DPS

2011 Annual Operations

Total inbound vehicles: 355,457, Total outbound vehicles: 433,247, Checked inbound vehicles: 73,524, Checked outbound vehicles: 56,449, Pre-cleared inbound vehicles: 281,933, Pre-cleared outbound vehicles: 376,798

Total inspected vehicles: 1,469, Total permits issued: 36,533, Weight citations: 150, Credential citations: 277

POE Improvements

Available as-builts (project number, type of work, year of construction):

-IR-15-1(39), signing project, 1993_

-ACIM-15-1(45), removal of old POE, 1993

Programmed/impending improvements (projects, costs): Environmental assessment from MP 0 to MP 16, $2.3 Million by 2015 (UDOT STIP 2012-2017), Utah POEs E-clearance

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Southern Pkwy, Distance from painted gore to centerline of cross-street: 0.72 miles, Weaving distance: 0.40 miles, Cross-street functional classification: Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: Black Rock Rd, Distance from painted gore to centerline of cross-street: 2.59 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 0.94 miles to the south

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Utah State Route 18 to County Road 91 (Santa Clara to Littlefield) or Utah State Route 9 to US 89A (Hurricane to Fredonia), Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 26.6

Adjacent land use and ownership: Undeveloped, ownership unknown

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Topography

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Automatic Vehicle Identification (AVI) PrePass advance antenna	Gore of I-15 SB Southern Pkwy TI on-ramp	Y
AVI In Cab Notification PrePass antenna	1,250' upstream of admin building	Y
Slow-speed weigh-in-motion (SSWIM) scale	1,250' upstream of admin building	Y (inaccurate)
3 loop detectors and 1 piezo sensor associated with SSWIM	1,250' upstream of admin building	Y
Overview Camera	1,250' upstream of admin building	Y
Height Detector	1,250' upstream of admin building	Y
2 Lane Control Signals (LCS) for bypass/enter	900' upstream of admin building	Y
2 LCS associated with return loop	500' upstream of admin building	N
SSWIM scale	250' upstream of admin building	Y (inaccurate)
Credential booth (abandoned)	150' upstream of admin building	N
Single-platform static scale (16' x 16')	100' upstream of admin building	Y
Overview Camera	100' upstream of admin building	Y
Changeable message sign (CMS)	40' downstream of admin building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☒ or Changeable message sign (CMS) ☐ or Flip sign ☐ Location: Near off-ramp gore, Functional (Y/N): Y

Port running provisions: Existing (Y/N): Y, Mainline ☐ or Ramp ☒, Type: Camera, Functional (Y/N): Y

Outbound traffic monitoring provisions: Existing (Y/N): Y, Mainline ☐ or Ramp ☒, Type: Northbound mirror-image POE, Functional (Y/N): Y, managed and operated by UDOT

Provision for vehicles that fail credential check or inspection (return traffic): Return loop

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 24', Length (between off- and on-ramp): 3,962', Shoulder Width: 14', Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 948', Stopping sight distance: 948' Total length: 1,945', Number of lanes: 1, Width: 12.5', Shoulder Width: 10', Pavement type: Concrete, Ramp gradient: N/A, Posted speed: 20 mph

Mainline on-ramp: Entrance type: Taper, Acceleration length: 908', Total length: 1,139', Number of lanes: 1, Width: 12-20', Shoulder Width: 10-12', Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane	-	-	-	-	-	-	-
Credential check lane	1	1, 300	14	-	Concrete	15	Y
Oversize truck credential check lane	-	-	-	-	-	-	-
Inspection lane	-	-	-	-	-	-	-
Truck bypass lane	1	1,300	12-14	-	Concrete	15	Y
Internal circulation lane	1	2,400	12-18*	-	Concrete	10	Y

**Loop ends are not wide enough to accommodate some oversized vehicles*

Site Layout

Credential check booth: Number: 1, Location: Detached from admin building, Functional (Y/N): N, Features: Abandoned

Administration building location: Inside loop ☒ or Outside loop ☐, Adjacent to static scale (Y/N): N, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☒ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: From employee parking lot to admin building, around admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: From parking lot to admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): Y, Location: Between abandoned former NB and SB ports, Functional (Y/N): N

Fire hydrant: Number: Y, Location: Near admin building, Functional (Y/N): Y

Other features: Water hose, flagpoles

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	12	N/A	Adjacent to return loop, north of the inspection area and admin	Y

			building	
Truck credential check	-	-	-	-
Truck inspection	4	108' x 15'	Adjacent to return loop, north of the inspection area and admin building	Y
Automobile (employee/visitor)	20	N/A	South of the admin building	Y
Covered parking (included in auto parking)	9	N/A	South of the admin building	Y
ADA parking	1	20' x 8'	South of the admin building	Y
Load adjustment parking	Large gravel area	93' x 13'	Adjacent to return loop, north of the inspection area and admin building	Y
Parking out of service	-	-	-	-
Overflow parking	19	88' x 13'	North of inspection area and admin building	Y
Enforcement Truck and Trailer	2	N/A	South of admin building	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	1	On west side in dirt area	Y
Chain link fence	N	-	-	-
Concrete barriers	Y		By inspection area	Y
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-
Metal pole	Y	1	Near SSWIM by old admin building	Y

Inspection Facilities

Inspection lane: Existing (Y/N): Y, Number: 2, Width: 26', Length: 250', Vertical clearance: N/A, Pavement type: Concrete, Location: Adjacent to admin building, Functional (Y/N): Y

Other Inspection Features	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Scale pit	N	-
Sump pump	N	-
Weighmaster room	N	-
General inspection storage	Y	Y
Electrical charging station	N	-

Eyewash or emergency showers	Y	Y
Fire suppression equipment	N	-

Inspection facility: Existing (Y/N): Y, Type: Enclosed ☐ or Roofed shelter ☒

Feature	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Enclosed inspection booth	N	-
Paved surface slope for drainage	Y	Y
Additional steel/concrete barrier/pillar protection	Y	Y
Pavement markings	Y	Y
Overhead signage	Y	Y

Inspection Pit

Existing (Y/N): Y, Inspection pit ☒ or Lighted deck ☒

Inspection bay: Number: __2__, Number with pits: _1_, Pavement type: _Concrete, Location: west side of admin building_, Functional (Y/N): _Y_, Railing near bay (Y/N): _N_

Pit covers: Existing (Y/N): Y, Functional (Y/N): _Y_, Type: Metal grate

Electrical services (lighting/electrical outlets): Existing (Y/N): Y, Functional (Y/N): Y

Mechanical/ventilation: Existing (Y/N): Y, Functional (Y/N): Y

Storage: Existing (Y/N): Y, Functional (Y/N): Y

Hazardous materials basin: Existing (Y/N): N, Functional (Y/N): N/A

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 20+ years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	1	Y	Brochures
Restroom (Men/Women)	Y	1/1	Y	
Drinking fountain	Y	1	Y	
Payphone	Y	1	Y	
Seating	Y	6	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Vending machine	Y	5	Y	
Customer window	Y	4	Y	No windows/ just space
Employee Area				
File Storage Lockers	Y	3	Y	
Evidence Custodial Area	Y	1	Y	
Secure Equipment/Parts Storage Room	Y	1	Y	
Supplies Storage Room	Y	1	Y	
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	Y	1	Y	Conference room
Drinking fountain (Men/Women)	Y	1	Y	
Restroom (Men/Women)	Y	1/1	Y	
Shower/Locker Room	Y	1	Y	16 lockers
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	3	Y	
Workstations	Y	4	Y	
Mail/Copy/Fax Area	Y	1	Y	
Telecommunication/Data Room	Y	1	Y	
Electrical Room	Y	1	Y	
Mechanical Room	Y	1	Y	
Break Room	Y	1	Y	
Emergency Generator	Y	1	Y	
Fire Protection Sprinklers	N	-	-	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	

Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection facility	N	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	Y	Y	
Fire protection	N	-	
Site drainage	Y	Y	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	Poor lighting near platform scale
Landscaping/irrigation	Y	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	N/A	Around admin building	Y
Outside inspection building	Y	N/A	Around inspection building	Y
Sidewalk/pedestrian path	Y	-	Around admin building	Y
Parking lot	Y	2	Southern edge of the truck rest area	Y
Ramps	Y	9	Along outside edge	Y

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): _Y_, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 4, Location: Adjacent to static scale, Functional (Y/N): Y

San Simon

I-10 San Simon Inbound (Westbound) Port of Entry

Facility Location

Roadway name: I-10

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 384.46, Credential check stop line: MP 383.31, On-ramp pavement gore: MP 382.88, Stateline: MP 391.23

County: Cochise County

Nearest town or city: Name: San Simon, Distance away: 2.88 miles to the west

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 14,795, K Factor: 12%, T Factor: 46.4%, D Factor: 60%

POE Operations

Hours of operation: 24 hours, Days open: All days except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sargent	3	3
Officer	9	3
Customer Service Rep.	6	3

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 240 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total inbound vehicles: 806,595, Checked inbound vehicles: 425,762, Pre-cleared inbound vehicles: 377,622,

Total inspected vehicles: 1,576, Total permits issued: 37,251, Weight citations: 480, Credential citations: 5,718

POE Improvements

Available as-builts (projects, type of work, year of construction):

-H300701C, IR-10-8(2), port of entry construction, 1992

-H209001C, IM-10-6(108), San Simon port of entry construction, 1995

-San Simon Port of Entry Final Location Design Concept Report, facility improvements, 2010

Programmed/impending improvements (projects, costs): Phase 1 and 2 of reconstruction of POE planned – $3.6 million programmed in FY 2016; design underway

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: N. Cavot Rd, Distance from painted gore to centerline of cross-street: 6.32 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Interstate 10 Business, Distance from painted gore to centerline of cross-street: 0.56 miles, Weaving distance: 0.36, Cross-street functional classification: Rural Minor Collector

Other nearby access points (name, distance away): Name: Rest area off-ramp, Distance away: 4.64 miles downstream

Distance to State line: 6.73 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: 1: US 70, 2: SR 80, 3: Cavot Rd at MP 391, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 18.4

Adjacent land use and ownership: Farmland, privately owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc): None

Known constraints to potential future expansion of site: Railroad track to the north

Site Geometry and Features

Screening Features

Screening Feature	Location	Year Installed	Functional (Y/N)
Overhead Changeable message sign (CMS)	Mainline, MP 385.20	-	N
Weigh-in-motion (WIM) scale with 2 loop detectors and 1 piezo sensor	Mainline outside lane, MP 384.95	1992	Y
Automatic Vehicle Classifier (AVC) with 2 loop detectors and 2 piezo sensors	Mainline outside lane, MP 384.95	1992	Y
2 loop detectors	Mainline both lanes, MP 384.95	1992	Y
Automatic Vehicle Identification (AVI) advance antenna	Mainline outside lane, MP 384.95	1992	Y
Overview Camera	Mainline right shoulder, MP 384.78	1992	Y
CMS	Mainline right shoulder, MP 384.78	1992	N
CMS	Mainline right shoulder, MP 384.76	1992	N
3 loop detectors associated with CMS	Mainline outside lane, MP 384.78, MP 384.77, MP 384.76	1992	Y
AVI In-Cab Notification antenna	Mainline outside lane, MP 384.76	1992	Y
AVC with 2 loop detectors and 2 piezo sensors	Mainline outside lane, MP 384.25	1992	Y
2 loop detectors	Mainline both lanes, MP 384.25	1992	Y
2 AVI compliance antennas	Mainline both lanes, MP 384.25	1992	Y
Camera	Mainline right shoulder, MP 384.25	-	Y
2 Lane Control Signals (LCS)	Off-ramp, one on each shoulder, MP 383.55	-	N
Overview Camera	Off-ramp right shoulder, MP 383.50	-	Y
3 Overhead LCS	Off-ramp overhead, MP 383.40	-	N
Overview Camera	Adjacent to static scale on left side	-	Y
LCS for static scale	Adjacent to main control room on left side of curb	-	Y
One-platform static scale (11' x 10')	Adjacent to admin building	-	Y
Overhead CMS	At the merge point of static scale lane and oversize truck lane	-	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☒ or Flip sign ☐ Location: Upstream of off-ramp, Functional (Y/N): N

Port running provisions: Existing (Y/N): Y, Mainline ☒ or Ramp ☐, Type: AVC, AVI, WIM, camera, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Return via canopy area south of administration building

If this station has both a WIM system and a static scale system, is there a difference between truck weight accuracy? ☒ Yes ☐ No ☐ N/A If yes, describe below:

Accuracy Issue Description: Accuracy of WIM is mostly affected by dust storms

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 24′, Length (between off- and on-ramp): 1.57 miles, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 250′, Stopping sight distance: 1.07 miles Total length: 1.12 miles, Number of lanes: 1, Width: 12.5′, Shoulder Width: 10′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: 55 mph

Mainline on-ramp: Entrance type: Taper, Acceleration length: 776′, Total length: 1,055′, Number of lanes: 1, Width: 14-16′, Shoulder Width: 10′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check lane/ static scale lane	1	466	11	-	Concrete	5	Y
Oversize truck credential check lane/truck bypass lane	1	478	13	-	Concrete	5	Y
Internal circulation lane	0	-	-	-	-	-	-

Site Layout

Credential check booth: Number: 1, Location: North of admin building between static scale lane and truck bypass lane, Functional (Y/N): Y, Features:

Administration building location: Inside loop ☒ or Outside loop ☐, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☐ or Counterclockwise ☒ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: On both sides of static scale lane, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Pedestrian ramp outside west part of admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	15	110’ x 15’	Northwest of administration building	Y
Truck inspection	2	-	Inside canopy	Y
Automobile (employee/visitor)	22	-	Inside canopy and immediate east of canopy	Y
Covered parking (included in auto parking)	10	-	Inside canopy	Y
ADA parking	1		East of admin building	Y
Load adjustment parking	0	-	-	-
Parking out of service	0	-	-	-
Truck rest area	0	-	-	-
Enforcement truck and trailer	3	-	Adjacent to storage trailers	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	Along perimeter of port and in the mainline median	Y
Chainlink fence	Y	-	Between two admin buildings and on the west side of western building	Y
Concrete barriers	N	-	-	-
Sand barrels	Y	16	Along diverge point of off-ramp to credential check lane	Y
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Guardrail	Y	3	North side of truck bypass lane and off-ramp; south of static scale adjacent to main control room	Y
Railroad tracks	Y	-	Immediate north of port	Y

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1954

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	1	Y	
Restroom	Y	1	Y	
Drinking fountain	N	-	-	
Payphone	N	-	-	
Seating	N	-	-	
Vending machine	Y	2	Y	
Customer window	Y	5	Y	3 in main building and 2 in adjacent building to the west
Employee Area				
File Storage Lockers	Y	5	Y	5 cabinets, 3 closets, very old
Evidence Custodial Area	Y	1	Y	Outside main building
Secure Equipment/Parts Storage Room	Y	1	Y	Scattered and need to be together
Supplies Storage Room	Y	3	Y	2 storage trailers west of admin building, scattered and need to be together
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	Y	1	Y	
Drinking fountain	N	-	-	
Restroom (Men/Women)	Y	2	Y	
Shower/Locker Room	Y	1	Y	Lockers in break room
Prisoner Cell	N	-	-	
Interview Room	Y	1	Y	Inside trailer building west of main admin building, lack of security
Offices	Y	2	Y	
Workstations	Y	6	Y	3 in main building and 3 in adjacent building to the west
Mail/Copy/Fax Area	Y	2	Y	
Telecommunication/Data Room	Y	1	Y	
Electrical Room	Y	1	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Mechanical Room	N	-	-	
Break Room	Y	1	Y	Same as training/meeting room
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	Y	Y	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	Y	Y	
Emergency power	N	-	
Fire protection	Y	Y	No sprinklers, only extinguishers
Site drainage	Y	Y	Water into main admin building after heavy rain
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y	Y	Weed control
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	7	Along outside edge of admin building	-
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	N/A	-	-	-

Parking lot	Y	7	Along outside edge of parking lot	Y
Ramps	Y	28	Along outside edge of mainline and ramps	Y
Canopy	Y	18	On the ceiling of canopy	Y

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Phone

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: PTZ, Number: 6, Location: 3 outside the perimeter of administration building, 2 on the east side of canopy, 1 in the storage area west of administration building, Functional (Y/N): Y

I-10 San Simon Outbound (Eastbound) Port of Entry

(only showing data not already included in the I-10 San Simon Inbound (Westbound) Port of Entry Site Assessment Form)

Facility Location

Roadway name: I-10

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 383.06, Credential check stop line: MP 383.21, On-ramp pavement gore: MP 383.57, Stateline: MP 391.23

POE Operations

Hours of operation: Only open occasionally, Days open: Only open occasionally

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 240 vehicles

Inspection and enforcement activities taking place: Varies

2011 Annual Operations

Total outbound vehicles: 0, Checked outbound vehicles: 0, Pre-cleared outbound vehicles: 0

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE exit: Name: Interstate 10 Business, Distance from painted gore to centerline of cross-street: 0.71 miles, Weaving distance: 0.23, Cross-street functional classification: Rural Minor Collector

Nearest cross-street or traffic interchange downstream of POE entrance: Name: N. Cavot Rd., Distance from painted gore to centerline of cross-street: 7.21 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Rest area off-ramp, Distance away: 4.85 miles downstream

Distance to State line: 8.23 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: 1: US 70, 2: SR 80, 3: Cavot Rd at MP 391, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 5.1

Adjacent land use and ownership: Farmland, privately owned

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Three-platform static scale (12’ x 10’, 20’, and 60’)	Adjacent to existing building	N
LCS associated with static scale	On the left curb of static scale lane, outside existing building	N

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable Message Sign (CMS) ☐ or Flip sign ☐ Location: Sand barrels blocking off-ramp entrance, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): None

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 24’, Length (between off- and on-ramp): 1.57 miles, Shoulder Width: 10’, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 149′, Stopping sight distance: 663′ Total length: 812′, Number of lanes: 1, Width: 16′, Shoulder Width: 3-12′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 1,476′, Total length: 1,955′, Number of lanes: 1, Width: 14′, Shoulder Width: 2-6′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/static scale lane	1	458	12	-	Concrete	-	Y
Truck bypass lane	1	506	14	-	Concrete	-	Y

Site Layout

Credential check booth: Number: 1, Location: Adjacent to static scale, Functional (Y/N): Y, Features:

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Outside existing building to the south, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Outside credential booth/building to the north, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck inspection/permit	7	90’ x 14’	Downstream of the static scale lane and bypass lane, on the edge of the pavement.	Y

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	On the south side of site vicinity and in the median	Y
Chainlink fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	Y	8	Aligned to block the entry of off-ramp	Y
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1954

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Customer window	Y	1	Y	
Employee Area				
Workstations	Y	1	Y	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	Y	Y	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	-	
Site lighting	Y	Y	

Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	3	Along outside edge of admin building	Y
Sidewalk/pedestrian path	N	-	-	-
Parking lot	Y	4	Along outside edge of parking areas	-
Ramps	Y	12	Along outside edge of ramps	-

Communication methodology to off-site screening features: None

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Phone

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: PTZ, Number: 1, Location: Adjacent to static scale, Functional (Y/N): Y

Sanders

I-40 Sanders Inbound (Westbound) Port of Entry

Facility Location

Roadway name: I-40

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 341.35, Credential check stop line: MP 341.56, On-ramp pavement gore: MP 340.15, Stateline: MP 359.65

County: Apache County

Nearest town or city: Name: Sanders, Distance away: 0.84 miles to the southwest

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 15,152, K Factor: 9%, T Factor: 47.5%, D Factor: 57%

POE Operations

Hours of operation: 17 hours, Days open: All days except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	3	2
Officer	4	2
Customer Service Rep.	9	2

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 240 vehicles

Inspection and enforcement activities taking place: Credentials, weight, height, CVSA inspection

Other agencies/entities sharing facilities: None at this time

2011 Annual Operations

Total inbound vehicles: 1,296,655, Checked inbound vehicles: 394,704, Pre-cleared inbound vehicles: 901,115,

Total inspected vehicles: 339, Total permits issued: 32,161, Weight citations: 380, Credential citations: 1,966

POE Improvements

Available as-builts (projects, type of work, year of construction):

-I-40-5(26), construction from Cedar Point-Houck, 1961

-I-40-5(53), reconstruction catch basins, new gore area paving, new barriers, 1981

-I-40-5(64), plan and profile of weigh station, 1983

-I-40-5(65), Cedar Point TI-3 Hogans, 1985

-IR-40-5(84), plan and profile from Holbrook-Lupton, 1990

-H267901C BID-IM-40-5(93), Cedar Point-New Mexico St. Ln., 1992

-H613901C-IM-HES-040-E(003)B, Querino-Hawthorne, 2006

Programmed/impending improvements (projects, costs): New Chambers POE

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Ortega Rd, Distance from painted gore to centerline of cross-street: 1.21 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Apache County Rd.7080/US 191, Distance from painted gore to centerline of cross-street: 0.63 miles, Weaving distance: 0.35 miles, Cross-street functional classification: Major Collector

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 19.05 miles to the northeast

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Indian 12 to SR 264, SR 61 to US 191, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 9.03

Adjacent land use and ownership: Undeveloped, privately-owned to the south.

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Railroad, topography, and wash

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Weigh-in-motion (WIM) scale with 2 loop detectors and 1 piezo sensor	Mainline outside lane	Y
Automatic Vehicle Classifier (AVC) with 2 loop detectors and 2 piezo sensors	Mainline outside lane	Y
2 loop detectors	Mainline both lanes	Y
Automatic Vehicle Identification (AVI) advance antenna	Mainline outside lane	Y
Overview Camera	Mainline left shoulder	Y
Changeable message sign (CMS)	Mainline right shoulder	N
Overview Camera	Mainline right shoulder	Y
CMS	Mainline right shoulder	N
3 loop detectors associated with CMS	Mainline outside lane	Y
AVI In-Cab Notification antenna	Mainline outside lane	Y
AVC with 2 loop detectors and 2 piezo sensors	Mainline outside lane	Y
2 loop detectors	Mainline both lanes	Y
Overhead LCS	Off-ramp entrance	Y
2 AVI compliance antennas	Mainline both lanes	Y
Overview Camera	Mainline right shoulder	Y
2 Overhead LCS	Off-ramp diverge to static scale lane and truck bypass lane	Y
Slow-speed WIM (SSWIM) scale	On truck bypass lane upstream of credential booth	Y
2 Lane Control Signals (LCS)	Static scale lane and truck bypass lane, one on left curb and one on right shoulder	Y
Three-platform static scale (12’ x 10’, 20’, and 60’)	Adjacent to admin building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☒ or Flip sign ☐ Location: Near off-ramp gore, Functional (Y/N): N

Port running provisions: Existing (Y/N): Y, Mainline ☒ or Ramp ☐, Type: AVC, AVI, SSWIM scale, camera, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Return loop

If this station has both a WIM system and a static scale system, is there a difference between truck weight accuracy? ☒ Yes ☐ No ☐ N/A If yes, describe below:

Accuracy Issue Description: During hail storm, high wind, and rain, WIM becomes less accurate.

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 12.5′, Length (between off- and on-ramp): 2,627′, Shoulder Width: 9.5′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 99′, Stopping sight distance: 913′ Total length: 1,012′, Number of lanes: 1, Width: 12.5′, Shoulder Width: 6′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 462′, Total length: 647′, Number of lanes: 1, Width: 14′, Shoulder Width: 4′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check lane/static scale lane	1	475	14	475	Concrete	N/A	Y
Truck bypass lane	1	475	14	475	Concrete	N/A	Y
Internal circulation lane	1	823	16	823	Concrete	N/A	Y

Site Layout

Credential check booth: Number: 1, Location: Detached from admin building, Functional (Y/N): Y, Features: Stairs, windows on two sides, air conditioning

Administration building location: Inside loop ☐ or Outside loop ☒, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☒ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Outside admin building, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A, ADA-compliant (Y/N): N/A

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck inspection/permit	8	150' x 15'	Downstream of admin building	Y
Automobile (employee/visitor)	~30	-	Southwest of admin building, inside canopy and northeast of canopy	Y
Covered parking (included in auto parking)	5	-	Inside canopy	Y
ADA parking	1	-	In employee parking lot southwest of admin building	N – partially occupied by storage cabinet
Load adjustment parking	5	90' x 12'	In right shoulder of internal circulation lane	Y

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	In the mainline median	Y
Chain link fence	Y	-	Along the right side of off-ramp	Y
Concrete barriers	Y	7	Between credential booth and truck bypass lane, in the perimeter of propane tank	Y
Sand barrels	Y	4	In front of credential check booth	
Flexible tubes	Y	>50	On the left shoulder of off-ramp, along diverge point of off-ramp to credential check lane, along employee parking lot and static scale lane	Y
Cattle guard	N	-	-	-
Guardrail	Y	2	At the entrance and exit of internal circulation lane	Y
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection lane: Existing (Y/N): Y, Number: 2, Width: 14', Length: 300', Vertical clearance: 13'5" and 14'2", Pavement type: Concrete, Location: Adjacent to admin building, Functional (Y/N): Y

Inspection facility: Existing (Y/N): Y – originally Department of Agriculture inspection facility, Type: Enclosed ☐ or Roofed shelter ☒

Feature	Existing (Y/N)	Functional Per POE Staff Input (Y/N)
Enclosed inspection booth	N	N/A
Paved surface slope for drainage	Y	Y
Additional steel/concrete barrier/pillar protection	N	Y
Pavement markings	Y	Y
Overhead signage	Y	Y

Inspection Pit

Existing (Y/N): N, Inspection pit ☐ or Lighted deck ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 30+years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	1	Y	
Restroom	Y	1	Y	
Drinking fountain	N	-	-	
Payphone	N	-	-	
Seating	Y	12	Y	Outside lobby area
Vending machine	Y	1	Y	
Customer window	Y	4	Y	
Employee Area				
File Storage Lockers	N	-	-	
Evidence Custodial Area	N	-	-	
Secure Equipment/Parts Storage Room	N	-	-	
Supplies Storage Room	Y	2	Y	storage trailer and cabinet southwest of admin building
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	Y	1	Y	
Drinking fountain	N	-	-	
Restroom (Men/Women)	Y	1	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Shower/Locker Room	Y	1	Y	Lockers in break room
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	2	Y	
Workstations	Y	5	Y	
Mail/Copy/Fax Area	Y	1	Y	
Telecommunication/Data Room	Y	1	Y	
Electrical Room	N	-	-	
Mechanical Room	Y	1	Y	
Break Room	Y	1	Y	Same as training room
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	Y	Y	Propane tank
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	Y	Y	
Emergency power	N	-	
Fire protection	Y	Y	No sprinklers, only extinguishers
Site drainage	Y	Y	Water into main admin building after heavy rain
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	7	Attached to admin building	Y
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	N/A	-	-	-
Parking lot	Y	3	Truck parking lot	Poor lighting for employee parking lot
Ramps	Y	8	Along outside edge of mainline and ramps, and left side of static scale lane	Y
Canopy	Y	10	Attached to ceiling of canopy	Y
Internal circulation lane	Y	3	Along outside edge	Y

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 5, Location: Outside the perimeter of admin building, Functional (Y/N): Y

I-40 Sanders Outbound (Eastbound) Port of Entry

(only showing data not already included in the I-40 Sanders Inbound (Westbound) Port of Entry Site Assessment Form)

Facility Location

Roadway name: I-40

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 340.12, Credential check stop line: MP 340.26, On-ramp pavement gore: MP 341.43, Stateline: MP 359.63

County: Apache County

Nearest town or city: Name: Sanders, Distance away: 0.84 miles to the southwest

POE Operations

Hours of operation: Only open occasionally, Days open: Only open occasionally

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Varies

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total outbound vehicles: 0, Checked outbound vehicles: 0, Pre-cleared outbound vehicles: 0

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Apache County Rd. 7080/US191, Distance from painted gore to centerline of cross-street: 0.60 miles, Weaving distance: 0.40 miles, Cross-street functional classification: Major Collector

Nearest cross-street or traffic interchange downstream of POE exit: Name: Ortega Rd, Distance from painted gore to centerline of cross-street: 1.25 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 19.26 miles to the northeast

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: US 191 to SR 61, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 6.7

Adjacent land use and ownership: Undeveloped, owned by Navajo Indian Tribe to the north

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Indian tribal lands to the north

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Three-platform static scale (12' x 10', 20', and 60')	Between two existing buildings	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable Message Sign (CMS) ☐ or Flip sign ☒ Location: At off-ramp gore, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Return loop

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 12.5′, Length (between off- and on-ramp): 2,432′, Shoulder Width: 9.5′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 103′, Stopping sight distance: 694′ Total length: 797′, Number of lanes: 1, Width: 12.5′, Shoulder Width: 6-9′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 880′, Total length: 1,036′, Number of lanes: 1, Width: 12′, Shoulder Width: N/A, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Static scale lane	1	220	12	220	Concrete	N/A	Y
Truck bypass lane	1	243	12-15	243	Concrete	N/A	Y
Internal circulation lane	1	550	16	550	Concrete	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: Unknown

Administration building location: Inside loop ☐ or Outside loop ☒, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☒ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Adjacent to static scale, Functional (Y/N): Y, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A, ADA-compliant (Y/N): N/A

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Swing gate

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck inspection/permit	8	90’ x 12’	Northeast of return loop, 4 each side of shoulder	Y, but not marked
Load adjustment parking	3	90’ x 12’	Right shoulder of internal circulation lane	Y

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	On the south side of site vicinity and in the median	Y
Concrete barriers	Y	4	Along the northern perimeter (next to existing building)	Y
Gate	Y	1	Blocking entrance of static scale lane	Y

Inspection Facilities

Inspection building: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 30+ years, Building features: Unknown because building is currently closed

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	

Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	-	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	2	Along northern boundary of site and adjacent to existing building and scale	N/A
Outside inspection building	N/A	-	-	N/A
Sidewalk/pedestrian path	Y	2	Same as lighting for admin building	N/A
Parking lot	N/A	-	-	N/A
Ramps	Y	12	Along outside edge of right shoulders of ramps and truck bypass lane	N/A
Internal circulation lane	Y	3	Along edge of left shoulder	N/A

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: N/A, Location: N/A, Functional (Y/N): N/A

Springerville

Facility Location

Roadway name: US 60

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 386.74, Credential check stop line: MP 386.67, On-ramp pavement gore: MP 386.60, Stateline: MP 401.97

County: Apache County

Nearest town or city: Name: Springerville, Distance away: 1.12 miles to the southeast

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 3,086, K Factor: 15%, T Factor: 9%, D Factor: 51%

POE Operations

Hours of operation: Currently closed, but when last open in 2009, typically open 8 hours a day, Monday-Friday, Days open: N/A

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: None

Other agencies/entities sharing facilities: None

2009 Annual Operations (last year open)

Total inbound vehicles: 3,528, Total outbound vehicles: 3,579, Checked inbound vehicles: 3,528, Checked outbound vehicles: 3,579, Pre-cleared inbound vehicles: 0, Pre-cleared outbound vehicles: 0

Total inspected vehicles: 58, Total permits issued: 285, Weight citations: 13, Credential citations: 48

POE Improvements

Available as-builts (projects, type of work, year of construction):

-Non F 026-2(57) A, roadway construction, 1957

-F-026-2-507, loop detector and reset manhole frame and cover, 1975

-F68(5), cattle guard, fence, and bank protection plans, 1954

-FR-026-2(8), repaving plan, 1992

-F-026-2-514 060 AP 385, roadway reconstruction with landscaping and irrigation, 1994

-AP EGR SS772 01 C, repaving project, 2011

-U-060-F-500 060 AP 383, signing and marking plans, 2004

Programmed/impending improvements (projects, costs): None

Site Vicinity

Mainline: Functional classification: Principal Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Silva Lane, Distance from painted gore to centerline of cross-street: 0.97 miles, Weaving distance: 0.97, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Becker Lake Rd, Distance from painted gore to centerline of cross-street: 0.96 miles, Weaving distance: 0.96 miles, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: Driveways to private properties, Distance away: varies both up and downstream, but less than a mile

Distance to State line: 15.98 miles to the east

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: US 180, US 191, SR 260, Airport Rd/Becker Lake Rd, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 1.9

Adjacent land use and ownership: Mostly undeveloped, some development to the southwest, privately owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): Little Colorado River southeast of site

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

None

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☐ or Flip sign ☒ Location: At inbound off-ramp gore and across from admin building in outbound direction, Functional (Y/N): Y

Port running provisions: Mainline ☐ or Ramp ☐, Type: None, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): U-turn

Mainline and Ramps

Mainline: Directional number of lanes: 1, Gradient: N/A, Width: 12′, Length (between off- and on-ramp): 760′, Shoulder Width: 12′, Pavement type: Asphalt, Posted speed: 50 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 181′, Stopping sight distance: 341′ Total length: 341′, Number of lanes: 1, Width: 12-25′, Shoulder Width: 2-25′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 89′, Total length: 89′, Number of lanes: 1, Width: 34′, Shoulder Width: 7-20′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Inbound credential check lane	1	456	18	-	Asphalt	N/A	Y
Inbound truck bypass lane	1	425	22	-	Asphalt	N/A	Y
Outbound permit parking lane	1	485	18	-	Asphalt	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight Through ☒

Sidewalk: Existing (Y/N): Y, Location: On three sides of admin building, Functional (Y/N): N, ADA-compliant (Y/N): N

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Crosswalk for crossing US 60 to get from the admin building to the outbound permit parking lane, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: N, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit (WB)	3	63' x 18'	Northwest of the admin building	Y
Truck permit (EB)	~5	63' x 18'	In EB permit parking lane	Y
Automobile (employee/visitor)	7	18' x 10'	Southeast of the admin building	Y
ADA parking	1	18' x 14'	Southeast of the admin building	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chain link fence	N	-	-	-
Concrete barriers	Y	2	In front of existing building on the southeast side	Y
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cattle guard	Y	-	Along the eastern perimeter of site vicinity	Y
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection building: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 30+ years, Building features: Building was closed during on-site visit. ADOT reports the facility as being in poor condition and in need of major remodeling in order to be functional.

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	-	

Water/ground well	Y	-	
Telephone communication	Y	-	
Data communication	Y	-	
Electric	Y	-	
Natural gas	N	-	
Heating/cooling – admin building	Y	-	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	-	
Site lighting	Y	-	
Ramp and roadway lighting	Y	-	
Landscaping/irrigation	N	-	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	3	Attached to the perimeter of admin building	N/A
Sidewalk/pedestrian path	Y	3	Attached to the perimeter of admin building	N/A
Parking lot	Y	4	2 streetlights at automobile parking lot; 2 streetlights at truck parking lot	N/A
Ramps	N	-	-	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): N/A, Type: N/A

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: 0, Location: N/A, Functional (Y/N): N/A

Teec Nos Pos

Facility Location

Roadway name: US 160

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 465.33, Credential check stop line: MP 465.19, On-ramp pavement gore: MP 465.13, Stateline: MP 470.73

County: Apache County

Nearest town or city: Name: Teec Nos Pos, Distance away: 0.42 miles to the southeast

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 3,166, K Factor: 12%, T Factor: 5.2%, D Factor: 58%

POE Operations

Hours of operation: 10 hours, Days open: Monday-Friday except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	0	0
Sergeant	0	0
Officer	3	1
Customer Service Rep.	0	0

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: DPS, MVD (functions performed by POE staff)

2011 Annual Operations

Total inbound vehicles: 12,158, Total outbound vehicles: 8,689, Checked inbound vehicles: 10,390, Checked outbound vehicles: 5,451, Pre-cleared inbound vehicles: 1,768, Pre-cleared outbound vehicles: 3,238

Total inspected vehicles: 703, Total permits issued: 10,401, Weight citations: 242, Credential citations: 1,778

POE Improvements

Available as-builts (projects, type of work, year of construction):

-S-427-901, seal coat, 1980

-MG-064-1(13)P 160 AP 465, intersection improvements, 2001

Programmed/impending improvements (projects, costs): None

Site Vicinity

Mainline: Functional classification: Principal Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: US 64, Distance from painted gore to centerline of cross-street: 0.08 miles, Weaving distance: 0.08 miles, Cross-street functional classification: Minor Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: BIA Rd 5059, Distance from painted gore to centerline of cross-street: 0.71 miles, Weaving distance: 0.71 miles, Cross-street functional classification: Local Road

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 5.65 miles to the east

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: US 64 to US 160, Truck restrictions on the bypass routes (Y/N): Y,

Size of site right-of-way (acres): 1.8

Adjacent land use and ownership: Undeveloped, owned by Navajo Indian Reservation

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: Adjacent mobile homes for POE staff

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Portable scales	Typically in WB permit parking lane	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: Approximately 700 feet from the admin building in both directions, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Outbound traffic monitoring provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): U-turn

Mainline and Ramps

Mainline: Directional number of lanes: 1, Gradient: N/A, Width: 12′, Length (between off- and on-ramp): 1,152′, Shoulder Width: 16-20′, Pavement type: Asphalt, Posted speed: 35 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 764′, Stopping sight distance: 764′ Total length: 764′, Number of lanes: 1, Width: 14′, Shoulder Width: 7′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 75′, Total length: 75′, Number of lanes: 1, Width: 17-35′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Permit parking lane (WB)	1	1,000	14	500	Asphalt	35	Y
Permit parking lane (EB)	1	600	14	400	Asphalt	35	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to permit parking lane (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight through ☒

Sidewalk: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A, ADA-compliant (Y/N): N/A

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from POE entrance to parking lot, crosswalk crossing US 160 to get from the admin building to the outbound side, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: N, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole, weather instruments

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit (WB)	8	Varies	3 north of admin building, 5 in permit parking lane	Y
Truck permit (EB)	4	Varies	In permit parking lane	Y
Automobile (employee/visitor)	7	24' x 9'	Adjacent to admin building on west and east sides	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	N	-	-	-
Guardrail	Y	1	In front of admin building on west side	Y

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): N, Estimated facility age: 20+ years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	-	Y	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Restroom	Y	1	Y	
Drinking fountain	Y	1	Y	
Payphone	N	-	-	
Seating	Y	7	Y	+1 testing station
Vending machine	N	-	-	
Customer window	Y	3	Y	2 for POE, 1 for MVD
Employee Area				
File Storage Lockers	Y	2	Y	
Evidence Custodial Area	N	-	-	
Secure Equipment/Parts Storage Room	Y	1	Y	
Supplies Storage Room	Y	1	Y	
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	N	-		
Drinking fountain	Y	1	Y	Same as lobby one
Restroom (Men/Women)	Y	1	Y	Some maintenance issues though
Shower/Locker Room	N	-	-	
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	1	Y	For DPS
Workstations	Y	3	Y	
Mail/Copy/Fax Area	Y	-	Y	
Telecommunication/Data Room	N	-	-	
Electrical Room	N	-	-	
Mechanical Room	N	-	-	
Break Room	N	-	-	
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	Extinguishers only

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	

Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	Y	
Site lighting	Y	Y	Poor lighting
Ramp and roadway lighting	N	-	
Landscaping/irrigation	N	-	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	4	Along outside of admin building	Y
Sidewalk/pedestrian path	Y	2	Floodlight at crosswalk	Y
Parking lot	Y	1	At west end of admin building	Y
Ramps	N	-	-	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: 0, Location: N/A, Functional (Y/N): N/A

Topock

I-40 Topock Inbound (Eastbound) Port of Entry

Facility Location

Roadway name: I-40

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 3.41, Credential check stop line: MP 3.82, On-ramp pavement gore: MP 4.10, Stateline: MP 0

County: Mohave County

Nearest town or city: Name: Topock, Distance away: 8.7 miles to the northwest

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 13,049, K Factor: 10%, T Factor: 38.3%, D Factor: 65%

POE Operations

Hours of operation: 24 hours, Days open: Weekdays except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	3	3
Officer	6	3
Customer Service Rep.	6	3

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, height, CVSA inspection

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total inbound vehicles: 557,936, Checked inbound vehicles: 208,873, Pre-cleared inbound vehicles: 346,905

Total inspected vehicles: 703, Total permits issued: 10,401, Weight citations: 242, Credential citations: 1,778

POE Improvements

Available as-builts (projects, plan/sheet, type of work, year of construction, costs):

-I-40-1 (51) RD, I-40-1 (51)A RD, construction of inspection station 1975 - 1982

-I-40-A-501, IM-040-A(010)A, construction of WIM, AVI, AVC, CMS, cameras 2003 - 2004__

-MA-NH-40-1(70), pavement marking plan 1993

Programmed/impending improvements (projects, costs): Complete reconstruction of POE planned – $1.5 million programmed in FY 2012 for design

Site Vicinity

Mainline: Functional classification: Interstate Freeway

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Needle Mountain Road, Distance from painted gore to centerline of cross-street: 2,930′, Weaving distance: 960′, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: SR 95, Distance from painted gore to centerline of cross-street: 5.54 miles, Weaving distance: N/A, Cross-street functional classification: Principal Arterial

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Oatman-Topock Hwy / Co Hwy 10

Size of site right-of-way (acres): 29.89

Adjacent land ownership: Undeveloped, owned by BLM

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): Wash on eastern edge of study area, Sonoran desert tortoise habitat

Known constraints to potential future expansion of site: Wash and hill on eastern edge of study area

Site Geometry and Features

Screening Features

Screening Feature	Location	Year Installed	Functional (Y/N)
Weigh-in-motion (WIM) scale with 4 loop detectors and 1 piezo sensor	Mainline outside lane, MP 2.98	2003	Y
Automatic Vehicle Identification (AVI) advance antenna	Mainline outside lane, MP 2.98	2003	Y
Overview Camera	Mainline left shoulder, MP 2.98	2003	Y
Overview Camera	Mainline right shoulder, MP 3.15	2002	Y
Changeable message sign (CMS)	Mainline right shoulder, MP 3.16, & MP 3.19	2002	N
3 loop detectors associated with CMS	Mainline outside lane, MP 3.11, MP 3.14, & MP 3.17	2002	Y
AVI In-Cab Notification antenna	Mainline outside lane, MP 3.19	2003	Y
Overview Camera	Mainline right shoulder, MP 3.65	2002	Y
2 AVI compliance antennas	Mainline both lanes, MP 3.65	2002	Y
Automatic Vehicle Classifier (AVC) with 2 loop detectors and 2 piezo sensors	Mainline inside lane, MP 3.65	2002	Y
Three-platform static scale (12' x 10', 20', and 60')	Static scale lane, MP 3.54	Redone in 1987	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or CMS ☒ or Flip sign ☐ Location: Near Needle Mountain Rd On-ramp, Functional (Y/N): Y

Port running provisions: Existing (Y/N): Y, Mainline ☒ or Ramp ☐, Type: AVC, AVI, WIM, camera, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Return loop

If this station has both a WIM system and a static scale system, is there a difference between truck weight accuracy? ☒ Yes ☐ No ☐ N/A If yes, describe below:

Accuracy Issue Description: Accuracy of WIM scale varies and is affected by weather.

Mainline and Ramp

Mainline: Directional number of lanes: 2, Gradient: 0.93%, Width: 70′, Length (between off- and on-ramp): 3,482′, Shoulder Width: 20′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration lane length: 850′, Stopping sight distance: 850′, Number of lanes: 1, Ramp gradient: 0.69% - 3.16%, Width: 22′ - 32′, Length: 1,920′, Shoulder Width: 8′, Pavement type: Asphalt, Posted speed: 35 mph

Mainline on-ramp: Entrance type: Taper, Acceleration lane length: 1,097′, Ramp gradient: -2.77% to -0.8%, Number of lanes: 1, Width: 22′, Length: 2150′, Shoulder Width: 8′, Pavement type: Asphalt, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Static scale lane	1	256	14	256	Concrete	N/A	Y
Truck bypass lane	1	256	18	256	Concrete	N/A	Y
Internal circulation lane	1	1600	22 - 32	1600	Concrete	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☒, Adjacent to static scale (Y/N): Y, Adjacent to inspection bay (Y/N): N

Site circulation direction: Clockwise ☒ or Counterclockwise ☐ or Mixed ☐

Sidewalk: Existing (Y/N): Y, Location: Along perimeter of administration building and connecting to stairs that lead to pedestrian tunnel, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp at end of sidewalk near front of administration building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): Y, Location: between inbound and outbound ports, Functional (Y/N): Y, but not secure; issues with wildlife in tunnel

Other features: Chain link fence with razor wire around employee parking area

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit/inspection	13	Width: 15’, length varies	East of admin building and across scale/bypass lanes	Y
Automobile (employee/visitor)	6/6+	11’ x 20’	East of admin building; visitor parking next to building, employee parking across scale/bypass lanes in a fenced-in dirt lot	Y
Covered parking	0	-	-	-
ADA parking	1	11’ x 20’	East of admin building	Y

Load adjustment parking	0	-	-	-
Parking out of service	0	-	-	-
Truck rest area	0	-	-	-

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	4,180'	Along north side of off-ramp, also serves as perimeter for parking area inside the return loop	Y
Chain link fence	N	-	-	-
Concrete barriers	N	-	-	-
Sand barrels	N	-	-	-
Flexible tubes	N	-	-	-
Cones	Y	6	Between static scale and bypass lane	Y
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection building: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 30+ years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	N	-	-	
Restroom	Y	1	Y	Port-a-potty in dirt within return loop
Drinking fountain	Y	1	Y	
Payphone	N	-	-	
Seating	N	-	-	
Vending machine	Y	1	Y	
Customer window	Y	3	Y	
Employee Area				
File Storage Lockers	Y	1	Y	
Evidence Custodial Area	Y	1	Y	
Secure Equipment/Parts Storage Room	Y	1	Y	Storage room outside admin building
Supplies Storage Room	Y	1	Y	
Maintenance Storage Space/Janitor's	N	-	-	

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Room				
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	N	-	-	
Drinking fountain	Y	1	Y	
Restroom (Men/Women)	Y	1	Y	
Shower/Locker Room	Y	1	Y	4 lockers
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	3	Y	
Workstations	Y	3	Y	
Mail/Copy/Fax Area	Y	2	Y	
Telecommunication/Data Room	N	-	-	
Electrical Room	N	-	-	
Mechanical Room	N	-	-	
Break Room	N	-	-	
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	Fire extinguisher present

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	Water quality is an issue
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	Y	Y	
Fire protection	Y	Y	
Site drainage	Y	Y	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	

Landscaping/irrigation	Y/N	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	9	Attached to the perimeter of admin building	Y
Outside inspection building	N/A	-	-	-
Sidewalk/Pedestrian path	Y	2	On pedestrian stairways to tunnel entrance	Y
Parking lot	Y	3	On the perimeter of parking lot	Y
Ramps	Y	13	Along outside edge of shoulders of ramps and bypass lane	Y
Internal circulation lane	Y	6	Along the edge of left shoulder	Y

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antennas, which communicate wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Radio

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 5, Location: Around perimeter of admin building, Functional (Y/N): Y

I-40 Topock Outbound (Westbound) Port of Entry

(only showing data not already included in the I-40 Topock Inbound (Eastbound) Port of Entry Site Assessment Form)

Facility Location

Roadway name: I-40

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 4.07, Credential check stop line: N/A, On-ramp pavement gore: MP 3.42, Stateline: MP 0

POE Operations

Hours of operation: Only open occasionally, Days open: Only open occasionally

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Varies

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total outbound vehicles: 585, Checked outbound vehicles: 495, Pre-cleared outbound vehicles: 0

Site Vicinity

Nearest cross-street or traffic interchange upstream of POE entrance: Name: SR 95, Distance from painted gore to centerline of cross-street: 5.54 miles, Weaving distance: 960′, Cross-street functional classification: Principal Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: Needle Mountain Road, Distance from painted gore to centerline of cross-street: 2930′, Weaving distance: 528′, Cross-street functional classification: Local Road

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: None

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Three-platform static scale (12’ x 10’, 20’, and 60’)	Credential check/static scale lane, MP 3.78	N
LCS associated with static scale	Left edge of credential check/static scale lane, MP 3.78	N

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable Message Sign (CMS) ☐ or Flip sign ☒ Location: At off-ramp gore, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): None

Mainline and Ramp

Mainline: Directional number of lanes: 2, Gradient: -0.93%, Width: 70′, Length (between off- and on-ramp): 3,528′, Shoulder Width: 20′, Pavement type: Asphalt, Posted speed: 75 mph

Mainline off-ramp: Exit type: Taper, Deceleration lane length: 450′, Stopping sight distance: 450′, Number of lanes: 1, Ramp gradient: 0.67%, Width: 22′-40′, Length: 1472′, Shoulder Width: 8′, Pavement type: Asphalt/Concrete, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration lane length: 1120′, Ramp gradient: -0.5%, Number of lanes: 1, Width: 22′, Length: 2156′, Shoulder Width: 8′, Pavement type: Asphalt/Concrete, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Static scale lane	1	400	14	400	Concrete	N/A	N
Truck bypass lane	1	400	26	400	Concrete	N/A	Y

Site Layout

Administration building location: Adjacent to static scale (Y/N): Y,

Site circulation: Existing (Y/N): N/A,

Sidewalk: Existing (Y/N): Y, Location: South of static scale lane (west of admin building), Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A, ADA-compliant (Y/N): N/A

Tunnel: Existing (Y/N): Y, Location: from outbound side to inbound side, Functional (Y/N): Y

Other features: Concrete barrier blocking static scale

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit/inspection	4	12’ x 90’	On right shoulder of truck bypass lane	Y, but not marked

Barrier

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Concrete barriers	Y	8	Blocking static scale lane	Y
Barricade	Y	7	At the gore area formed by concrete barrier and curb, upstream of static scale	Y
Guard rail	Y	-	Right shoulder of off-ramp	Y

Inspection Facilities

Inspection building: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 30+ years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Customer window	Y	1	Y	
Employee Area				
Restroom (Men/Women)	Y	1	Y	
Workstations	Y	1	N	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Heating/cooling – admin building	Y	Y	
Emergency power	Y	Y	
Fire protection	Y	Y	Fire extinguisher available
Site drainage	Y	Y	
Site lighting	Y	Y	
Ramp and roadway lighting	Y	Y	
Landscaping/irrigation	Y/N	Y	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	3	East of and attached to admin building	Y
Sidewalk/Pedestrian path	Y	1	East of admin building	Y

Parking lot	Y	3	Along outside edge of right shoulder of bypass lane	Y
Ramps	Y	8	Along the right shoulder of ramps	Y

Communication methodology to off-site screening features: None

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 1, Location: Attached to the north side of admin building, Functional (Y/N): N

Yuma (B-8)

Facility Location

Roadway name: B-8

Direction of travel: Southbound

Milepost: Off-ramp pavement gore: MP 0.16, Credential check stop line: MP 0.20, On-ramp pavement gore: MP 0.24, Stateline: MP 0

County: Yuma County

Nearest town or city: Name: Yuma, Distance away: within City limits

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 14,914, K Factor: 12%, T Factor: 4.4%, D Factor: 51%

POE Operations

Hours of operation: 16 hours, Days open: Monday-Friday except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	1	1
Sergeant	0	0
Officer	2	2
Customer Service Rep.	2	2

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, CVSA inspection

Other agencies/entities sharing facilities: None

2011 Annual Operations

Total inbound vehicles: 26,574, Total outbound vehicles: 0, Checked inbound vehicles: 24,594, Checked outbound vehicles: 0, Pre-cleared inbound vehicles: 1,980, Pre-cleared outbound vehicles: 0,

Total inspected vehicles: 46, Total permits issued: 4,350, Weight citations: 20, Credential citations: 99

POE Improvements

Available as-builts (projects, type of work, year of construction):

-N-900-935 008B YU ASP, grading and drainage construction, 1994

-M-950-2-507 008B YU 000, mill and replace AR-ACFC, 1997

-8-B YU 0 H7999 01U, 30% concept report, railroad crossing improvements, 2012

Programmed/impending improvements (projects, costs): Installing vehicle lift and subdividing office space before end of 2012

Site Vicinity

Mainline: Functional classification: Urban Principal Arterial

Nearest cross-street or traffic interchange upstream of POE entrance: Name: I-8 Interchange, Distance from painted gore to centerline of cross-street: 0.29 miles, Weaving distance: 0.29 miles, Cross-street functional classification: Interstate

Nearest cross-street or traffic interchange downstream of POE exit: Name: 1st St., Distance from painted gore to centerline of cross-street: 0.04 miles, Weaving distance: 0.04, Cross-street functional classification: Urban Principal Arterial

Other nearby access points (name, distance away): Name: Driveway on the east side of the road for a park, Distance away: 0.03 miles upstream

Distance to State line: 0.21 miles to the north

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Winterhaven Dr to Quechan Rd to 1st St, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 1.3

Adjacent land use and ownership: Undeveloped, owned by BLM

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): Park, canal, Yuma Quartermaster Depot historic site

Known constraints to potential future expansion of site: Railroad, park, canal, historic site, B-8

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Single-platform static scale (12' x 10')	In lane next to admin building	Y
Green/red control light associated with static scale	By lane next to admin building, at back of building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: In front of the admin building, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Outbound traffic monitoring provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Vehicles must back up through bypass lane

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 25′, Length (between off- and on-ramp): 594′, Shoulder Width: 25′, Pavement type: Asphalt, Posted speed: 35 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 246′, Stopping sight distance: 246′ Total length: 246′, Number of lanes: 1, Width: 12-40′, Shoulder Width: 0-2′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 168′, Total length: 168′, Number of lanes: 1, Width: 43′, Shoulder Width: 8′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/scale lane	1	150	12	150	Concrete	N/A	Y
Truck bypass lane	1	150	15	150	Concrete	N/A	Y
Truck permit parking lane	1	150	20	150	Concrete	N/A	Y
Employee/visitor parking lane	1	200	15	200	Concrete	N/A	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight Through ☒

Sidewalk: Existing (Y/N): Y, Location: Around admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from admin building to ADA-accessible parking space, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpoles

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	3	Varies	Along truck permit parking lane	Y
Automobile (employee/visitor)	5	Varies	Along employee/visitor parking lane	Y
ADA parking	1	24’ x 10’	North of the admin building	Y, but poor pavement condition

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	Y	-	West side of site	Y
Chain link fence	Y	-	West side of site	Y
Concrete barriers	N	-	West edge of site next to Redondo Center Drive on-ramp	Y
Sand barrels	Y	1	Upstream of admin building	Y
Flexible tubes	N	-	-	-
Cattle guard	N	-	-	-
Railroad tracks	Y	1	Diagonally across inbound approach	N

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 40+ years

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	N	-	-	
Restroom	N	-	-	
Drinking fountain	Y	1	Y	Water doesn't taste good
Payphone	N	-	-	
Seating	Y	6	Y	
Vending machine	Y	1	Y	
Customer window	Y	2	Y	Different heights
Employee Area				
File Storage Lockers	Y	1	Y	
Evidence Custodial Area	N	-	-	
Secure Equipment/Parts Storage Room	Y	1	Y	
Supplies Storage Room	N	-	-	
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	N	-	-	
Drinking fountain	N	-	-	
Restroom (Men/Women)	Y	4/3	Y	
Shower/Locker Room	N	-	-	
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	1	Y	Being split into 2 offices by end of 2012
Workstations	Y	2	Y	
Mail/Copy/Fax Area	Y	1	Y	
Telecommunication/Data Room	Y	1	Y	Closet

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Electrical Room	N	-	-	
Mechanical Room	N	-	Y	
Break Room	N	-	-	
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	Water doesn't taste good
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	Y	N	Crushed pipe causes pooling
Site lighting	Y	Y	Poor lighting at night
Ramp and roadway lighting	N/Y	Y	Poor lighting at night
Landscaping/irrigation	Y/Y	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	3	Along truck permit parking lane	Poor
Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	Y	16	Mounted on admin building	Poor
Parking lot	N	-	-	-

Ramps	N	-	-	-

Communication methodology to off-site screening features: N/A

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Shares office with DPS

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 4, Location: 4 corners of admin building, Functional (Y/N): Y

Yuma (I-8)

I-8 Yuma Inbound (Eastbound) Port of Entry

Facility Location

Roadway name: I-8

Direction of travel: Eastbound

Milepost: Off-ramp pavement gore: MP 0.89, Credential check stop line: MP 1.17, On-ramp pavement gore: MP 1.49, Stateline: MP 0

County: Yuma County

Nearest town or city: Name: Yuma, Distance away: within City limits

Mainline Traffic Data

Existing (2011) mainline traffic data: AADT: 20,397, K Factor: 12%, T Factor: 14.8%, D Factor: 58%

POE Operations

Hours of operation: 16 hours, Days open: All days except Thanksgiving day, Christmas day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	0	0
Sergeant	3	3
Officer	6	3
Customer Service Rep.	7	3

Estimated hourly credential processing capacity: Per booth: 120 vehicles, Total for site: 120 vehicles

Inspection and enforcement activities taking place: Credentials, weight, height, CVSA inspection

Other agencies/entities sharing facilities: ADOT DPS

2011 Annual Operations

Total inbound vehicles: 133,915, Checked inbound vehicles: 65.531, Pre-cleared inbound vehicles: 68,340,

Total inspected vehicles: 342, Total permits issued: 25,023, Weight citations: 72, Credential citations: 668

POE Improvements

Available as-builts (projects, type of work, year of construction):
-I-IG-8-1(62), roadway construction, 1979
-I-8-1(69), signing plan sheets, 1979
-I-8-1-502, repaving project, 1980
-I-8-1(67), landscaping and irrigation plans, 1985
-IM-8-1(98) 008 YU 000, sign rehabilitation and update, 1998
-MG-8-1(112)P 008 YU 001, landscape and irrigation plans, 2002_
Programmed/impending improvements (projects, costs): Reconstruction of POE planned - $2.5 million programmed in FY 2017 for final design

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Exit 1: Redondo Center Dr, Distance from painted gore to centerline of cross-street: 0.23 miles, Weaving distance: N/A, Cross-street functional classification: Local Road

Nearest cross-street or traffic interchange downstream of POE exit: Name: Exit 2: US 95 (16th St), Distance from painted gore to centerline of cross-street: 0.74 miles, Weaving distance: 0.44 miles, Cross-street functional classification: Principal Arterial

Other nearby access points (name, distance away): Name: Connection between Redondo Center Dr on-ramp and POE credential check/scale lane, Distance away: 400′ upstream of admin building

Distance to State line: 0.89 miles to the north

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: Quechan Rd, Redondo Center Dr, 16th St/US 95, Giss Pkwy, Truck restrictions on the bypass routes (Y/N): Y, on the Redondo Center Dr exit

Size of site right-of-way (acres): 6.9

Adjacent land use and ownership: Undeveloped, privately-owned ADOT-owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): None

Known constraints to potential future expansion of site: I-8 and Redondo Center Drive on-ramp

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Single-platform static scale (12' x 10')	In lane next to admin building	Y
Automatic Vehicle Identification (AVI) In Cab Notification PrePass antenna	1 mile upstream of admin building	Y
Single-platform static scale (12' x 10')	In lane next to admin building, at front of building	Y
Green/red control light associated with static scale	Over lane next to admin building, at back of building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: One approaching gore, one at gore, and one at scale, Functional (Y/N): Y

Port running provisions: Existing (Y/N): N, Mainline ☐ or Ramp ☐, Type: N/A, Functional (Y/N): N/A

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Vehicles must back up through bypass lane

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 24′, Length (between off- and on-ramp): 3,182′, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 65 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 620′, Stopping sight distance: 620′ Total length: 620′, Number of lanes: 1, Width: 12-16′, Shoulder Width: 2-5′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 1,105′, Total length: 1,411′, Number of lanes: 1, Width: 12′, Shoulder Width: 2′-5′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/scale lane	1	773	12	400	Concrete	5	Y
Oversize truck lane	1	260	16	260	Concrete	5	Y

Truck bypass lane	1	260	12	260	Concrete	5	Y

Site Layout

Credential check booth: Number: 0, Location: N/A, Functional (Y/N): N/A, Features: N/A

Administration building location: Inside loop ☐ or Outside loop ☐, Adjacent to static scale (Y/N): Y,

Site circulation direction: Clockwise ☐ or Counterclockwise ☐ or Mixed ☐ or Straight Through ☒

Sidewalk: Existing (Y/N): Y, Location: Around admin building, Functional (Y/N): Y, ADA-compliant (Y/N): N – too narrow in several spots

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from admin building to employee and truck parking lots, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Tunnel: Existing (Y/N): N, Location: N/A, Functional (Y/N): N/A

Fire hydrant: Number: 0, Location: N/A, Functional (Y/N): N/A

Other features: Flagpole

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Truck permit	13	137' x 42'	North of the admin building	Y
Automobile (employee/visitor)	9	24' x 9'	3 north and 6 south of the admin building	Y
ADA parking	1	24' x 10'	North of the admin building	Y
Parking out of service	2	-	Concrete shoulder south of the admin building	Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Barbwire fence	N	-	-	-
Chain link fence	Y	-	West edge of site next to Redondo Center Drive on-ramp	Y
Concrete barriers	Y	-	West edge of site next to Redondo Center Drive on-ramp	Y
Sand barrels	Y	12	West edge of credential check/scale lane	Y

Flexible tubes	Y	4	Employee/visitor parking lot	Y
Cattle guard	N	-	-	-
Railroad tracks	N	-	-	-

Inspection Facilities

Inspection facility: Existing (Y/N): N, Enclosed ☐ or Roofed shelter ☐

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1970s

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Kiosk distributing public information	Y	1	Y	Brochures
Restroom	N	-	-	
Drinking fountain	Y	2	Y	Water doesn't taste good
Payphone	N	-	-	
Seating	Y	3	Y	
Vending machine	Y	1	Y	
Customer window	Y	3	Y	Different heights
Employee Area				
File Storage Lockers	Y	1	Y	
Evidence Custodial Area	N	-	-	
Secure Equipment/Parts Storage Room	Y	4	Y	
Supplies Storage Room	Y	1	Y	Several closets
Maintenance Storage Space/Janitor's Room	Y	1	Y	
Laboratory/Testing Space	N	-	-	
Training/Meeting Room	N	-	-	
Drinking fountain	N	-	-	
Restroom (Men/Women)	Y	1/1	Y	
Shower/Locker Room	N	-	-	
Prisoner Cell	N	-	-	
Interview Room	N	-	-	
Offices	Y	3	Y	DPS + 3 Sgts. moving to back room office soon

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Workstations	Y	7	Y	
Mail/Copy/Fax Area	Y	1	Y	
Telecommunication/Data Room	Y	1	Y	Connected to outbound POE
Electrical Room	Y	1	Y	
Mechanical Room	Y	1	Y	
Break Room	Y	1	N	Closet
Emergency Generator	N	-	-	
Fire Protection Sprinklers	N	-	-	

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	Water doesn't taste good
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Natural gas	N	-	
Heating/cooling – admin building	Y	Y	
Heating/cooling – inspection building	N/A	-	
Heating/cooling – credential booth	N/A	-	
Emergency power	N	-	
Fire protection	N	-	
Site drainage	N	-	
Site lighting	Y	Y	Poor lighting at night
Ramp and roadway lighting	N	-	
Landscaping/irrigation	Y	Y	
Renewable energy features	N	-	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	5	Mounted on admin building	Poor

Outside inspection building	N/A	-	-	-
Sidewalk/pedestrian path	Y	5	Mounted on admin building	Poor
Parking lot	Y	2	At front and back of admin building	Poor
Ramps	N	-	-	-

Communication methodology to off-site screening features: Copper wire in conduits for all except AVI antenna, which communicates wirelessly via radio

Inter-communications with local law enforcement: Existing (Y/N): Y, Type: Shares office with DPS

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): Y, Type: Dome, Number: 7, Location: 4 corners of admin building, Functional (Y/N): Y, but 2 are foggy

I-8 Yuma Outbound (Westbound) Port of Entry

(only showing data not already included in the I-10 Ehrenberg Inbound (Eastbound) Port of Entry Site Assessment Form)

Facility Location

Roadway name: I-8

Direction of travel: Westbound

Milepost: Off-ramp pavement gore: MP 1.20, Credential check stop line: MP 1.44, On-ramp pavement gore: MP 1.66, Stateline: MP 0

POE Operations

Hours of operation: Typically 8 hours when open, Days open: Varies, but often Monday-Friday day

Positions	Number of employees	Shifts
Current staffing		
Lieutenant	0	0
Sergeant	0	0
Officer	1	1
Customer Service Rep.	1	1

Estimated hourly credential processing capacity: Per booth: 60 vehicles, Total for site: 60 vehicles

Other agencies/entities sharing facilities: None

2011 Annual Operations

Pre-cleared outbound vehicles: 669, Checked outbound vehicles: 47,078, Total outbound vehicles: 47,963

Site Vicinity

Mainline: Functional classification: Interstate

Nearest cross-street or traffic interchange upstream of POE entrance: Name: Exit 2: US 95 (16th St), Distance from painted gore to centerline of cross-street: 0.58 miles, Weaving distance: 0.24 miles, Cross-street functional classification: Principal Arterial

Nearest cross-street or traffic interchange downstream of POE exit: Name: Exit 1: Giss Pkwy, Distance from painted gore to centerline of cross-street: 0.48 miles, Weaving distance: 0.25 miles, Cross-street functional classification: Minor Arterial

Other nearby access points (name, distance away): Name: None, Distance away: N/A

Distance to State line: 1.66 miles to the west

Alternate route around POE (truck usage to bypass port) (Y/N): Y, Bypass route names: 16th St/US 95, Giss Pkwy, Truck restrictions on the bypass routes (Y/N): N,

Size of site right-of-way (acres): 4.6

Adjacent land use and ownership: Undeveloped, privately owned

Environmental features within or adjacent to site (e.g., river, cultural site, Hazmat site, etc.): N/A

Known constraints to potential future expansion of site: I-8

Site Geometry and Features

Screening Features

Screening Feature	Location	Functional (Y/N)
Single-platform static scale (12' x 10')	In lane next to admin building, at front of building	Y
Green/red control light associated with static scale	Over lane next to admin building, at back of building	Y

Other Features

Advanced signage indicating if port is open: Existing (Y/N): Y, Type: Flashing lights ☐ or Changeable message sign (CMS) ☐ or Flip sign ☒ Location: Near off-ramp gore, Functional (Y/N): Y

Provision for monitoring vehicles that fail credential check or inspection (return traffic): Vehicles must back up through bypass lane

Mainline and Ramps

Mainline: Directional number of lanes: 2, Gradient: N/A, Width: 24′, Length (between off- and on-ramp): 2,692′, Shoulder Width: 10′, Pavement type: Asphalt, Posted speed: 65 mph

Mainline off-ramp: Exit type: Taper, Deceleration length: 1,023′, Stopping sight distance: 1,023′ Total length: 1,023′, Number of lanes: 1, Width: 12-26′, Shoulder Width: 6′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Mainline on-ramp: Entrance type: Taper, Acceleration length: 1,143′, Total length: 1,143′, Number of lanes: 1, Width: 14-22′, Shoulder Width: 5-8′, Pavement type: Asphalt, Ramp gradient: N/A, Posted speed: N/A

Site Laneage

Type of Lane	# of Lanes	Length (ft)	Width (ft)	Storage Length (ft)	Pavement Type	Posted Speed (mph)	Functional (Y/N)
Credential check/scale lane	1	400	12	200	Concrete	N/A	Y
Oversize truck lane	1	216	16	216	Concrete	N/A	Y
Truck bypass lane	1	216	12	216	Concrete	N/A	Y

Site Layout

Sidewalk: Existing (Y/N): Y, Location: Around admin building, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Pedestrian ramps and crosswalks, Existing (Y/N): Y, Location: Ramp from admin building to employee parking lot, Functional (Y/N): Y, ADA-compliant (Y/N): Y

Parking

Type of Parking	Number	Size	Location	Functional (Y/N)
Automobile (employee/visitor)	5	24’ x 9’	2 north and 3 south of the admin building.	Y
ADA parking	1	24’ x 10’		Y

Barriers

Barrier Feature	Existing (Y/N)	Number	Location	Functional (Y/N)
Swing gate	Y	-	In advance of static scale	Y
Chain link fence	Y	-	East side of admin building	Y

Administration Building

Administration Building: Existing (Y/N): Y, Estimated facility age: 1970s

Building Feature	Existing (Y/N)	Number	Functional Per POE Staff Input (Y/N)	Other Notes
Lobby/Public Area				
Seating	Y	4	Y	-
Vending machine	Y	1	Y	Will relocate to inbound side soon
Customer window	Y	2	Y	Need to flip lobby and employee area so employees can see trucks coming
Employee Area				
Supplies Storage Room	Y	1	Y	-
Restroom (Men/Women)	Y	2/1	Y	-
Workstations	Y	3	Y	-

Utilities

Utilities	Existing (Y/N)	Functional Per POE Staff Input (Y/N)	Other Notes
Sewer/septic	Y	Y	
Water/ground well	Y	Y	
Telephone communication	Y	Y	
Data communication	Y	Y	
Electric	Y	Y	
Heating/cooling – admin building	Y	Y	
Site lighting	Y	Y	
Landscaping/irrigation	Y	Y	

Communications and Security

Lighting

Location	Existing (Y/N)	Number	Location	Functional Per POE Staff Input (Y/N)
Outside admin building	Y	2	Mounted on admin building	Poor
Sidewalk/pedestrian path	Y	2	Mounted on admin building	Poor
Parking lot	N	-		
Ramps	N	-		

Communication methodology to off-site screening features: Copper wire in conduits

Inter-communications with local law enforcement: Existing (Y/N): N, Type: N/A

Closed-Circuit Television Cameras (CCTV): Existing (Y/N): N, Type: N/A, Number: N/A, Location: N/A, Functional (Y/N): ______

Appendix F: Port of Entry Facilities Photos

This Appendix contains all of the additional photos that were taken by the technical team during their site visits. All pictures in this section are photographs of the inbound port facilities, unless otherwise noted. For sites that had both inbound and outbound facilities, photos of the outbound facilities are provided and labeled accordingly. All photographs will be provided in DVD format, along with any videos taken as part of the on-site assessments, at the end of the project.

The sites are listed in alphabetical order.

F.1 Duncan

Admin Building

Static Scale and LCS

Bidirectional Scale Lane and Bypass Lane

Outbound Truck Entrance

Outbound Credential Check Lane

Pedestrian Ramp Outside Admin Building

Storage Facilities

Utility Box

On-ramp for Inbound Trucks and Entry for Outbound Trucks	Off-ramp for Inbound Trucks and Exit for Outbound Trucks
	
Outbound Truck Lane Assignment Sign	**Outbound Truck Scale Clearance Sign**
 	

Ehrenberg

Truck Queues on Credential Check Lane

Credential Booth with LCS

Trucks on Static Scale Lane

Credential Check and Static Scale

Inbound Administration Building

Employee Parking (Former Agriculture Check)

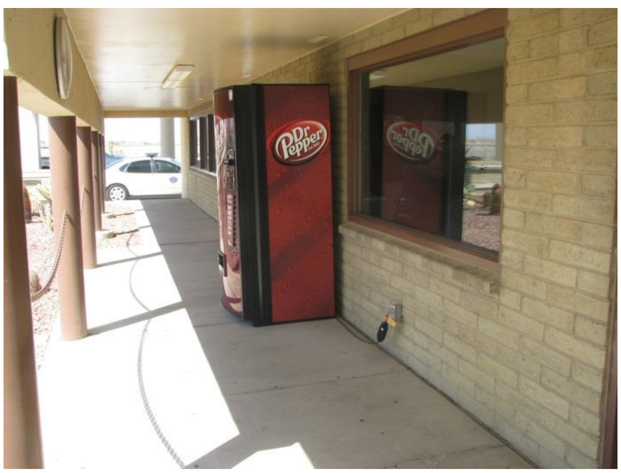
LCS Associated with Static Scale

Employee Parking Lot

Storage Building and Truck Parking

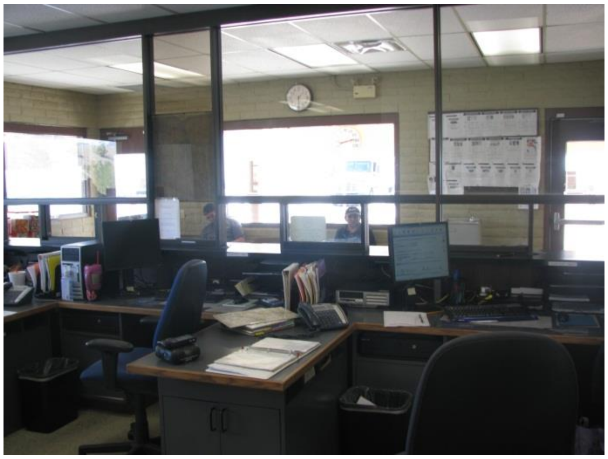
Return Loop Entrance

Patio of Administration Building



Main Control Room/Weigh Room

Customer Service Windows



Office

Outbound POE

Outbound Static Scale

Outbound Administration Building

Outbound Pedestrian Tunnel Entrance

Fredonia

Fredonia POE Pedestrian Entrance

SB Permit Parking Lanes

NB Permit Parking Lane

Crosswalk from NB Permit Parking Lane

Guardrail at End of Crosswalk

Green/Red Control Signal and Loudspeaker

ADA-accessible Parking Space and Ramps

Gravel Area Behind Admin Building

Back of Admin Building

POE Entry Signage

Figure 1 – POE Advance Signage at US 89A/SR 389

Figure 2 – Signage at NB Permit Parking Lane

Kingman

SSWIM Scale on Inbound Off-ramp

SSWIM Scale

Inbound Lane Control Signal

Credential Check/Scale Lane and Bypass Lane

Camera on US 93 SB Mainline

Return Loop

Employee/Visitor Parking Lot

Return Loop and Truck Parking Lot

Inspection Facility

Inspection Pit

Entrance to Inspection Pit

Sidewalks outside Admin Building

Garage and Storage Room

Emergency Shower and Eye Wash Facility

Drainage Wash Within POE

Front Lobby and Customer Service Windows

Credential and Weight Check Screen

Conference Room/Break Room

Page

Page POE Pedestrian Entrance	South (POE) Parking Lot
	
North (MVD) Parking Lot	**Static Scale at Inbound POE**
	

Credential/Scale Lane with Concrete Divider

Green/Red Control Signal at Scale

NB Truck Driver Using Crosswalk

NB Permit Parking Lanes

Dip in Pavement Where Water Pools

Poor Pavement Condition

Erosion Issue From Adjacent land

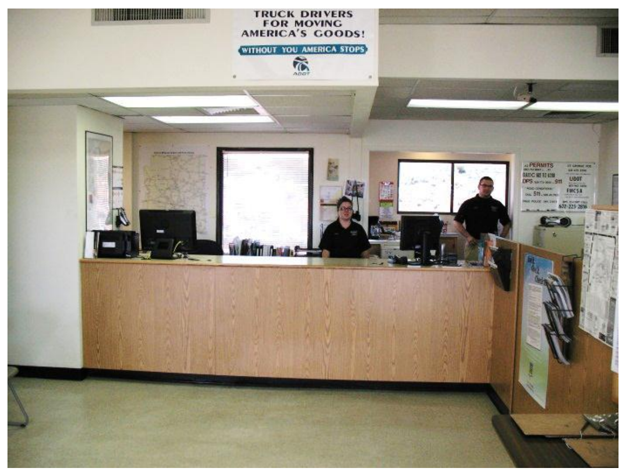
POE Entry Signage

Pedestrian Warning Signage and Beacons

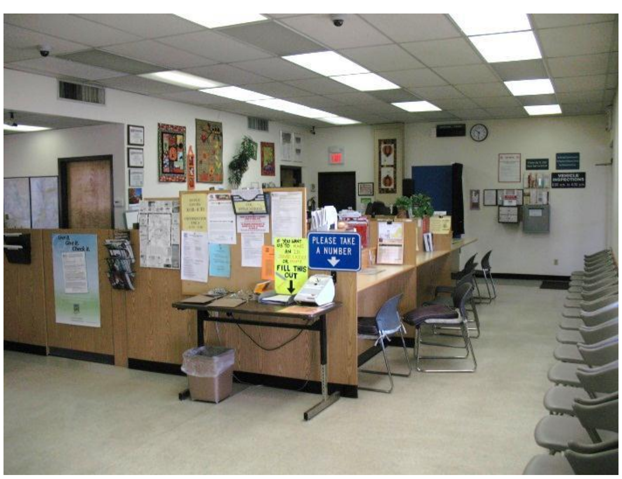
NB Truck Performing U-turn

Admin Building Window Overlooking Scale

POE Counter and Windows



MVD Windows and Seating



Portable Scales

Parker

Inbound POE Entry Signage

SR 95S Inbound Off-ramp to POE

Inbound POE Off-ramp

Admin Building and Static Scale

Red/Green Signal Downstream of Scale

Truck Parking Lot and On-ramp

Employee/Visitor Parking Lot

Pedestrian Warning Signage and Beacons

Inspection Canopy and Crosswalk

Admin Building Entrance and Signage

Truck Inspection Lanes

Outbound Truck Permit Parking Lanes

St. George

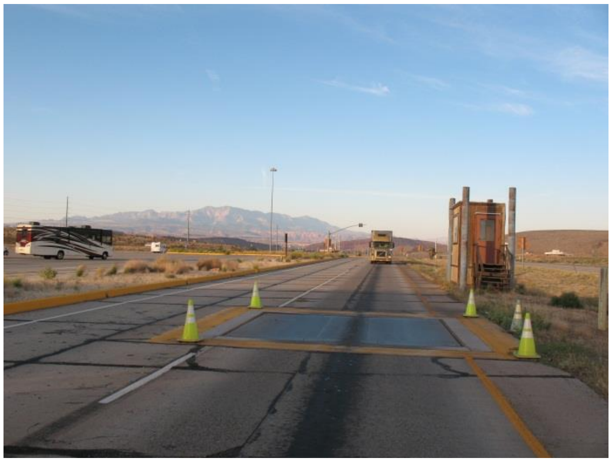
SSWIM Scale on Inbound Off-ramp

WIM

Lane Control Signal on Inbound Off-ramp

Static Scale at Inbound POE

Static Scale and Abandoned Credential Booth



Landscaping

Inbound Administration Building

Return Loop to Inspection Facility

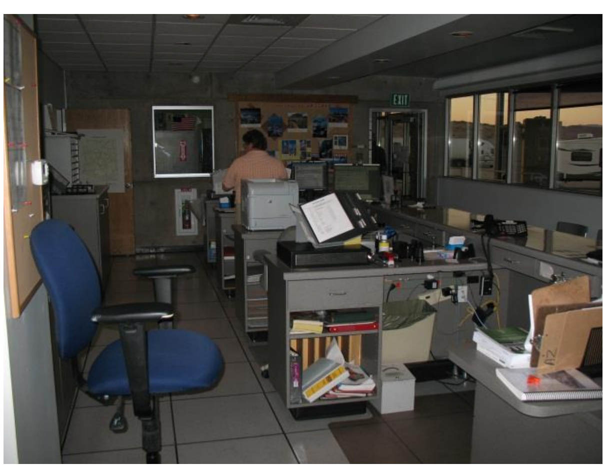
Inspection Facility

Inspection Pit

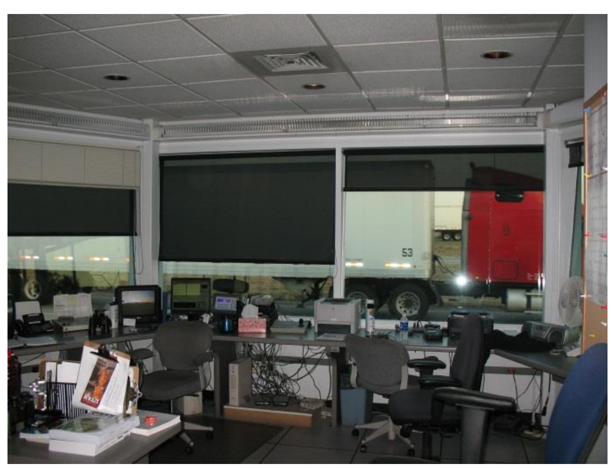
Overflow Parking

Truck Parking

Customer Service/Permit Counter



Main Control Room



IRD WIM/LCS Panel

Employee Parking

Return Loop and Additional Truck Parking

Truck Return Loop

San Simon

Static Scale with LCS and Overhead CMS

Truck Weighed on Static Scale

Oversize Truck Lane

Credential Booth

Scale House Attached to Admin Building	Railroad Track Adjacent to Site
	

Admin Building and Canopy	Mobile Enforcement Equipment
	

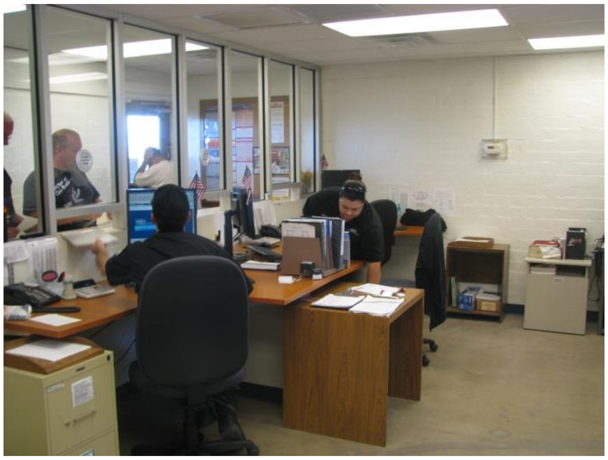
Storage Facilities and Truck Parking

Stored Equipment

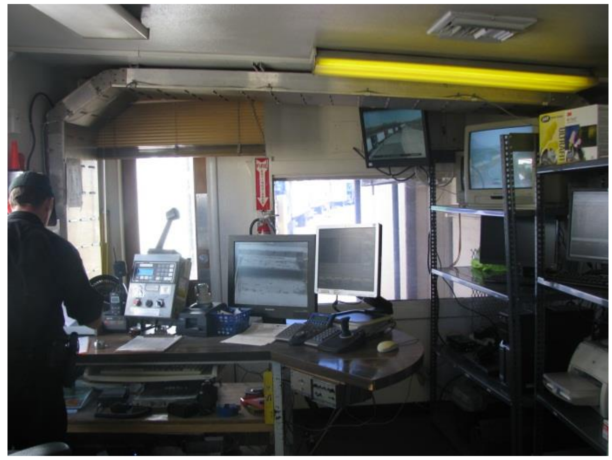
Inside Canopy

Customer Lobby

Customer Service Windows



Inside Scale House



Conference/Break Room

Outbound Existing Buildings

Outbound Static Scale and LCS	Outbound Truck Parking Area
	

Sanders

Inbound Static Scale Lane and Admin Building

Inbound Static Scale

Inbound Oversize Truck Lane and Booth

Truck Being Weighed and Checked

Slow Speed WIM and LCS Upstream of Booth	Inbound Off-ramp
	

Overhead LCS on Inbound Off-ramp	Inbound Return Loop Entrance
	

Inbound Truck Parking Lot

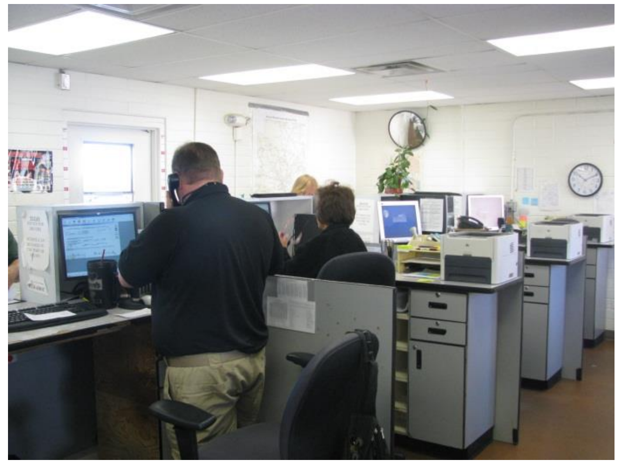
Employee/Visitor Parking and Storage Facility

Propane Gas Tank

Storage Facility

Canopy Structure Attached to Admin Building

Inbound Customer Service Area



Inbound Office

Outbound Existing Buildings and Static Scale

Outbound Scale Lane Closed by Gate	Railroad Track near Outbound POE
	

Springerville

Front of Admin Building

Side of Admin Building

Inbound Credential Check Lane

Truck Parking Lot

POE On-ramp to US 60

Inbound Truck Bypass Lane

Driver Testing Area

Crosswalk from Outbound Permit Parking Lane

Truck Parked on Inbound Shoulder

Storage Facilities

ADA Parking Space

Outbound POE Entry Signage

Teec Nos Pos

Teec Nos Pos POE Admin Building

Inbound Permit Parking Lane

Outbound Permit Parking Lane

Portable Scales in Permit Parking Lane

Employee/Visitor Parking Spaces

Truck Parking Spaces

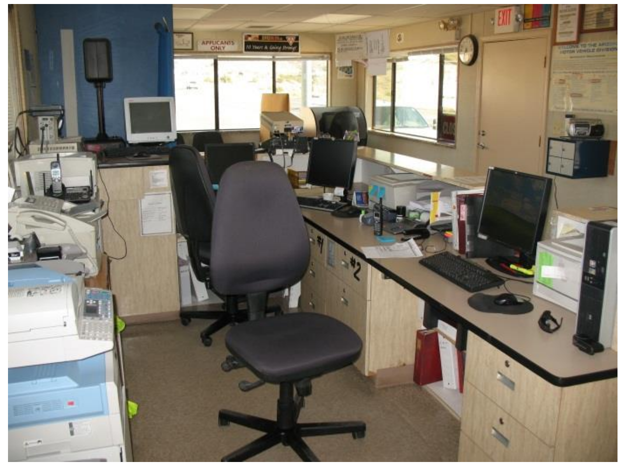
Advance Pedestrian Warning Signage

Crosswalk at Admin Building Across US 160

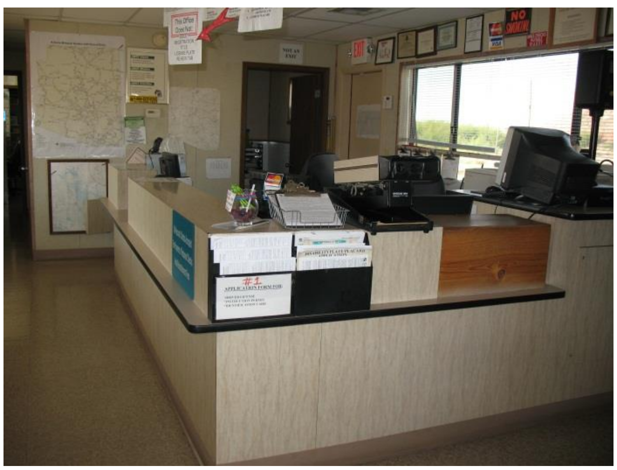
POE Entry Signage	Signage at Inbound Permit Parking Lane
	
Housing for POE Staff	**MVD Driver Testing Area**
	

Pedestrian Entrance to Admin Building

POE Counter and Windows

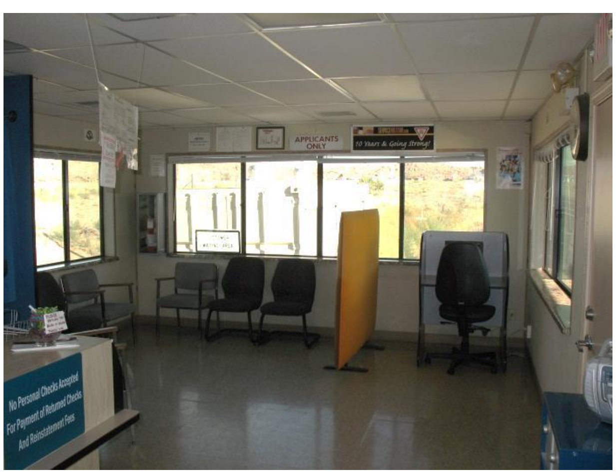


MVD Counter and Window



Truck Driver at POE Counter

MVD Lobby and Seating Area



DPS Office

Topock

Inbound Mainline Screening Infrastructure 	**Inbound Mainline Compliance Infrastructure** 
Front of Admin Building 	**Static Scale and Height Measuring Device** 

Inbound Scale Lane and Bypass Lane

Inbound Truck Queue Backed Up

Office Trailer Next to Admin Building

Scale and Parking Lots

Truck Re-entering from Return Loop

Sidewalk to Pedestrian Tunnel Entrance

Admin Building Security Camera and Lighting

Customer Service Windows

Interior of Credential Checking Booth

Outbound POE Admin Building

Outbound Static Scale and Concrete Barriers

Outbound Credential Lane and Bypass Lane

Emergency Power Generator for the POE	Pedestrian Tunnel Connecting EB/WB POEs
	

Yuma (B-8)

Inbound Truck in Credential Check/Scale Lane

Inbound Lanes at Admin Building

Inbound Static Scale West of Admin Building

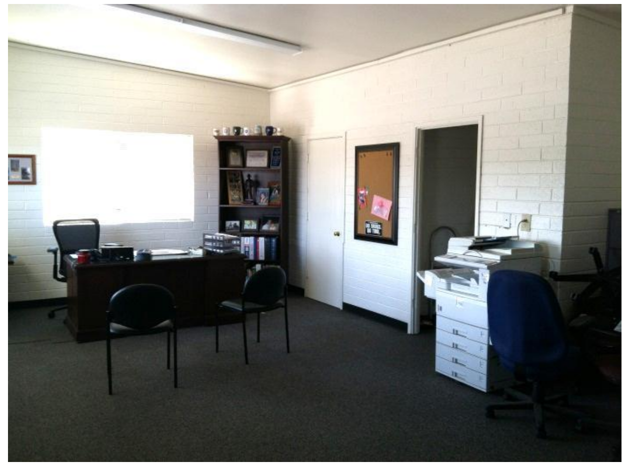
Lane Control Signal Downstream of Scale

Railroad Tracks Across Inbound Approach

Employee/Visitor Parking Lane

ADA-accessible Parking Space

Signage at Scale and Pedestrian Entrance

Customer Service Windows	Office of Lieutenant
	
Outdoor Employee Restrooms	**Truck Permit Parking Lane Signage**
	

Yuma (I-8)

I-8 EB Trucks in Credential Check/Scale Lane

I-8 EB Oversize Lane and Adjacent On-ramp

I-8 EB POE Static Scale West of Building

Connection from On-ramp to I-8 EB POE

I-8 EB POE Administration Building

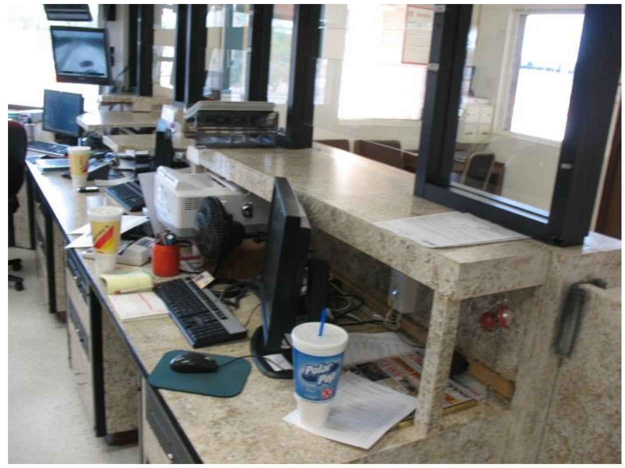
I-8 EB POE Bypass Lane East of Building

I-8 EB POE ADA-accessible Parking Space

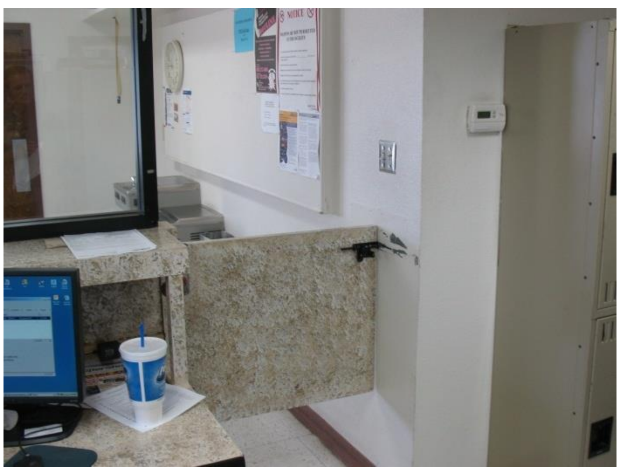
I-8 EB POE Truck Parking Lot

I-8 EB POE Out-of-service Parking

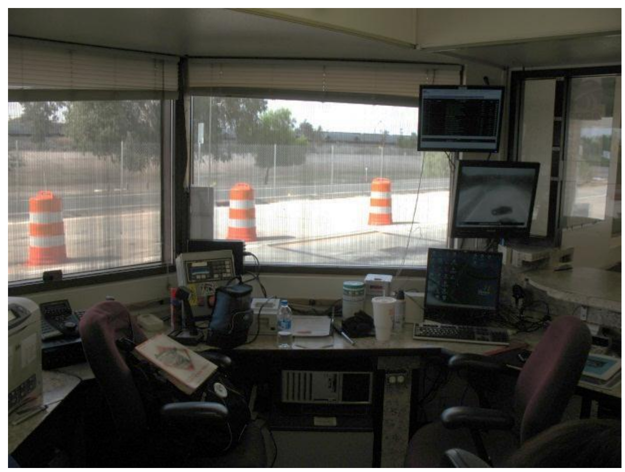
I-8 EB Admin Building Customer Windows



I-8 EB Admin Building Unsecure Swing Gate



I-8 EB Admin Building Main Control Room



Skid Marks at I-8 WB POE Off-ramp

Trucks Queued at I-8 WB POE

I-8 WB POE Bypass Lane West of Building

Truck Being Weighed at I-8 WB POE

I-8 WB POE Employee/Visitor Parking Spaces	I-8 WB POE Admin Building Interior