General Services Administration

Final Environmental Impact Statement

Expansion and Modernization of the San Luis I Land Port of Entry San Luis, Arizona

Prepared for:

General Services Administration

Submitted by:

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October 2020

Cover Sheet

Responsible Agency: General Services Administration

Title: Environmental Impact Statement for the Expansion and Modernization of the San Luis I Land Port of Entry, San Luis, Arizona

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Abstract

The General Services Administration (GSA) proposes to expand and modernize the San Luis I Land Port of Entry (LPOE), in San Luis, Arizona. GSA, through its Border Station Program, assists U.S. Customs and Border Protection (CBP) by planning, designing, building, owning, and leasing LPOEs to CBP. GSA, owner and manager of the San Luis I LPOE, has prepared this Final Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA) as amended (42 U.S.C. 4321 et seq.), the Council on Environmental Quality's NEPA implementing regulations (40 CFR 1500–1508), and GSA Order ADM 1095.1F (Environmental Consideration in Decision Making) to analyze the potential environmental impacts of the Proposed Action at the San Luis I LPOE and adjacent, former Friendship Park, San Luis, Arizona.

The San Luis I LPOE is located on the U.S.–Mexico border in the City of San Luis, Arizona. Adjacent to the west of the San Luis I LPOE is the former Friendship Park, which was a city park managed by the City of San Luis that was closed to the public in 2011. Approximately 4 miles from the California border, the San Luis I LPOE is the westernmost port of entry in Arizona. The LPOE connects U.S. Highway 95 on the north and Mexican Federal Highway 2 and Sonora State Highway 40 to the south. The existing facilities and utility systems at the LPOE are deteriorating. The Proposed Action assumes that the old, deteriorated buildings onsite would be replaced because traffic flow is increasing and the structures and utility systems are in decline. The Proposed Action would be implemented in phases and would achieve a minimum of Leadership in Energy and Environmental Design (LEED) Gold for all buildings, a certification that conveys the efficient and responsible use of resources. The exact layout of the LPOE and construction phasing sequence would be determined by the contractor and would be similar in scope to what is described in this EIS.

EXECUTIVE SUMMARY

The General Services Administration (GSA) proposes the expansion and modernization of the San Luis I Land Port of Entry (LPOE) located in San Luis, Arizona, along the U.S.–Mexico international border. The Proposed Action would correct operational deficiencies caused by deteriorating building conditions and inadequate facilities and improve the LPOE's functionality, capacity, and security. The Proposed Action would provide a strengthened security system and a streamlined pedestrian and privately owned vehicle (POV) traffic flow through the LPOE, decreasing wait times and traffic strain on downtown San Luis. The exact layout of the LPOE and construction phasing sequence would be determined by the contractor and would be similar in scope to what is described in the Environmental Impact Statement (EIS).

ENVIRONMENTAL REVIEW PROCESS

GSA prepared this EIS to analyze the potential impacts of the Proposed Action: the expansion and modernization of the San Luis I LPOE in San Luis, Arizona. The EIS was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 as amended (42 U.S.C. 4321 et seq.), Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500–1508), and GSA Order ADM 1095.1F (Environmental Consideration in Decision Making).

Scoping

A Notice of Intent was published in the *Federal Register* on November 13, 2017, announcing the intent of GSA to prepare this EIS. GSA held a public scoping meeting on November 29, 2017, in San Luis, Arizona. During the public scoping process, GSA received one comment letter (containing multiple comments) from the City of San Luis. A summary of comments received, along with where the comment is addressed in the EIS as applicable, is presented in Table 1-1.

Draft EIS Public Review

A Notice of Availability was published in the Federal Register on March 15, 2019 and the *Yuma Sun* on March 15 and 31, 2019, announcing the availability of the Draft EIS. The public comment review period for the Draft EIS was March 15 to April 29, 2019. GSA held a public meeting on April 17, 2019, in San Luis, Arizona. The public comment period for the Draft EIS was March 15 to April 29, 2019. During the Draft EIS review period, multiple comments were received, including one comment which identified a new alternative to be included in the analysis. Therefore, GSA determined that the Draft EIS would be re-released for public review that includes the new alternative. Alternative 2, Relocate Southbound POV Processing, was added to the Revised Draft EIS and carried forward for analysis. A summary of the comments received during the public comment period, along with where each comment is addressed in the EIS, as applicable, is presented in Table 1-2.

Revised Draft EIS Public Review

A Notice of Availability was published in the Federal Register on March 31, 2020 (85 FR 17890) and the *Yuma Sun* on April 10, 2020, announcing the availability of the Draft EIS. Due to the COVID-19 outbreak, the public comment period was extended 90 days (April 3, 2020 to July 2, 2020). A second Federal Register notice (85 FR 39566) and newspaper announcement were published (July 10 and 12, 2020) to announce that GSA would hold a virtual public meeting on Wednesday, July 15, 2020. The notice also announced that the public comment period was extended through July 21, 2020 (see Appendix E).

The virtual public meeting was held via a Zoom Webinar and consisted of a PowerPoint presentation by GSA and an opportunity for interested parties to provide comments during the Q&A session. Forty-two individuals participated in the virtual public meeting (see Appendix E). During the Revised Draft EIS comment period, two comments were received via email and 16 questions were asked during the virtual public meeting Q&A session (see Appendices E and F).

INTRODUCTION

The San Luis I LPOE is located on the U.S.–Mexico border in the City of San Luis, Arizona. Approximately 4 miles from the California border, it is the westernmost port of entry in Arizona. The LPOE connects U.S. Highway 95 on the north and Mexican Federal Highway 2 and Sonora State Highway 40 to the south. Adjacent to the west of the San Luis I LPOE is the former Friendship Park, which was a city park managed by the City of San Luis. Friendship Park was a former city park that contains two maintenance sheds, a concession stand, a baseball backstop and dugouts, lamp posts, parking bollards, two shade structures, and a restroom building. The park was closed in 2011 and is no longer maintained by the City of San Luis. A metal, chain-link fence surrounds the site.

The facilities at the San Luis I LPOE are in deteriorated condition and inadequate for the present volume of pedestrian and vehicle traffic. The main building is in poor condition, with outdated systems and building code issues. The pedestrian processing center is located in proximity to the international border; along with subpar lighting conditions, this creates security threats, such as infiltration attempts. All detainees, including family units, juveniles, and individuals of high risk, share a waiting and processing area that lacks proper separation for officers and detainees, including separate restrooms and showers. In addition, the emergency power system is undersized for the facility; the sanitary sewer piping system is failing, as evidenced by leaks and clogs in the main building and headhouse; and the water and lighting systems require updating.

Second, the number of POVs crossing the border at the LPOE has steadily increased since 2010, with a 58 percent increase. The higher volume coupled with outdated facilities creates long wait times, leading to traffic backups in downtown San Luis from southbound vehicles and additional traffic backups from northbound vehicles traveling from Mexico. Modernization and expansion are necessary to ensure that U.S. Customs and Border Protection (CBP) can continue to fulfill its mission of managing and securing the nation’s borders.

PURPOSE AND NEED

To meet CBP's continually evolving needs and mission requirements, GSA proposes to expand and modernize the San Luis I LPOE to correct the operational deficiencies imposed by deteriorating building conditions and improve the LPOE's functionality, capacity, and security. The purpose of the Proposed Action is to provide facilities to fully support CBP's mission. The need for the action is to improve the safety, security, and operations of the LPOE and reduce vehicle and pedestrian wait times.

SUMMARY OF THE PROPOSED ACTION AND ALTERNATIVES

Three action alternatives and the No-Action Alternative are evaluated in this EIS. Each alternative involves continual operation of the San Luis I LPOE as an international border station during construction and renovation activities.

Proposed Action—Demolition and Redevelopment

The Proposed Action would be implemented using a phased approach to alleviate potential disruption to operations at the LPOE. The four phases of construction and demolition presented in the EIS are theoretical representations used for discussion and environmental analysis. The exact construction phasing sequence and layout of the LPOE would be determined by the construction contractor and would be similar in scope to what is described in the EIS.

Under the Proposed Action, GSA would acquire from Bureau of Land Management (BLM), the legal interest necessary to construct and operate the expansion of the San Luis I LPOE for the former Friendship Park site (6.13 acres) and the LPOE would be reconfigured to streamline CBP operations and inspection processes. Construction would be expected to take place for a total 42-months. If funding is divided amongst two phases, the construction timeline would be adjusted. During Phase 1 of the Proposed Action, GSA would construct a public-facing building, sidewalk for southbound pedestrians, parking lot, secure storage, impound lot, and utility yard. The public-facing building would reroute traffic away from the main building. The utility yard would be constructed within the former Friendship Park with the secure storage, impound lot, and parking lot located north of the utility yard. Outbound pedestrian traffic would run on the east side of the building and new outbound processing facilities would be constructed west of existing outbound lanes. After completion of Phase 1, the commercial facility would be vacated, and the parking areas and outbound inspection operations would be relocated to the newly constructed facilities on the former Friendship Park site.

Phase 2 would demolish the easternmost area of the LPOE including the parking lot, prior commercial facility, and impound lot. GSA would construct POV processing facilities and a kennel. The primary and secondary inspection facilities, headhouse, kennel, and any temporary facilities would relocate to the eastern portion of the site, once completed. The western portion of the main building would be vacated.

Phase 3 would demolish the former inbound and outbound POV processing facilities and construct the main building, and family unit and unaccompanied juveniles processing facility. Any

remaining pedestrian processing functions of the main building would be relocated to the north annex.

Phase 4 would demolish the existing main building and construct pedestrian processing facilities as a wing of the new main building. As part of Phase 4, the option exists for the future expansion of inbound and outbound processing.

Alternative 1—Renovate and Modernize

Under Alternative 1, GSA would not acquire the legal interest of the former Friendship Park from BLM but would renovate and modernize all existing facilities and infrastructure at the LPOE. Utility renovations would include replacing all heating, ventilation, and air conditioning (HVAC), electrical, and mechanical systems; and upgrading the stormwater retention and water filtration systems. Interior renovations would include new paint, flooring, and cosmetic upgrades. Exterior renovations would include replacing all windows and roofs, repainting building exteriors, and replacing existing asphalt.

The current LPOE layout would remain as currently configured. Current traffic patterns entering and leaving the LPOE would remain the same and, as such, traffic backups would continue to persist.

Alternative 2—Relocate Southbound POV Processing

Under Alternative 2, GSA would acquire from BLM, the legal interest necessary to construct and operate the expansion of the San Luis I LPOE on the former Friendship Park site and construct new facilities as described under the Proposed Action, however the outgoing traffic would be routed directly south from Archibald Street (through the former Friendship Park site) to Avenida Morelos in Mexico (see Figure 2-7). The rerouting of southbound traveling vehicles directly south from Archibald Street would alleviate the need for vehicles to turn left onto Urtuzuastegui Street.

No-Action Alternative

Under this alternative, GSA would not renovate or expand any portion of the LPOE; the LPOE would remain in its current condition. The deteriorated conditions of the buildings and outdated systems would continue to present poor working conditions for CBP personnel, and the security risks to pedestrians and personnel would remain. The LPOE's patrons would continue to experience long processing times and traffic backups. The No-Action Alternative would not improve the safety, security, and operations of the LPOE or reduce vehicle and pedestrian queues. Further, CBP's ability to fulfill its mission could be compromised.

IDENTIFICATION OF THE PREFERRED ALTERNATIVE

CEQ's implementing regulations instruct EIS preparers to "identify the agency's preferred alternative, if one of more exists in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference" (40 CFR 1502.14(e)). GSA's preferred alternative is to implement Alternative 2 as described in Section 2.3.

IMPACT COMPARISON MATRIX

This EIS evaluates the potential impact on the environmental conditions from implementing the Proposed Action, Alternative 1, Alternative 2, or the No-Action Alternative. Implementation of either of these alternatives is not expected to result in major environmental or socioeconomic effects. For each resource analyzed in this EIS, the expected consequences of the alternatives are summarized in Table ES-1.

Table ES-1. Summary of Potential Impacts by Alternative

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Geology and Soils	Short-term, minor, adverse impacts on geological, soil, and topographical conditions. Long-term, negligible to minor, adverse impacts on geology and soils would be expected from the conversion of the former Friendship Park to paved areas.	No short- or long-term impacts on geology and soils would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on geology and soils would be expected.
Water Resources	No short- or long-term impacts on water supply, surface waters, traditionally navigable waters, waters of the US, or wetlands would be expected. Long-term, moderate, beneficial impacts on stormwater would be expected.	No short- or long-term impacts on water supply, surface waters, traditionally navigable waters, waters of the US, or wetlands would be expected.	Impacts would be the same as those described for the Proposed Action.	No impacts on water use, groundwater, surface water, waters of the US, or wetlands would be expected. Long-term, minor, adverse impacts on water quality would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Land Use and Visual Resources	No short-term impacts on land use would be expected. Short-term, minor, adverse impacts on visual resources would be expected. Long-term, minor, beneficial impacts on land use and visual resources would be expected from the development of the former Friendship Park and removal of deteriorating buildings.	No short- or long-term impacts on land use would be expected. Short-term, minor, adverse impacts on visual resources would be expected during construction. Long-term, negligible, beneficial impacts on visual resources would be expected from the renovated facilities.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on land use would be expected. Long-term, negligible, adverse impacts on visual resources would be expected.
Biological Resources	No short-term impacts on wildlife or federally protected species would be expected. Short- and long-term, negligible, adverse impacts on vegetation would be expected.	Impacts would be the same as described for the Proposed Action.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on biological resources would be expected.
Cultural Resources	No short- or long-term impacts on cultural resources would be expected.	No short- or long-term impacts on cultural resources would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on cultural resources would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Infrastructure and Utilities	Short-term, minor, adverse impacts on utilities and roadways would be expected during construction. Long-term, moderate to major, beneficial impacts on utilities, roadways, and paved surfaces would be expected during continued LPOE operations.	Short-term, minor, adverse impacts on utilities would be expected during construction. Long-term, minor to moderate, adverse impacts on utilities and facility infrastructure would be expected from continued use. Long-term, negligible to minor, beneficial impacts on site utilities and facilities would be expected from minor renovations and upgrades.	Impacts would be the same as those described for the Proposed Action.	Long-term, moderate, adverse effects on utilities and infrastructure would be expected.
Traffic and Transportation	Short-term, minor, adverse impacts on roadway segments during construction activities, and long-term, minor, adverse impacts would be expected during continued LPOE operations.	Short-term, negligible to minor adverse impacts would be expected from the addition of construction vehicles. Traffic would continue to increase and long-term, indirect, minor to moderate, adverse impacts would be expected.	Impacts would be similar to those described for the Proposed Action.	Long-term, minor to moderate, adverse effects on traffic and local roadways from the long wait times would be expected.
Air Quality and Greenhouse Gases	Short-term, minor, adverse and long-term, minor, beneficial impacts on air quality would be expected.	Short- and long-term, minor, adverse impacts on air quality would be expected.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on air quality would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Noise	Short-term, negligible to moderate, adverse impacts on noise levels during construction would be expected. Long-term, minor, beneficial impacts on noise levels would be expected during continued operations.	Short-term, minor to moderate, adverse impacts on noise levels during construction would be expected. Long-term, minor, adverse impacts on the noise environment would be expected during continued operations.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on the noise environment would be expected.
Human Health and Safety	Short-term, negligible, adverse impacts would be expected during construction activities. Long-term, minor to moderate, beneficial impacts on human health and safety of CBP personnel and the public would be expected.	Short-term, negligible, adverse impacts would be expected during construction activities. Long-term, minor, adverse impacts on human health and safety of CBP personnel and the public would be expected.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on human health and safety of CBP personnel and the public would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Socioeconomics	No short-term impacts on population and housing. Long-term, negligible to minor impacts on population and housing would be expected. Short- and long-term, direct, negligible, beneficial impacts from increased income during construction activities. Short-term, minor, beneficial impacts from the creation of jobs would be expected. Short-term, negligible to minor impacts on the quality of life of local residents. No long-term impacts on the quality of life or education quality.	Short-term, negligible, adverse impacts and long-term, negligible to minor, adverse impacts on population and housing; labor and earnings; and community services would be expected.	Impacts would be the same as those described for the Proposed Action.	No short-term impacts would be expected. Long-term, minor, adverse impacts on residents would be expected from increased air emissions (due to long wait times at the LPOE).

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Environmental Justice and Protection of Children	Short-term, minor to moderate, adverse and long-term, negligible adverse impacts on minority populations and children from noise, air emissions, and increased traffic congestion would be expected. Long-term, minor, beneficial impacts due to the creation of jobs would be expected.	Impacts would be similar to but less than those described for the Proposed Action. Short-term, negligible to minor, adverse impacts on minority populations and children would be expected during construction activities. Long-term, indirect, negligible to minor, beneficial impacts due to the creation of jobs would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts would be expected.
Recreation	Short-term, negligible to minor, adverse impacts on recreational resources would be expected. No long-term impacts would be expected.	Impacts would be similar to but less than those described for the Proposed Action.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts would be expected.

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ABBREVIATIONS AND ACRONYMS

ABA	Architectural Barriers Act
ACM	asbestos containing material
ADEQ	Arizona Department of Environmental Quality
ADFFM	Arizona Department of Forestry and Fire Management
ADOA	Arizona Department of Administration
ADOT	Arizona Department of Transportation
ADT	average daily traffic
ADWR	Arizona Department of Water Resources
ALS	Arizona Labor Statistics
AOI	area of interest
APE	area of potential effect
AQCR	Air Quality Control Region
ASCE	American Society of Civil Engineers
ASLD	Arizona State Land Department
ASM	Arizona State Museum
AST	aboveground storage tank
BEA	Bureau of Economic Analysis
BLM	Bureau of Land Management
BLS	Bureau of Labor Statistics
BMP	best management practice
BTS	Bureau of Transportation Statistics
CAA	Clean Air Act
CBP	U.S. Customs and Border Protection
CEQ	Council on Environmental Quality
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COVID-19	Coronavirus
CT	census tract
dBA	A-weighted decibel
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
GCR	General Conformity Rule
GHG	greenhouse gas
GSA	General Services Administration
GWP	global warming potential
HAP	hazardous air pollutant
HAD	Health Development Agency
HVAC	heating, ventilation, and air conditioning
IBC	International Building Code
ICA	Industrial Commission of Arizona
IPCC	Intergovernmental Panel on Climate Change
LEED	Leadership in Energy and Environmental Design
LBP	lead-based paint
LCP	lead-containing paint
LOS	level of service
LPOE	Land Port of Entry
MBTA	Migratory Bird Treaty Act
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAPA	National History Preservation Act
NCES	National Center for Education Statistics

NCSS	National Cooperative Soil Survey
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIBS	National Institute of Building Sciences
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO_x	nitrogen oxides
NPS	National Park Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWR	National Wildlife Refuge
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCPI	per capita personal income
PM	particulate matter
PM_{10}	fine particulate matter
$PM_{2.5}$	very fine particulate matter
POV	privately owned vehicle
ppb	parts per billion
PPEP TEC	Portable Practical Educational Preparation Training for Employment Centers
ppm	parts per million
PSD	Prevention of Significant Deterioration
REC	Recognized Environmental Condition
ROC	Region of Comparison
ROI	Region of Influence
RV	recreational vehicle
SENTRI	Secure Electronic Network for Travelers Rapid Inspection
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasure
SRI	Senior Immigration Inspector
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USDOT	US. Department of Transportation
USEPA	U. S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
USGS	U.S. Geological Survey
V/C	volume-to-capacity
VOC	volatile organic compound
WACOG	Western Arizona Council of Government
WoUS	Waters of the United States
YMPO	Yuma Metropolitan Planning Organization
YRMC	Yuma Regional Medical Center

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1. PURPOSE OF AND NEED FOR THE PROPOSED ACTION

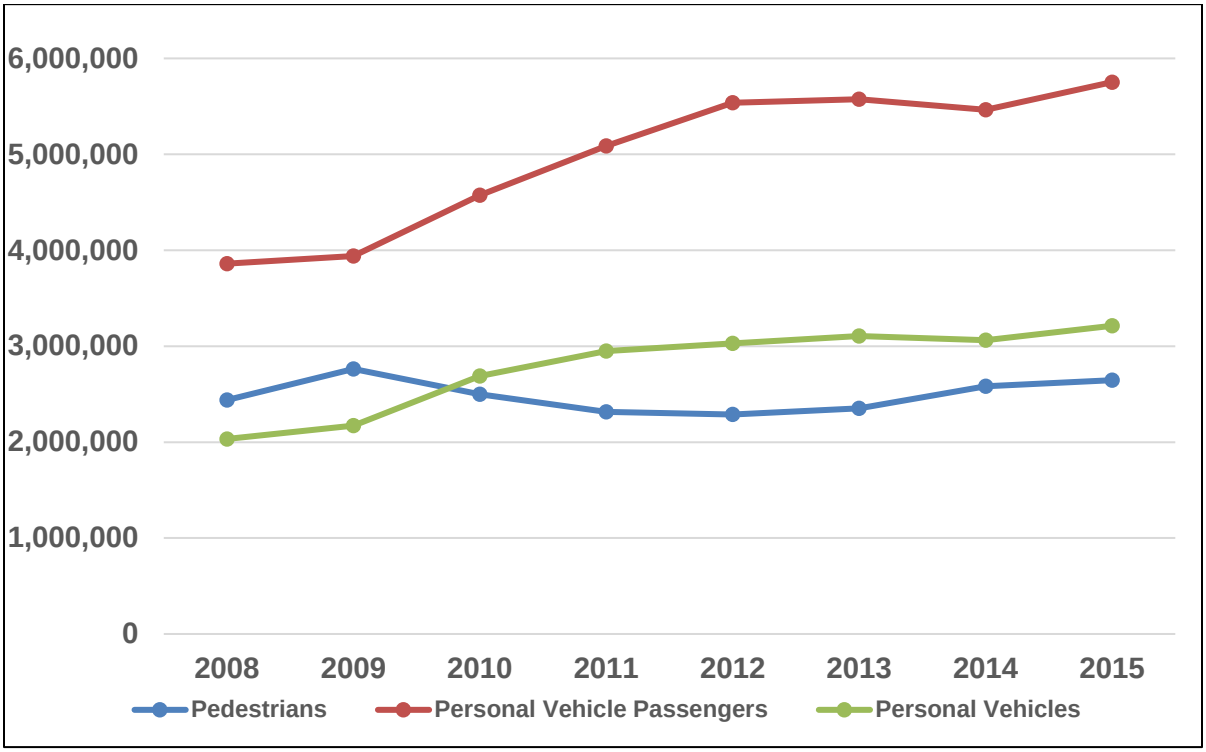
1.1 INTRODUCTION

This Environmental Impact Statement (EIS) has been prepared to analyze the proposal by the General Services Administration (GSA) to expand and modernize the San Luis I Land Port of Entry (LPOE), San Luis, Arizona. This EIS has been prepared pursuant to the National Environmental Policy Act (NEPA) as amended (42 U.S.C. 4321 et seq.), the Council on Environmental Quality's (CEQ) NEPA implementing regulations (40 CFR 1500–1508), and GSA Order ADM 1095.1F (Environmental Consideration in Decision Making) to analyze the environmental impacts of proposed changes to the San Luis I LPOE and adjacent, former Friendship Park, in San Luis, Arizona.

GSA, through its Border Station Program, assists U.S. Customs and Border Protection (CBP) by planning, designing, building, owning, and leasing LPOEs to CBP. GSA owns and manages the San Luis I LPOE, located on the U.S.–Mexico border in the City of San Luis, Arizona (see Figure 1-1). Adjacent to the west of the San Luis I LPOE is Friendship Park, which was a city park managed by the City of San Luis that was closed to the public in 2011. Friendship Park was a former city park that contains two maintenance sheds, a concession stand, a baseball backstop and dugouts, lamp posts, parking bollards, two shade structures, and a restroom building. The park is no longer maintained by the City of San Luis. A metal, chain-link fence surrounds the site (GSA 2017b).

Figure 1-1. General Location of the San Luis I LPOE

The San Luis I LPOE was built in 1982 to accommodate noncommercial traffic to and from Mexico. The port operates eight vehicle lanes and seven pedestrian lanes, and in 2017 it processed over 3.2 million personal vehicles, 5.7 million personal vehicle passengers, and 2.3 million pedestrians. The quantity of personal vehicles and passengers processed at the San Luis I LPOE has steadily increased since 2010 (see Figure 1-2). There has been a 58 percent increase in the number of personal vehicles processed since 2010, further exacerbating the long wait times. During 2010–2017, there have been increases of 8 percent and 49 percent in the number of pedestrians and privately owned vehicle (POV) passengers, respectively (see Figure 1-2) (BTS 2017).



Source: BTS 2017

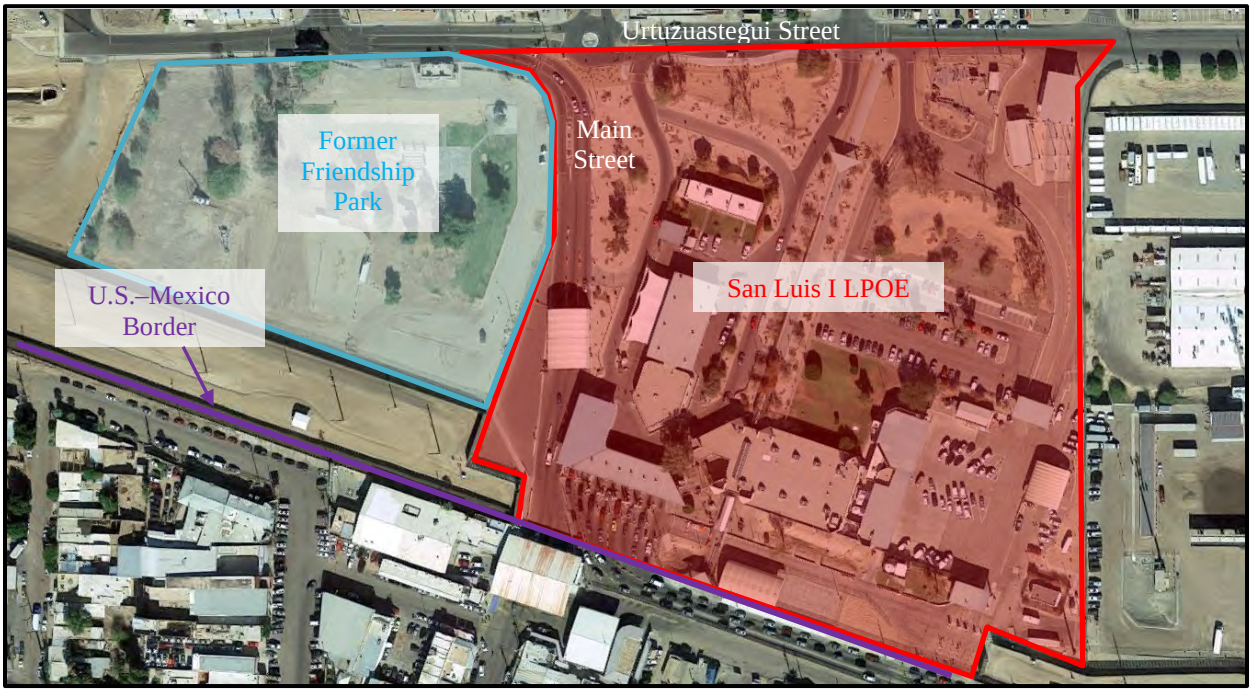
Figure 1-2. Pedestrian and Personal Vehicle Traffic at the San Luis I LPOE, 2008–2017

Many of the facility's building systems—such as plumbing, generators, and paved areas—are nearing or past their operational life and do not comply with GSA's P100 Facilities Standards or CBP's LPOE Design Guide. For example, the GSA P100 Facilities Standards' requirement to use energy- and water-efficient equipment and products is not being met by the existing facilities. According to the CBP LPOE Design Guide, an LPOE should be, where applicable, aesthetically pleasing, functional and operational, productive, secure and safe, and sustainable (Conway 2017).

1.2 DESCRIPTION OF THE SAN LUIS I LPOE

The San Luis I LPOE is approximately 4 miles from the California border and is the westernmost port of entry in Arizona. The LPOE connects U.S. Highway 95 on the north and Mexican Federal Highway 2 and Sonora State Highway 40 to the south. It serves as the primary, daily crossing location for farmworkers transported to agricultural fields across Yuma County, Arizona.

The LPOE covers 12.1 acres and is located at 431 Main Street, San Luis, Arizona, along the U.S. and Mexico international border. It is bounded by Urtuzuastegui Street to the north, industrial buildings to the east, the U.S.–Mexico border to the south, and the former Friendship Park (6.13 acres) to the west. Figure 1-3 shows an aerial depiction of the LPOE and project area.



Source: Google Maps 2017

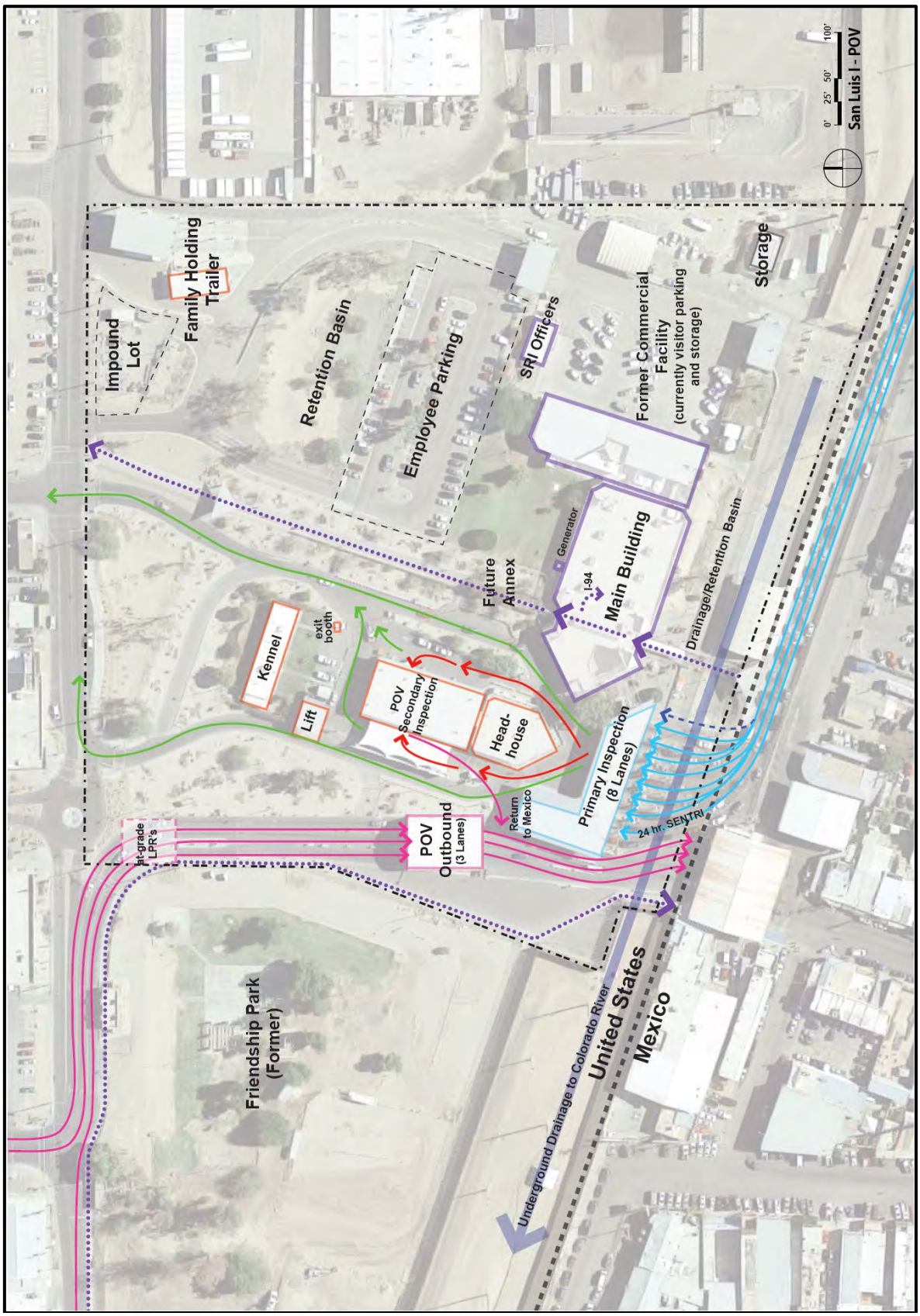
Figure 1-3. San Luis I LPOE Location

The LPOE contains a main building, a commercial facility used for visitor parking and storage, inbound POV primary and secondary inspection structures, an outbound POV inspection structure, officers' quarters, a kennel, a lift, a generator, a secure storage area, a family holding trailer, a headhouse, and an exit booth. Other elements include an employee parking lot, two drainage or retention basins, an impound lot, paved roads, concrete sidewalks, and landscaping.

The primary users of the San Luis I LPOE are CBP and Immigrations and Customs Enforcement officers, as well as the general public seeking to enter or exit the United States. Traffic from the LPOE must be routed into downtown San Luis; this often creates traffic jams. Northbound traffic (i.e., entering the City of San Luis) has recently been rerouted to exit via First Street, and southbound traffic enters the LPOE via Archibald Street to Urtuzuastegui Street. No southbound traffic on Main Street can enter the LPOE due to the roundabout intersection (see Figure 1-4).

1.2.1 LPOE Facilities

As Figure 1-4 shows, the LPOE's former commercial processing facility, used for storage and excess parking, occupies the eastern area of the site. The main building and a pedestrian pathway leading into the United States occupy the central area of the site. POV processing facilities are to the west of the main building. The kennel is north of the POV secondary inspection area. The west side of the facility site contains the outgoing POV processing area, accessed via Archibald Street. Outgoing pedestrians are routed along a sidewalk west of POV traffic (GSA 2017a).



Source: GSA 2017a

Figure 1-4. Existing Traffic Flow at the San Luis I LPOE

There are two modular, detached buildings at the port. One, located northeast of the main building, houses Senior Immigration Inspector officers, and the second, in the upper northeastern corner of the site, is used for family holding (GSA 2017a).

The main building was found in poor condition during a visual inspection of the facility in 2016, with many outdated systems and building code issues. The pedestrian processing area is in proximity to the international border. Coupled with subpar lighting conditions, this has created several security risks, including unruly behavior and infiltration attempts at the southern edge of the building (GSA 2017a).

A large number of family units and unaccompanied juveniles are processed at the San Luis I LPOE. The general public, detained families, juveniles, and high-risk detainees share a waiting and processing area, creating a risk for officers and for these individuals. A small trailer used for family holding does not provide proper segmentation for officers and detainees or proper processing, detention, or storage space. The trailer does not contain separate restrooms or showers, and the private officer areas are used for family units. Further, the trailer is in poor condition and lacks a fire alarm system.

1.2.2 Utility Systems

The existing building systems—such as electrical, water, lighting, plumbing, and paved areas—are approximately 35 years old and severely deteriorated. All systems were last inspected in 2013.

Electrical. During the inspection of the electrical system and generators, it was determined that the majority of the electrical load was not supported by emergency or standby power and that the emergency power system was undersized for this facility per GSA guidelines. The study recommended a new 1,052 kW generator, 1,600-amp automatic transfer switch, a fuel storage tank, and load banks (devices used to convert power output) (GSA 2017a). An emergency generator is being installed to help alleviate the load and provide emergency or standby power for the LPOE. Additional generators are necessary to handle the anticipated load of the future LPOE design (Edwards and Kleppe 2018).

Energy. Energy and water usage and lighting and water systems were also inspected. The study recommended a $2.6 million upgrade to the water and lighting systems to improve energy efficiency. It also recommended that the chilled water system and air handling systems be replaced and that a 5,000 ft^2 solar photovoltaic array be installed (GSA 2017a).

Plumbing. A study analyzed the sanitary sewer piping system. The system was in generally poor condition, and the cast-iron piping was failing, causing leaks and clogs in the main building and the secondary inspection headhouse. The study recommended that GSA replace all floor and sink drains and all waste lines with less than a 4-inch diameter and provide proper sealing and waterproofing for floor penetrations (GSA 2017a).

1.3 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

To meet CBP's evolving needs and mission requirements, GSA proposes to expand and modernize the San Luis I LPOE to correct the operational deficiencies imposed by deteriorating building conditions and improve the LPOE's functionality, capacity, and security. The purpose of the Proposed Action is to provide facilities to fully support CBP's mission. The need for the action is

to improve the safety, security, and operations of the LPOE and reduce vehicle and pedestrian wait times.

1.4 PUBLIC OUTREACH

GSA has pursued several avenues to notify the public of opportunities and methods for involvement in GSA's intent to prepare an EIS, as outlined below.

1.4.1 Scoping

A Notice of Intent (NOI) was published in the *Federal Register* on November 13, 2017 (see Appendix A). The NOI announced GSA's intention to prepare an EIS to evaluate the impacts of modernizing the San Luis I LPOE to improve its functionality, capacity, and security. The publication of the NOI officially marked the beginning of the scoping period, during which time GSA accepted public comments on the Proposed Action. The NOI also provided background information, the proposed alternatives (including a No-Action Alternative), requests for comment, a point of contact, and an announcement of the public scoping meeting time and location. In addition, GSA published the NOI in a local newspaper, *The Yuma Sun*, on November 22 and 26, 2017, to announce its intent to prepare the EIS and hold the scoping meeting (see Appendix A).

GSA held a scoping meeting on November 29, 2017, in San Luis, Arizona, to gather community-specific issues and concerns on which to focus the EIS analysis. The public scoping meeting afforded an opportunity for the public to receive information about the Proposed Action and alternatives and to assist GSA in identifying potential environmental impacts and key issues of concern. Eleven people attended the public scoping meeting, including representatives of the local government. A list of attendees is provided in Appendix A.

GSA provided the public with various methods for commenting on the EIS, including comment forms distributed at the scoping meeting and electronic and postal mail addresses for comments. Commenters were mostly concerned about staffing, signage and infrastructure, and improving wait times at the LPOE. A summary of the comments received during the scoping process, along with where each comment is addressed in the EIS as applicable, is presented in Table 1-1.

Table 1-1. Comments Received During the Scoping Period

Comment	Addressed in EIS?	If yes, location; if no, rationale
Consider expanding the acquisition of Friendship Park to include the entire park so southbound vehicle traffic can exit from Archibald Street directly to Mexico.	Yes	Section 2.1.1
GSA to support the acquisition of Bureau of Land Management (BLM) land for city parkland due to loss of Friendship Park.	No	The acquisition of additional park land is not a part of this Proposed Action.

Comment	Addressed in EIS?	If yes, location; if no, rationale
If the acquisition of land changes to the East, GSA should work directly with the State Land Department and the Industrial Park Associations that might affect their business.	No	The acquisition of additional land is not part of this Proposed Action. GSA will continue to coordinate with stakeholders during the course of the Proposed Action.
Port of Entry storm water drainage should be evaluated as its runoff might be affecting surrounding areas. The Port of Entry should address this issue by retaining their storm water on site.	Yes	Sections 3.3 and 3.7
Provide sufficient parking for U.S. Customs & Border Protection employees and visitors within the port area.	Yes	Section 2.1 describes the parking that would be included under the Proposed Action.
San Luis Port of Entry should be modernized to include areas where equipment can be placed to monitor and provide accurate border crossing waiting times.	No	GSA is not planning to include equipment to monitor border crossing wait times as a component of this Proposed Action.
Coordinate with San Luis Rio Colorado on land acquisition, design and construction of the port of entry.	No	GSA will continue to coordinate with stakeholders during the course of the Proposed Action.
Work with city staff during the design and construction phasing of the project.	No	GSA will continue to coordinate with stakeholders during the course of the Proposed Action.
Provide access to public safety personnel for emergencies.	No	Access for public safety personnel will be provided. GSA is actively coordinating with the City of San Luis Fire Department.
Include entry and exit lanes for bicycles.	No	Following completion of the North Annex, bicycles would be processed via the Secure Electronic Network for Travelers Rapid Inspection (SENTRI) lanes.
Provide SENTRI lanes that do not interfere with ready, and regular lanes.	Yes	SENTRI lanes would be included in the LPOE.
Coordinate with the city on the pedestrian, bicycle, and vehicles exiting the port (traffic impact).	Yes	Potential impacts to traffic are addressed in Section 3.8.2. GSA will continue to coordinate with stakeholders during the Proposed Action.
Coordinate the need for a bridge for pedestrians traveling southbound if the vehicles southbound traffic is not routed through Archibald Street directly into Mexico without looping back to Main Street.	Yes	A pedestrian sidewalk is included in the design of the LPOE and is discussed in Section 2.1.1.

Comment	Addressed in EIS?	If yes, location; if no, rationale
Consider the results of the Urban Design Study, input from ADOT and ACA on potential traffic or other pilot projects.	Yes	Potential impacts to traffic are addressed in Section 3.8.2. GSA will continue to coordinate with stakeholders during the Proposed Action.
The EIS should take into consideration that the impact will include the known flow of traffic to and from the port to the schools. All of the schools are located North of Juan Sanchez from Highway 95 to 10th Avenue.	Yes	Potential impacts to traffic are addressed in Section 3.8.2.
The EIS should take into consideration that the impact will include the known flow of traffic to the Agriculture Business Labor busses.	Yes	Existing traffic flow was considered in the analysis of traffic impacts in Section 3.8.
The EIS should include the impacts on arterials to Highway 95 and Juan Sanchez.	Yes	Potential impacts to traffic are addressed in Section 3.8.2.
Include the City of San Luis Fire Department in traffic pattern planning and fire suppression planning.	Yes	Potential impacts to traffic are addressed in Section 3.8.2. GSA is actively coordinating with the City of San Luis Fire Department.

1.4.2 Draft EIS Public Comment Period

A Notice of Availability was published in the Federal Register on March 15, 2019 and the *Yuma Sun* on March 15 and 31, 2019, announcing the availability of the Draft EIS. The public comment review period for the Draft EIS was March 15 to April 29, 2019. GSA held a Draft EIS meeting on April 17, 2019, in San Luis, Arizona, to gather community-specific issues and concerns on which to focus the EIS analysis. The Draft EIS comment meeting afforded an opportunity for the public to receive information about the Proposed Action and alternatives and to assist GSA in identifying potential environmental impacts and key issues of concern. Twenty-eight people attended the public meeting, including representatives of the local government. A list of attendees is provided in Appendix C.

GSA provided the public with various methods for commenting on the Draft EIS, including comment forms distributed at the Draft EIS meeting and electronic and postal mail addresses for comments. Multiple comments were received at the public meeting and throughout the public comment period. Commenters were mostly concerned about southbound traffic flow. Therefore, Alternative 2, Relocate Southbound POV Processing, was added to the Revised Draft EIS and carried forward for analysis. As such, GSA determined that the Draft EIS would be re-released for public review that includes the new alternative. A summary of the comments received during the drafting process, along with where each comment is addressed in the EIS as applicable, is presented in Table 1-2.

Table 1-2. Comments Received During the Draft EIS Public Comment Period

Comment	Addressed in EIS?	If yes, location; if no, rationale
Preference should be given to rerouting the southbound traffic directly from Archibald Street, through the current Friendship Park and connect to Mexico at Avenida Morelos on the Mexican side at San Luis Rio Colorado.	Yes	Alternative 2 was added to the EIS to address this comment and the Revised Draft EIS was released for public comment. See Section 2.3 and analysis in Section 3.
The City Park land is not owned by the United States. Friendship Park lands are owned by the city of San Luis under Patent No. 02-74-0002. The BLM has a reversionary and mineral interest in the park land.	Yes	Revisions made throughout the EIS to state that Friendship Park is owned and managed by the City of San Luis.
The EIS anticipates that additional diesel fueled backup electricity generators will be needed for the anticipated electrical load of the future LPOE design. It is recommended that GSA consider, as an alternative to diesel powered generators, the use of on-site battery storage using the new photovoltaic array if feasible. If the GSA instead choses to use diesel backup generators for the LPOE, it is encouraged that GSA commit to EPA Tier 4 or better backup generators to minimize air pollution during emergency power generation.	No	Currently, GSA is not considering the use of on-site battery storage. The specific size and capacity of the backup generators is not known at this time. GSA will determine the appropriate size generator and will minimize air emissions from diesel generators, to the maximum extent practicable.
The majority of pedestrians are traveling south on Main St. and crossing Urtuzuastegui St. There is a congestion issue, particularly in the median because the median is not big enough to hold people waiting there. The EIS should look into or fix the congestion at this crossing.	No	The City of San Luis is responsible for the roadways and medians outside of the LPOE. GSA will continue to coordinate with the City of San Luis during the course of the Proposed Action. This action is outside of the scope of the actions evaluated in the EIS.
Need direct lanes to border to avoid winding across access points which will improve northbound and southbound traffic.	Yes	Alternative 2 was added to this Revised Draft EIS to analyze a direct southbound exit from Archibald Street to Avenida Morelos in Mexico.
More can be done to improve wait times of vehicle traffic and pedestrian traffic.	No	Comment noted.
Oppose enlarging the site, and support a wall to keep people from crossing the border.	No	Comment noted. Alternative 1 would not increase the footprint of the LPOE. Construction of a border wall is beyond the scope of this EIS.

1.4.3 Revised Draft EIS Public Comment Period

A Notice of Availability was published in the Federal Register on March 31, 2020 (85 FR 17890) and the *Yuma Sun* on April 10, 2020, announcing the availability of the Draft EIS. Due to the COVID-19 outbreak, the public comment period was extended 90 days (April 3, 2020 through July 2, 2020). A second Federal Register notice (85 FR 39566) and newspaper announcement were published (July 10 and 12, 2020) to announce that GSA would hold a virtual public meeting on Wednesday, July 15, 2020. The notice also announced that the public comment period was extended through July 21, 2020 (see Appendix E).

The virtual public meeting was held via a Zoom Webinar and consisted of a PowerPoint presentation by GSA and an opportunity for interested parties to provide comments during the Q&A session. Forty-two individuals participated in the virtual public meeting (see Appendix E).

During the Revised Draft EIS comment period, two comments were received via email (see Appendix F). No comments were received via U.S. mail. During the virtual public meeting, 16 questions were asked during the Q&A session and answers were provided verbally by GSA. The questions/comments are included in Appendix E. A summary of the comments received during the public comment period are presented in Table 1-3, along with where each comment is addressed in the EIS, as applicable.

Table 1-3. Comments Received During the Revised Draft EIS Public Comment Period

Comment	Number of comments	Addressed in EIS?	If yes, location; if no, rationale
Coordination with the Mexican government; infrastructure development in Mexico and City of San Luis, AZ	2	No	The development of Alternative 2 (Southbound POV Processing) requires the coordination of all parties, however coordination with the Mexican government is not included in the analysis of this EIS. However, GSA and the City of San Luis are continuing to discuss options for better throughput with the Mexican government.
Project timeline/schedule; Phased approach for construction; GSA funding	4	No	The overall project schedule, funding availability, and the construction phasing schedule are beyond the scope of the environmental analysis included in this EIS.
Major changes in the Revised Draft EIS	1	No	The addition of Alternative is the only major change from the Draft EIS to Revised Draft EIS.
NEPA process; Selection of alternatives	1	No	The selection of the alternative will be made by GSA after the conclusion of the NEPA process.
Flooding concerns	1	Yes	See Sections 3.3 and 3.7.

Comment	Number of comments	Addressed in EIS?	If yes, location; if no, rationale
Use of photovoltaic arrays and battery energy storage as an alternative to diesel fueled backup generators, or commit to Tier 4 or better generators	1	No	Currently, GSA is not considering the use of on-site battery storage. The specific size and capacity of the backup generators is not known at this time. GSA will determine the appropriate size generator and will minimize air emissions from diesel generators, to the maximum extent practicable.
Project support/other	3	No	Comment noted.

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2. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

GSA proposes to modernize and update facilities at the San Luis I LPOE to provide a strengthened security system and a more streamlined pedestrian and POV traffic flow through the LPOE. Renovating the San Luis I LPOE would allow the facility to adapt to increasing traffic demand, provide for more thorough inspections, improve safety for employees and the public, and reduce processing delays. Three action alternatives and the No-Action Alternative are evaluated in this EIS. Each alternative involves continual operation of the San Luis I LPOE as an international border station during construction and renovation activities.

2.1 PROPOSED ACTION—DEMOLITION AND REDEVELOPMENT

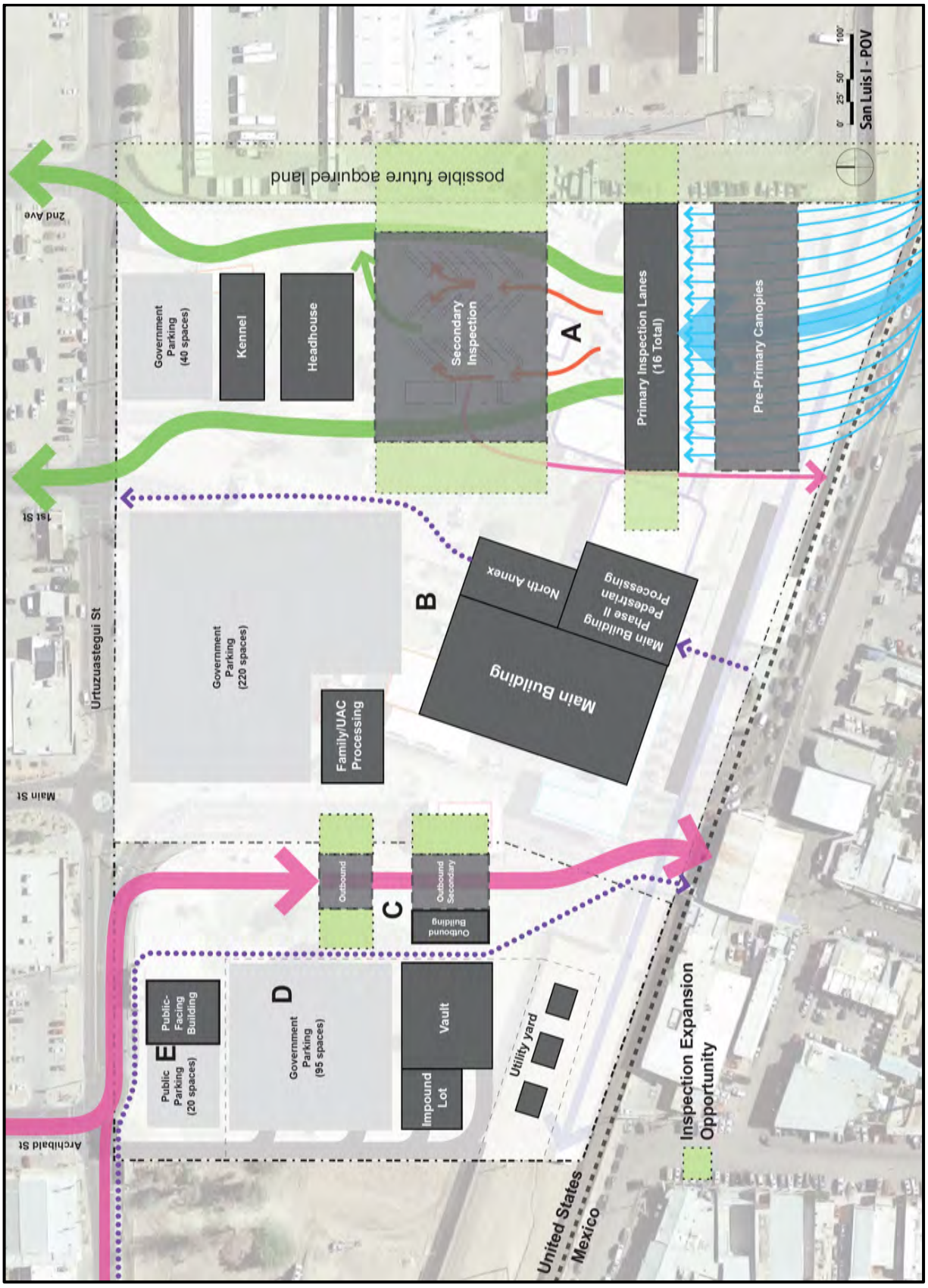
Given the declining quality of the structures and utility systems at the San Luis I LPOE and the increasing flow of traffic, the Proposed Action assumes that the old, deteriorated buildings onsite would be replaced, including the main building, inspection spaces, kennel, and commercial processing facilities. Building designs would include upgraded cooling systems and expanded canopies to protect officers and patrons from the region's extreme weather conditions. The facility would also include an onsite water filtration and treatment system to provide potable water and prevent corrosion of future plumbing systems. The Proposed Action would achieve a minimum of Leadership in Energy and Environmental Design (LEED) Gold for all buildings, a certification that conveys the efficient and responsible use of resources.

The Proposed Action would be implemented using a phased approach to alleviate potential disruption to operations at the LPOE. The four phases of construction and demolition presented in the EIS, shown in Figure 2-2, are theoretical representations used for discussion and environmental analysis. The exact construction phasing sequence and layout of the LPOE would be determined by the construction contractor and would be similar in scope to what is described in the EIS. Construction would be expected to take place over a 42-month period and demolition and construction activities would occur during normal working hours (e.g., Monday–Friday, 7 a.m.–5 p.m.).

Under the Proposed Action, GSA would acquire from BLM, the legal interest necessary to construct and operate the expansion of the San Luis I LPOE on the former Friendship Park site, located adjacent to the western end of the LPOE, and construct new infrastructure to accommodate the increasing volume of pedestrian and vehicle traffic, including inbound and outbound POV and pedestrian processing facilities; main building, kennel, headhouse, and family processing facilities; public and government parking lots; an impound lot; and a secure storage area. Figure 2-1 is a theoretical overview of the Proposed Action showing improved traffic flow of pedestrians and vehicles.

2.1.1 Phase 1

GSA would acquire the legal interest in the former Friendship Park (6.13 acres) site and construct a public-facing building, a sidewalk for southbound pedestrians, a parking lot, secure storage area, an impound lot, and a utility yard (see Figure 2-3). Friendship Park was closed in 2011 and is no longer maintained by the City of San Luis. A metal, chain-link fence surrounds the site. Trash and debris associated with homeless encampments have accumulated throughout the property (GSA 2017b).



Source: GSA 2017a

Figure 2-1. Theoretical Overview of the Proposed Action at the San Luis I LPOE

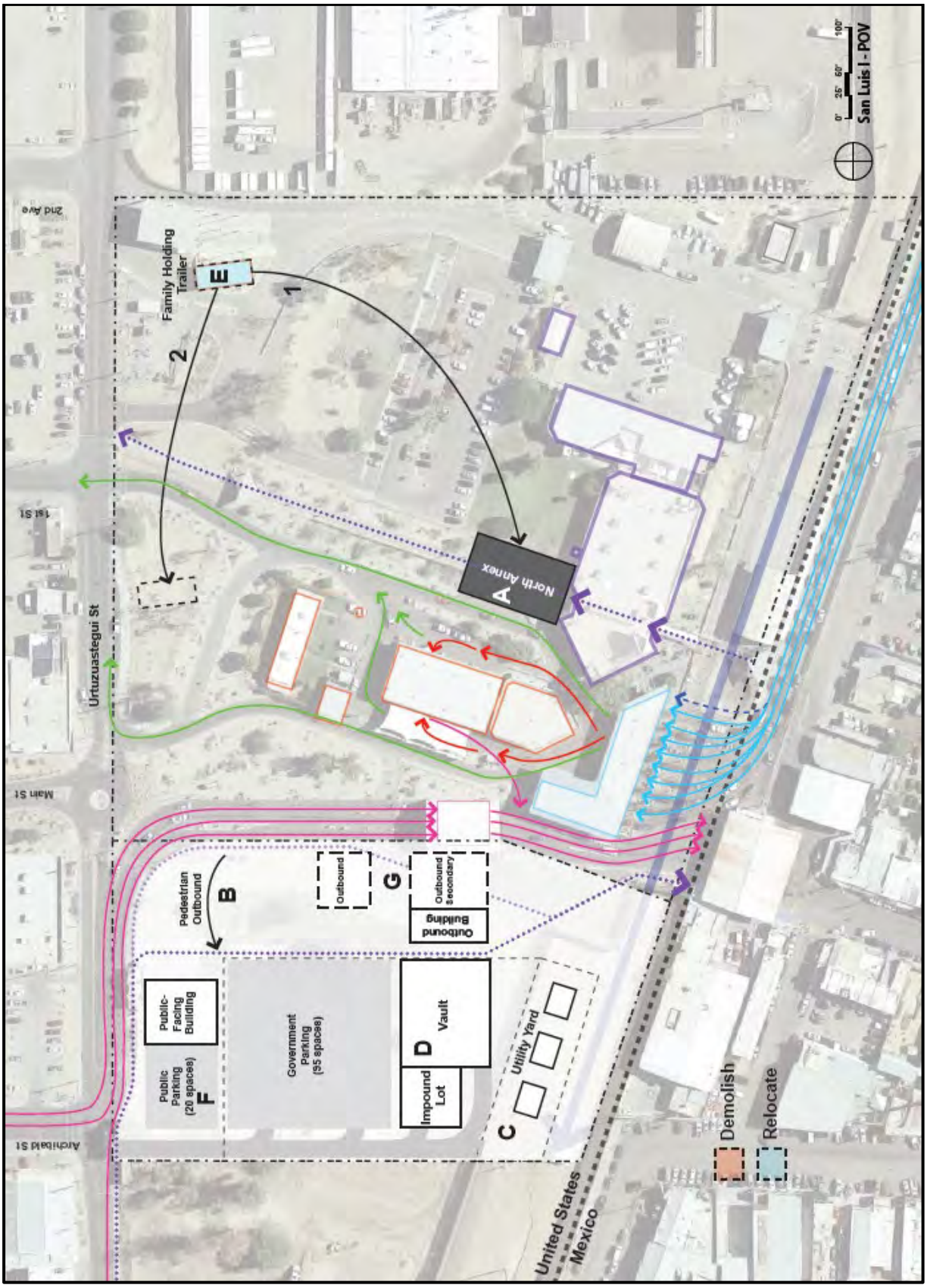
Figure 2-2. Overview of Theoretical Construction Phases under the Proposed Action

The utility yard would be constructed on the southern portion of the former Friendship Park and include a new water-processing plant and emergency generator system. North of the utility yard, GSA proposes to construct a secure storage area and 10-vehicle impound lot with fencing, lighting, and cameras. A parking lot for government vehicles would be located north of the storage area (GSA 2017a).

The public-facing building would be located on Urtuzuastegui Street and redirect traffic away from the main building. This building would serve people seeking permits and SENTRI enrollment. The entrance of the public parking lot would align with Archibald Street to the north, and the sidewalk for outbound pedestrian traffic would run on the east side of the building. New outbound processing facilities would be constructed west of existing outbound lanes. The family holding area would also be relocated to a 1,000 square foot area within the North Annex (GSA 2017a), which is currently under construction. The North Annex will serve as a pedestrian processing facility (Edwards and Kleppe 2018).

Following completion of Phase 1, various facilities and personnel would be relocated within the LPOE. The commercial facility and Senior Immigration Office would be vacated. The commercial facility is currently used for storage and occupied by homeland security investigators. Officers would be temporarily transferred to other facilities within the LPOE until the construction of the main building is completed.

In addition, the parking areas would be relocated to the new public parking and government parking lots constructed in Phase 1. The existing impound lot would also be relocated to the lot constructed in Phase 1. Finally, outbound inspection operations would be relocated to the newly constructed facilities on the former Friendship Park site (GSA 2017a).



Source: GSA 2017a

Figure 2-3. Theoretical Construction Phasing of the Proposed Action, Phase 1

2.1.2 Phase 2

During Phase 2, GSA would demolish the easternmost area of the site, including the parking lot, prior commercial facility, and impound lot. Following demolition and clearing of the site, GSA would construct POV processing facilities and a kennel (see Figure 2-4). Following completion of the new POV processing facility, the primary and secondary inspection facilities, headhouse, kennel, and any temporary facilities would relocate to the completed eastern portion of the site. Finally, GSA would vacate the western portion of the main building (labeled "B" in Figure 2-4) to allow the new facility to be built in its place (GSA 2017a).

2.1.3 Phase 3

Phase 3 would begin with the demolition of the former inbound and outbound POV processing facilities in the center of the site. Following demolition, GSA would construct the main building, family unit, and unaccompanied juveniles processing facility (see Figure 2-5). The main building would no longer have pedestrian processing functions, which would be relocated to the North Annex. All other functions of the main building would be returned to the new building (GSA 2017a).

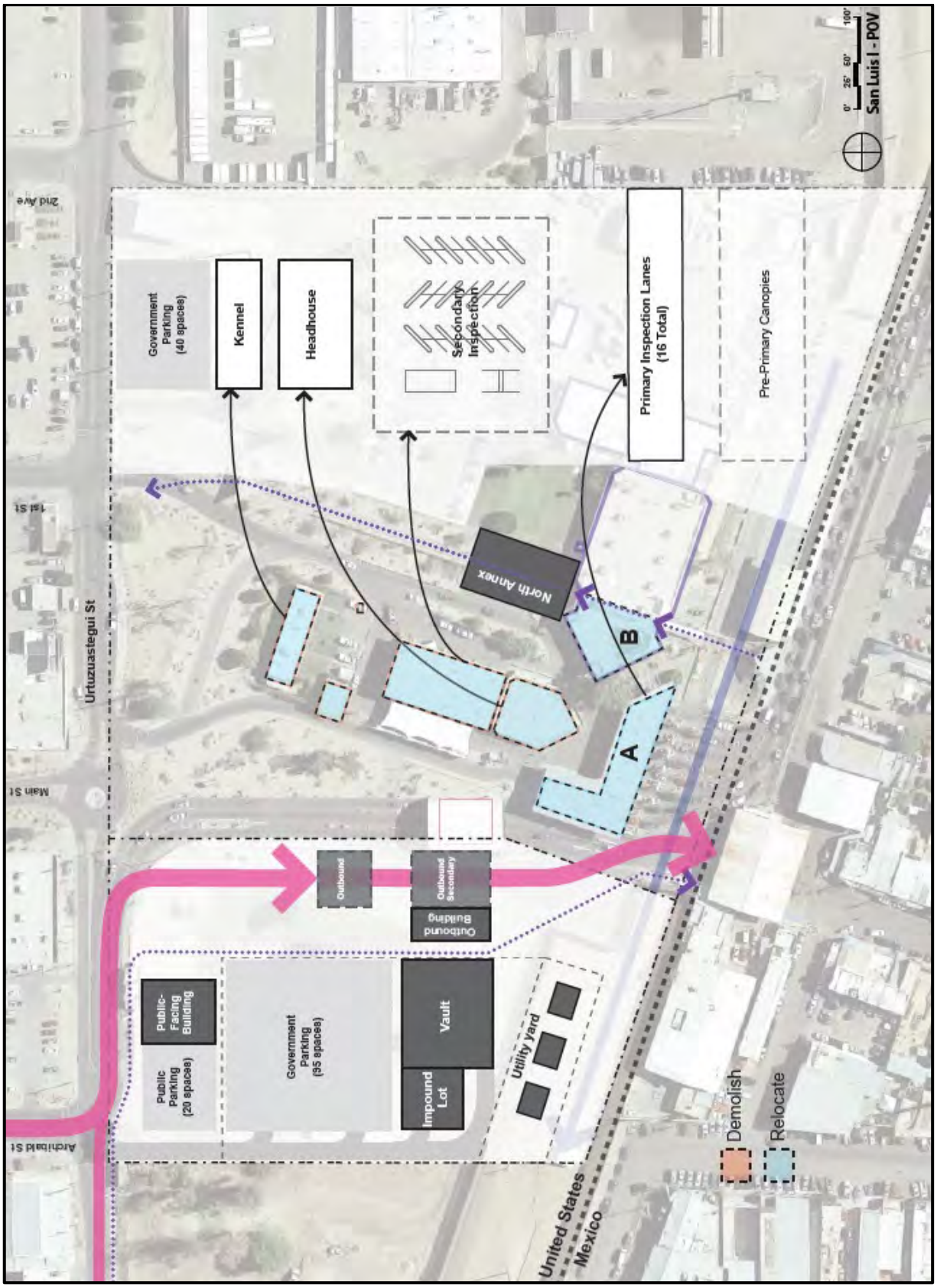
2.1.4 Phase 4

In the final phase, GSA would demolish the main building and construct pedestrian processing facilities. To ensure pedestrian safety, the queueing area would be temporarily routed away from the construction site through a temporary structure or the main building. The permanent processing area would be constructed as a wing of the main building. This would allow the processing to be located closer to the POV processing areas while separating the public and CBP administrative functions of the main building. This phase includes an option for expansion of future inbound and outbound processing (depicted by green shaded areas in Figure 2-6).

2.2 ALTERNATIVE 1—RENOVATE AND MODERNIZE

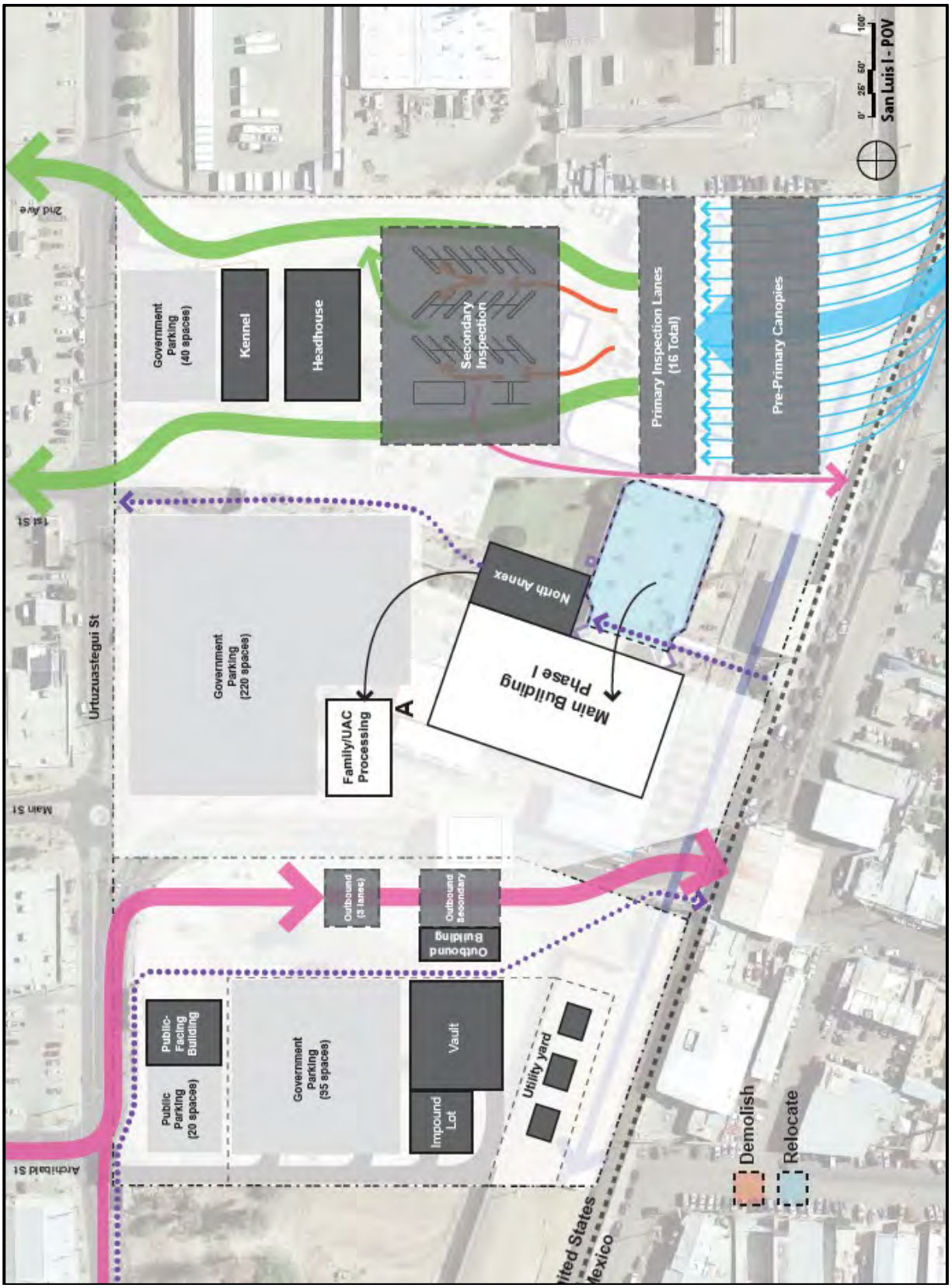
Under Alternative 1, GSA would renovate and modernize all facilities at the San Luis I LPOE. However, the legal interest in the former Friendship Park site would not be acquired from BLM, as described under the Proposed Action. Utility renovations would include replacing all heating, ventilation, and air conditioning (HVAC), electrical, and mechanical systems; and upgrading the stormwater retention and water filtration systems. Interior renovations to facilities would include new paint, flooring, and other cosmetic upgrades. The interior space of some facilities would be realigned to meet current mission requirements. Exterior building renovations would include replacing all windows and roofs, painting building exteriors, and replacing asphalt.

The aforementioned renovations may not adequately fulfill the purpose and need for expansion of the LPOE or the need to alleviate traffic strain in downtown San Luis. Renovations made under Alternative 1 would not increase the facility's size and capacity, leaving the port unable to accommodate the increasing volume of pedestrians and vehicles it processes. Current traffic patterns entering and leaving the LPOE would remain the same, with traffic backups into downtown San Luis continuing to persist.



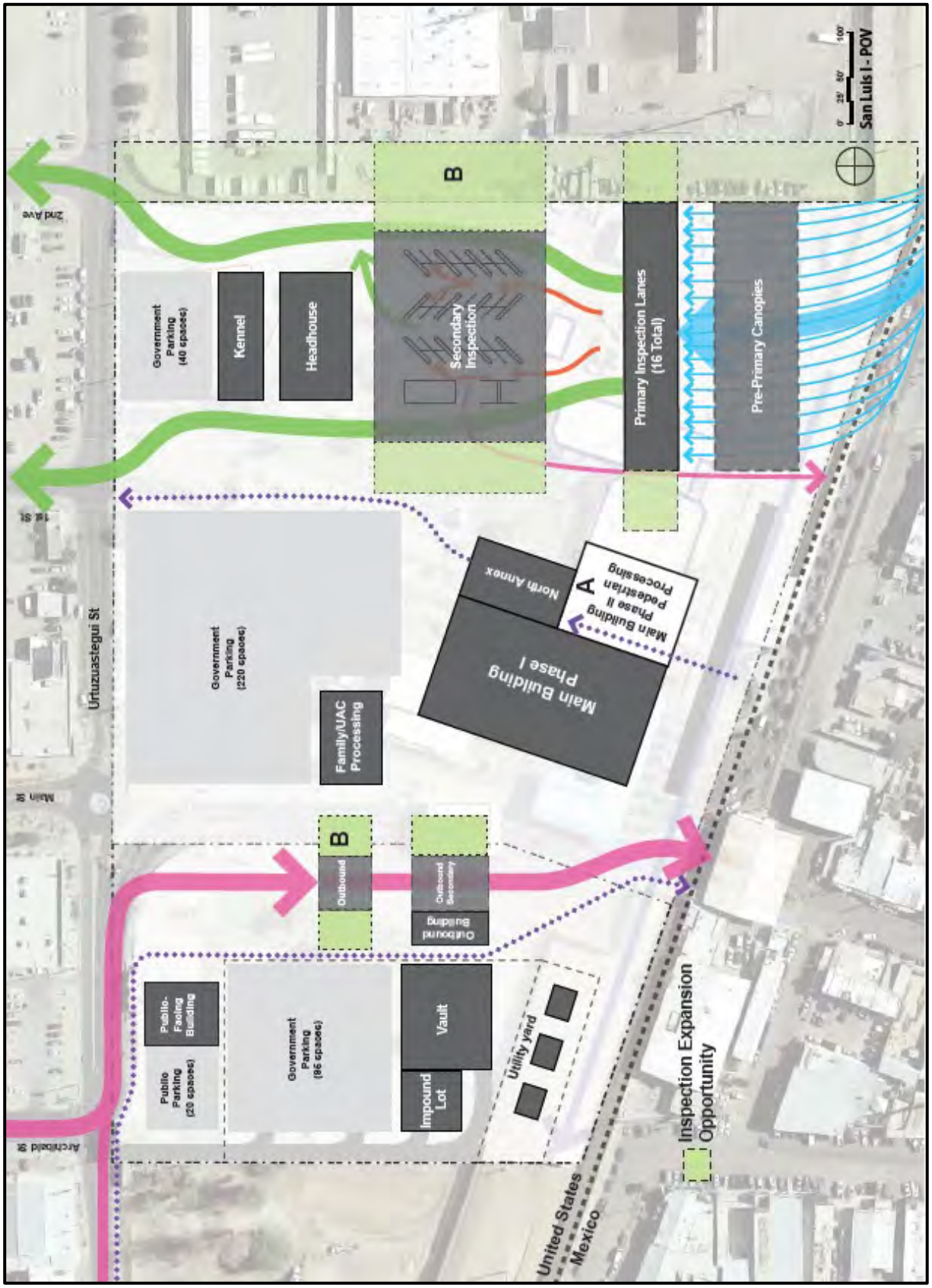
Source: GSA 2017a

Figure 2-4. Theoretical Construction Phasing of the Proposed Action, Phase 2



Source: GSA 2017a

Figure 2-5. Theoretical Construction Phasing of the Proposed Action, Phase 3



Source: GSA 2017a

Figure 2-6. Theoretical Construction Phasing of the Proposed Action, Phase 4

Without adequate facility expansion, vehicle and pedestrian traffic would not be processed more efficiently, exacerbating long wait times. In addition, the LPOE would continue to process vehicles and pedestrians amidst the construction and renovation; this could create additional delays to processing times.

2.3 ALTERNATIVE 2—RELOCATE SOUTHBOUND POV PROCESSING

Under Alternative 2, GSA would acquire from BLM, the legal interest for the former Friendship Park site and construct new facilities as described under the Proposed Action, however the outgoing traffic would be routed directly south from Archibald Street (through the former Friendship Park site) to Avenida Morelos in Mexico (see Figure 2-7). The rerouting of southbound traveling vehicles directly south from Archibald Street would alleviate the need for vehicles to turn left onto Urtuzuastegui Street.

2.4 NO-ACTION ALTERNATIVE

Per CEQ regulations, the No-Action Alternative is included to determine a baseline of impacts for comparison against the site's existing conditions. Under this alternative, GSA would not renovate or modernize any portion of the LPOE. The LPOE would remain as-is and continue its operations in facilities as they are currently configured. The deteriorated state of these facilities and unreliable utility systems would continue to present poor working conditions to CBP personnel and low-quality service to the port's patrons. Without the necessary expansion and redevelopment, CBP personnel would continue to suffer from uncomfortable environmental conditions and extreme weather conditions, the LPOE would continue to experience long processing times, and the potential for security risks and vulnerabilities would remain. The No-Action Alternative would not improve the safety, security, and operations of the LPOE or reduce vehicle and pedestrian queues. In addition, by not providing adequate facilities, the No-Action Alternative could compromise CBP's ability to fulfill its mission.

2.5 IDENTIFICATION OF THE PREFERRED ALTERNATIVE

CEQ's implementing regulations instruct EIS preparers to "identify the agency's preferred alternative, if one of more exists in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference" (40 CFR 1502.14(e)). GSA's preferred alternative is to implement Alternative 2 as described in Section 2.3.

2.6 SUMMARY COMPARISON OF THE ALTERNATIVES

This section summarizes the potential impacts on resources under the Proposed Action, Alternative 1, Alternative 2, and the No-Action Alternative. Detailed descriptions of the resources and potential impacts are provided in Section 3.

Project-related environmental impacts are described by their type, context, intensity, and duration for each affected resource area. The levels of impacts and their definitions vary based on the resources that are evaluated. Table 2-1 summarizes the potential impacts of implementing the alternatives on each resource.

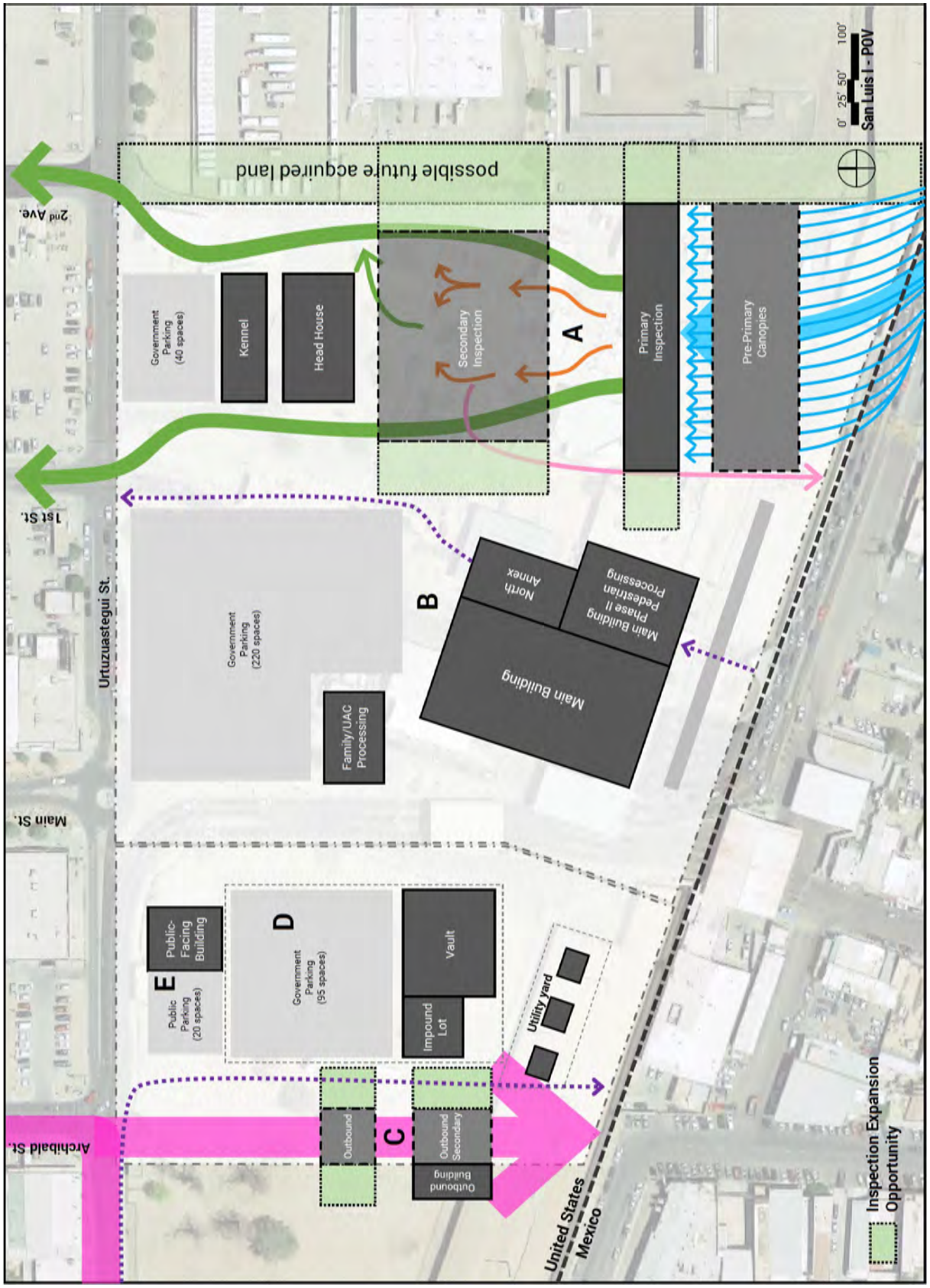


Figure 2-7. Theoretical Layout for Alternative 2

Table 2-1. Summary of Potential Impacts by Alternative

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Geology and Soils	Short-term, minor, adverse impacts on geological, soil, and topographical conditions. Long-term, negligible to minor, adverse impacts on geology and soils would be expected from the conversion of the former Friendship Park to paved areas.	No short- or long-term impacts on geology and soils would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on geology and soils would be expected.
Water Resources	No short- or long-term impacts on water supply, surface waters, traditionally navigable waters, waters of the US, or wetlands would be expected. Long-term, moderate, beneficial impacts on stormwater would be expected.	No short- or long-term impacts on water supply, surface waters, traditionally navigable waters, waters of the US, or wetlands would be expected.	Impacts would be the same as those described for the Proposed Action.	No impacts on water use, groundwater, surface water, waters of the US, or wetlands would be expected. Long-term, minor, adverse impacts on water quality would be expected.
Land Use and Visual Resources	No short-term impacts on land use would be expected. Short-term, minor, adverse impacts on visual resources would be expected. Long-term, minor, beneficial impacts on land use and visual resources would be expected from the development of the former Friendship Park and removal of deteriorating buildings.	No short- or long-term impacts on land use would be expected. Short-term, minor, adverse impacts on visual resources would be expected during construction. Long-term, negligible, beneficial impacts on visual resources would be expected from the renovated facilities.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on land use would be expected. Long-term, negligible, adverse impacts on visual resources would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Biological Resources	No short-term impacts on wildlife or federally protected species would be expected. Short- and long-term, negligible, adverse impacts on vegetation would be expected.	Impacts would be the same as described for the Proposed Action.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on biological resources would be expected.
Cultural Resources	No short- or long-term impacts on cultural resources would be expected.	No short- or long-term impacts on cultural resources would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts on cultural resources would be expected.
Infrastructure and Utilities	Short-term, minor, adverse impacts on utilities and roadways would be expected during construction. Long-term, moderate to major, beneficial impacts on utilities, roadways, and paved surfaces would be expected during continued LPOE operations.	Short-term, minor, adverse impacts on utilities would be expected during construction. Long-term, minor to moderate, adverse impacts on utilities and facility infrastructure from continued use would be expected. Long-term, negligible to minor, beneficial impacts on site utilities and facilities would be expected from minor renovations and upgrades.	Impacts would be the same as those described for the Proposed Action.	Long-term, moderate, adverse effects on utilities and infrastructure would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Traffic and Transportation	Short-term, minor, adverse impacts on roadway segments during construction activities, and long-term, minor, adverse impacts would be expected during continued LPOE operations.	Short-term, negligible to minor adverse impacts would be expected from the addition of construction vehicles. Traffic would continue to increase and long-term, indirect, minor to moderate, adverse impacts would be expected.	Impacts would be similar to those described for the Proposed Action.	Long-term, minor to moderate, adverse effects on traffic and local roadways from the long wait times would be expected.
Air Quality and Greenhouse Gases	Short-term, minor, adverse and long-term, minor, beneficial impacts on air quality would be expected.	Short- and long-term, minor, adverse impacts on air quality would be expected.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on air quality would be expected.
Noise	Short-term, negligible to moderate, adverse impacts on noise levels during construction would be expected. Long-term, minor, beneficial impacts on noise levels would be expected during continued operations.	Short-term, minor to moderate, adverse impacts on noise levels during construction would be expected. Long-term, minor, adverse impacts on the noise environment would be expected during continued operations.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on the noise environment would be expected.

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Human Health and Safety	Short-term, negligible, adverse impacts would be expected during construction activities. Long-term, minor to moderate, beneficial impacts on human health and safety of CBP personnel and the public would be expected.	Short-term, negligible, adverse impacts would be expected during construction activities. Long-term, minor, adverse impacts on human health and safety of CBP personnel and the public would be expected.	Impacts would be the same as those described for the Proposed Action.	Long-term, minor, adverse impacts on human health and safety of CBP personnel and the public would be expected.
Socioeconomics	No short-term impacts on population and housing. Long-term, negligible to minor impacts on population and housing would be expected. Short-term, negligible to minor and long-term, negligible, beneficial, direct impacts from increased income and the creation of jobs during construction activities. Short-term, negligible to minor impacts on the quality of life of local residents. No long-term impacts on the quality of life or education quality.	Short-term, negligible, adverse impacts and long-term, negligible to minor, adverse impacts on population and housing; labor and earnings; and community services would be expected.	Impacts would be the same as those described for the Proposed Action.	No short-term impacts would be expected. Long-term, minor, adverse impacts on residents would be expected from increased air emissions (due to long wait times at the LPOE).

Resource Area	Proposed Action	Alternative 1	Alternative 2	No-Action Alternative
Environmental Justice and Protection of Children	Short-term, minor to moderate, adverse and long-term, negligible adverse impacts on minority populations and children from noise, air emissions, and increased traffic congestion would be expected. Long-term, minor, beneficial impacts due to the creation of jobs would be expected.	Impacts would be similar to but less than those described for the Proposed Action. Short-term, negligible to minor, adverse impacts on minority populations and children would be expected during construction activities. Long-term, indirect, negligible to minor, beneficial impacts due to the creation of jobs would be expected.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts would be expected.
Recreation	Short-term, negligible to minor, adverse impacts on recreational resources would be expected. No long-term impacts would be expected.	Impacts would be similar to but less than those described for the Proposed Action.	Impacts would be the same as those described for the Proposed Action.	No short- or long-term impacts would be expected.

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3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This section describes the affected environment and existing conditions for the resource areas potentially affected by the Proposed Action. The affected environment is limited to the San Luis I LPOE, the former Friendship Park, and the immediate vicinity of the area. Following the description of the affected environment, are the potential impacts on existing environmental conditions resulting from the Proposed Action.

Impact Assessment Method

For the purposes of this EIS, Table 3-1 describes the evaluation criteria for potential impacts to physical, biological, and traditional cultural resources from the implementation of the Proposed Action. The evaluation criteria include the type, intensity, and duration of potential impacts. The EIS categorizes impacts based on if they directly or indirectly result from the Proposed Action. *Direct impacts* immediately result from project-related activities (e.g., direct mortality of species or removal of vegetation and habitat) and may be either temporary (reversible) or permanent (irreversible). Most direct effects are confined to the project footprint, but some (e.g., noise) may extend beyond the project boundary. *Indirect impacts* are spatially removed from project-related activities, or occur later in time, but are reasonably certain to occur. Indirect effects tend to be diffuse, resource-specific, and less amenable to quantification or mapping than direct effects.

Table 3-1. Evaluation Criteria for Analyzing Potential Environmental Impacts

Type	
Beneficial	The impact would result in some level of environmental improvement.
Adverse	The impact would result in some level of environmental degradation.
Intensity	
Negligible	No impact to resources or the impact would be at or below levels of detection.
Minor	A detectable change to resources; however, the impact would be small, localized, and of little consequence.
Moderate	A readily apparent change to the human environment which would not be major.
Major	A substantial change to the character of the resource over a large area.
Duration	
Short-term	Occurs only during the period of demolition and construction activities (approximately 42 months for the Proposed Action).
Long-term	Continues after the period of demolition and construction activities.

3.2 GEOLOGY AND SOILS

This section discusses the geologic and soil characteristics of the project area. Within a given physiographic province, resources are typically described in terms of topography, geology, soils, and, where applicable, geologic hazards and paleontology. When considered together, geology,

topography, and soils critically influence water resources, habitat, wildlife success, and many other resources.

3.2.1 Affected Environment

The project site is located along the western edge of the Central Sonoran/Colorado Desert Basin Ecoregion, approximately two miles east of the Colorado River (Griffith et al. 2014). San Luis is characterized by an arid environment with sparse vegetation comprised mostly of creosote bush and white bursage (Griffith et al. 2014; Yuma County 2010). The site is relatively flat, with some drainage towards the Colorado River (GSA 2017a). The average elevation in the area is approximately 140 feet above mean sea level.

3.2.1.1 Geology and Topography

The project site is characterized by broad desert plains and river flood plains, with low but rugged mountains trending generally north-northwest (Mattick et al. 1973). The majority of the summits have been buried by alluvial fill, with the maximum elevation in the area reaching just over 3,000 feet in the southeastern Gila Mountains. Mountains in the Yuma area are composed mostly of pre-Tertiary plutonic and metamorphic rocks. Earth materials of the Yuma area include crystalline rocks to unconsolidated alluvium and windblown sand and are grouped into several main stratigraphy units (Olmsted et al. 1973). Bedrock units include Late Cretaceous igneous and metamorphic rocks and Tertiary sedimentary rocks, including mudstone and shale, the thickness of which can reach up to 10,000 feet. Non-marine sedimentary rocks from the Tertiary period are exposed in parts of the mountains and underlie most of the alluvium layer (Mattick et al. 1973). The alluvial deposits, the top most layer of rock in the area, range from clay to gravel, with clay and silt constituting only 20 percent of the total thickness across the majority of the region. The alluvium layer contains most of the usable groundwater for the Yuma area due to the layers of gravel beds that deposit water to nearby wells. Figure 3-1 shows the stratigraphic relationships of the rock layers in the Yuma area.

3.2.1.2 Seismicity

The greatest risk of earthquake activity in Arizona occurs in the Yuma region (Bausch and Brumbaugh 1997). San Luis is identified as an area of high risk for seismic activity due to its proximity to the San Andreas, Imperial, Cerro Prieto, and Algodones faults (GSA 2017a). San Luis is approximately 70 miles from the San Andreas Fault in California, 30 miles from the Imperial Fault in California, 40 miles from the Cerro Prieto Fault in Mexico, and 10 miles from the Algodones Fault in Mexico (GSA 2000) (see Figure 3-2).

Using an older system of classification, the project site lies within a zone 4 seismic hazard area, which is the highest risk classification (GSA 2017a). However, zone hazard area maps have been replaced with detailed contour maps that provide a more accurate representation of the earthquake hazard of a given area (Dean 2017).

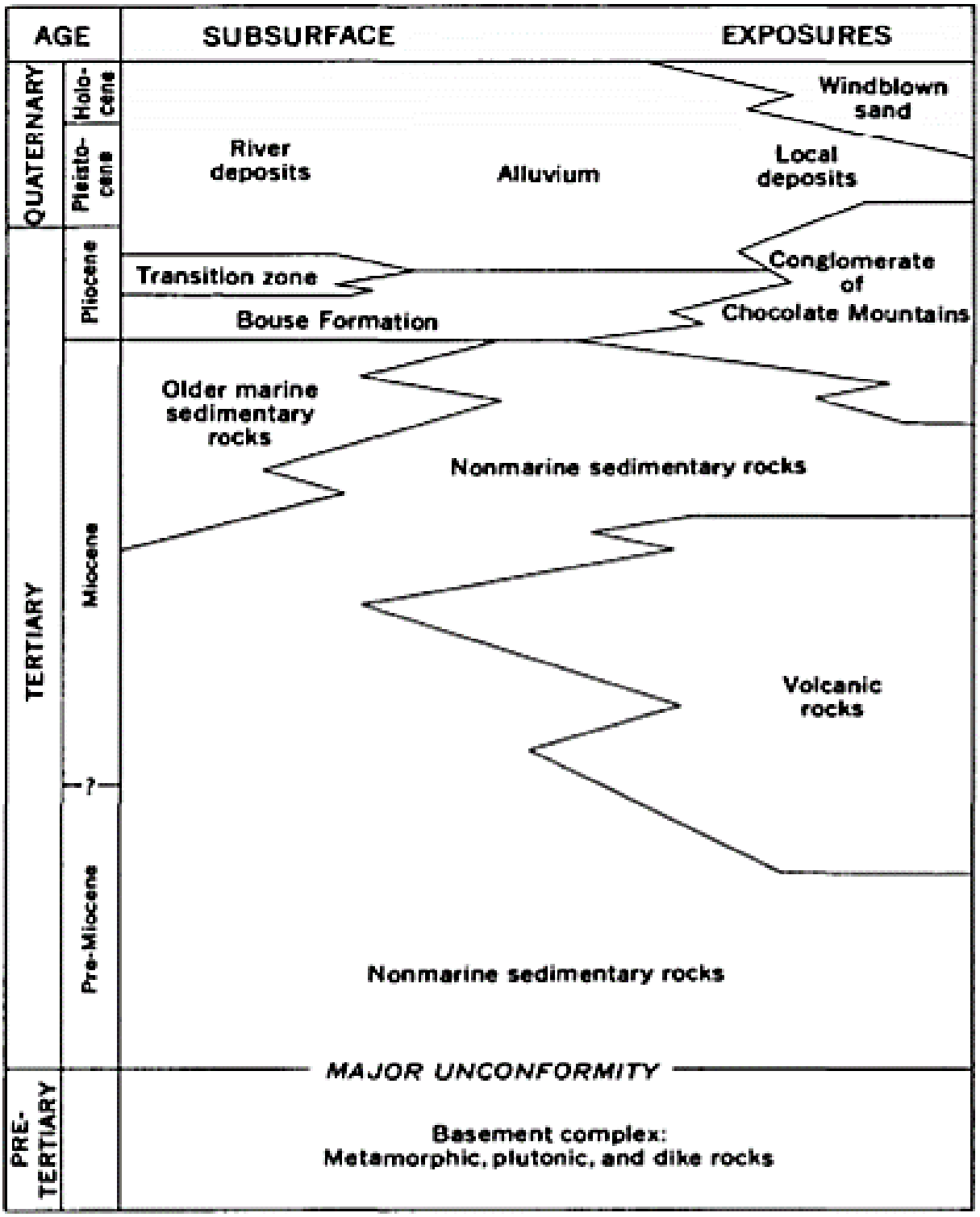
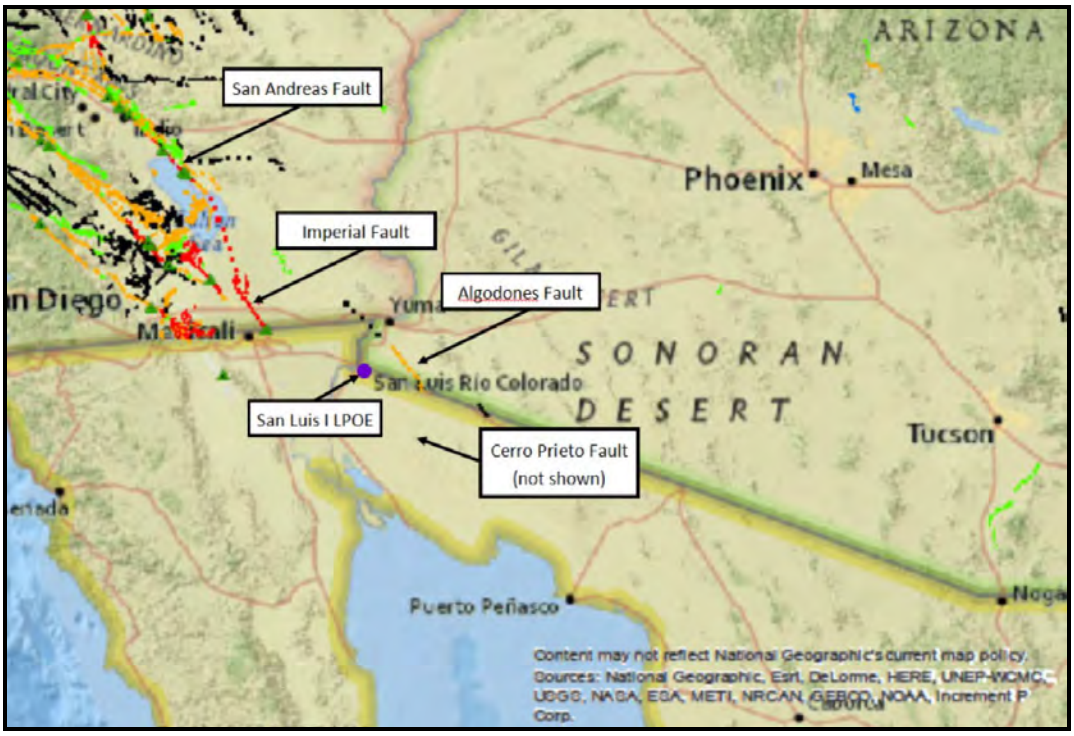


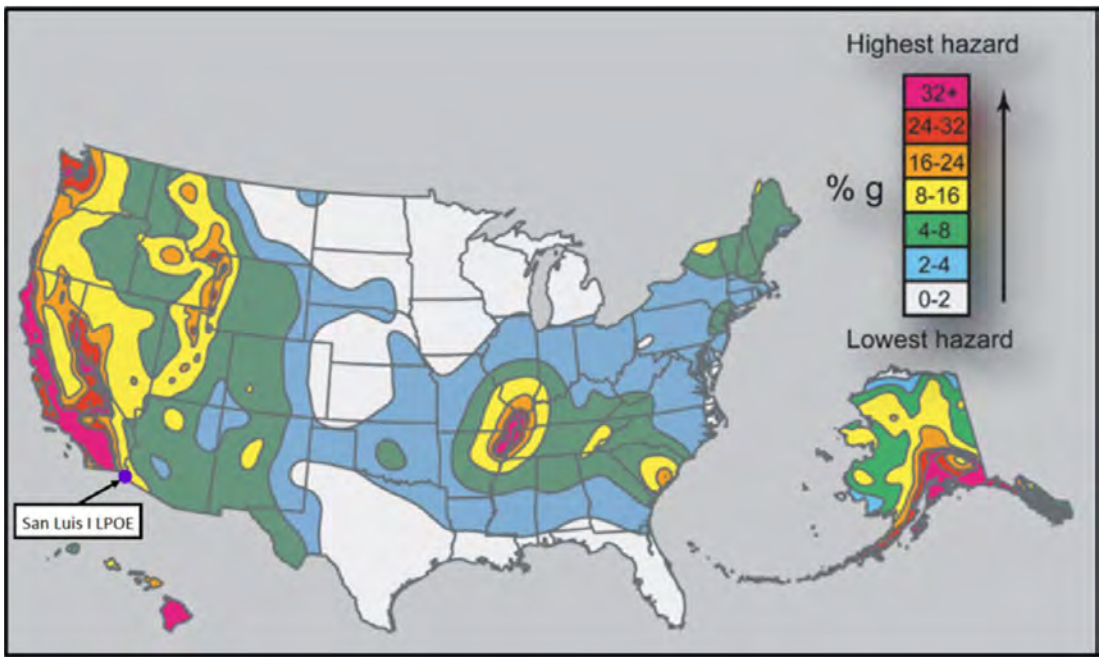
Figure 3-1. Stratigraphic Relations of the Major Rock Units in the Yuma Area



Source: USGS 2018a.

Figure 3-2. USGS Fault Map of Southern Arizona

Figure 3-3 presents an updated map of seismic risk in the San Luis area in terms of percentage of gravity, or the amount of ground shaking that has a 2-in-100 chance of being exceeded in a 50-year period (USGS 2005). San Luis is ranked with an 8–16 percentage of gravity, meaning there is a 2-in-100 chance that this level of shaking will be exceeded in a 50-year period (USGS 2008).



Source: USGS 2005.

Figure 3-3. Seismic Hazard Map

3.2.1.3 Soils

The project's area of interest (AOI) is defined as the San Luis I LPOE and neighboring, former Friendship Park, an AOI of 18.7 acres. According to the U.S. Department of Agriculture's (USDA) Web Soil Survey application (2017), the project area is completely composed of Superstition sand (100 percent of AOI). Figure 3-4 and Table 3-2 show the soil composition in the AOI.

The Superstition series occurs in southern and northwestern Arizona and southern California, and consists of very deep, somewhat excessively drained soils that formed in sandy eolian deposits (NCSS 2007). The elevation range is 40 to 2,500 feet, and annual precipitation in these areas averages 3 inches. The Superstition series has low runoff rates, and rapid permeability.

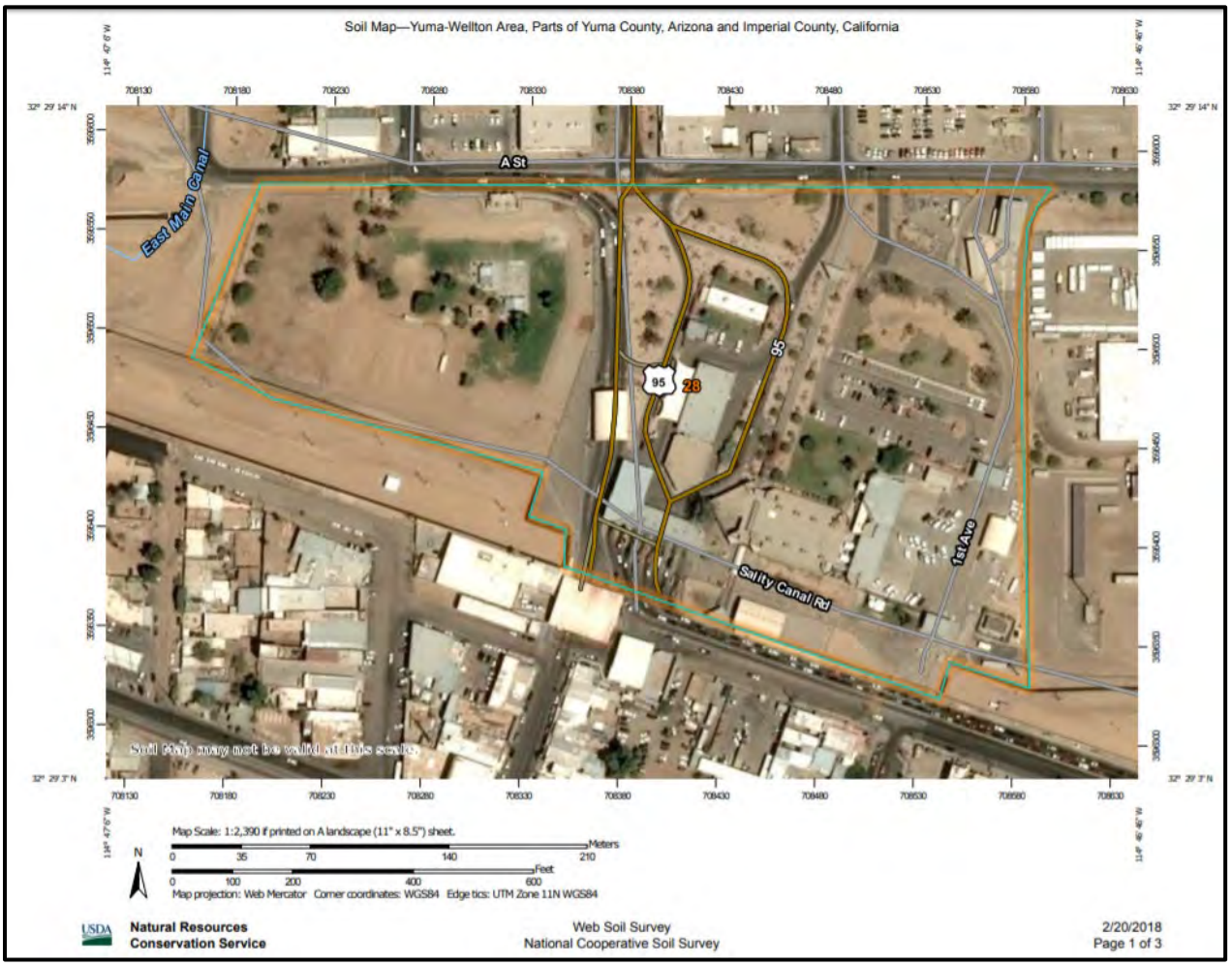


Figure 3-4. Soil Map—San Luis, Yuma County, Arizona

Table 3-2. San Luis Project Area—Soil Map Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
28	Superstition sand	18.7	100.0
	Totals for AOI	**18.7**	**100%**

Source: USDA 2017.

3.2.2 Environmental Consequences

3.2.2.1 Proposed Action

Short-term, minor, adverse impacts on geological, soil, and topographical conditions would be expected during the construction activities associated with the Proposed Action. Construction activities would temporarily increase the risk of soil erosion as soils would be disturbed and exposed to wind and water. However, the relatively flat topography and the rapid permeability of the soil type would decrease the risk of soil erosion caused by water. Dust control measures would be implemented to limit the potential for wind erosion during construction. Long-term, negligible to minor adverse impacts on geology and soils would be expected as a result of the conversion of the former Friendship Park from undeveloped space to paved parking lots and roads within the LPOE. However, this area does not contain any unique geological features and was previously developed.

Since the project site is located in an area with an 8–16 percent gravity rating (earthquake hazard zone 4), there is the potential for seismic activity to damage buildings and structures. While the City of San Luis adopted the 2003 International Building Code (IBC) in 2010, which specifies earthquake design requirements for construction, GSA's P100 Facilities Standards follow the 2012 IBC and American Society of Civil Engineers (ASCE) 41-13 standards (City of San Luis 2018, GSA 2017c). All new buildings associated with the Proposed Action would adhere to the 2012 IBC and ASCE 41-13 standards and be constructed and maintained to withstand moderate to severe shaking.

3.2.2.2 Alternative 1

Under Alternative 1, less soil would be disturbed compared to the Proposed Action, no additional land would be required, and existing buildings would be renovated within the current footprint of the LPOE. Therefore, no impacts on geology or soil are anticipated under Alternative 1.

The risk of structural damage due to seismic activity would still be present, as explained for the Proposed Action. The existing LPOE was constructed in 1982, after the enactment of the Earthquake Hazards Reduction Act of 1977, which established standards for enhancing the seismic safety of buildings (NIBS 2016). Alternative 1 involves interior renovations (i.e., cosmetic upgrades) and exterior renovations (i.e., replacing windows, roofs, and existing asphalt and painting building exteriors). However, the existing reinforced structures and design elements of the LPOE buildings may be damaged or in deteriorated condition, increasing the risk of seismic damage. The proposed renovations would not replace or update infrastructure and may not suffice for improving the structural soundness of the existing buildings and ensuring compliance with GSA building standards.

3.2.2.3 Alternative 2

Under Alternative 2, impacts on geological, soil, and topographical conditions would be the same as those described for the Proposed Action. Therefore, short-term, minor, adverse impacts on geological, soil, and topographical conditions would be expected during the construction activities under Alternative 2.

3.2.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Additional property would not be required. Therefore, no impacts on geology, soils, or topography would occur. Existing risks pertaining to seismic activity would remain.

3.3 WATER RESOURCES

This section discusses the water resources of the project area. Water resources are typically described in terms of water use, water quality, groundwater, surface water, and the regulatory aspects of Waters of the United States (WoUS). When considered together, these water resources are dependent on geology, topography, and soils and, in turn, critically influence habitat, wildlife success, endangered species, human behaviors, and many other resources.

Water resources at this location were previously discussed in the 2016 Final Environmental Assessment for the San Luis I Land Port of Entry and are incorporated here by reference (GSA 2016a).

Water Use. Water use patterns in a desert region are tied to the supply of water. Water supply is dependent on rainfall, groundwater availability, and surface water availability. Changes in usage can drastically impact the total supply of water available for continued human activities as well as habitat.

Water Quality. Water quality impacts the amount of water available for a given use. Land use practices can influence water quality by direct contamination of runoff or by contaminant release.

Groundwater and Surface Water. Groundwater and surface water are interconnected and dependent on drainage features and hydrology. Drainage features and hydrology recharge the aquifer which both provides water for extraction from wells, and can flow into surface water in gaining streams or rivers. Evaluation of hydrology requires a study of the occurrence, distribution, and movement of water, and its relationship with the environment. Many factors affect the hydrology of a region, including natural precipitation and evaporation rates, and outside influences such as groundwater withdrawals. Groundwater is a subsurface hydrologic resource that can recharge, or be recharged by, surface water. It is used for drinking, irrigation, and industrial processes. Groundwater is described in terms of its depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations.

Regulated WoUS. The laws and regulations of the United States recognize certain water features as WoUS that require specific analyses to ensure that they are protected. Projects cannot impair these waters' ability to attain their designated uses under the Clean Water Act. Changes that affect the flow of water require coordination with the U.S. Army Corps of Engineers Regulatory Branch. These WoUS include recognized surface waters but also wetlands, ephemeral streams, and other types of water that have a significant nexus to traditionally navigable waters.

3.3.1 Affected Environment

The project site is at the western edge of the Central Sonoran/Colorado Desert Basin Ecoregion, located east of and near the Colorado River (Griffith et al. 2015). San Luis is characterized by an

arid environment with sparse vegetation. The site is relatively flat, with some drainage towards the Colorado River (GSA 2017a). Water supplies in the Lower Colorado River planning area include groundwater, surface water, Central Arizona Project water, and effluent.

Water Use. San Luis is located in the Yuma Basin of the Colorado River, which has the largest agricultural water demand in the Lower Colorado River planning area (ADWR 2014). However, most water used in the San Luis area is considered withdrawn for high intensity municipal and industrial needs. The City of San Luis currently acquires all of its water supply from groundwater pumped from wells located within the city limits and on the Yuma Mesa (City of San Luis 2012).

Water Quality. No waters are listed as impaired in the Yuma Basin (USEPA 2018a). No surface waters exist within the project area. Two canals close to the project are water quality sampling stations for U.S. Geological Survey (USGS) and U.S. Environmental Protection Agency (USEPA). Groundwater quality in the basin is fairly chemically uniform and similar to the Colorado River which supports previous assertions that Yuma Basin groundwater consists largely of recharged Colorado River water (Olmsted et al. 1973).

Groundwater and Surface Water. In the entire Yuma Basin there are only two perennial streams; the Colorado River and the Gila River. Some portions of the Gila River are considered intermittent. There are no springs in the basin (ADWR 2008). No surface water exists within the footprint of the project. Two canals are close to the western edge of the project; the 242 lateral above Main Drain at AZ–Sonora boundary and the Yuma Main Drain above AZ–Sonora boundary (GSA 2016a).

Groundwater from the Yuma Basin supplies drinking water to San Luis as well as for many agricultural industrial and private well withdrawals within the region. The upper, fine-grained layer is the shallowest water bearing unit and averages about 100 feet below river valleys and 175 feet below Yuma Mesa (a river terrace). This upper layer serves as the recharging unit for deeper groundwater sources and few wells withdraw from it (ADEQ 1995). The second layer is a coarse-gravel zone which is the source of San Luis' drinking water (ADEQ 1995).

Regulated WoUS. No traditionally navigable waters, potential WoUS, or wetlands exist at the site of the proposed project (USFWS 2018). There are two canals to the west of the project site, but these waters are clearly man-made canal structures and not considered as WoUS.

3.3.2 Environmental Consequences

3.3.2.1 Proposed Action

Under the Proposed Action, demolition of existing structures, acquisition of the legal interest for the former Friendship Park site, construction and installation of both underground and aboveground utilities, rerouting of traffic, and construction of new buildings and ancillary structures would occur.

A minimal quantity of water would be required to fabricate concrete during construction activities. However, no adverse impacts on the local or regional water supply would be expected because the quantity is negligible compared to the total supply available. Following completion of the construction activities, no increase in water use would be expected. The LPOE would continue to

serve roughly the same number of vehicles and pedestrians as it currently processes and no additional CBP personnel would be assigned to the LPOE as a result of this Proposed Action.

No surface waters, traditionally navigable waters, WoUS, or wetlands exist on the site; therefore, no impacts would be expected. Best management practices (BMPs) would be employed during construction activities to avoid sedimentation and provide erosion protection; therefore, no impacts on water quality or groundwater would be expected.

The current stormwater drainage system is inadequate for the area and floods during rain surge events. Long-term, moderate, beneficial impacts on stormwater would be expected from the installation of new stormwater structures at the LPOE. Additional information regarding the stormwater drainage system is discussed in Section 3.7.

3.3.2.2 Alternative 1

Impacts under Alternative 1 would be similar to but less than those described for the Proposed Action. No surface waters, traditionally navigable waters, WoUS, or wetlands exist on the site; therefore, no impacts would be expected. BMPs would be employed during construction activities to avoid sedimentation and provide erosion protection; therefore, no impacts on water quality or groundwater would be expected.

3.3.2.3 Alternative 2

Under Alternative 2, impacts on water use, water quality, surface waters, WoUS, and stormwater systems would be the same as those described for the Proposed Action. Therefore, no impacts on water quality, water availability, surface waters or WoUS and long-term, moderate, beneficial impacts on stormwater would be expected during the construction activities under Alternative 2.

3.3.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Long-term, minor, adverse impacts on water quality would be expected from the No-Action Alternative as a result of the continued strain on the inadequate stormwater system. No impacts on water use, groundwater, surface water, WoUS, or wetlands would be expected.

3.4 LAND USE AND VISUAL RESOURCES

Land use is defined as how a specific area is utilized. Land use can be determined by zoning regulations, which set the type and extent of development allowable in an area. Visual resources consist of natural and cultural landscape features that define an area's visual character. Landscape features can include viewsheds, skylines, or other features that give visual definition to an area. This section describes the general land use patterns and visual resources in the areas adjacent to San Luis I LPOE and the former Friendship Park in the City of San Luis, Yuma County, Arizona.

3.4.1 Affected Environment

The City of San Luis was founded in 1930 with the opening of the international land border crossing. The City of San Luis is a gateway for imports and exports from Mexico and is located

on the border across from San Luis Río Colorado, Sonora, Mexico. A large portion of the local economy is dependent on cross border trade, agriculture, and manufacturing (City of San Luis 2011a). The city is located to the east of the Colorado River and is surrounded by active agricultural land and vacant land. The project area consists of the San Luis I LPOE and neighboring, former Friendship Park.

The San Luis I LPOE occupies 12.1 acres of property along the southern edge of the City of San Luis, just north of the U.S.–Mexico border. As discussed in Section 1.3, the LPOE property contains multiple buildings, structures, and paved lots. Immediately adjacent to the west of the LPOE is the former Friendship Park, a 6.13-acre parcel managed by the City of San Luis. The former city park contains site improvements in the form of two maintenance sheds, a concession stand, a baseball backstop and dugouts, lamp posts, parking bollards, two shade structures, and a restroom building. Friendship Park was managed by the City of San Luis until it was closed to the public in 2011. A chain-link, metal fence surrounding the park.

The LPOE and former Friendship Park are located in an industrial and commercial section of the urbanized City of San Luis. The project area is bounded on the south by the international border. The border is delineated with a tall pedestrian fence, which impedes views of San Luis Río Colorado, Mexico to the south (see Figure 3-5). The area to the west of the former Friendship Park is undeveloped and a channel that connects to the Colorado River runs through the property (see Figure 3-6).

Figure 3-5. View of Pedestrian Fence Located South of the San Luis I LPOE

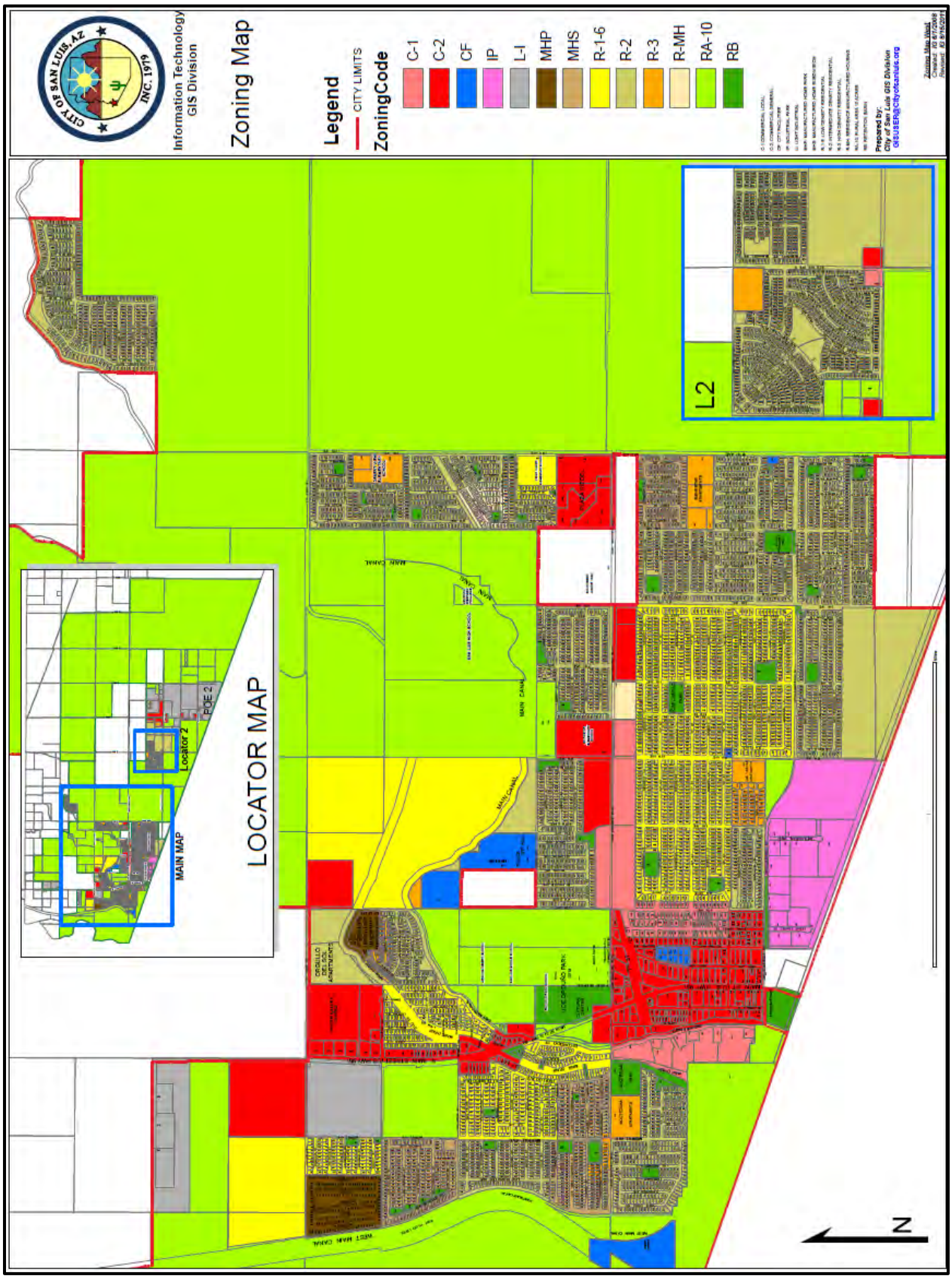
Figure 3-6. View of Area West of the Former Friendship Park

The LPOE and the former Friendship Park are bound by Urtuzuastegui Street on the north. The area directly north is zoned for commercial development and contains retail stores and service centers. The area directly east of the LPOE is zoned as an industrial park and the visual landscape is urbanized and dominated by warehouses. Figure 3-7 shows the current land use zones for the City of San Luis.

Development Trends

In 2011, the City of San Luis released a General Plan 2020 to guide development of the community (City of San Luis 2011a). The planning area for the city consists of approximately 58,718 acres, of which approximately 21,033 acres are within the incorporated limits of the city. Land use categories from 2011 for the 58,718 acres are shown in Table 3-3.

The City of San Luis is one of the fastest growing communities within in Yuma County, and continued growth is anticipated. The 2010 Census reported the population as 25,505, with a population estimate of 32,148 in 2016 (USCB 2017). The 2020 General Plan identifies the area surrounding the LPOE as an *Activity Center* with the intent of allowing for higher density and intensity development and efficient transit. The 2020 General Plan does not identify specific plans for future development of the areas adjacent to the LPOE, but improved efficiency would be consistent with the plan's objectives.



Source: City of San Luis 2011b.

Figure 3-7. Land Use Zoning Map for San Luis, Arizona

Table 3-3. Percentage of Land Use (by Category) in the City of San Luis

Land Use Category	Acres	Percent
Agriculture	16,935	29%
Ranchette[a]	3,935	7%
Neighborhood	8,247	14%
Activity Center	3,614	6%
Business	6,720	11%
Industrial	6,807	12%
Conservation	11,626	20%
Border Buffer	834	1%
Total	**58,718**	**100%**

Source: City of San Luis 2011a.

Note: [a] Residential with large lots, density of one dwelling unit per acre.

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

Under the Proposed Action, the existing LPOE buildings and structures would be demolished and replaced with new buildings and structures. Along with the replacement of existing infrastructure, GSA would acquire the legal interest for the former Friendship Park site and construct new infrastructure on 6.13 acres of the former park in order to expand and improve functionally at the LPOE.

The replacement of the current buildings and structures would continue the current land use at the San Luis I LPOE. The construction and operation of the new infrastructure at the former Friendship Park area would be consistent with the City of San Luis 2020 General Plan. There would be no loss in acreage of active parkland as the former city park has been removed from public use and vacant since 2011. The Proposed Action would not conflict with established or future planned land use within the City of San Luis. New outbound lanes would be constructed to mitigate impacts on traffic patterns (see additional discussion in Section 3.8).

Building and structure heights would not vary greatly from the current buildings, and the newly constructed buildings would be aligned with the general style of buildings in the immediate vicinity of the LPOE. The old deteriorating buildings and structures would be replaced with new buildings and structures. Development and maintenance of the former Friendship Park area would eliminate the accumulation of trash and debris associated with the homeless encampments around the property.

Short-term, minor, adverse impacts on visual resources from construction activities would be expected. Construction equipment and activities would be visible from surrounding commercial facilities and warehouses.

Long-term, minor, beneficial impacts on visual resources would be expected from the change in the viewscape by removing the old deteriorated buildings and replacing them with new buildings.

Open space within the former Friendship Park area would be infilled and vegetation would be removed. Under the Proposed Action, the former city park area would be maintained, and trash and debris wound no longer accumulate on the site. The visual changes would not substantially modify the overall urban character of the area.

Long-term, minor, beneficial impacts on land use would be expected from the development of vacant land (i.e., the former Friendship Park site). Streamlining the LPOE processing and revising the traffic patterns would likely result in enhanced commercial corridors within the City of San Luis.

3.4.2.2 Alternative 1

Under Alternative 1, GSA would renovate and modernize all existing LPOE facilities. There would be no change in size of the San Luis I LPOE. GSA would not acquire the legal interest for the former Friendship Park site from BLM.

The renovation of the current buildings and structures would be compatible with the current land use at the San Luis I LPOE. Therefore, no impacts on land use would be expected. No impacts on recreation would be expected because the legal interest for the former Friendship Park site would not be acquired and would continue to be a closed area. However, Alternative 1 would not be consistent with the City of San Luis 2020 General Plan's objective for improved efficiency.

Short-term, minor, adverse impacts on visual resources would be expected during renovation activities. Construction activities and heavy equipment would be visible from surrounding commercial facilities and warehouses. Long-term, negligible, beneficial impacts on visual resources would be expected as a result of updates to the LPOE, such as new windows, roofs, paint, and asphalt.

3.4.2.3 Alternative 2

Under Alternative 2, impacts on land use and visual resources would be the same as those described for the Proposed Action. Therefore, no impacts on land use and short-term, minor, adverse impacts on visual resources would be expected during the construction activities under Alternative 2. Additionally, long-term, moderate, beneficial impacts on land use would be expected from the development of vacant land (i.e., the former Friendship Park site). Streamlining the LPOE processing and revising the traffic patterns would likely result in enhanced commercial corridors within the City of San Luis.

3.4.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Long-term, negligible, adverse impacts on visual resources would be expected as the existing buildings continued to deteriorate. No impacts on land use or recreational resources would be expected.

3.5 BIOLOGICAL RESOURCES

Biological resources include vegetation, aquatic and terrestrial wildlife, migratory bird species (covered by the Migratory Bird Treaty Act [MBTA]), special status species (including federal

endangered, threatened, candidate, and State of Arizona protected species), and critical habitat. Together, these resources form the ecological character of a given site. Geology, soils, and water resources have a large influence on which biological resources can survive in an area, but the vegetation is the key factor determining which animal species are present and how many individuals can be supported. All of these resources constitute a species' habitat. Critical habitat, as defined by U.S. Fish and Wildlife Service (USFWS), is the habitat necessary to support the special needs of a special status species.

Vegetation. Vegetation resources include all plants that are found within the region of analysis. Vegetation analysis and descriptions were conducted using Bailey's multi-tiered classification of ecoregions contained in the U.S. Forest Service's *Descriptions of the Ecoregions of the United States* (USFS 1995). In addition, the U.S. Geological Survey's (USGS) Gap Analysis Program Level 3 data and associated NatureServe descriptions of the ecological systems were used to describe the vegetation in the region of analysis (2018b). Site visits and surveys were completed in preparation of the *Final Environmental Assessment for the San Luis I Land Port of Entry* and are incorporated here by reference (GSA 2016a).

An ecoregion contains geographically distinct environmental communities and conditions based on several tiers of classification. These include domains, divisions, and provinces. Domains are the largest geographic level of ecoregional classification and are generally defined by climate. Domains are split into divisions, which are defined according to climate and vegetation. Divisions are subsequently split into provinces that are typically defined by their major plant formations. Because ecoregions are defined by their shared biotic and abiotic characteristics, they represent practical units on which to base conservation planning.

Wildlife. No WoUS, surface waters, traditionally navigable waters, or wetlands are known to exist in the project area. Therefore, no discussion aquatic wildlife is included in this EIS. Terrestrial wildlife includes native and naturalized terrestrial animals and the habitats in which they exist. Species addressed in this section include those not listed as threatened or endangered by the USFWS.

Birds. In the United States, the MBTA protects birds that migrate across its national borders. The MBTA makes it unlawful to pursue, hunt, take, capture, kill, or sell birds (including any parts, dead or alive, feathers, eggs, and nests) that are listed in the statute. Currently there are over 800 species on the list.

Threatened and Endangered Species. Under the Endangered Species Act (ESA), an endangered species is defined as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as any species likely to become an endangered species in the foreseeable future.

Species listed as threatened or endangered under the ESA, that have the potential to be affected by implementation of the Proposed Action or No-Action Alternative, are discussed in this section. NatureServe elemental occurrence data were used to determine the presence of species within the region of analysis. An elemental occurrence is defined by NatureServe as an area of land or water where a species or natural community is or was present and has conservation value (NatureServe 2013). These occurrence data require that a species is in appropriate habitat, at the appropriate time

of the year, and are naturally occurring (NatureServe 2013). This section presents those federally listed species that are known to occur or have the potential to occur within the region of analysis.

3.5.1 Affected Environment

Biological resources at this location were previously discussed in the *Final Environmental Assessment for the San Luis I Land Port of Entry* and those findings are incorporated herein by reference (GSA 2016a). The project site is at the western edge of the Central Sonoran/Colorado Desert Basin Ecoregion, in the Yuma desert, located east of the Colorado River (Griffith et al. 2014).

3.5.1.1 Vegetation

San Luis is characterized by an arid environment with sparse vegetation. It is close to the Yuma desert, which is characterized by sandy plains that are virtually devoid of vegetation (Ohmart et al. 1988). Proximity to the Colorado River provides moisture that fosters scrub and shrub vegetation, such as, creosote bush (*Larrea tridentata*) and the ocotillo (*Fouquieria splendens*). The creosote bush is widespread throughout the desert whereas the ocotillo is commonly found in alluvial fans. Various desert trees that occur in dry watercourses are also present, including paloverde (*Parkinsonia* sp.), desert willow (*Chilopsis linearis*), desert ironwood (*Olneya tesota*), and smoke tree (*Psorothamnus spinosus*). This region is also home to the iconic saguaro cactus (*Carnegiea gigantea*) (NPS 2017).

The project site is relatively flat, with some drainage towards the Colorado River. The project site consists of two distinct portions—the eastern and western portions. The eastern portion is completely developed as the existing LPOE and consists of ornamental landscaping plants. The western portion of the project is the abandoned park area (i.e., Friendship Park). According to a survey conducted in September 2015 in preparation of the *Final Environmental Assessment for the San Luis I Land Port of Entry*, the vegetation in the project area consists entirely of ornamental landscaping plants, including various non-native grasses, oleander (*Nerium oleander*), bougainvillea (*Bougainvillea glabra*), boxwood (*Buxus* sp.), bottle tree (*Brachychiton rupestris*), sissoo (*Dalbergia sissoo*), and citrus trees (GSA 2016a).

3.5.1.2 Wildlife

Given the proximity of the project site to the Colorado River, the ecology of the site could be expected to be more like river valley ecosystems than the desert ecosystems just east of the project area. Expected wildlife fauna in undeveloped portions of this area include the Sonora mud turtle (*Kinosternon sonoriense*), the Colorado River toad (*Incilius alvarius*), desert tortoises (*Gopherus agassizii* and *Gopherus morafkai*), mule deer (*Odocoileus hemionus*), rattlesnakes (*Crotalus scutulatus* and *Crotalus cerastes*), and the Yuma myotis bat (*Myotis yumanensis*) (GSA 2016a).

No surface water or wetlands occur on the project site; therefore, there are no aquatic wildlife resources present. The eastern portion of the project site is completely developed and the western portion is highly disturbed and landscaped with non-native plants. No natural faunal assemblages are present. A site visit in 2015 found no wildlife species, but offered the opinion than only urban adapted wildlife could utilize the project area, including desert cottontail (*Sylvilagus audubonii*) and ground squirrels (*Spermophilus variegatus* and *Spermophilus tereticaudus*), reptiles such as

Western banded geckos (*Coleonyx variegatus*) and ornate tree lizards (*Urosaurus ornatus*), and birds (GSA 2016a).

3.5.1.3 Birds

Several bird species protected by the MBTA could occur within the project area throughout the year. Table 3-4 lists the species with the potential to occur (USFWS 2008). No bird nests or sign of nesting activity were observed within the project area during the 2015 site visit; however, some trees within the area could provide suitable nesting habitat for some species protected by the MBTA (GSA 2016a).

Table 3-4. Potentially Occurring Bird Species within the Project Area

Migratory Bird Common Name	Migratory Bird Genus/Species	Probability of Presence	Breeding Season
Bald eagle	*Haliaeetus leucocephalus*	January, November, and December	Mar. 20 to Sep. 15
Bendire's thrasher	*Toxostoma bendirei*	March to May and July	Mar. 15 to Jul. 31
Black rail	*Laterallus jamaicensis*	February to December	Mar. 1 to Sep. 15
Black-chinned sparrow	*Spizella atrogularis*	February, April to May, and November	Apr. 15 to Jul. 31
Burrowing owl	*Athene cunicularia*	January to December	Mar. 15 to Aug. 31
Clark's grebe	*Aechmophorus clarkii*	January to December	Jan. 1 to Dec. 31
Costa's hummingbird	*Calypte costae*	January to December	Jan. 15 to Jun. 10
Elf owl	*Micrathene whitneyi*	April to May	May 1 to Jul. 15
Gila woodpecker	*Melanerpes uropygialis*	January to December	Apr. 1 to Aug. 31
Gilded flicker	*Colaptes chrysoides*	January to July and September to December	May 1 to Aug. 10
Golden eagle	*Aquila chrysaetos*	January to February, October, and December	Apr. 1 to Aug. 31
Gray vireo	*Vireo vicinior*	February to April and December	May 10 to Aug. 20
LeConte's thrasher	*Toxostoma lecontei*	January to July, September to October, and December	Feb. 15 to Jun. 20
Long-billed curlew	*Numenius americanus*	January to May, and July to December	N/A (breeds elsewhere)
Marbled godwit	*Limosa fedoa*	April, July, and August	N/A (breeds elsewhere)
Mountain plover	*Charadrius montanus*	October and December	N/A (breeds elsewhere)
Rufous hummingbird	*Selasphorus rufus*	February to May, September	N/A (breeds elsewhere)
Whimbrel	*Numenius phaeopus*	March to May	N/A (breeds elsewhere)

Migratory Bird Common Name	Migratory Bird Genus/Species	Probability of Presence	Breeding Season
Willet	*Tringa semipalmata*	April to May and July to August	N/A (breeds elsewhere)

Source: USFWS 2008.

3.5.1.4 Threatened and Endangered Species

There are three federally protected species identified by the USFWS with the potential to occur in the project area: Southwestern willow flycatcher (*Empidonax traillii extimus*), yellow-billed cuckoo (*Coccyzus americanus*), and Yuma clapper rail (*Rallus longirostris yumanensis*) (see Table 3-5) (USFWS 2018). Unlike most states, Arizona does not classify protected species. All three of these species are birds that require riparian habitat. However, the project area has no suitable habitat for any of these species given the fact that there are no surface waters. There are no critical habitat designations for these protected bird species in the area of the proposed project area (USFWS 2018).

Table 3-5. Protected Species with the Potential to Occur in the Project Area

Species Name	Federal Status	Habitat Requirements/Range	Possibility of Occurrence in the Project Area
Southwestern willow flycatcher (*Empidonax traillii extimus*)	Endangered	Cottonwood or willow and tamarisk riparian communities along rivers and streams below 8,500 feet.	None. No suitable habitat. No riparian vegetation. No critical habitat in the project area.
Yellow-billed cuckoo (*Coccyzus americanus*)	Threatened	Large blocks of riparian woodlands below 6,500 feet.	None. No suitable habitat. No riparian woodlands. No critical habitat in the project area.
Yuma clapper rail (*Rallus longirostris yumanensis*)	Endangered	Marshes associated with dense emergent riparian vegetation below 4,500 feet.	None. No suitable habitat. No marshes or emergent riparian vegetation. No critical habitat in the project area.

Source: USFWS 2018.

3.5.2 Environmental Consequences

3.5.2.1 Proposed Action

Under the Proposed Action, vegetation at the LPOE and the former Friendship Park would be removed. The vegetation at the LPOE consists of ornamental landscaping plants. There is no suitable habitat for wildlife species at the LPOE and no known federally protected species are present. The vegetation at the former city park is largely horticultural species with little habitat value and a few potential nesting sites with marginal value. The remainder of the former Friendship Park area is mainly devoid of vegetation. No critical habitat, other wildlife habitat, aquatic habitat, or habitat suitable for the three federally protected species are present at the former Friendship Park. Therefore, no short-term adverse impacts on wildlife or federally protected species would be

expected as a result of the Proposed Action. Short- and long-term, negligible adverse impacts on vegetation would be expected from the removal of the existing plants.

3.5.2.2 Alternative 1

Under Alternative 1, vegetation at the LPOE would be removed. The vegetation at the LPOE consists of ornamental landscaping plants. No critical habitat, other wildlife habitat, aquatic habitat, or habitat suitable for the three federally protected species are present at the LPOE. There is no critical habitat, aquatic habitat, or suitable habitat for wildlife species at the LPOE and no known federally protected species are present. Therefore, no short-term adverse impacts on wildlife or federally-protected species would be expected as a result of Alternative 1. Short- and long-term, negligible adverse impacts on vegetation would be expected from the removal of the existing plants.

3.5.2.3 Alternative 2

Under Alternative 2, impacts on biological resources would be the same as those described for the Proposed Action. No impacts on critical habitat, other wildlife habitat, aquatic habitat, or habitat suitable for the three federally protected species would be expected under Alternative 2. No short-term adverse impacts on wildlife or federally protected species would be expected as a result of Alternative 2. Short- and long-term, negligible adverse impacts on vegetation would be expected from the removal of the existing plants.

3.5.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. No impacts on vegetation, wildlife, or federally protected species would be expected.

3.6 CULTURAL RESOURCES

3.6.1 Affected Environment

The term “cultural resources” refers to a broad range of properties relating to history, prehistory, or places important in traditional religious practices. While not formally included in NEPA, or other heritage related laws and Executive Orders (EOs), several federal laws and EOs, including the National Historic Preservation Act (NHPA), the Archeological and Historic Preservation Act, the American Indian Religious Freedom Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act (NAGPRA), protect cultural resources. The NHPA focuses on property types such as prehistoric and historic sites, buildings and structures, historic districts, and other places with physical evidence of human activity considered important to a culture or a community for scientific, traditional, religious, or other reasons. These resources can prove useful in understanding and describing the cultural practices of past peoples or retain cultural and religious significance to modern groups. Resources judged significant under criteria established in the NHPA are considered eligible for listing in the National Register of Historic Places (NRHP). The NRHP refers to these places as “historic properties” protected under the NHPA.

The NHPA requires federal agencies to take into account the effects of their activities and programs on NRHP-eligible properties. Regulations for Protection of Historic Properties (36 CFR 800) describes the process for federal agencies to consult with the appropriate State Historic Preservation Office (SHPO), Native American groups, other interested parties, and when appropriate, the Advisory Council on Historic Preservation. This ensures the impacts from the undertaking are adequately considered on historic properties.

NAGPRA is a federal law that provides a process for museums and federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants, and culturally affiliated Indian tribes and Native Hawaiian organizations.

A Class I records review of the project area and a one-mile study radius was completed, as well as a review of the AZSITE database at the Arizona State Museum (ASM) to determine if any cultural resources were located within the Area of Potential Effect (APE) or if any archaeological surveys had been conducted within the APE. The APE for the direct impacts for the Proposed Action is the LPOE and the former Friendship Park. No cultural resources or surveys were located within the APE.

Fifteen archaeological surveys have been conducted within one mile of the APE (see Table 3-6 and Figure 3-8). These include surveys for housing developments, an industrial park, road widening and construction projects, power lines, and an evaluation of the San Luis townsite. These surveys recorded a total of six historic sites within one mile of the APE (see Table 3-7 and Figure 3-9). Five of the six sites are parts of the canal system within the town of San Luis. Four of these are considered eligible for listing in the NRHP and one (the East Main Canal) has already been determined as eligible for listing. The last site, U.S. Highway 95 (AZ L:7:30[ASM]), contains portions of the highway which are considered eligible for the NRHP.

Table 3-6. Archaeological Surveys within 1 Mile of the APE

Project Number	Description	Sites Recorded	Reference
1981-114.ASM	Survey of 100 acres for the San Luis housing development	No sites recorded	Lange 1981
1983-23.ASM	Survey of 14 acres for the San Luis Industrial Park	No sites recorded	Madsen 1983
1985-041.ASM	Survey of 30.9 acres for the State Land Department	No sites recorded	Rozen 1985
1994-331.ASM	Survey of 20 miles for highway widening project along US 95	Recorded ten sites, none within project area	Hathaway and Stone 1994
1995-105.ASM	Survey of 3.2 miles for the San Luis Canal Crossing power line	No sites recorded	Bruder and Darrington 1995
1995-300.ASM	Survey of 3.1 miles for the San Luis Alternative Canal Crossing power line	No sites recorded	Darrington 1995
2000-051.ASM	Survey of 72.17 acres in the San Luis Industrial Park	No sites recorded	Jones 2000
2001-826.ASM	Survey of 2.2 miles for a truck bypass route	No sites recorded	Doak 2002
2004-128.ASM	Survey of 182 acres for the Yuma lighting and fence project	Five previously recorded sites—AZ X:6:15, 39, and 65(ASM); X:9:5 and 6(ASM)	Hart 2004
2005-101.ASM	Survey of 1 acre for a wireless telecommunications project	No sites recorded	Dobschuetz 2005
2013-293.ASM	Survey of 11.72 acres for road construction	No sites recorded	Bowler and Solliday 2012
BLM-050-02-09-82-N	San Luis Townsite cultural resources evaluation	Unknown	BLM-050-02-09-82-N
BLM-050-85-23-N	Unknown	Unknown	BLM-050-85-23-N
BLM-050-92-54	Unknown	Unknown	Pfaff et al. 1999
BLM-050-95-6	Unknown	Unknown	BLM-050-95-6

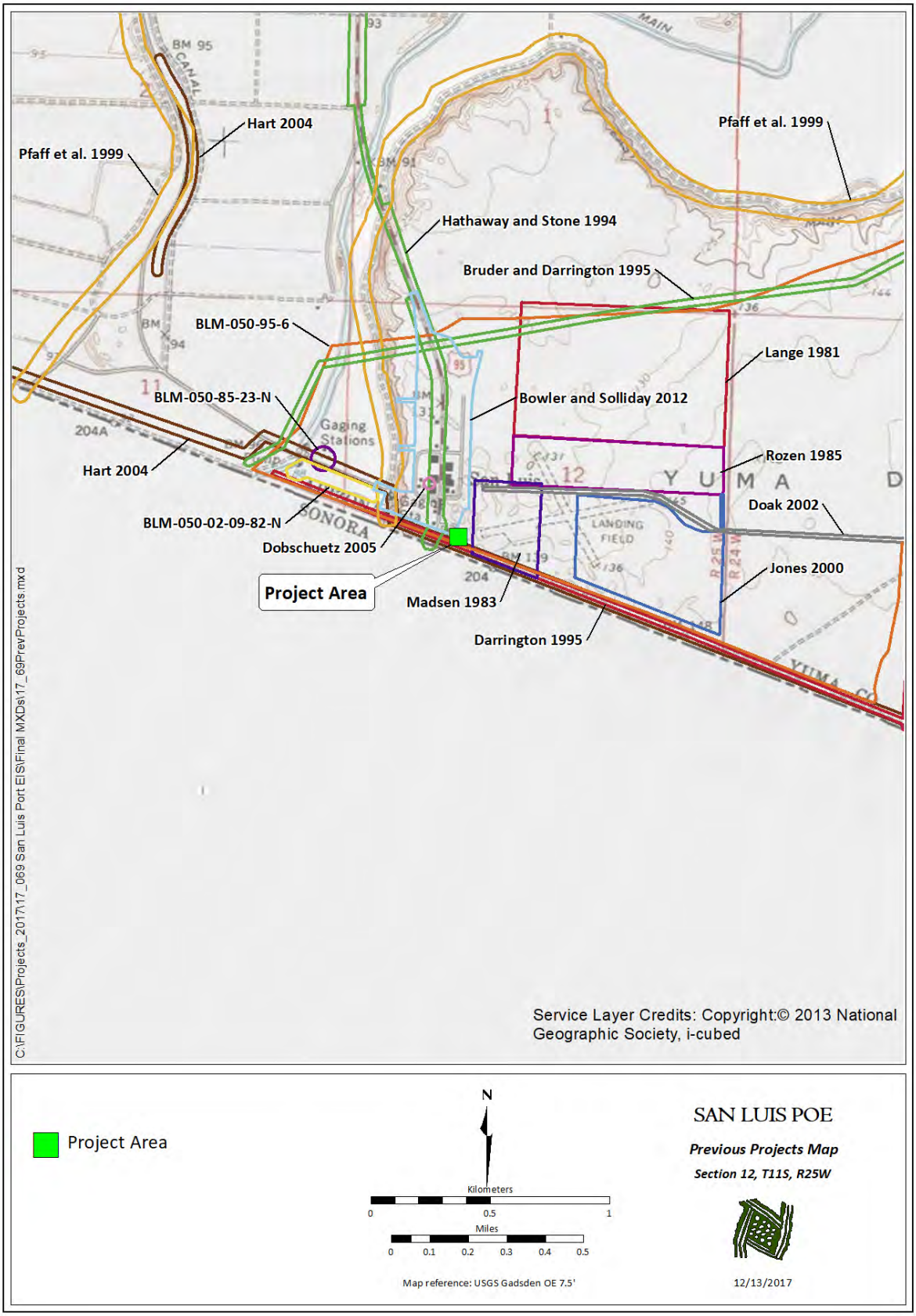


Figure 3-8. Previous Archaeological Surveys within 1 Mile of the APE

Table 3-7. Cultural Resources Located within 1 Mile of the APE

Site Number	Description	NRHP Eligibility	Reference
AZ L:7:30(ASM)	U.S. Highway 95	Eligible individually	Hart 2004
AZ X:6:15(ASM)/AZ X:5:10(ASM)	Valley Levee, water control device, earthen levee with sloping sides extending from Yuma along east bank of Colorado River to the Mexican boundary	Considered eligible	Hart 2004
AZ X:6:39(ASM)/ AZ X:5:16(ASM)	Main Drain, earthen channel that collects excess water from irrigated lands in the valley division	Considered eligible	Hart 2004
AZ X:6:65(ASM)/AZ X:5:8(ASM)	East Main Canal	Determined eligible, criteria A and C	Hart 2004
AZ X:9:5(ASM)	Check and Culvert Main Canal, water control device at the terminus of the East Main Canal near the Mexican border	Considered eligible, criteria A and D	Hart 2004, Bowler and Solliday 2012
AZ X:9:6(ASM)	Boundary Water Pumping Plant	Considered eligible	Hart 2004

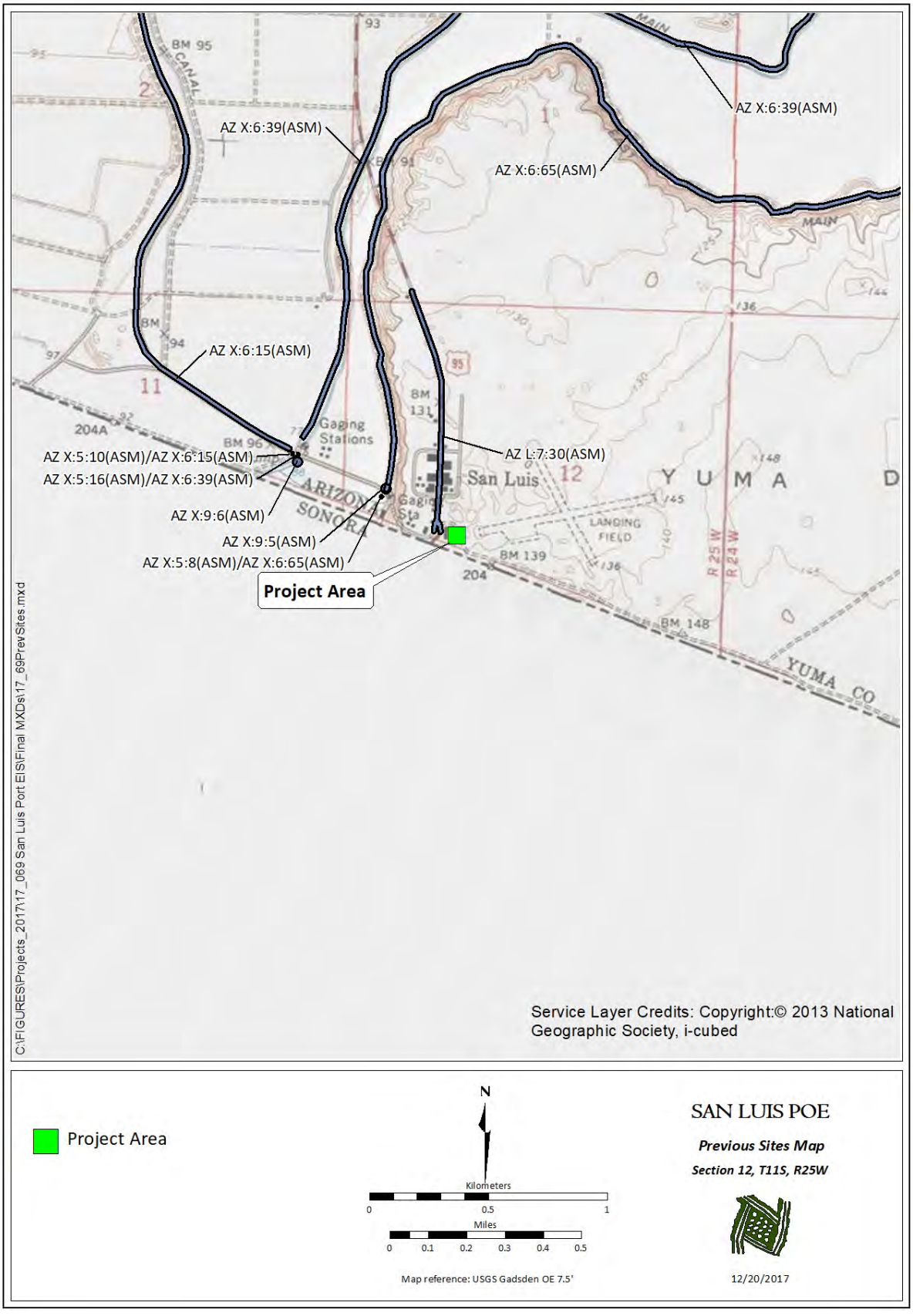


Figure 3-9. Cultural Resources Located within 1 Mile of the APE

3.6.2 Environmental Consequences

Impacts on cultural resources could occur from a variety of activities. Subsurface resources could be damaged by construction activities, such as trenching and excavation. Surface resources could be impacted by altering the viewshed or physically damaging or altering a resource.

3.6.2.1 Proposed Action

The records review revealed that no previously recorded cultural resources were located within the archaeological APE. Six NRHP-eligible historic properties are located within one mile of the APE; however, the eligibility of these sites would not be impacted by the Proposed Action. The archaeological records review resulted in the recommendation of no historic properties affected for either the APE or within one mile of the APE.

There are no significant cultural resources or isolated occurrences located on the project site; therefore, no direct or indirect effects on any known cultural resources would be expected. If previously unidentified cultural resources are encountered during the undertaking, all ground disturbing activities in the vicinity of the discovery would cease and the area would be secured. GSA would contact the Arizona SHPO immediately and no additional work would commence without the approval of the Arizona SHPO.

3.6.2.2 Alternative 1

The APE for Alternative 1 is the same as described for the Proposed Action. Therefore, impacts under Alternative 1 would be the same as those described for the Proposed Action. The archaeological records review resulted in the recommendation of no historic properties affected for either the APE or within one mile of the APE; and no direct or indirect effects on any known cultural resources would be expected.

3.6.2.3 Alternative 2

Under Alternative 2, impacts on cultural resources would be the same as those described for the Proposed Action. Therefore, no impacts on historic properties, significant cultural resources or isolated occurrences would be expected during the construction activities under Alternative 2.

3.6.2.4 No-Action Alternative

Under the No-Action Alternative, the LPOE would remain as-is and would continue operations in existing facilities as they are currently configured. Therefore, no direct or indirect impacts on cultural resources would be expected.

3.7 INFRASTRUCTURE AND UTILITIES

Infrastructure is wholly man-made and consists of the systems and physical structures that enable a population in an area to function. The extent of the infrastructure determines what areas are characterized as urban (developed) or rural (undeveloped). The infrastructure components discussed in this section include onsite buildings, road networks, electrical system, water and plumbing system, liquid fuel supply, stormwater drainage, communication systems, and heating,

ventilation, and air conditioning systems. The region of influence includes the existing San Luis I LPOE, adjacent roadways, and the former Friendship Park area.

3.7.1 Affected Environment

3.7.1.1 Infrastructure

Facilities

San Luis I LPOE. The overall condition of the facilities at San Luis I LPOE are fair to good. The current facilities contain many operational deficiencies imposed by deteriorating building conditions and improve the LPOE's functionality, capacity, and security. The specific facilities at San Luis I LPOE and current conditions are described in Table 3-8.

Table 3-8. Current Condition of Facilities, Paved Areas, and Other Onsite Improvements at San Luis I LPOE

Facility Name	Condition	Notes
Former commercial processing facility (currently used for storage and parking)	Very good	Interior building configuration does not adequately separate CBP officers and support staff.
Main building	Poor	Utility systems are outdated. Several building code violations are present.
POV processing facilities (primary and secondary inspection and outgoing POVs)	Fair	No indication of damage or deterioration.
Senior Inspection officer modular building	Fair	No indication of damage or deterioration.
Family holding modular building	Poor	Interior building configuration does not provide separation between CBP officers and detainees.
Secure storage	Fair	No indication of damage or deterioration. Located too close to the U.S.–Mexico border.
Canine kennel	Poor	Inadequate ventilation in both housing and officer work areas.
Main Street (west of San Luis I LPOE)	Fair	No indication of damage or deterioration.
Landscaping	Good	Grounds are well-maintained, no indication of neglect or deterioration.
Pedestrian pathways and sidewalks	Good	The pedestrian pathway was constructed in 2016 and well-maintained, no indication of neglect or deterioration. Remaining concrete sidewalks appeared to be in good condition, no indication of damage or deterioration.
Lamp posts and electrical infrastructure	Fair	No indication of damage or deterioration.
Parking lots	Fair	Minimal damage and degradation (i.e., cracks, erosion, and staining on pavement).

A Regional Feasibility Study was completed in 2017 to evaluate the condition of the San Luis I LPOE and to identify the needs and deficiencies in anticipation of its modernization (GSA 2017a). The study showed that the LPOE has deteriorating utilities infrastructure, poor building conditions, general issues with the site layout, and limited space for expansion.

An asbestos containing material (ACM) and lead-containing paint (LCP) survey was conducted in August and October of 2017. The survey identified ACM in the Main Building (rooms 01013 and 01049) and the Secondary Inspection Building (room 01126). LCP and lead-based paint (LBP) was found in the Main Building, Dock Area, and Secondary Inspection Building. Further information on ACM and LBP is provided in Section 3.11.1.

Former Friendship Park. A Phase I Environmental Site Assessment of the former Friendship Park was also completed in 2020 to evaluate the current condition of the park in preparation for acquisition and use in the proposed expansion of the San Luis I LPOE (GSA 2017b). Friendship Park was closed to the public in 2011 and is no longer maintained by the City of San Luis. The park's ground cover consists of grass, dirt, trees, pavement, and concrete. A metal, chain-link fence surrounds the site. As a result, trash and debris associated with homeless encampments have accumulated throughout the property. The site was improved with two maintenance sheds, a concession stand, a baseball backstop and dugouts, lamp posts, parking bollards, two shade structures, and a restroom building (GSA 2017b). Table 3-9 lists the facilities and other improvements that are currently at the former Friendship Park and their current condition.

Table 3-9. Current Condition of Facilities, Paved Areas, and Other Onsite Improvements at the former Friendship Park

Facility Name	Condition	Notes
Maintenance equipment storage sheds	Poor	Neglected building. Exterior paint is chipping.
Concession stand	Poor	Neglected building. Exterior paint is chipping.
Restroom building	Poor	Neglected building and unsanitary conditions are present.
Pedestrian pathways and sidewalks	Good	The pedestrian pathway was constructed in 2016 and well-maintained, no indication of neglect or deterioration. Remaining concrete sidewalks appeared to be in good condition, no indication of damage or deterioration.
Lamp posts and electrical infrastructure	Fair	No indication of damage or deterioration.
Parking lots	Fair	Minimal damage and degradation (i.e., cracks, erosion, and staining on pavement).
Landscaping	Poor	Visual inspections revealed dead or neglected plants and trees.
Baseball backstop and dugouts	Poor	Visual inspections indicated the backstop and dugouts are damaged and unmaintained.
Shade structures	Fair	Visual inspections did not reveal indications of damage or decay.

The ACM and LCP survey conducted in August and October of 2017, identified ACM in the North Storage Shed, Central East Showers, and Restrooms. LCP and lead-based paint (LBP) was found

in the Friendship Park Buildings (GSA 2017a). Further information on ACM, LCP, and LBP is provided in Section 3.11.1.

Road Networks

Roadways in the vicinity of the LPOE include Main Street, eight POV entry lanes (including four ready lanes and one SENTRI lane), Urtuzuastegui Street to the north, and various unnamed paved driveways and parking areas at the San Luis I LPOE. Traffic entering the United States is routed through the LPOE via Main Street and exits onto 1st Street. Traffic leaving the United States enters the LPOE via Urtuzuastegui Street and continues south to Mexico. The 2017 Feasibility Study determined that onsite pavement is in poor condition due to its age and continuous use (GSA 2017a). The current road configuration does not adequately support the traffic demands. Traffic from San Luis I LPOE is routed into downtown San Luis, which often creates traffic jams.

3.7.1.2 Utilities

Electrical Service

Electrical service to San Luis I LPOE and the former Friendship Park is provided by the Arizona Public Service Company via aboveground and underground electricity transmission lines. An 800-amp supply of electrical service was installed when the port was constructed, but is no longer adequate due to the additional loads added over the years. A 600-amp service was installed in 2012 to provide additional capacity and currently provides power to two booths (GSA 2013a). A 2013 inspection of the electrical system determined that the majority of the electrical load was not supported by emergency or standby power and that the existing emergency power system was undersized for this facility per GSA guidelines (GSA 2013b).

Water and Plumbing System

Water service is provided by the City of San Luis, which extracts groundwater from well sites located throughout the city (City of San Luis 2016). The cast-iron plumbing system is at least 35 years old (installed in approximately 1982) and is in poor condition. A 2013 study determined that the onsite plumbing system was outdated, and the sanitary sewer piping system was in poor condition and failing due to the city's mineral-heavy water causing deterioration. The study identified many leaks and clogs in the main building and secondary inspection headhouse plumbing systems (GSA 2013c).

The main building contains two 60-ton electric, water-cooled reciprocating chillers and a condensing water storage system to distribute and supplement building demand. Each of the buildings at the port have individual hot water heaters to supply hot water for that building (GSA 2016b).

Diesel Fuel

Records indicate that an underground storage tank (UST) was previously operated at the San Luis I LPOE. In February 2000, two incidents of the UST leaking were reported and it was subsequently closed in January 2001 and removed in 2016 (EDR 2017). The UST was considered a historic recognized environmental condition; however, no further investigation is required.

There is a 1,000-gallon aboveground storage tank (AST) is connected to the onsite emergency generator and is in good condition with no evidence of spills or releases. The AST is constructed of steel and is in good condition with all associated piping located aboveground. The AST is equipped with secondary storage on a concrete base. A 2013 assessment determined that the emergency power system was undersized for this facility per GSA guidelines (GSA 2013b).

Stormwater Drainage

The project area is relatively flat with gentle drainage to the west. There are two stormwater retention basins at the San Luis I LPOE, one is north of the onsite employee parking lot and the second is on the southern boundary of the LPOE. The San Luis I LPOE has an underground drainage system leading to the Colorado River on the southern border of the site not currently in use as part of the onsite drainage system. The site's drainage system is currently unable to handle the extensive stormwater experienced during summer and winter rain surge events, often resulting in flooding of primary processing lanes (GSA 2017a).

Communications Systems

The communication equipment consists of systems for public addresses, intercommunication and paging, telephone, television, time keeping, fire alarm, security and detection, and local area networks. The system controls are housed with the LPOE's energy infrastructure in an unventilated standalone electrical room (GSA 2016b).

Heating, Ventilation, and Air Conditioning (HVAC) Systems

The facilities at the LPOE are either cooled electrically or by individual wall-mounted, air conditioners (i.e., in trailers). Heat is provided by either electrical power or propane gas. The HVAC systems are roof-mounted and composed of heat and cooling elements, distribution, terminal and package units, and controls (GSA 2016b).

The 2016 Building Engineering Report identified several deficiencies in the onsite HVAC systems. The units on the guard booth and modular building are in fair condition and have exceeded their expected usable lives. Pneumatic control panels, dampers, and other associated devices in mechanical spaces throughout the main building are out of date, and the canopy HVAC units are operating below optimal efficiency. The cooling towers, central air handing unit, and exhaust fans have also exceeded their useful life, and the chilled water system requires replacement. Finally, because the electrical systems room has no dedicated cooling unit, site personnel keep the door propped open, posing a security risk to sensitive communication equipment and power to the site (GSA 2016b).

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

The proposed site renovations and expansions would increase the demand on utility systems. Under the Proposed Action, onsite facilities at the San Luis I LPOE would be demolished and redeveloped with upgraded, higher-efficiency utility systems. The Proposed Action includes subsurface grading, trenching for utility system installations, tree removal, and paving for access

roads and parking lots. Based on the LPOE's previously-disturbed surface and subsurface conditions, short-term, negligible to minor adverse impacts would be expected.

Newly constructed facilities would optimize and streamline CBP operations at San Luis I LPOE. The new facilities would be equipped with utility systems that can adequately support CBP operations, such as a water-processing plant, emergency generator systems, HVAC system, and plumbing and sanitary sewer piping. These changes would provide improved conditions for CBP personnel as well as enhancing traveler comfort. The upgraded sewer systems would provide reliable storm water drainage, reducing the frequency and size of flooding at the site.

Long-term, minor, beneficial impacts would be expected from the removal of ACM, LCP, and LBP from the facilities the San Luis I LPOE and Friendship Park. The concentration levels of the ACM, LCP, and LBP are considered very low and therefore do not require full remediation of the site, however these materials would be removed in accordance with state, local, and federal regulations prior to any construction activities that may disturb these materials. Additional impacts from the removal of ACM, LCP, and LBP materials are discussed in Section 3.11.2.

Short-term, minor, adverse impacts on utilities would be expected as a result of utility service interruptions during construction and renovation activities. However, long-term, moderate to major, beneficial impacts would be expected from the construction and installation of new utility systems. The existing systems have reached their life expectancy and can no longer support CBP operations at the San Luis I LPOE.

Short-term, minor, adverse impacts on road networks would be expected from the construction activities; however, the Proposed Action would use a phased approach for the redevelopment of the LPOE to avoid any significant impacts on service capabilities, vehicle and pedestrian wait times, and traffic. Long-term, moderate, beneficial impacts on roadways and parking lots would be expected from the construction of new parking lots, roadways, and inspection lanes. The new inbound and outbound processing facilities and improved roads would reduce vehicle wait times and decrease traffic congestion. Section 3.8.2 includes a detailed discussion of impacts on traffic.

3.7.2.2 Alternative 1

Under Alternative 1, onsite facilities and utilities would be modernized and renovated to meet GSA building standards. No additional land would be acquired, paved, or altered to accommodate LPOE activities. Short-term, minor adverse impacts on utilities would be expected as a result of utility service interruptions during construction and renovation activities.

Long-term, minor to moderate, adverse impacts on utilities and facility infrastructure would be expected as a result of increasing strain on facilities, utilities, and systems already beyond their useful lifespan. Prior to the renovation of the LPOE facilities, ACM, LCP, and LBP would be removed in accordance with state, local, and federal regulations prior to any construction activities that may disturb these materials. The concentration levels of the ACM, LCP, and LBP are considered very low and therefore do not require full remediation of the site. Long-term, minor, beneficial impacts would be expected from the removal of ACM, LCP, and LBP from the facilities the San Luis I LPOE. Additional impacts from the removal of ACM, LCP, and LBP materials are discussed in Section 3.11.2.

Long-term, negligible to minor, beneficial impacts on site utilities would be expected from upgrading utility systems. However, the demand on the utility systems would remain the same and may continue to put strain on the outdated systems. The upgrades would only be temporary solutions and may require additional repairs and maintenance in the future. Upgraded HVAC systems would provide more comfortable indoor working conditions for building occupants; upgraded electrical and mechanical systems would provide more reliable and higher-quality service to the site; and the upgraded sewer system would provide better drainage.

Facility renovations under Alternative 1 would be expected to result in long-term, minor, beneficial impacts. The interior space upgrades would improve the site's safety conditions and the exterior renovations would decrease roof and window leaks and reduce safety threats resulting from degrading facility conditions. Asphalt replacement would provide greater comfort and safety to travelers in vehicles. However, the LPOE would not be redeveloped to provide a streamlined configuration that would reduce wait times and traffic congestion.

3.7.2.3 Alternative 2

Under Alternative 2, impacts on infrastructure and utilities would be the same as those described for the Proposed Action. Therefore, short-term, negligible to minor adverse impacts from site disturbance and utility service disruptions would be expected under Alternative 2. Additionally, long-term, minor, beneficial impacts from the removal of ACM, LCP, and LBP and long-term, moderate, beneficial impacts from overall construction improvements of facilities and parking lots would be expected.

3.7.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Long-term, moderate, adverse effects on utilities and infrastructure would be expected from the No-Action Alternative as a result of increasing use and strain on infrastructure already beyond its useful lifespan. Additional long-term, moderate, adverse impacts would be expected from the continued use of facilities that contain ACM, LCP, and LBP. The San Luis I LPOE would remain out-of-compliance with GSA guidelines. The water and electrical service at the LPOE would continue to be unreliable and of low-quality. The facility and utility conditions would continue to impede CBP personnel productivity and threaten the success of CBP's mission.

3.8 TRAFFIC AND TRANSPORTATION

3.8.1.1 Regulatory Setting

The Architectural Barriers Act (ABA) was enacted in 1968 and applies to all federal government buildings. The ABA requires that facilities designed, built, altered, or leased with certain federal funds be accessible to the public. GSA has enacted policies for the implementation of the ABA, including a requirement to design and build federal facilities in compliance with the Uniform Federal Accessibility Standards. Compliance with these accessibility standards reinforces GSA's commitment to build facilities that provide equal access for all persons.

3.8.1.2 Methods and Thresholds

Level of service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment are measured. LOS is defined on a scale of A to F, where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering and little or no delays. LOS F facilities are characterized as having highly unstable, congested conditions with long delays. Delays are measured in seconds to determine LOS at intersections.

Volume-to-capacity (V/C) ratio is another important parameter that determines LOS for roadway segments. V/C is a measure of traffic demand on a roadway segment expressed as volume compared to the segment's traffic-carrying capacity. The *2033 Regional Transportation Plan* published by the Yuma Metropolitan Planning Organization (YMPO) specifies roadway capacities in vehicles per day for various facility types that can be used to compute a V/C ratio. The functional classification for the area roadways was obtained from the Arizona Department of Transportation (ADOT) Functional Classification Maps (ADOT 2012).

The LOS for a roadway segment can be determined by converting the V/C ratio to a LOS using correlated V/C ratio ranges provided in the *2033 Regional Transportation Plan*. LOS D is generally considered the minimum acceptable level of service for roadways in an urban area.

3.8.2 Affected Environment

3.8.2.1 Traffic Study Area

The traffic study area includes roadway segments which are likely to be affected by the Proposed Action. Intersection analysis was not completed and intersection turning movement counts were not taken for this project. Figure 3-10 shows the traffic study area and the existing traffic count as reported by ADOT. The traffic study area includes the following roadway segments:

- U.S. Highway Route 95 (US 95), north of Juan Sanchez Boulevard
- US 95 (Main Street), south of D Street
- Archibald Street (US 95T) between D Street and Urtuzuastegui Street
- Urtuzuastegui Street, west of 1st Street
- 1st Street (US 95T), north of Urtuzuastegui Street
- D Street, west of 1st Street
- 2nd Avenue, north of Urtuzuastegui Street.

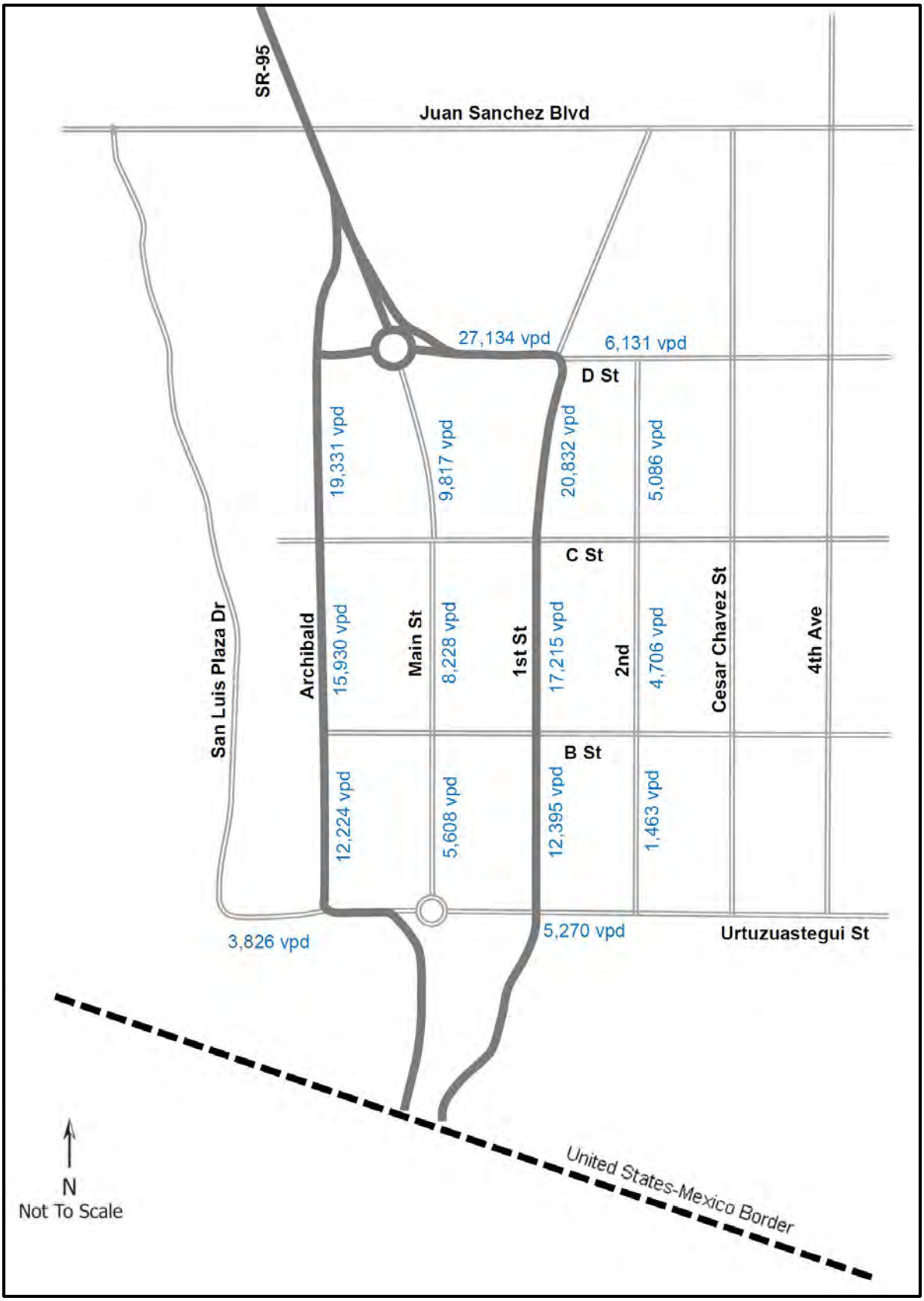


Figure 3-10. Existing Traffic Counts

3.8.2.2 Roadway Network

There are no freeways in the vicinity of the San Luis I LPOE. Regional access to the LPOE is provided by US 95, a two lane National Highway System route managed by the ADOT, running northeast through Yuma, where it connects with Interstate 8 (I-8), and continues north to Quartzsite where it connects with Interstate 10 (I-10). In San Luis, US 95 ends at Juan Sanchez Boulevard and transitions into a truck route (US 95T) along southbound Archibald Street and northbound 1st Street. East–west regional access, in Mexico, is provided by Mexican Federal Highway 02 which connects with Mexicali, 47 miles to the west, and Sonoyta, 126 miles to the east via a two-lane road. US 95 carries approximately 19,000 vehicles per day on average. Juan Sanchez Boulevard is the principal east–west roadway on the U.S. side of the border, eventually turning into US 195, which leads east and north approximately 20 miles to I-8 at Araby Road.

Main Street

Main Street, between D Street and Urtuzuastegui Street provides one lane in each direction with a landscaped median between D Street and B Street. Between B Street and Urtuzuastegui Street there is no median; however, there are landscaped islands accompanying on-street parking on the east and west sides of the street. Each side of Main Street has sidewalks and overhead lighting infrastructure. A bike lane is provided for southbound traffic on Main Street between D Street and Urtuzuastegui Street. Immediately outside of the LPOE, a roundabout is located at the intersection of Main Street and Urtuzuastegui Street. The posted speed limit on Main Street is 25 miles per hour (MPH). This roadway serves multiple commercial businesses associated with LPOE activities; however, it is no longer the primary vehicular route for traffic crossing the border.

US 95

North of Juan Sanchez Boulevard, Main Street transitions into US 95 providing two lanes in each direction with a two-way left turn lane. Each side of the street has sidewalks and overhead lighting infrastructure. The posted speed limit on US 95 in this area is 35 MPH. Covered and uncovered bus stops are located on both sides of the roadway, which traverses in a north/south direction out of San Luis before connecting to Gadsden, Somerton, Cocopah, and Yuma.

Archibald Street (US 95T)

Archibald Street is a southbound, one-way, roadway that serves as the primary route for outbound traffic leaving the United States and entering Mexico via the LPOE. Archibald Street, south of D Street, consists of three southbound lanes. Sidewalks are located on the east and west sides of Archibald Street. Overhead roadway lighting is in place on the west side of Archibald Street on overhead power poles. The posted speed limit on Archibald Street is 25 MPH. At the intersection with Urtuzuastegui Street, all three southbound lanes on Archibald Street provide access for outbound traffic leaving the United States via a southbound left turn at a signalized intersection.

Urtuzuastegui Street

Urtuzuastegui Street provides east–west access through the City of San Luis. For this analysis, the focus of Urtuzuastegui Street is the portion between 1st Street and Archibald Street. Between Archibald Street and Main Street, Urtuzuastegui Street provides three eastbound lanes which turn southbound to leave the United States. The left lane provides an option for traffic to continue

eastbound and stay in the United States. East of Main Street, Urtuzuastegui Street provides one lane in the eastbound and westbound directions. The intersection of Urtuzuastegui Street and Main Street is controlled by a small roundabout. There are sidewalks on both the north and south sides of Urtuzuastegui Street in this area.

1st Street (US 95T)

1st Street is a northbound, one-way, roadway that serves as the primary route for inbound traffic entering the United States via the LPOE. 1st Street provides two northbound lanes and a bike lane between Urtuzuastegui Street and D Street. At D Street, northbound traffic continues west under a free-flow condition using westbound D Street to access northbound US 95 at the roundabout. Sidewalks are located on the east and west sides of 1st Street. Overhead roadway lighting is located sporadically through the project limits. The posted speed limit on 1st Street is 25 MPH.

D Street

D Street provides east–west access in San Luis three blocks north of Urtuzuastegui Street. For this analysis, the focus of D Street is the portion between 1st Street and Archibald Street. Between 1st Street and Main Street, D Street provides two westbound lanes. Drivers can transition north onto US 95 by bypassing the roundabout at Main Street or entering the roundabout to travel west or south. Between Archibald Street and Main Street, D Street provides one lane in each direction and serves adjacent business access points. D Street has sidewalks on both sides of the street with marked crosswalks at each leg of the roundabout. In addition, D Street has roadway lighting on the north and south sides of the street. The posted speed limit is 25 MPH.

2nd Avenue

2nd Avenue is an unstriped local roadway between Urtuzuastegui Street and D Street providing one lane of traffic in each direction. The approximately 36-foot wide roadway generally allows on-street parking on each side of the street. Sidewalks are located on both sides of the road and there is no overhead lighting on 2nd Avenue. The posted speed limit on 2nd Avenue in this area is 25 MPH. 2nd Avenue does not generally act as a significant through route for north/south traffic in the area based on the low speeds, stop signs, and multiple crossroads between Urtuzuastegui Street and D Street.

Summary of ADOT Improvements

Recently, ADOT completed two projects to improve traffic and pedestrian mobility through the San Luis I LPOE in an effort to reduce conflicts between motorists, bicyclists, and pedestrians. Other project goals included improving drainage in the area and enhancing and revitalizing the business district on Main Street. The projects included the following items:

- Constructing two roundabouts: US 95/D Street and Urtuzuastegui Street/Main Street.
- Converting Archibald Street (southbound) and 1st Street (northbound) to one-way streets.
- Reconfiguring northbound traffic from the LPOE directly to 1st Street with accessibility to Main Street from the Urtuzuastegui Street.
- Reducing Main Street from a five-lane facility to a pedestrian friendly two-lane local street.

- Constructing a transition road from the F Street/Main Street intersection, north of the D Street roundabout, west to Archibald Street.
- New construction, reconstruction, and widening of Archibald Street from a two-lane street to a three-lane one-way southbound facility.
- Constructing an additional eastbound lane on Urtuzuastegui Street from Archibald Street to the LPOE.
- Providing amenities throughout the area to accommodate pedestrian and bicycle traffic.
- Installing benches, lighting, bicycle racks, and new signage.
- Widening sidewalks and adding crosswalks.
- Constructing new landscaping and installing irrigation systems to serve the landscaping.

Existing Conditions of Roadway Segments

To determine the existing conditions and growth rates of the City of San Luis roadways, traffic volumes from the *City of San Luis Traffic Circulation Study* (Jacobs 2011) were compared to the available 2018 traffic volumes obtained from the ADOT transportation data management system (see Figure 3-10). The calculated growth rate (3 percent/year) was applied to all of the available traffic volumes. Traffic volumes on Archibald Street, 1st Street, and Main Street were then adjusted to account for the traffic circulation changes following the completion of the ADOT improvements.

Table 3-10 shows the 2018 average daily traffic (ADT) for roadway segments within the traffic study area. Currently, the following roadway segments operate at LOS E or F:

- 1st Street from C Street to D Street (LOS F)
- 1st Street from B Street to C Street (LOS E)
- D Street from Main Street to 1st Street (LOS F).

Table 3-10. 2018 Roadway Segment Conditions

Roadway Segment	Lanes/ Classification	ADT	V/C	LOS
Archibald Street				
C Street to D Street	3/principal arterial	19,331	0.74	D
B Street to C Street	3/principal arterial	15,930	0.61	C
Urtuzuastegui Street to B Street	3/principal arterial	12,224	0.47	A
Main Street				
C Street to D Street	2/minor arterial	9,817	0.70	C
B Street to C Street	2/minor arterial	8,228	0.59	B
Urtuzuastegui Street to B Street	2/minor arterial	5,608	0.40	A
1st Street				
C Street to D Street	2/principal arterial	20,832	1.19	F

Roadway Segment	Lanes/ Classification	ADT	V/C	LOS
B Street to C Street	2/principal arterial	17,215	0.98	E
Urtuzuastegui Street to B Street	2/principal arterial	12,395	0.71	C
2nd Avenue				
C Street to D Street	2/local road	5,086	0.39	A
B Street to C Street	2/local road	4,706	0.36	A
Urtuzuastegui Street to B Street	2/local road	1,463	0.11	A
D Street				
Main Street to 1st Street	2/principal arterial	27,134	1.55	F
1st Street to Cesar Chavez Street	2/local road	6,131	0.47	A
Urtuzuastegui Street				
West of Archibald Street	2/local road	3,826	0.29	A
1st Street to 2nd Avenue	2/local road	5,270	0.41	A

Source: Jacobs 2011.

Queuing and Wait Times at San Luis I LPOE

Northbound traffic into the United States currently experiences peak wait times of 150 minutes and an average of 45 minutes during the day at the San Luis I LPOE. This results in long vehicle queues waiting to cross the border.

3.8.2.3 Public Transportation

Public transportation is provided by the Yuma County Intergovernmental Public Transportation Authority via the Yuma County Area Transit. The Yellow Route 95 runs buses along Archibald Street, Urtuzuastegui Street, and 1st Street around the downtown area of San Luis. Gray Route 9 also runs north along US 95 to provide connectivity to Yuma and Winter Haven. The YMPO is currently conducting a circulator route study in San Luis, AZ to maximize service to the most transit riders.

There are several client-oriented transportation providers serving San Luis:

- Saguaro Transportation Services—part of the Saguaro Foundation serving their clients as well as having contracts with the Arizona Department of Economic Security, including vocational rehabilitation, family services, and developmental disabilities; Arizona health cost containment system for Medicaid transportation; the United Way; and the Arizona Department of Corrections for transportation for prison visitors.
- City of San Luis—provides subsidized transportation services for seniors in the San Luis area.
- The EXCEL Group—provides transportation based on medical necessity for the elderly and disabled adult customers.

- Catholic Community Services in Western Arizona—a non-profit organization that has provided Yuma County residents with a variety of transportation services.
- The Regional Center for Border Health, Inc.—offers medical transportation services to residents of Yuma County.
- The Yuma Work, Opportunity, Responsibility, and Confidence Center, Inc.—a nonprofit agency that serves the needs of individuals with disabilities within the Yuma community.
- Comité de Bien Estar—operates a public transportation service to meet the transportation needs of specific subsets of its membership.

3.8.3 Environmental Consequences

The transportation network was analyzed under near-term (2022) and horizon year (2032) conditions with the three action alternatives and the No-Action Alternative utilizing an assumed growth rate for ambient traffic in the area. The near term (2022) represents traffic conditions following the completion of demolition and construction activities and horizon year denotes future buildout traffic volumes.

3.8.3.1 Proposed Action

The Proposed Action consists of demolition and redevelopment of the existing infrastructure, resulting in changes to the existing circulation network. Table 3-11 shows the expected LOS for the analyzed roadway segments under the near-term conditions without and with the Proposed Action.

As shown in Table 3-11, the following roadway segments would operate at LOS E or F under near-term conditions without the Proposed Action being implemented:

- 1st Street from C Street to D Street (LOS F)
- 1st Street from B Street to C Street (LOS F)
- D Street from Main Street to 1st Street (LOS F).

Table 3-11. Near-Term (2022) Roadway Segment Conditions

Roadway Segment	No Build (2022)			Proposed Action (2022)		
	ADT	V/C	LOS	ADT	V/C	LOS
Archibald Street						
C Street to D Street	21,757	0.83	D	21,757	0.83	D
B Street to C Street	17,929	0.68	C	19,929	0.68	C
Urtuzuastegui Street to C Street	13,759	0.52	B	13,757	0.52	B
Main Street						
C Street to D Street	11,050	0.79	D	11,050	0.79	D
B Street to C Street	9,260	0.66	C	9,260	0.66	C
Urtuzuastegui Street to C Street	6,312	0.45	A	6,312	0.45	A
1st Street						

Roadway Segment	No Build (2022)			Proposed Action (2022)		
	ADT	V/C	LOS	ADT	V/C	LOS
C Street to D Street	23,447	1.34	F	15,631	0.89	E
B Street to C Street	19,376	1.11	F	12,917	0.74	D
Urtuzuastegui Street to C Street	13,951	0.80	D	9,301	0.53	B
2nd Avenue						
C Street to D Street	5,724	0.44	A	13,540	1.04	F
B Street to C Street	5,297	0.41	A	11,755	0.90	E
Urtuzuastegui Street to C Street	1,647	0.13	A	6,297	0.48	A
D Street						
Main Street to 1st Street	30,540	1.75	F	30,540	1.75	F
1st Street to Cesar Chavez Street	6,901	0.53	B	6,901	0.53	B
Urtuzuastegui Street						
West of Archibald Street	4,306	0.33	A	4,306	0.33	A
1st Street to 2nd Avenue	5,931	0.46	A	8,345	0.64	C

Under the Proposed Action, most of the roadway segments would continue to experience the same traffic volumes and operate at the same LOS. However, the change in traffic pattern for vehicles entering the United States would result in an increased traffic volume along all segments of 2nd Avenue and along Urtuzuastegui Street from 1st Street to 2nd Avenue. The increased volume along 2nd Avenue would change the LOS from A to F for the segment between C Street to D Street and from A to D for the segment between B Street to C Street. The higher volumes and reduction in LOS would result in short-term, minor, adverse impacts on these roadway segments. The other impacted roadway segments would continue to operate at an acceptable LOS.

Table 3-12 shows the expected LOS for the analyzed roadway segments under the horizon year (2032) conditions without and with the Proposed Action.

As shown in Table 3-12, many of the roadway segments would operate at LOS E or F under horizon year (2032) conditions with and without the proposed action being implemented.

Under the Proposed Action, most of the roadway segments would continue to experience the same traffic volumes and operate at the same LOS. However, the change in traffic pattern for vehicles entering the United States would result in an increased traffic volume along all segments of 2nd Avenue and along Urtuzuastegui Street from 1st Street to 2nd Avenue. The higher volumes and reduction in LOS would result in long-term, minor, adverse impacts on these roadway segments. The other impacted roadway segments would continue to operate at an acceptable LOS.

Table 3-12. Horizon Year (2032) Roadway Segment Conditions

Roadway Segment	No Build (2032)			Proposed Action (2032)		
	ADT	V/C	LOS	ADT	V/C	LOS
Archibald Street						
C Street to D Street	29,240	1.11	F	29,240	1.11	F
B Street to C Street	24,095	0.92	E	24,095	0.92	E

Roadway Segment	No Build (2032)			Proposed Action (2032)		
	ADT	V/C	LOS	ADT	V/C	LOS
Urtuzuastegui Street to C Street	18,490	0.70	C	18,490	0.70	C
Main Street						
C Street to D Street	14,850	1.06	F	14,850	1.06	F
B Street to C Street	12,445	0.89	E	12,445	0.89	E
Urtuzuastegui Street to C Street	8,483	0.61	C	8,483	0.61	C
1st Street						
C Street to D Street	31,510	1.80	F	21,007	1.20	F
B Street to C Street	26,040	1.49	F	17,360	0.99	E
Urtuzuastegui Street to C Street	18,749	1.07	F	12,499	0.71	C
2nd Avenue						
C Street to D Street	7,693	0.59	B	18,197	1.40	F
B Street to C Street	7,118	0.55	B	15,798	1.22	F
Urtuzuastegui Street to C Street	2,213	0.17	A	8,463	0.65	C
D Street						
Main Street to 1st Street	41,043	2.35	F	41,043	2.35	F
1st Street to Cesar Chavez Street	9,274	0.71	C	9,274	0.71	C
Urtuzuastegui Street						
West of Archibald Street	5,787	0.45	A	5,787	0.45	A
1st Street to 2nd Avenue	7,971	0.61	C	10,385	0.80	D

Under the Proposed Action, there would be several overall benefits to the area from reducing wait times for northbound traffic into the United States. With an increased number of lanes under the Proposed Action, the total daily traffic volume would not necessarily increase but the efficiency of the San Luis I LPOE would improve. The expanded number of entry lanes is reduced to one or two lanes before traffic enters the street network in San Luis. This reduction in lanes creates a natural metering effect for vehicles entering the United States. Peak wait times would be expected to decrease under the Proposed Action and the resultant effect may be a more even distribution of traffic throughout the day. Travelers entering the United States may not need to plan for such extended wait times and could naturally distribute over a longer period of time.

3.8.3.2 Alternative 1

Under Alternative 1, GSA would renovate and modernize all existing LPOE facilities. There would be no change in the function or capacity of the LPOE. Therefore, short-term, negligible to minor adverse impacts would be expected from the addition of construction vehicles. Traffic would continue to increase and, as shown in Table 3-12, the following roadway segments would be expected to operate at LOS E or F by the year 2032:

- Archibald Street from C Street to D Street (LOS F)
- Archibald Street from B Street to C Street (LOS E)
- Main Street from C Street to D Street (LOS F)

- Main Street from B Street to C Street (LOS E)
- 1st Street from C Street to D Street (LOS F)
- 1st Street from B Street to C Street (LOS F)
- 1st Street from Urtuzuastegui Street to B Street (LOS F)
- D Street from Main Street to 1st Street (LOS F).

The increase in roadway segments with unacceptable LOS indicates that there would be a need for traffic improvements in the study area by the horizon year. Capacity of the listed roadway segments will have to be increased to avoid congested conditions with long delays. Long-term, indirect, minor to moderate impacts would be expected from not improving the flow of traffic into and out of the San Luis I LPOE.

3.8.3.3 Alternative 2

Under Alternative 2, impacts on traffic and transportation would be similar to those described for the Proposed Action. The routing of southbound POV traffic through Friendship Park would eliminate the need for multiple turns from Archibald Street to the international border. Peak wait times at the LPOE would be consistent with those described in Alternative 1.

3.8.3.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Long-term, indirect, minor to moderate, adverse effects on traffic and local roadways would be expected from the long wait times and from not improving the flow of traffic into and out of the San Luis I LPOE.

3.9 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

USEPA Region 9 and the Arizona Department of Environmental Quality (ADEQ) regulate air quality in Arizona. The Clean Air Act (CAA) (42 U.S.C. 7401-7671q), as amended, gives USEPA the responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR 50) that set acceptable concentration levels for six criteria pollutants, compounds that cause or contribute to air pollution and which could endanger public health and the environment. The six criteria pollutants are particulate matter (fine particulate matter [PM_{10}] and very fine particulate matter [$PM_{2.5}$]), sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), and lead (Pb).[1] O_3 is a strong photochemical oxidant that is formed when NO reacts with volatile organic compounds (VOCs, also referred to as hydrocarbons) and oxygen in the presence of sunlight. O_3 is considered a secondary pollutant because it is not directly emitted from pollution sources but is formed in the ambient air.

Short-term standards (1-, 8-, and 24-hour periods) have been established for criteria pollutants that contribute to acute health effects, while long-term standards (annual averages) have been established for pollutants that contribute to chronic health effects. Each state has the authority to

[1] Lead is not considered further in this analysis because none of the project activities have the potential to generate lead emissions.

adopt standards stricter than those established under the federal program; however, Arizona accepts the federal standards. AQCRs that exceed the NAAQS are designated as *nonattainment* areas, and those in accordance with the standards are designated as *attainment* areas; AQCRs that have been redesignated from *nonattainment* to *attainment* are called maintenance areas.

3.9.1 Regulatory Review

The CAA, as amended in 1990, mandates that states develop a State Implementation Plan (SIP) that explains how the state will comply with the CAA and achieve and maintain *attainment* of the NAAQS. The Arizona SIP[2] applies to industrial sources, commercial facilities, and residential development activities. Regulation occurs primarily through a process of reviewing engineering documents and other technical information, applying emission standards and regulations in the issuance of permits, performing field inspections, and assisting industries in determining their compliance status.

ADEQ has the authority to issue permits for the construction and operation of new or modified stationary source air emissions in Arizona. ADEQ air permits are required for any facility that will emit or currently emits regulated pollutants and must comply with the following regulations of the CAA: New Source Review, Prevention of Significant Deterioration (PSD), Title V Permitting, National Emission Standards for Hazardous Air Pollutants (NESHAP) (HAPs), and New Source Performance Standards (NSPS). An overview of the applicability of CAA air regulations to the project is shown in Table 3-13.

In addition to the CAA regulations listed in Table 3-13, there are more specific Arizona state regulations that apply to activities that are likely to occur during construction. These regulations are outlined in Arizona Administrative Code Title 18, Chapter 2. They include the following:

- Emissions from Open Areas, Dry Washes, or Riverbeds (Title 18.2.604);
- Open Burning Permits (Title 18.2.602)
- Air Pollution from Motor Vehicle (Title 18.2.1001); and
- Classes of Air Permits for Construction Projects (Title 18.2.302).

Table 3-13. CAA Regulatory Review for the Proposed Action and Alternative1

CAA Regulation	Description of the Regulation	Applicability to the Proposed Action and Alternative 1 and 2
New Source Review	New Source Review permitting protects air quality when factories, industrial boilers, and power plants are built or modified.	The new emergency generators installed under the Proposed Action and Alternative 1 and 2 would need to undergo the New Source Review permitting process.

[2] The Arizona SIP was initially approved in 1972 and is revised as needed to comply with new federal or state requirements when new data improves modeling techniques, when a specific area's *attainment* status changes, or when an area fails to reach *attainment* (ADEQ 2018b).

CAA Regulation	Description of the Regulation	Applicability to the Proposed Action and Alternative 1 and 2
Prevention of Significant Deterioration	PSD applies to new major sources or modifications at existing sources of air pollutants where the area the source is located is in *attainment* or unclassifiable.	PSD review would be required for the new emergency generators installed under each action alternative.
Title V permitting requirements	A Title V permit requires sources of air pollutants to obtain and operate in compliance with an operating permit. A permit is required if a source has actual or potential emissions greater than or equal to 100 tons per year.	A Title V permit would not be required because the new emergency generators installed under the Proposed Action and Alternative 1 and 2 would be below the 100 tons per year threshold.
National Emission Standards for Hazardous Air Pollutants	NESHAP are stationary source standards for HAPs. HAPs are those pollutants that are known or suspected to cause cancer or other serious health effects.	The use of maximum available control technology would not be required because the potential HAP emissions would not exceed NESHAP thresholds for any of the alternatives.
New Source Performance Standards	NSPS are technology-based emission standards which apply to new, modified, and reconstructed facilities in specific source categories such as manufacturers of glass, cement, rubber tires, and wool fiberglass.	The project would be exempt from NSPS permitting requirements because none of the alternatives would involve construction or operation of any of these types of facilities.

Source: USEPA 2017b.

Fugitive Dust Control. Construction activities at the San Luis I LPOE would generate fugitive dust (non-toxic particulate matter) emissions. Emissions from Open Areas, Dry Washes, or Riverbeds (Title 18.2.604) requires reasonable precautions to prevent PM from becoming airborne. Such precautions can include:

- using water for dust control when grading roads or clearing land;
- applying water on dirt roads, materials stockpiles, and other surfaces that could create airborne dust;
- paving roadways and maintaining them in a clean condition;
- covering open equipment when conveying or transporting material likely to create objectionable air pollution when airborne; and
- promptly removing spilled or tracked dirt or other materials from paved streets.

3.9.2 Affected Environment

Air Quality

Air quality is measured and regulated on a regional level; therefore, the following air quality analysis uses air quality data from the Mohave-Yuma Intrastate Air Quality Control Region (AQCR) (40 CFR 81.268). The Mohave-Yuma Intrastate AQCR encompasses two counties in Arizona (Mohave County and Yuma County) and includes the area where the Proposed Action and Alternative 1 would occur.

USEPA has designated Yuma County (part of the Mohave-Yuma Intrastate AQCR) as a *nonattainment* area for PM_{10} (USEPA 2018b). The Proposed Action site is located in a *nonattainment* area; therefore, the General Conformity Rule[3] requirements apply. The General Conformity Rule states that, if a project would result in a total net increase in direct and indirect emissions of *nonattainment* or maintenance pollutants that are less than the applicable *de minimis* (i.e., negligible) thresholds established in 40 CFR 93.153(b), detailed conformity analyses are not required pursuant to 40 CFR 93.153(c).

The U.S. Environmental Protection Agency (EPA) monitors levels of criteria pollutants at representative sites in each region throughout the U.S. However, Yuma County does not have a monitoring station for every criteria pollutant and, therefore, historical data on air emissions from the closest air monitoring stations were used to provide a baseline for air quality emissions in the area surrounding the San Luis I LPOE. Monitoring stations in La Paz County were used to establish a baseline for CO; Pima County for NO_2 and SO_2; and Maricopa County for Pb. Table 3-14 shows the monitored concentrations, the NAAQS, and the air monitor location for each criteria pollutant; air monitoring data for the SO_2 3-hour standard were unavailable. As shown in Table 3-14, Yuma County did not meet the $PM_{2.5}$ 24-hour standard or the PM_{10} 24-hour standard. These data are consistent with EPA's list of counties currently designated as *nonattainment* areas which shows Yuma County as a *nonattainment* area for PM_{10} (EPA 2018b).

The San Luis I LPOE is located in downtown San Luis, in developed and urban or suburban portions of Yuma County with residences located nearby. Sensitive receptors (e.g., daycares, hospitals, schools) and their distance from the San Luis I LPOE are listed in Table 3-15.

Table 3-14. National Ambient Air Quality Standards and 2017 Measured Criteria Pollutant Concentrations

Pollutant	NAAQS	Monitored Data	Monitor Location[a]
CO			
1-hour[b] (ppm)	35	0.3	La Paz County, AZ
8-hour[b] (ppm)	9	0.3	La Paz County, AZ
NO_2			
1-hour (ppb)	100	45	Pima County, AZ

[3] Established under the CAA, the General Conformity Rule ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain the NAAQS. According to the rule, if a project takes place in an area that is in *attainment*, then the general conformity requirements do not apply to the project.

Pollutant	NAAQS	Monitored Data	Monitor Location[a]
Annual arithmetic mean (ppb)	53	8.4	Pima County, AZ
O_3			
8-hour[c]	0.070	0.064	Yuma County, AZ
SO_2			
1-hour[b] (ppb)	75	3.8	Pima County, AZ
3-hour[b] (ppm)	0.5	N/A	N/A
$PM_{2.5}$			
24-hour[d] ($\mu g/m^3$)	35	51	Yuma County, AZ
Annual arithmetic mean[e] ($\mu g/m^3$)	12	8.5	Yuma County, AZ
PM_{10}			
24-hour[b] ($\mu g/m^3$)	150	222	Yuma County, AZ
Pb			
3-month average ($\mu g/m^3$)	0.15	0.05	Maricopa County, AZ

Source: 40 CFR 50.1–50.12; ADEQ 2018a; EPA 2016, 2017a.

Notes: ppb = parts per billion; ppm = parts per million, $\mu g/m^3$ = micrograms per cubic meter.

[a] Because air monitoring stations in Yuma County do not monitor every criteria pollutant, the monitoring stations closest to the project area for each criteria pollutant were used.

[b] Not to be exceeded more than once per year.

[c] The 3-year average of the fourth highest daily maximum 8-hour average O_3 concentrations.

[d] The 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor must not exceed 35 $\mu g/m^3$.

[e] The 3-year average of the weighted annual mean $PM_{2.5}$ concentrations must not exceed 12.0 $\mu g/m^3$.

Table 3-15. Sensitive Receptors and Their Distance from San Luis I LPOE

Name	Distance from San Luis I LPOE (miles)
Schools/Daycares	
Rio Colorado Elementary School	0.9
Arizona Desert Elementary School	1.2
San Luis Middle School	1.0
San Luis Pre-School	0.4
Border Community Child Care	0.8
Ed Pastor Elementary 4	1.1
Bienestar Child Development Center	1.3
Gadsden Elementary School District #32	1.1
Desert View Elementary School	2.5
Cesar Chavez Elementary School	2.2
Southwest Junior High School	1.6
Chicanos Por La Causa	1.8
WACOG San Luis Head Start	2.1
Harvest Preparatory Academy	2.1
Estrellita Day Care	2.2
San Luis Migrant Headstart	0.8
San Luis High School	1.7
PPEP TEC—Cesar Chavez Learning Center	1.2
Gadsden School	1.5
Hospitals	
Yuma Regional Medical Center	16

Sources: ASLD 2014; USCB 2012-2016a; Yuma Regional 2018.

Notes: PPEP TEC = Portable Practical Educational Preparation Training for Employment Center, WACOG = Western Arizona Council of Government.

Greenhouse Gas Emissions

It is well documented that the Earth's climate has fluctuated throughout its history from entirely natural causes. However, recent scientific evidence indicates a correlation between increasing global temperatures over the past century and the worldwide increase in anthropogenic (human) greenhouse gas (GHG) emissions (IPCC 2013). Climate change associated with global warming is predicted to produce negative environmental, economic, and social consequences across the globe in the coming years.

More specifically, GHG emissions from the Proposed Action and Alternative 1 would directly contribute to an increase in global GHG atmospheric concentrations and average global temperatures, which indirectly causes numerous environmental and social effects. These global

impacts would be manifested as impacts on resources and ecosystems in Arizona. For purposes of analysis, the incremental changes in GHG emissions discussed in this EIS imply potential impacts on global climate change.

GHG Emissions and Effects. GHGs are gases that trap heat in the atmosphere by absorbing outgoing infrared radiation. GHG emissions occur from both natural processes and human activities. Water vapor is the most important and abundant GHG in the atmosphere. However, human activities produce only a small amount of the total atmospheric water vapor. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The main source of GHGs from human activities is the combustion of fossil fuels, such as oil, coal, and natural gas. Other examples of GHGs created and emitted primarily through human activities include fluorinated gases (e.g., perfluorocarbons) and sulfur hexafluoride. The main sources of these man-made GHGs are refrigerants and electrical transformers.

Numerous studies document the recent trend of rising atmospheric concentrations of CO_2. The longest continuous record of CO_2 monitoring extends back to 1958 (Keeling 1960; Scripps 2017). These data show that atmospheric CO_2 levels have risen an average of 1.5 ppm per year over the last 56 years (NOAA 2017). As of 2014, CO_2 levels are about 30 percent higher than the highest levels estimated for the 800,000 years preceding the industrial revolution, as determined from CO_2 concentrations analyzed from air bubbles in Antarctic ice core samples (USGCRP 2014). Recent observed changes due to climate change include rising temperatures, shrinking glaciers and sea ice, thawing permafrost, a lengthened growing season, and shifts in plant and animal ranges. International and national organizations independently confirm these findings (IPCC 2013; USGCRP 2014).

Each GHG is assigned a global warming potential (GWP) by the EPA (EPA 2018c). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO_2, which is given a value of one. For example, CH_4 has a GWP of 28, which means that it has a global warming effect 28 times greater than CO_2 on an equal-mass basis (IPCC 2013). To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO_2 equivalent, which is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emission rate representing all GHGs. While CH_4 and N_2O have much higher GWPs than CO_2, CO_2 is emitted in such great quantities it is the predominant contributor to global CO_2 equivalent emissions from both natural processes and human activities.

3.9.3 Environmental Consequences

3.9.3.1 Proposed Action

EPA's General Conformity Rule under the CAA ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain the NAAQS (40 CFR 93.153(b)). The Mohave-Yuma Intrastate AQCR is a PM_{10} *nonattainment* area; therefore, the General Conformity Rule requirements apply and the Proposed Action is subject to review under the General Conformity Rule for PM_{10} and a general conformity analysis is required (see Appendix B). However, for completeness, all direct and indirect emissions of CO, NO_2, SO_2, and $PM_{2.5}$ were also estimated for the construction phase of the Proposed Action and compared to the General

Conformity Rule *de minimis* threshold rates to determine whether implementation of the Proposed Action would impact air quality in the region. Emissions of ozone and lead were not analyzed because ozone is a secondary pollutant and the precursor pollutant (i.e., NO_2) was below the *de minimis* threshold rate and project activities would not be expected to result in the generation of lead emissions.

Construction and demolition emissions were estimated for on-road and non-road vehicles. The emissions from on-road vehicles, such as POVs, were estimated using industry standard emission rates (Argonne 2013, EPA 2009). Emission rates for non-road vehicles, such as excavators, cranes, graders, backhoes, and bulldozers, were estimated using EPA's Motor Vehicle Emission Simulator (MOVES) 2014a model coefficients (EPA 2015). For purposes of analysis and to provide a conservative estimate of potential air emissions, it was assumed that, during the construction phases, all non-road equipment would be operated full-time (i.e., eight hours per day and five days per week) and all on-road vehicles would be traveling 50 miles per day. Full documentation of the methodology used to estimate the air emissions is presented in Appendix B (General Conformity Analysis). The results of the conformity analysis are presented in Table 3-16. The total annual direct and indirect emissions associated with the demolition and construction phases of the Proposed Action would not exceed the *de minimis* threshold rate for any of the criteria pollutants analyzed. Therefore, further analysis under the General Conformity Rule is not required. Overall, the demolition and construction activities would cause short-term, minor, adverse impacts on air quality and could affect individuals in close proximity to the San Luis I LPOE. These impacts would occur during the estimated three to four years of construction and demolition and would end once these activities are completed.

Table 3-16. Annual Emissions and General Conformity Rule Thresholds Comparison for Proposed Action Activities

Equipment	Tons of CO	Tons of NO_2	Tons of SO_2	Tons of PM_{10}	Tons of $PM_{2.5}$
Non-Road Vehicles					
Excavator (diesel)	0.219	0.400	5.97×10^{-4}	0.0324	0.0314
Crane (diesel)	0.0547	0.100	1.49×10^{-4}	8.09×10^{-3}	7.85×10^{-3}
Bulldozer (diesel)	0.109	0.200	2.98×10^{-4}	0.0162	0.0157
Dump truck/concrete truck (diesel)	0.274	0.501	7.46×10^{-4}	0.0405	0.0393
Grader (diesel)	0.109	0.200	2.98×10^{-4}	0.0162	0.0157
Rollers, compactor (diesel)	0.164	0.300	4.47×10^{-4}	0.0243	0.0236
Paving equipment (diesel)	0.0547	0.100	1.49×10^{-4}	8.09×10^{-3}	7.85×10^{-3}
Generator (gasoline)	0.706	6.07×10^{-3}	1.85×10^{-5}	5.33×10^{-3}	4.90×10^{-3}
Air compressor (gasoline)	0.470	4.05×10^{-3}	1.23×10^{-5}	3.55×10^{-3}	3.27×10^{-3}
On-Road Vehicles					
Personal vehicles	5.73	0.240	8.43×10^{-3}	0.0152	0.0152
Total (tons per year)	**7.89**	**2.05**	**0.0111**	**0.170**	**0.165**
***De minimis* threshold (tons per year)**	**100**	**100**	**100**	**100**	**100**

Source: EPA 2017c.

Operation of the San Luis I LPOE would result in long-term, moderate, beneficial impacts on air quality. Because the Proposed Action would expand the LPOE, increased demand for electric services would be expected. (It is anticipated that electricity consumption would increase by approximately 30 percent.) However, the Proposed Action proposes to achieve Leadership in Energy and Environmental Design (LEED) Gold certification to reduce the use of electricity. Also, although there would be emissions generated by emergency generator testing and usage and an increase in power consumption (which would result in higher indirect emissions from the power source), the improvements made to the San Luis I LPOE would be expected to reduce the overall air emissions generated at the site. Under the Proposed Action, POV queue time (i.e., vehicle idle time) would be expected to decrease from approximately 44 minutes to approximately 20 minutes. The emissions decrease from the reduced vehicle idle time, presented in Table 3-17, would far outweigh the additional emissions generated from demolishing and redeveloping, and continued operation of the San Luis I LPOE. Therefore, an overall improvement to air quality in the area would be expected.

Table 3-17. Estimated Reduction in Annual Air Emissions from POV Idling

Queue Time	Tons of CO	Tons of NO_2	Tons of SO_2	Tons of PM_{10}	Tons of $PM_{2.5}$
Current conditions: 44 minutes	2,000	99.3	[a]	33.7	30.3
Proposed Action conditions: 20 minutes	908	45.1	[a]	15.3	13.8
Reduction	1,090	54.2	[a]	18.4	16.5

Note: [a] EPA does not have a SO_2 emission factor for vehicle idling.

Mitigation of Air Quality Impacts from Construction. Mitigation measures would be developed and implemented by GSA and its contractors to control PM_{10} emissions and fugitive dust during construction. These mitigation measures would be included in a detailed Construction Emissions Mitigation Plan that would identify BMPs for the construction effort. The BMPs would be designed to reduce air quality impacts associated with emissions of criteria pollutants (NO_x, CO, CO_2, PM, and SO_2) and specifically to minimize potential exposure of individuals near the project site to PM_{10} from fugitive dust and heavy equipment tailpipe emissions.

GHG Emissions. The Proposed Action would generate GHG emissions during construction and demolition activities, and in the short term, it would represent an incremental, but overall negligible, contribution to climate change. Short-term GHG emissions associated with the Proposed Action would primarily result from construction and demolition of facilities and power use. In accordance with the 2016 Council on Environmental Quality (CEQ) guidance on GHG analysis, the GHGs emissions for the Proposed Action were estimated using EPA emission factors (CEQ 2016; EPA 2014). Using the GWP rating system described in Section 3.9.1, the GHG emissions generated during the construction and demolition phase of the project were calculated (see Table 3-18). As shown in Table 3-18, the annual GHG emissions under the Proposed Action would represent approximately 0.0030 percent of Arizona's estimated annual GHG emissions in 2020 (164 million metric tons of CO_2 equivalent). The total amount of GHG emissions from the Proposed Action that would occur over the entire four-year demolition and construction period compared to Arizona's estimated 2020 emissions, accounts for approximately 0.012 percent (ADEQ 2005).

Table 3-18. Carbon Dioxide Equivalent Emissions during Construction and Demolition Activities

Comparison of GHG Emissions	Tons of CO_{2e}
Annual GHGs—construction and demolition	4,970
Total GHGs—construction and demolition[a]	19,870
Arizona's estimated 2020 GHG emissions	164,000,000
Proposed Action's Percent of Arizona's estimated 2020 emissions—Annual	0.0030
Proposed Action's Percent of Arizona's estimated 2020 emissions—Total (4 years)	0.012

Source: ADEQ 2005.

Note: CO_{2e} = carbon dioxide equivalent.

[a] For the purpose of analysis, it was assumed that construction and demolition activities would occur over 4 years.

Long-term, minor, beneficial impacts from implementing the Proposed Action would be expected. Although GHGs would be generated by emergency generator testing and usage and an overall increase in power consumption, the improvements made to the San Luis I LPOE would be expected to reduce the overall GHGs generated at the site. As discussed previously, under the Proposed Action, the POV queue time (i.e., vehicle idle time) is expected to decrease by approximately 50 percent. The reduction in GHG emissions from POVs in queue at the San Luis I LPOE is expected to outweigh the additional GHGs emitted from operations.

3.9.3.2 Alternative 1

As described in Section 2.2, many of the construction and demolition activities that would occur under the Proposed Action would not occur under Alternative 1. As a result, the total direct and indirect emissions associated with Alternative 1 would be less than the total emissions under the Proposed Action (shown in Table 3-16) and would not exceed the *de minimis* threshold rates. The use of heavy construction equipment,[4] deliveries to the construction site, and fugitive dust would cause short-term, minor, adverse impacts on air quality and could affect individuals in close proximity to the San Luis I LPOE during demolition and redevelopment activities. Due to the reduced amount of construction required under this alternative, annual emissions of criteria pollutants would be lower than the emissions estimated for the Proposed Action. These emissions would occur during the estimated three to four years of construction and would end upon completion.

Long-term, minor, adverse impacts on air quality would occur during operation of the San Luis I LPOE. The adverse impacts would occur because the improvements to the POV inspection lanes would not take place and the POV queue time (i.e., vehicle idle time) would continue to increase. The increase in vehicle idle time would result in an overall increase in air emissions.

[4] The usage of heavy equipment under Alternative 1 would be less than under the Proposed Action. For purposes of analysis, it was assumed that construction equipment would be limited to cranes to lift supplies to the roofs of buildings and paving equipment to repave the parking areas.

Mitigation of Air Quality Impacts from Construction. Mitigation measures would be developed and implemented by GSA and its contractors to control PM_{10} emissions and fugitive dust during construction. These mitigation measures would be included in a detailed Construction Emissions Mitigation Plan that would identify BMPs for the construction effort. The BMPs would be designed to reduce air quality impacts associated with emissions of relevant criteria pollutants (NO_x, CO, CO_2, PM, and SO_2) and specifically to minimize potential exposure of individuals near the project site to PM_{10} from fugitive dust and heavy equipment tailpipe emissions.

GHG Emissions. Alternative 1 would generate GHG emissions during construction activities, and in the short term, it would represent an incremental, but overall negligible, contribution to climate change. Short-term GHG emissions associated with Alternative 1 would primarily result from the renovation of facilities and power use. The total amount of GHG emissions that would occur under Alternative 1 would be less than the GHG emissions under the Proposed Action (shown in Table 3-16).

Long-term, minor, adverse effects from implementing Alternative 1 would be expected. Unlike the Proposed Action, Alternative 1 would not include improvements to the POV inspection lanes and, therefore, would result in increased POV queue times. Consequently, the reduction in GHG emissions discussed under Section 3.9.2.1 would not occur and there would be an overall increase in GHG emissions under Alternative 1.

3.9.3.3 Alternative 2

Under Alternative 2, impacts on air quality and greenhouse gas emissions would be the same as those described for the Proposed Action. Therefore, short-term, minor, adverse impacts on air quality and a short-term increase in GHG emissions associated with construction and demolition would be expected under Alternative 2. Additionally, long-term, minor, beneficial impacts from the decrease POV queue times (i.e., vehicle idle time) would be expected.

3.9.3.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Therefore, the average queue times for POVs would be expected to increase over time, resulting in increased criteria pollutant and GHG emissions. In addition, due to overall expected population growth (and the corresponding increase in emissions from vehicles and power generation for new homes) in the region, there may be a slight decrease in air quality in the region. Overall, long-term, minor, adverse impacts on air quality and climate change under the No-Action Alternative would be expected.

3.10 NOISE

Sound is defined as an auditory effect produced by a given source, such as the sound of wind rustling tree branches. Noise in the auditory sense is sound with the same physical aspects but a different value judgement. Noise is considered a disturbance while sound is defined as an auditory effect. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. In fact, noise is not always strictly detected as audible by humans, as is the case with complaints about low-frequency sounds from wind turbine blades. Therefore, noise can be readily identifiable or

nondescript. Human and wildlife response to increased sound levels varies according to the type, characteristics of the sound source, distance between the source and receptor, receptor sensitivity, and time of day. How an organism responds to the sound source determines whether the sound is judged as pleasing, annoying, or disruptive to a normal behavior. Affected receptors can be specific (e.g., wildlife, schools, churches, or hospitals) or broad (e.g., nature preserves or designated districts) areas in which occasional or persistent sensitivity to noise above ambient levels exists (EPA 1981a).

Noise Metrics and Regulations. Although the human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibel (dBA) characterizes sound levels that can be sensed by the human ear. "A-weighted" denotes the adjustment of the frequency range to what the average human ear can sense when experiencing an audible event. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (EPA 1981b). Table 3-19 compares common sounds and the associated noise level (in dBA) and how they affect hearing. For example, a whisper is usually 30 dBA and considered to be very quiet, while an air conditioning unit 20 feet away is considered an intrusive noise at 60 dBA and the sound of a refrigerator at 55 dBA is considered at the level of ambient sound levels. Noise levels can become annoying at 80 dBA and very annoying at 90 dBA. To the human ear, each 10 dBA increase seems twice as loud (EPA 1981b).

Table 3-19. Sound Levels and Human Response

Noise Level (dBA)	Common Sounds	Effect
10	Just audible	Negligible
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying; hearing damage (8 hours)
100	Garbage truck	Very annoying
110	Pile drivers	Strained vocal effort
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Source: EPA 1981b.

Under the Noise Control Act of 1972, the Occupational Safety and Health Administration (OSHA) established workplace standards for noise. The minimum requirement states that constant noise exposure must not exceed 90 dBA over an 8-hour period. The highest allowable sound level to which workers can be constantly exposed is 115 dBA; exposure to this level must not exceed 15 minutes within an 8-hour period. The standards limit instantaneous exposure, such as impact noise, to 140 dBA. If noise levels exceed these standards, employers are required to provide hearing protection equipment that reduce sound levels to acceptable limits (OSHA 2018).

Construction Sound Levels. Construction, maintenance, and repair activities can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. Table 3-20 lists noise levels associated with common types of equipment (EPA 1971).

Table 3-20. Predicted Noise Levels for Maintenance and Repair Equipment

Equipment	Predicted Noise Level at 50 feet (dBA)
Bulldozer	80
Grader	0–93
Truck	83–94
Roller	73–75
Backhoe	72–93
Jackhammer	81–98
Concrete mixer	74–88
Welding generator	71–82
Paver	86–88

Source: EPA 1971.

3.10.1 Affected Environment

The land within the region of analysis is characterized by desert landscapes. Property uses along the border between the United States and Mexico in the project area (i.e., a pre-existing LPOE) include public lands, neighborhoods, and ranch land. Vehicle noise is the predominant source of noise in the area. In addition to vehicle noise, natural sources of noise, such as high winds, thunder, rain, and water flows, occur within the region of analysis. Wildlife, such as avian species, mammals, and insects, are additional sources of natural noise within the region of analysis.

The closest human receptor populations are directly across the border in San Luis Rio Colorado, Mexico. North of the LPOE, in the United States, are many residential, urban neighborhoods. This urban environment is characterized by common sounds of a city environment. The City of San Luis is a developed urban area containing many businesses and buildings in the immediate vicinity of the Proposed Action.

Sensitive receptors of noise include land uses such as picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. The closest sensitive receptor area would be the former Friendship Park, which was closed in 2011 and is recommended for acquisition as a part of this Proposed Action. There are three schools (Arizona Desert Elementary School, Rio Colorado Elementary School, and San Luis Middle School), one church (Ebenezer Church), and multiple parks within the residential neighborhoods in a 1-mile radius of the San Luis I LPOE (EPA 2018d).

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

During demolition and construction activities, heavy equipment would be operated and higher than ambient noise levels would be expected. Demolition and construction activities are proposed to occur Monday–Friday, during normal working hours (e.g., 7 a.m.–5 p.m.). Short-term, minor-to-moderate, adverse impacts from the operation of heavy equipment during demolition and construction activities would be expected. Noise levels would be higher than normal, ambient levels and may result in disturbance to personnel and visitors at the LPOE. Excavation and demolition activities would be expected to generate the highest sound pressures from the use of trucks, jack hammers, and backhoes and this equipment would occur for very short durations. None of the levels provided in Table 3-20 would exceed the thresholds for "annoying" (i.e., potential damage threshold for sound pressure listed in Table 3-19). Individuals closest to the actual equipment during use are at a greater risk for hearing damage. OSHA regulations and BMP guidance require hearing protection and limits exposures to no more than 8 hours in duration.

Short-term, negligible-to-minor, adverse impacts on sensitive noise receptors (i.e., schools, parks, and churches) would be expected. The area is characterized with noises common for an urban environment; therefore, noise from construction activities would be slightly higher than typical noise levels.

Under the Proposed Action, the facility would be renovated to streamline the vehicle processing and, therefore, reduce the time each vehicle is idling in queue. The decrease in vehicle queueing would also result in less noise emitting from each vehicle, causing a long-term, minor, beneficial impact on the noise environment.

3.10.2.2 Alternative 1

Under Alternative 1, short-term, minor-to-moderate, adverse impacts from the operation of heavy equipment during construction activities would be expected. OSHA regulations (i.e., wearing hearing protection and limiting exposure) would be followed to reduce the impact of noise on construction workers.

Long-term, minor, adverse impacts on the noise environment would be expected from the continued presence of vehicles in the processing queue.

3.10.2.3 Alternative 2

Under Alternative 2, impacts on the noise environment would be the same as those described for the Proposed Action. Therefore, short-term, minor-to-moderate, adverse impacts during construction and demolition activities and long-term, minor, beneficial impacts from the reduction of vehicle queuing on the noise environment would be expected under Alternative 2.

3.10.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Long-term, minor, adverse impacts on the noise environment would be expected from the continued presence of vehicles in the processing queue.

3.11 HUMAN HEALTH AND SAFETY

Human health and safety includes direct and indirect factors that have the potential to affect the human population or workers associated with the Proposed Action. Direct factors include exposure to chemicals, extreme temperatures, and weather, while indirect factors include physical safety and security of the surrounding environment. Existing conditions of the surrounding environment related to water quality, infrastructure and utilities, traffic hazards, air quality, and noise are discussed in Sections 3.3, 3.7, 3.8, 3.9, and 3.10, respectively. Factors in the project area that could affect human health include automobile or pedestrian accidents, workplace accidents, criminal activities, and extreme weather.

3.11.1 Affected Environment

Worker Safety. As a division of the Industrial Commission of Arizona, the Arizona Division of Occupational Safety and Health operates under an approved plan with the U.S. Department of Labor to regulate occupational safety and health issues within Arizona (ICA 2018). The Arizona Occupational Safety and Health Plan adopts federal OSHA standards and, in addition, has several unique standards for general industry, construction, and fall protection, among others (OSHA undated a). The plan governs both private-sector and public-sector workplaces, with the exception of federal government employers (OSHA undated a).

The occupational health and safety concerns of federal employers and employees are the responsibility of OSHA. OSHA regulations applicable to the Proposed Action include 29 CFR 1910 and 29 CFR 1926, which cover general industry and construction regulations, respectively (OSHA undated b). Hazards faced by personnel at the San Luis I LPOE could include injuries sustained from collisions with moving vehicles, lifting and moving equipment, and contact with hazardous substances during inspections.

Hazardous Materials. A Phase I Environmental Site Assessment of the former Friendship Park was completed in September 2020. The Environmental Site Assessment included a walking visual inspection of the site, visual reconnaissance of onsite buildings, and driving reconnaissance of the surrounding area (GSA 2017b and GSA 2018a). Federal, state, and local databases; relevant public records; local regulatory agency records; historical maps; and demographic information were reviewed to identify any Recognized Environmental Conditions (REC) affecting the property. As discussed in Section 3.7.1, there is an AST on the western portion of the LPOE. The AST is in good condition and upslope from the property and, therefore, is not considered a REC. A diesel fuel UST was historically operated at the LPOE and removed in December 2016. Interviews with onsite personnel confirmed that contaminated soils were removed for disposal in both locations. The UST is therefore designated as an historic REC.

An ACM and LCP survey of the San Luis I LPOE and the former Friendship Park was completed in August and October of 2017. The asbestos survey included a visual assessment of interior and exterior building to identify homogenous areas of suspect ACM. This assessment was conducted in visually accessible areas of the buildings proposed for demolition and renovation, including the roofing systems. A physical assessment was conducted to assess the friability and condition of the materials. Bulk samples of suspect ACM were collected using wet methods for laboratory testing. Regulated ACM, Category I non-friable ACM, and Category II non-friable ACM were identified in the Main Building of the San Luis I LPOE and in the Storage Shed, Central East Showers, and

Restrooms at the former Friendship Park. Materials containing less than or equal to 1% asbestos were located in the Secondary Inspection Building and Friendship Park Showers (GSA 2017a).

The LCP survey included a visual assessment of interior and exterior buildings to identify construction materials suspect for LCP and physically assessed to identify evidence of distress, flaking, or peeling. An X-ray fluorescence portable lead paint analyzer was used to obtain direct readouts of lead content on coated surfaces. Results were confirmed with laboratory testing of paint-chip samples. Lead-containing and lead-based paints were identified in the San Luis I LPOE Main Building, Dock Area, and Secondary Inspection Building and in Friendship Park. A negative exposure assessment should be conducted to determine if exposure during construction activities are below the required OSHA action levels and permissible exposure limits. Two composite samples of painted potential demolition debris were collected from San Luis I LPOE building materials and Friendship Park building materials to conduct a toxicity characteristic leaching procedure. Lead was not found in the sample from the LPOE. The Friendship Park sample contained 0.3 mg/L of lead. The EPA Maximum Contaminant Level for lead to be hazardous is 5.0 mg/L, therefore the waste would not be considered hazardous and can be disposed of as general demolition debris (GSA 2017a).

Security and Law Enforcement. CBP has reported several instances of security risks at the LPOE, including unruly behavior while waiting in line and infiltration attempts at the main building (GSA 2017a). The distance between the existing pedestrian processing area and the U.S.–Mexico border, as well as inadequate outdoor lighting, exacerbate security concerns at the existing LPOE.

The San Luis Police Department is located approximately one mile north of the project site and is the primary provider of law enforcement and police protection services in the area. In addition, the Yuma Police Department is located approximately 24 miles away, and Yuma County Sheriff's Office is approximately 26 miles away, both in Yuma, Arizona.

Emergency Services. The Yuma Regional Medical Center (YRMC) is located in Yuma, Arizona, approximately 22 miles northeast of the project site. It is currently the only hospital serving the Yuma region. YRMC is a 406-bed, not-for-profit hospital with 2,400 employees and over 400 medical practitioners, serving both year-round residents and visitors (Yuma Regional 2018). Medical services include emergency care, pediatrics, surgery, family medicine, oncology, behavioral health, and immunology.

The San Luis I LPOE buildings, with the exception of the family holding trailer, are equipped with smoke detectors and audible fire alarms (GSA 2017a). Fire protection services are provided by the San Luis Fire Department, located in San Luis, approximately 1.5 miles from the project site.

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

Under the Proposed Action, risks to human health and safety of personnel and patrons would increase slightly during the construction phase. Risks would be minimized by adhering to occupational safety and health regulations, the use of protective gear and equipment, and the implementation of BMPs. Access to the construction site would be restricted to construction workers and applicable CBP personnel. During the Proposed Action, the pedestrian queuing area would be temporarily routed away from the construction site, through a temporary structure or the

main building. Risks to human health and safety during construction of the Proposed Action would therefore be negligible.

No underground storage tanks would be constructed as part of the Proposed Action, but due to the existence of the historic REC at the LPOE, there is the potential to uncover contaminated soil during the construction phase. Construction would require the use of hazardous substances, such as oil and brake fluid. The presence of these materials onsite would temporarily increase the risk of an accidental release of hazardous substances to the environment. Therefore, short-term, negligible, adverse impacts would be expected. Hazardous materials would be used and stored in accordance with the project's Spill Prevention Control and Countermeasure (SPCC) plan, as well as with federal, state, and local regulations. BMPs would be implemented to minimize the risk of spills and if contaminated soil is encountered during construction.

ACM, LCP, and LBP in LPOE and Friendship Park buildings would be removed prior to construction activities. Therefore, short-term, minor, adverse impacts would be expected from the potential adverse effects on human health and safety. However, effects would be minimized by ensuring that OSHA standards are followed in the disturbance, removal, and transportation of ACM, LCP, and LBP. Long-term, minor, beneficial impacts on the health and safety of CBP personnel would be expected from the removal of ACM, LCP, and LBP from the facilities the San Luis I LPOE.

During the operations phase of the LPOE, potential adverse effects on human health and safety would be minimized by ensuring compliance with applicable building and safety codes. A fire alarm system would be installed in the family holding trailer, including the sleeping area (GSA 2016b). Employees would adhere to fire safety standards set forth in the Arizona State Fire Code and the 2012 International Fire Code (ADFFM undated).

The Proposed Action would decrease adverse risks to human health and safety. The existing main building is in poor condition and not in compliance with GSA building codes. The pedestrian processing area is located in close proximity to the international border and does not have adequate exterior lighting, contributing to several security risks. Under the Proposed Action, the LPOE would be expanded and redeveloped with modernized facilities meeting all applicable building codes, a pedestrian processing area located further away from the border, and enhanced security systems throughout the facility. CBP personnel would experience better working conditions and be sheltered from extreme weather conditions.

Further, the expansion and redevelopment of the LPOE would improve CBP's ability to carry out its mission of interdicting unlawful people and goods attempting to encroach U.S. borders. The vulnerabilities of the existing LPOE would be removed by relocating the processing facilities further away from the border and installing enhanced security systems. The operations of the LPOE would also improve, reducing traffic jams and minimizing the risk of vehicular and pedestrian accidents. Therefore, long-term, minor-to-moderate, beneficial impacts on human health and safety of CBP personnel and the public would be expected from the modernization of the San Luis I LPOE.

3.11.2.2 Alternative 1

All existing buildings and infrastructure at the LPOE would be renovated and modernized under Alternative 1 including utility, HVAC, and storm water systems, improving working conditions

for CBP personnel. Prior to the renovation of the LPOE facilities, ACM, LCP, and LBP would be removed in accordance with state, local, and federal regulations prior to any construction activities that may disturb these materials. The concentration levels of the ACM, LCP, and LBP are considered very low and therefore do not require full remediation of the site. Long-term, minor, beneficial impacts would be expected from the removal of ACM, LCP, and LBP from the facilities the San Luis I LPOE.

Construction activities would require the use of hazardous substances, but less soil would be disturbed than for the Proposed Action, minimizing the risk of encountering contaminated soil. BMPs and an SPCC plan would be implemented to minimize the potential for spills. Existing facilities would not be expanded or relocated, and, therefore, security and safety risks for pedestrians and personnel would continue to exist. The processing time would remain unchanged and traffic back-ups into the City of San Luis would continue. Therefore, long-term, minor, adverse impacts on human health and safety would be expected under Alternative 1.

3.11.2.3 Alternative 2

Under Alternative 2, impacts on human health and safety would be the same as those described for the Proposed Action. Therefore, long-term, minor, beneficial impacts on the health and safety of CBP personnel and the public would be expected under Alternative 2 from the removal of ACM, LCP, and LBP and the modernization of the San Luis I LPOE. Negligible, short-term, adverse impacts during construction and demolition activities would also be expected under Alternative 2.

3.11.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Risks to health and safety associated with existing conditions and operations at the San Luis I LPOE would remain. GSA would not redevelop the existing buildings at the LPOE or relocate the pedestrian processing facilities. Long-term, minor, adverse impacts on human health and safety would therefore be expected, as CBP personnel would continue to suffer from unfavorable working conditions, extreme weather conditions, ACM, LCP, and LBP in the existing LPOE buildings; and security risks to pedestrians and personnel would still exist.

3.12 SOCIOECONOMICS

The analysis of socioeconomic resources identifies those aspects of the social and economic environment that are sensitive to changes and that may be affected by actions associated with demolition, redevelopment, and renovation activities at the San Luis I LPOE. Since potential impacts with the greatest intensity would likely occur in Yuma County, it is defined as the Region of Influence (ROI) or the area analyzed for direct socioeconomic impacts.

Social impacts would be felt most by individuals, residents, and workers in Yuma County; especially residents in areas adjacent to the San Luis I LPOE. Businesses, housing, community services, and economic systems in Yuma County could change in response to the implementation of the Proposed Action and Alternative 1. While social impacts are discussed in this section, a discussion of those impacts that could disproportionately affect minority and low income and youth populations are discussed in Section 3.13. A detailed discussion of traffic and roads is included in the Section 3.8.

The data supporting this analysis were collected from standard sources, including federal agencies such as the U.S. Census Bureau (USCB), Bureau of Labor Statistics (BLS), and Bureau of Economic Analysis (BEA); state agencies such as the Arizona Department of Administration (ADOA), Office of Employment and Population Statistics and Arizona Labor Statistics (ALS), Office of Economic Opportunity; and local agencies such as the Yuma County Chamber of Commerce. Demographic data are presented for the City of San Luis and Yuma County and compared to the State of Arizona overall. Economic data presented in this section focuses on Yuma County.

3.12.1 Affected Environment

3.12.1.1 Population

Past and current population data and future population estimates for San Luis, Yuma County, and Arizona are shown in Table 3-21. All population estimates are from the USCB and population projections are from the ADOA, Office of Employment and Population Statistics. The populations of San Luis, Yuma County, and Arizona all increased from 2000 to 2016. Notably, the population of San Luis more than doubled during this period, growing an average of 6.4 percent per year. From 2020 to 2040, the population in Yuma County and Arizona is projected to grow approximately 1.6 percent per year, a slightly slower annual average rate than the previous sixteen years (ADOA 2015).

Table 3-21. Population Growth for the City of San Luis, Yuma County, and Arizona

	Historical and Current Population			
Location	**2000**	**2010**	**2016**	**Average Annual Growth Rate (2000-2016)**
City of San Luis	15,322	27,909[a]	31,118	6.4
Yuma County	160,026	195,751	203,292	1.7
Arizona	5,130,632	6,392,017	6,728,577	1.9
	Projected Population			
Location	**2020**	**2030**	**2040**	**Average Annual Growth Rate (2020-2040)**
City of San Luis	N/A	N/A	N/A	N/A
Yuma County	232,800	269,700	307,700	1.6
Arizona	7,346,800	8,535,900	9,706,800	1.6

Source: USCB 2000; USCB 2010; USCB 2012–2016a; ADOA 2015.

[a] Population count revised on January 2, 2013.

Housing

A housing unit refers to a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters. Both occupied and vacant housing units are included in the total housing unit

inventory. A housing unit is classified as occupied if it is the usual place of residence of a person or group of people; conversely, a housing unit is classified as vacant if it is not the usual place of residence of a person or group of people. The rental vacancy rate is the proportion of the rental inventory which is vacant for rent[5] (USCB 2018).

The total housing units, occupied housing units, and rental vacancy rates in San Luis, Yuma County, and Arizona are shown in Table 3-22. In Yuma County, there are 90,071 housing units, of which 79 percent are occupied; the rental vacancy rate is 8.5 percent. The vacancy rate in Yuma County is almost two percent higher overall than in the City of San Luis; and approximately 0.6 percent higher than in the state overall (USCB 2012–2016b).

Table 3-22. Housing Characteristics for the City of San Luis, Yuma County, and Arizona

Location	Total Housing Units	Occupied Housing Units	Rental Vacancy Rate (%)
City of San Luis	8,790	8,233	6.3
Yuma County	90,071	70,924	8.5
Arizona	2,913,541	2,448,919	7.9

Source: USCB 2012–2016b.

3.12.1.2 Labor

Indirect and induced jobs could be created if the Proposed Action or Alternative 1 were selected. Therefore, labor force and employment statistics are presented for Yuma County.

Labor Force

The size of a county's civilian labor force is measured as the sum of those currently employed and unemployed. People are classified as unemployed if they do not have a job, have actively looked for work in the prior four weeks, and are currently available for work (BLS 2015). As shown in Table 3-23, from 2000 to 2016 Yuma County's labor force grew approximately one percent faster than the state overall. Yuma County added about 30,000 people to its labor force during this period, and the State of Arizona added more than 700,000 to its labor force during this same period (BLS 2000, BLS 2005, BLS 2010, BLS 2016).

Table 3-23. Civilian Labor Force for the Yuma County and Arizona, 2000–2016

Location	2000	2005	2010	2016	Average Annual Growth Rate (2000-2016)
Yuma County	64,337	76,067	90,156	94,005	2.9
Arizona	2,509,884	2,883,225	3,100,255	3,237,865	1.8

Sources: BLS 2000, 2005, 2010, and 2016.

[5] The rental vacancy rate is computed by dividing the number of vacant units for rent by the sum of the number of renter-occupied units, the number of vacant units for rent, the number of rented not yet occupied units, and then multiplying by 100 (USCB 2018).

Unemployment

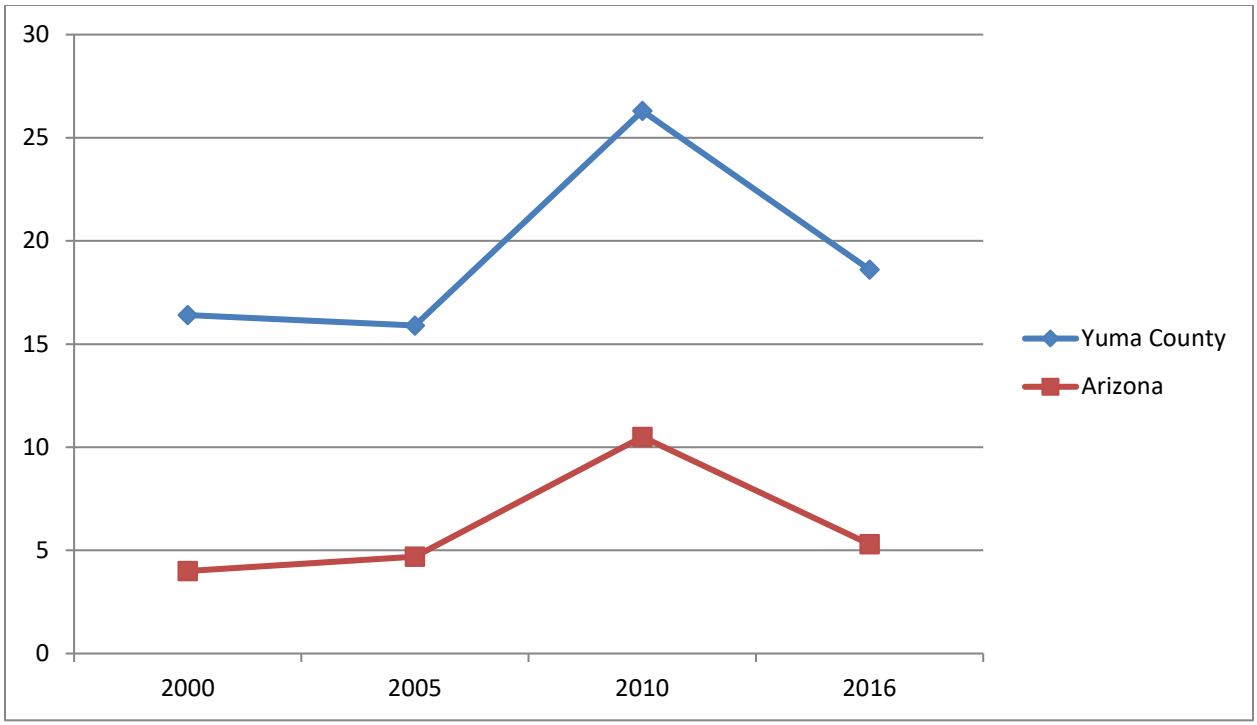
The unemployment rate is calculated based on the number of unemployed persons divided by the labor force. Unemployment rates in Yuma County were 12.4, 11.2, 15.8, and 13.3 percent higher than in the State of Arizona for 2000, 2005, 2010, and 2016, respectively (BLS 2000, BLS 2005, BLS 2010, BLS 2016). Yuma County also had the highest unemployment rate of any county in Arizona for these same years. San Diego State University economics professor James Gerber said, "The unemployment rate of border communities can sometimes artificially increase—and even double—because of a large uncounted migrant population. And border cities tend to have greater health problems and lower levels of education, which are associated with high unemployment" (The Washington Post 2013).

From 2005 to 2010, unemployment in Yuma County and Arizona increased by 10.4 percent and 5.8 percent, respectively. The sharp increase between 2005 and 2010 can be attributed to the 2008 economic crisis, which was part of the global financial downturn. Unemployment rates have decreased since 2010, and in 2016 unemployment rates were 18.6 and 5.3 percent in Yuma County and Arizona, respectively. Figure 3-11 shows the annual unemployment levels in Yuma County and Arizona in 2000, 2005, 2010, and 2016.

Employment by Industry

Employment statistics by industry in Yuma County are shown in Table 3-24. The leading industries in the county are service-providing; goods-producing; natural resources and mining (in Yuma County, this refers to farming); and trade, transportation, and utilities.

Table 3-25 shows the top ten employers in Yuma County. The Yuma Regional Medical Center, located approximately 16 miles northeast of the San Luis I LPOE, is the third-largest employer in Yuma County. Notably, the U.S. Border Patrol employs 1,000 people in Yuma County (Yuma County Chamber of Commerce undated).



Sources: BLS 2000, BLS 2005, BLS 2010, BLS 2016.

Figure 3-11. Unemployment Rates in Yuma County and Arizona, 2000–2016

Table 3-24. Employment by Industry in Yuma County, 2013

Industry	Establishments	Employment
Service-Providing	2,297	31,723
Goods-Producing	613	16,769
Natural Resources and Mining (i.e., farming)	219	14,488
Trade, Transportation, and Utilities	653	9,754
Local Government	90	9,473
Education and Health Services	353	7,161
Professional and Business Services	379	5,887
Leisure and Hospitality	315	5,492
Federal Government	71	3,682
Construction	311	2,321
Manufacturing	84	1,960
Financial Activities	250	1,685
State Government	14	1,492
Other Services	255	1,144
Information	38	558
Unclassified	55	42
Total	**5,997**	**113,631**

Source: ALS 2013.

Table 3-25. Top Ten Employers in Yuma County

Rank	Company	Activity	Employment
1	Marine Air Corps Station Yuma	Government	4,723
2	Yuma Proving Ground	Government	2,510
3	Yuma Regional Medical Center	Healthcare	1,991
4	Yuma Elementary District #1	Education	1,400
5	Yuma County	Government	1,336
6	Date Pac, LLC	Manufacturing	1,275
7	TRAX	Government	1,262
8	City of Yuma	Government	1,200
9	U.S. Border Patrol	Government	1,000
10	Yuma Union High School District #70	Government	1,000
		Total	**17,697**

Source: Yuma County Chamber of Commerce undated.

3.12.1.3 Earnings

Several measures are used to describe earnings, including per capita personal income (PCPI), total industry income, and compensation by industry. Personal income data are measured and reported for the county of residence. PCPI, then, is the personal income for county residents divided by the county's total population. Compensation data, however, are measured and reported for the county of work location and are typically reported on a per job basis. Compensation data indicate the wages and salaries for work done in a particular place (e.g., a county), but if the worker does not live in the county where the work occurred (e.g., a person from a neighboring county may cross county lines to go to work), then a sizeable portion will be spent elsewhere. These expenditures will not remain in or flow back to that county's economy. Total compensation includes wages and salaries as well as employer contribution for employee retirement funds, social security, health insurance, and life insurance.

Per Capita Personal Income

Personal income is the income received by all persons from all sources, or the sum of net earnings by a place of residence, property income, and personal current transfer receipts (BEA 2016a). This includes earnings from work received during the period, interest and dividends received, and government transfer payments, such social security checks. It is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars.

Table 3-26 contains 2000, 2005, 2010, and 2016 annual PCPI for Yuma County and the State of Arizona. All dollar estimates are in current dollars (not adjusted for inflation). Arizona's PCPI was about 46 percent higher than Yuma County's in 2000; 35 percent higher in 2005, 24 percent higher in 2010; and 21 percent higher in 2016. Arizona's PCPI was consistently higher than Yuma County's PCPI during the 16-year interval shown in Table 3-26. However, Yuma County's PCPI grew about 32 percent faster than the states.

Table 3-26. Annual Per Capita Personal Income in Yuma County and Arizona (in dollars)

Location	Per Capita Personal Income				
	2000	2005	2010	2016	Percent Change 2000–2016
Yuma County	17,941	23,983	27,049	33,365	86.0
Arizona	26,232	32,288	33,558	40,415	54.1

Source: BEA 2016b.

Note: All dollar estimates are in current dollars (not adjusted for inflation).

Industry Compensation

The term "Total Industry Compensation" is often used in economic data, but it is somewhat of a misnomer in that a portion of the "industry earnings" stems from government-related activity. In Yuma County, government and government enterprises account for 37.5 percent of total compensation of employees (see Table 3-27). It should be noted that while government and government enterprises often account for a large proportion of the compensation of employees in a county, 37.5 percent is considered a high proportion and can be attributed to the Marine Air Corps Station Yuma and the U.S. Border Patrol presence along the U.S.–Mexican border. Nevertheless, total industry compensation provides a good picture of the relative sizes of market-related economic activity, or business activity, performed in Yuma County.

As shown in Table 3-27, income is generated by economic activity in Yuma County through a variety of sectors, including various types of business as well as government. The government and government enterprises; health care and social assistance; forestry, fishing, related activities (support activities for agriculture and forestry); and retail trade accounted for approximately 66 percent of the approximately $3.7 billion compensated to employees working in Yuma County in 2016. Compensation for Forestry, fishing, related activities (support activities for agriculture and forestry) ($342,428,000 or 9.4 percent) and farms ($154,321,000 or 4.2 percent) accounted for approximately 13.6 percent of the 2016 total ($3,652,102,000). Farmland near the project area in the Yuma Valley, off the mesa in the fertile river bottoms, tends to be of the highest quality found in Yuma County. Some of the more common crops that are grown in the planning area include lettuce, cotton, melons, wheat, and safflower (Yuma County 2017).

The City of San Luis plays a major role as a gateway for imports to and from Mexico. With the connection of I-95, Interstate 8, and Highway 95, the city's industrial base increases the demand of business development and the commercial shipping industry, directly connecting Mexican states with major U.S. markets (City of San Luis undated). San Luis is also a popular area for border tourists to shop. Some industries have grown around the San Luis I LPOE in response to the market created by commercial shipping, tourists, and workers crossing the border. Yuma County has experienced economic growth due to free trade and growing permanent and tourist populations. These populations increase demand for goods and services, causing the job market and the trade economy to expand in the area (BoR 2000).

Table 3-27. Compensation of Employees by Industry in Yuma County, 2016

Industry Description	Compensation ($000)	Percent[a]
Government and government enterprises	1,367,994	37.5
Healthcare and social assistance	407,674	11.1
Forestry, fishing, related activities (support activities for agriculture and forestry)	342,428	9.4
Retail trade	292,317	8.0
Professional, scientific, and technical services	167,733	4.6
Farm (crops, livestock, and dairy)	154,321	4.2
Administrative and support and waste management and remediation services	144,015	3.9
Manufacturing	129,612	3.5
Accommodation and food services	125,464	3.4
Construction	102,544	2.8
Wholesale trade	102,274	2.8
Other services except public administration	83,312	2.3
Finance and insurance	68,102	1.8
Transportation and warehousing	55,828	1.5
Information	25,465	0.7
Real estate and rental and leasing	22,672	0.6
Educational services	18,889	0.5
Management of companies and enterprises	16,949	0.5
Utilities	16,445	0.5
Arts, entertainment, and recreation	6,393	0.2
Mining, quarrying, and oil and gas extraction	1,671	0.04
Total Compensation of Employees	**3,652,102**	

Source: BEA 2016c.

Note: [a] Numbers may not add up to exactly 100 percent due to rounding.

3.12.1.4 Quality of Life and Community Services

Quality of life can be characterized as a person's well-being and happiness. Quality of life is a subjective measure and cannot be solidly defined. For this analysis, quality of life considerations focus on those elements that the public generally associates with a high quality of life: education, safety, and a positive general living environment. Other factors, such as air quality, noise, and recreation opportunities, could also contribute to a person's sense of quality of life and are addressed in other sections of this EIS. Based on comments received during the scoping period for this EIS, potential impacts to community services (i.e., police and fire services) and access to schools were also considered.

Police and Fire Services

The City of San Luis Police Department is located at 1030 E. Union Street, adjacent to City Hall. The department employs 35 officers and generally has a response time of two to three minutes (City of San Luis 2011a).

The City of San Luis Fire Department is located at 1165 N. McCain Avenue. There is one fire station in the city with two fire trucks. The department provides pre-hospital, advanced life support services to the community with medical direction through the base hospital, YRMC. Emergency transportation services are provided by a separate, private provider (City of San Luis 2011a).

The San Luis Fire Department was formed as a volunteer fire department, and is comprised of 23 full-time employees, 6 part-time employees, and 11 fire cadets (student firefighters). There are 21 full-time and 4 part-time firefighters; 13 are certified emergency paramedics, 12 are emergency medical technicians; 15 are hazardous materials technicians; and 10 are hazardous materials first responders. Also, the Arizona State Prison Complex in Yuma has a wildland fire crew that consists of 1 sergeant, 2correctional officers, and 20 inmates that assist in fighting fires throughout Arizona (City of San Luis 2011a).

Schools

Students residing in the City of San Luis attend schools in the Gadsden Elementary School District #32 and Yuma Union High School District #70, or at Harvest Preparatory Academy and Portable Practical Educational Preparation Training for Employment Center (PPEP TEC) high schools (a set of 11 charter high schools across Arizona). Figure 3-12 shows the location of the schools in Yuma County in relation to the San Luis I LPOE.

The average student-to-teacher ratio in Arizona for elementary, middle, and high schools is about 23 students to 1 teacher. This student-to-teacher ratio is among the highest in the country; the national average is 16 students to 1 teacher. All of the schools in the City of San Luis have a student-to-teacher ratio that is higher than the State of Arizona (NCES 2016). Total enrollment and student-to-teacher ratio for the 12 schools in the City of San Luis are presented in Table 3-28.

Table 3-28. Schools in the City of San Luis, 2015–2016

School	Enrollment	Student-to-Teacher Ratio
San Luis Pre-School	35	9:1
Gadsden Elementary School	569	30:1
Arizona Desert Elementary School	769	29:1
Rio Colorado Elementary School	601	29:1
Ed Pastor Elementary 4	331	26:1
Desert View Elementary School	799	27:1
Cesar Chavez Elementary School	742	28:1
San Luis Middle School	693	26:1
Southwest Junior High School	788	27:1
Harvest Preparatory Academy (K–8)	569	28:1
San Luis High School	2,662	29:1

Sources: ASLD 2014 and Google Maps 2018.

Figure 3-12. Preschools and Elementary, Middle, and High Schools in Yuma County

3.12.2 Environmental Consequences

The effects analysis considers aspects of the social and economic environment that are sensitive to changes and that may be adversely or beneficially affected by activities associated with the Proposed Action and Alternative 1. As noted earlier, the ROI for the socioeconomic analysis is defined as Yuma County, but social impacts to population, housing, and quality of life and community services focus on the City of San Luis—or the area most likely to be affected by the Proposed Action and Alternative 1.

3.12.2.1 Proposed Action

Population and Housing

The population is not expected to grow during the construction phase or increase demand on local housing because construction workers are not expected to relocate to the area. No short-term impacts would be expected on housing in the City of San Luis and the larger Yuma County. Non-local workers would stay in local hotels for one or two nights at a time during the construction phase. In the long-term, impacts on population and housing would be expected to be negligible to

minor. Additional personnel may be required to operate the San Luis I LPOE and may cause the housing demand to increase and contribute to a permanent population increase.

GSA anticipates that between 10 and 15 percent of construction workers would be local or would commute under an hour to the San Luis I LPOE. The remaining non-local workers would likely be hired from Tucson or Phoenix and commute every two days to San Luis for back-to-back shift work. Non-local workers would not relocate semi-permanently or permanently to San Luis (i.e., rent an apartment in or near the City of San Luis). Instead, non-local workers from Phoenix or Tucson would spend one or two nights at a time in hotels in or near San Luis. Contractors would be onsite anywhere from two days to four months at a time (GSA 2018b). As such, the demand on local housing would not be expected to increase during the construction phase. The ability of individuals in Yuma County living on a fixed income to pay rent; Yuma County's tax base; and Yuma County's ability to provide funding for social services, health services, or schools would not be affected. In the short term, no impacts would be expected on the population and housing in Yuma County.

In the long term, once the larger LPOE is completed, CBP may hire additional personnel to operate the San Luis I LPOE. While it is difficult to estimate the exact level of in-migration, it is assumed that most of the CBP personnel relocating to the area would prefer relocating to the City of San Luis. As such, the population may permanently grow (including families) in the long-term. Considering the number of vacant housing units, those who relocate to the area would have ample housing options in the City of San Luis or nearby cities, and this in-migration would help offset local housing vacancies.

Labor and Earnings

From FY 2018 to FY 2021, approximately 600–700 construction jobs would be created over the course of the redevelopment of the San Luis I LPOE. As discussed above, approximately 10-15 percent of workers would be hired locally or from Yuma County. Therefore, the Proposed Action would create between 60 and 105 direct construction jobs in the short-term.

As described in Section 3.12.1.3 (Earnings), compensation data are measured and reported for the county of work location and are typically reported on a per job basis. Compensation data indicate the wages and salaries for work done in a particular place (e.g., Yuma County), and if the worker lives in the county where the work occurred, then a sizeable portion would be spent in the county. Because workers would not relocate to the City of San Luis or to nearby surrounding cities, most of their expenditures (e.g., rent, property taxes) for the duration of their employment as it relates to the Proposed Action would not remain in or flow back into Yuma County's economy.

However, the wages and salaries of approximately 60 to 105 local LPOE construction workers would be spent in Yuma County. In general, approximately 80 percent is actually "take home" pay, and the other 20 percent goes toward workers' compensation, health insurance, unemployment, and Social Security. Therefore, approximately 80 percent of the wages and salaries of local LPOE construction workers would flow into Yuma County's economy. The PCPI and compensation of employees in the construction sector in Yuma County would be expected to increase slightly from FY 2018 to FY 2021, and the unemployment rate would likely decrease slightly. However, direct economic benefits from these slight increases in PCPI and industry compensation and slight decrease in unemployment would be negligible overall in both the short- and long-term.

The Proposed Action would also be expected to create indirect and induced jobs that would likely be filled by the local workforce. Unemployment rates would likely decrease slightly during the construction phase, and compensation of employees in retail trade; accommodation and food services; construction; real estate and rental and leasing; and arts, entertainment, and recreation would likely increase—creating indirect, minor, beneficial impacts. In the long term, unemployment rates would be expected to return to existing levels as is the compensation of employees in the abovementioned industries.

Indirect or induced jobs could be created from project-related spending (i.e., purchase of materials from local vendors, discussed below) and workers spending wages on rent, food, entertainment, etc. in the area. In 2016, the unemployment rate in Yuma County was 18.6 percent, or 17,485 of the 94,005-person labor force. While unemployment rates may be artificially inflated due to seasonal workers, with the number of unemployed individuals in Yuma County, it is likely that any indirect or induced jobs created as a result of this alternative would be filled in Yuma County. Beneficial impacts on the labor force or employment would be most felt by those in search of a job in Yuma County.

Indirect socioeconomic impacts would result from directly impacted industries purchasing supplies and materials from other industries. The estimated project cost of the Proposed Action is $48.5 million—approximately $13.5 million of which would be spent on construction labor and materials (GSA 2018b). Materials and equipment would be purchased from local vendors when applicable. Indirect jobs would be created when the design and build firm makes purchases from local vendors and retail stores and at establishments where workers would shop. Induced impacts would occur when employees of the directly and indirectly affected industries spend the wages they receive. The types of indirect and induced jobs that would be created during the construction phase would likely be relatively low-wage jobs, such as restaurant workers or convenience store clerks.

As San Diego State University economics professor James Gerber stated, “Border cities tend to have greater health problems and lower levels of education, which are associated with high unemployment” (The Washington Post 2013). Potential economic and health benefits associated with the indirect or induced jobs could benefit Yuma County residents in search of a job. Jobs and income are strongly associated with a number of beneficial health outcomes, such as an increase in life expectancy, improved child health status, improved mental health, and reduced rates of chronic and acute disease morbidity and mortality (HDA 2004; Cox et al. 2004).

Quality of Life and Community Services

In the short term, the quality of life of residents in close proximity to the San Luis I LPOE would decrease due to increased noise levels, air emissions, and traffic and congestion. The daily increase in population from construction workers would not be expected to overwhelm current police and fire services in Yuma County and therefore impacts would be negligible. Because no additional students would be expected to relocate to Yuma County, no impacts on the student-to-teacher ratio or quality of education would be expected at Yuma County schools.

In the long term, noise levels would return to existing levels once construction activities are completed. Residents close to the San Luis I LPOE as well as residents in the larger Yuma County would be expected to benefit from improved circulation and overall air quality in the area. Any

additional CBP personnel and their families that may relocate to the City of San Luis would contribute to a permanent population increase and would result in minor adverse impacts on the educational quality. Given that the student-to-teacher ratio in Yuma County already exceeds the state and national averages, additional students would contribute to unfavorable student-to-teacher ratios at schools, and adverse impacts on education would be minor and adverse in the long term.

Noise Disturbances

The demolition and redevelopment of facilities would use on-road vehicles such as POVs and non-road vehicles such as excavators, cranes, graders, paving equipment, and bulldozers that would cause noise levels to increase. Noise impacts would be felt most by residents in close proximity to the San Luis I LPOE. As discussed in Section 3.10, locations farther removed from the project area would seldom experience appreciable levels of construction noise. To minimize the effects of noise levels, OSHA regulations and BMPs would be implemented, such as wearing hearing protection and limiting exposures to no more than 8 hours in duration. In addition, demolition and construction activities would occur Monday–Friday, during normal working hours (e.g., 7 a.m.–5 p.m.).

Air Quality

Short-term, minor, adverse direct and indirect impacts would be expected to affect residents and recreationists at nearby parks due to increased air emissions from on-road and non-road vehicles during construction activities. Recreationists at 14 parks located within approximately one mile of the San Luis I LPOE would experience direct impacts; recreationists at parks more than one mile from the San Luis I LPOE would experience indirect impacts. Once construction ceases, air emissions and ambient pollutant concentrations from on-road and non-road vehicles and traffic would return to existing levels. In the long term, after the completion of demolition and construction activities at the San Luis I LPOE, negligible, adverse, direct, and indirect impacts on air quality would be expected. Air quality would likely improve due to decreased wait times at the San Luis I LPOE.

Emissions, airborne dust, and soil surface disturbance from the use of on-road and non-road construction vehicles could degrade air quality in the area surrounding the San Luis I LPOE. The majority of the NO_x, SO_2, and CO emissions would be associated with vehicle and equipment exhaust. Since these emissions would occur at ground level, they would likely cause short-term increases in air pollutant emissions in the immediate vicinity of the project area. However, for purposes of this analysis, it was assumed that these emissions would not likely be transported more than one mile, except on windy days. Because the Yuma Mesa is subject to windstorms and occasional thunderstorms, dust from loose desert soil can be easily kicked up into the air during a windstorm, causing air quality to temporarily decrease. As discussed in Section 3.9 (Air Quality and Greenhouse Gas Emissions), the ambient air concentration for fine particulate matter (PM_{10}) in the Yuma area exceeds federal and state standards. The EPA lists Yuma County as a *nonattainment* area for PM_{10}.

Short-term air quality impacts would be felt most by residents in close proximity to the San Luis I LPOE, or residents within one mile of the project area. As discussed in Section 3.9 (Air Quality and Greenhouse Gas Emissions), it was assumed that the use of on-road and non-road vehicles during demolition and redevelopment activities would increase mobile source air pollutant emissions. Indirect air quality impacts could also be felt by residents in the larger City of San Luis.

The use of on-road and non-road vehicles for construction activities could also cause short-term, direct and indirect air quality impacts to recreationists at several parks near the San Luis I LPOE. Impacts to parks and recreation centers are discussed in Section 3.14. Potential impacts to children are also discussed in further detail in Section 3.13 (Environmental Justice and Protection of Children).

Congestion

Short-term, minor, adverse impacts would be expected to affect residents near the San Luis I LPOE due to increased congestion. In the long term, adverse impacts would be negligible once construction activities cease, and congestion in the areas would likely improve due to the addition of POV lanes.

Schools

No short-term impacts would be expected on the quality of education in the City of San Luis. In the long term, additional CBP personnel may be required to operate the San Luis I LPOE. Any additional personnel and their families relocating to the City of San Luis would contribute to a permanent population increase. Given that the student-to-teacher ratio at Yuma County schools already exceeds the state and national averages, any additional students from the relocation of CBP personnel and their families would contribute to unfavorable student-to-teacher ratios at schools. In the long term, adverse impacts on the quality of education at schools in the City of San Luis would be minor.

Police and Fire Services

While construction workers would not be expected to relocate semi-permanently or permanently to Yuma County, the total population would still increase in the short term, even if construction workers are in Yuma County for only a few days at a time. The short- and long-term population increase from the Proposed Action would not be expected to overwhelm current police and fire services in Yuma County. There are 35 law enforcement officers and 24 full and part-time firefighters currently serving Yuma County.

Assuming a temporary, daily increase of approximately 85–140 construction workers from FY 2018 to FY 2021, project-related increases in population would raise the ratio of residents to law enforcement officers and residents to firefighters by less than one percent. While the Proposed Action would not contribute to funding for community services (i.e., with tax revenues), it is unlikely that the temporary, daily increase in population would cause law enforcement and firefighting activities to become overwhelmed.

Residents adjacent the San Luis I LPOE may be delayed in reaching emergency and urgent care facilities during construction activities. The Yuma Regional Medical Center is the closest hospital to the San Luis I LPOE offering emergency services. The response time of ambulances, fire trucks, and police may increase slightly when attempting to access a residence adjacent to the San Luis I LPOE. In the case of an emergency, time delays due to traffic or congestion from the demolition and redevelopment activities under the Proposed Action could have serious consequences, although the likelihood of this occurrence is low.

3.12.2.2 Alternative 1

Under Alternative 1, short-term, adverse impacts would be negligible. In the long-term, negligible to minor, adverse impacts on population and housing; labor and earnings; and community services in Yuma County would be expected. It is assumed that the use of heavy equipment under Alternative 1 would be less than under the Proposed Action. For purposes of analysis, it was assumed that construction equipment would be limited to cranes to lift supplies to the roofs of buildings and paving equipment to repave the parking areas. Therefore, noise disturbances and increased air emissions and congestion from Alternative 1 would be expected to be less intense than those described under the Proposed Action.

Similar to the Proposed Action, construction workers would not relocate to Yuma County and therefore demand on local housing would not be affected. In the short term, Alternative 1 would not be expected to affect the quality of education in the City of San Luis. Economic and health impacts could also benefit Yuma County residents in search of a job under Alternative 1; however, compared to the Proposed Action, much fewer construction jobs would be created under Alternative 1. As such, indirect, beneficial impacts due to the creation of indirect and induced jobs would also occur under Alternative 1, but the intensity of the impacts would be expected to be negligible to minor. Any decrease in the unemployment rate and increase in compensation of employees in the retail trade; accommodation and food services; construction; real estate and rental and leasing; and arts, entertainment, and recreation industries would likely be negligible to minor.

In the long term, residents in close proximity to the San Luis I LPOE would experience negligible to minor, adverse effects. Without the addition of POV lanes at the San Luis I LPOE (which would occur under the Proposed Action), wait times and, therefore, air emissions would continue to increase under Alternative 1. Congestion and traffic would continue to increase in the area, potentially delaying access to schools, recreation areas, hospitals, and other community facilities. It is unlikely that additional personnel would be needed to operate the San Luis I LPOE under this alternative. As such, long-term population growth and the associated impacts on housing and schools would not occur under Alternative 1. Any social and economic benefits of indirect and induced job creation that would occur in the short-term would not be permanent and would largely be reversed in the long-term, after construction was completed.

3.12.2.3 Alternative 2

Under Alternative 2, impacts on socioeconomic resources would be the same as those described for the Proposed Action. Therefore, no short-term impacts on housing and population would be expected under Alternative 2. Short-term, beneficial impacts on labor and earnings would be expected during construction and demolition activities of the LPOE.

3.12.2.4 No-Action Alternative

Under the No-Action Alternative, site conditions would remain as they currently exist and no construction, renovation, or demolition activities would occur. Potential short-term impacts described under the Proposed Action and Alternative 1 due to noise disturbances, increased air emissions, and social and economic benefits from direct, indirect, and induced jobs would not occur on Yuma County residents under the No-Action Alternative. Long-term, minor, adverse impacts on San Luis residents would be expected without the addition of POV lanes to reduce wait

times and, therefore, air emissions. Congestion and traffic would continue to increase in the area, delaying access to schools, hospitals, and other community facilities.

3.13 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN

Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires that federal agencies consider as a part of their action any disproportionately high and adverse human health or environmental effects to minority and low-income populations. Agencies are required to identify and address these potential effects.

EO 13045, "Protection of Children from Environmental Health Risks and Safety Risks," places a high priority on the identification and assessment of environmental health and safety risks that may disproportionately affect children. The EO requires that each agency "shall ensure that its policies, programs, activities, and standards address disproportionate risks to children." It considers that physiological and social development of children makes them more sensitive than adults to adverse health and safety risks and recognizes that children in minority and low-income populations are more likely to be exposed to and have increased health and safety risks from environmental contamination than the general population.

3.13.1 Affected Environment

The Environmental Protection Agency (EPA) defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The goal of "fair treatment" is not to shift risks among populations, but to identify potential disproportionately high adverse impacts on minority and low-income communities and identify alternatives to mitigate any adverse impacts.

For purposes of assessing environmental justice under NEPA, the Council on Environmental Quality (CEQ) defines a minority population as one in which the percentage of minorities exceeds 50 percent or is substantially higher than the percentage of minorities in the general population or other appropriate unit of geographic analysis (CEQ 1997). As with the socioeconomics impacts analysis, since potential impacts with the greatest intensity and longest duration would occur in the City of San Luis, Yuma County. Yuma County is defined as the ROI for any direct and indirect impacts that may be associated with the implementation of the Proposed Action and Alternative 1. For purposes of comparison, the State of Arizona is defined as the Region of Comparison (ROC), or the "general population" as it corresponds to the CEQ definition.

In this section, race and income data for Yuma County (the ROI) are compared to race and income data for the State of Arizona (the ROC). Due to the site-specific nature of the Proposed Action and alternatives, census tract (CT) data are then used to identify high concentration "pockets" of environmental justice populations near the San Luis I LPOE. Table 3-29 shows the distribution of minorities populations in the vicinity of the San Luis I LPOE. All figures and calculations are based on the 2012–2016 United States Census Bureau (USCB) American Community Survey datasets.

Table 3-29. Summary of Minorities in the ROI and ROC[a]

Location	Total Population	Minority	American Indian and Alaska Native	Black or African American	Asian	Native Hawaiian and Other Pacific Islander	Hispanic or Latino
Yuma County[b]	203,292	66.7	1.1	2.1	1.3	0.2	62.0
Arizona[c]	6,728,577	42.6	4.4	4.3	3.1	0.2	30.6

Source: USCB 2012–2016a.

Notes: [a] Percent minorities, [b] ROI, and [c] ROC.

3.13.1.1 Minority Populations

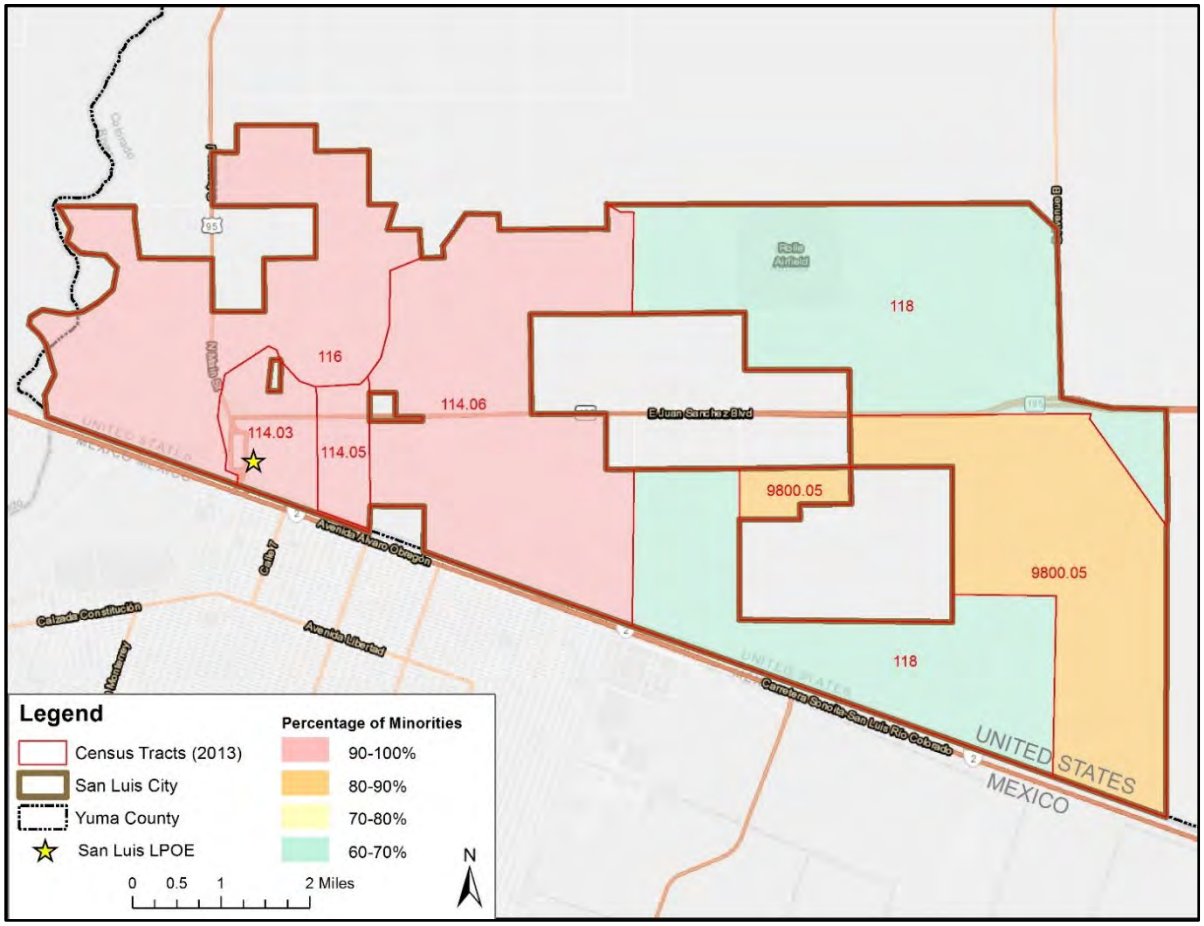
The CEQ defines "minority" as including the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic Origin; or Hispanic (CEQ 1997). The CEQ defines a minority population in the following ways:

- "…If the percentage of minorities exceeds 50 percent..." (CEQ 1997). As this definition applies to the Proposed Action and Alternative 1, if more than 50 percent of the Yuma County population consists of minorities, this would qualify the county as constituting an environmental justice population.
- "…[If the percentage of minorities] is substantially higher than the percentage of minorities in the general population or other appropriate unit of geographic analysis" (CEQ 1997). For purposes of this analysis, a discrepancy of 10 percent or more between minorities (the sum of all minority groups) in Yuma County and the State of Arizona would be considered "substantially" higher and would categorize Yuma County as constituting an environmental justice population.

Table 3-29 indicates, Yuma County meets the regulatory definition of a minority population or minority group(s) because minorities represent more than 50 percent of Yuma County's total population. Furthermore, the percentage of minorities in Yuma County is more than 10 percent higher than the percentage of minorities in the State of Arizona (USCB 2012–2016a). By both CEQ definitions of a minority population, the ROI constitutes an environmental justice population.

Minority Populations by Census Tracts

Due to the site-specific nature of the Proposed Action and Alternative 1, in addition to describing minority populations on the county level, CT data are used to identify any high concentration "pockets" of minority populations and describe the distribution of minorities in the vicinity of the San Luis I LPOE (CEQ 1998). CTs are small, relatively permanent statistical subdivisions of a county or equivalent entity, generally with a population size between 1,200 and 8,000 people. A CT usually covers a contiguous area, and its boundaries usually follow visible and identifiable features (e.g., road, river). They were designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions (USCB 2014). Table 3-30 shows the distribution of minorities populations in the CTs surrounding the San Luis I LPOE. It should be noted that although Figure 3-13 and Table 3-30 present census data for a geographic area within the ROI, the ROI does not change and is still defined as Yuma County.



Sources: USCB 2012–2016a, USCB 2013a, USCB 2013b.

Figure 3-13. Minorities in Census Tracts near the San Luis I LPOE

Table 3-30. Minorities in Census Tracts near the San Luis I LPOE[a]

Location	Total Population	Minorities	American Indian and Alaska Native	Black or African American	Asian	Native Hawaiian and Other Pacific Islander	Hispanic or Latino
114.03[b]	4,585	98.9	0.0	0.0	0.0	0.0	98.9
114.05	5,353	98.7	0.0	0.0	0.0	0.0	98.7
114.06	9,070	99.5	0.0	0.0	0.0	0.0	99.5
116	9,717	99.9	0.0	0.0	0.0	0.0	99.9
Aggregate of CTs	28,725	99.4	0.0	0.0	0.0	0.0	99.4
City of San Luis	31,118	96.9	0.4	1.0	0.0	0.0	95.5

Source: USCB 2012–2016a.

[a] Percent minorities.

[b] Proposed Action and Alternative 1 are located in CT 114.03.

Potential impacts from noise disturbances, air emissions, and traffic delays would be felt most by populations in CTs located near the San Luis I LPOE. The Proposed Action and Alternative 1 would be located in CT 114.03; CTs 116, 114.05, and 114.06 surround CT 114.03 and are within two miles of the San Luis I LPOE. The percentage of minorities in these four CTs are compared to the percentage(s) of minorities in the larger San Luis city to determine whether these four CTs constitute an environmental justice population. Applying the CEQ definition(s) from above, the four CTs would be identified as an environmental justice population if

- more than 50 percent of the four CTs consist of minorities or
- the percentage of minorities in the four CTs is substantially higher than the percentage of minorities in San Luis city. For purposes of this analysis, a discrepancy of 10 percent or more between minorities (the sum of all minority groups) in the four CTs and San Luis city would be considered "substantially" higher and would categorize these four CTs as an environmental justice population.

Figure 3-13 shows the distribution of minorities in these CTs, color-coding the proportion of minorities using ranges. These ranges were developed based on commonalities or themes revealed by the CT data. For example, CTs shown in light green indicate that between 60 and 70 percent of the population is represented by minorities. Each CT is outlined red and labeled (per USCB numbering); San Luis city is outlined brown; and the San Luis I LPOE is shown with a yellow star outlined in black.

To determine the percentage of minorities in the four CTs, the aggregate estimate of minorities in the four CTs is divided by the total population for the four CTs. As shown in Table 3-30, the percentage of minorities in CTs 114.03, 114.05, 114.06, and 116 exceed 50 percent of the population; therefore, they constitute an environmental justice population on this basis.

In summary, Yuma County consists of a minority population by both CEQ definitions. The four CTs closest to the San Luis I LPOE also consist of a minority population, consisting of more than 50 percent of the population.

3.13.1.2 Low-Income Populations

Low-income populations are defined as households with incomes below the federal poverty level. There are two slightly different versions of the federal poverty measure: poverty thresholds defined by the USCB and poverty guidelines defined by the Department of Health and Human Services (DHHS).

The poverty thresholds are the original version of the federal poverty measure and are updated each year by the USCB. The USCB uses a set of income thresholds that vary by family size and composition (number of children and elderly) to determine who is in poverty. The official poverty thresholds do not vary geographically but are updated for inflation. The official poverty definition considers pre-tax income and does not include capital gains or non-cash benefits such as public housing, Medicaid, and food stamps (CEQ 1998). Poverty thresholds are primarily used for statistical purposes, such as calculating poverty population figures or estimating the number of Americans in poverty each year. *Environmental Justice Guidance Under NEPA* recommends that USCB poverty thresholds be used to identify low-income populations (CEQ 1997).

The DHHS poverty guidelines are simplifications of the USCB's detailed matrix of poverty thresholds and are used mostly for administrative purposes, such as determining financial eligibility for certain federal programs. The poverty guidelines do not vary geographically for the 48 contiguous states. The DHHS 2018 poverty guidelines define low-income populations as those whose median household income is at or below the maximum annual income of $20,780 for a family of three (DHHS 2018).

Because CEQ guidance does not specify a threshold for identifying low-income populations, the same approach used to identify environmental justice minority populations is applied to low-income populations. Yuma County would be defined as a low-income population or environmental justice population if

- more than 50 percent of Yuma County consists of families or persons below the poverty threshold or
- the percentage of low-income families or persons in Yuma County is substantially higher than the percentage in Arizona. A discrepancy of 10 percent or more between Yuma County and the State of Arizona would be considered "substantially" higher and would categorize Yuma County as constituting a low-income population.

The CEQ does not use median household income to directly define low-income populations. However, DHHS uses median household figures to define poverty guidelines which have several federal, state, and regional applications. As such, median household income figures are also used to identify low-income populations. A discrepancy of 10 percent or more between the median household income(s) in Yuma County and Arizona would categorize Yuma County as constituting a low-income population.

Table 3-31 provides statistics relevant to assessing the presence of low-income populations in the areas that would be affected by the Proposed Action and Alternative 1. The percentage of all people and all families below the poverty threshold in Yuma County is 2.8 and 4.5 percent higher than in Arizona, respectively. The discrepancy between people or families in Yuma County and the State of Arizona living below the poverty threshold is less than 10 percent. Neither the percentage of all people nor of all families living below the poverty threshold in Yuma County exceeds 50 percent of the total county population. Therefore, Yuma County does not qualify as having a low-income population by either CEQ definition.

Table 3-31. Summary of Income and Poverty Statistics in the ROI and ROC

Location	People Below the Poverty Threshold (%)	Families Below the Poverty Threshold (%)	Median Household Income[c]	Average Family Size
Yuma County[a]	20.5	17.4	41,467	3.39
Arizona[b]	17.7	12.9	51,340	3.19

Sources: USCB 2012–2016b, USCB 2012–2016c, USCB 2012–2016d.

Notes: [a] ROI, [b] ROC, [c] In 2016 inflation-adjusted dollars.

The median household income in the State of Arizona is $9,873 higher than in Yuma County, or about 2.4 percent higher. The median household income in Yuma County is not substantially lower than in the State of Arizona. Yuma County, therefore, does not qualify as an environmental justice population on this basis, either.

Low-Income Populations by Census Tracts

As with minority populations, due to the site-specific nature of the Proposed Action and Alternative 1, CT data are used to identify high concentration "pockets" of low-income populations and describe the distribution of low-income populations in the vicinity of the San Luis I LPOE (CEQ 1998). Although Table 3-32 and Figure 3-14 present census data for a geographic area within the ROI, the ROI does not change and is still defined as Yuma County. The potential to experience delays from traffic, suffer a loss of (or gain from) employment or income, or experience adverse effects to general mental and physical health and well-being would be felt most by low-income populations close to the San Luis I LPOE. Poverty statistics in CTs 114.03, 116, 114.05, and 114.06 are compared to the poverty statistics in the City of San Luis to determine whether these four CTs constitute an environmental justice population.

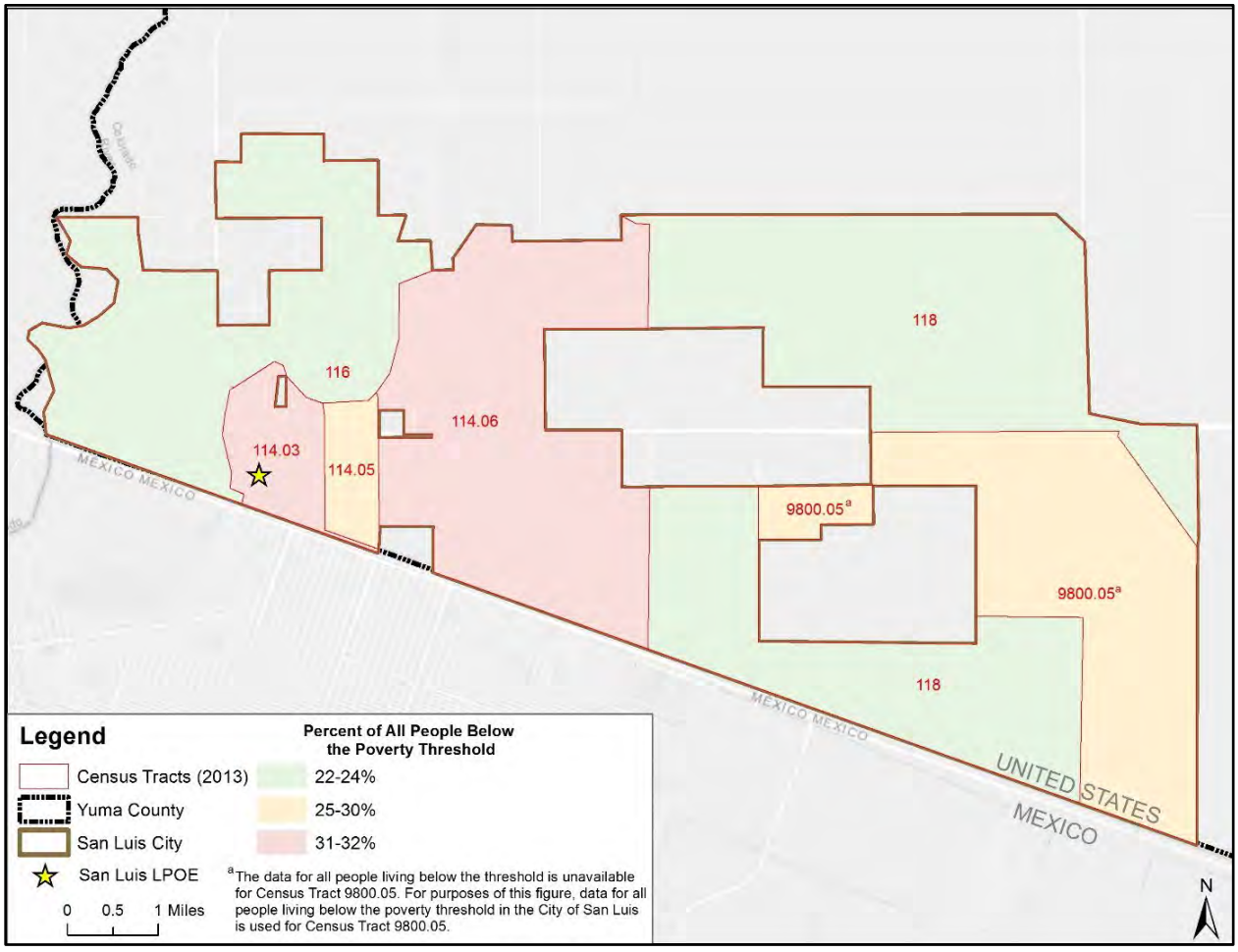
Applying the CEQ definition(s) from above, the four CTs would be identified as having a low-income population if

- more than 50 percent of the population in the four CTs consists of families or persons below the poverty threshold or
- the percentage of low-income families or persons in the four CTs is substantially higher than the percentage in the City of San Luis. For purposes of this analysis, a discrepancy of ten percent or more between low-income populations in the four CTs and the City of San Luis would be considered "substantially" higher and would categorize these CTs as constituting a low-income population.

The distribution of low-income populations by CT is shown below in Figure 3-14, color-coding the proportion of low-income populations using ranges. These ranges were developed based on commonalities or themes revealed by the CT data. For example, CTs shown in light green indicates that between 22 and 24 percent of the population is living below the poverty threshold.

To determine the percentage of low-income populations in the four CTs, the aggregate estimate of all persons or families living below the poverty threshold is divided by the total population for the four CTs. As shown in Table 3-32, 28.4 percent of people and 25.4 percent of families are living below the poverty threshold in the four CTs, respectively. The percentage of low-income populations (people or families) in the four CTs does not exceed 50 percent of the population; therefore, the four CTs do not constitute an environmental justice population by this CEQ definition. Also, the discrepancy between the percentage of people or families living below poverty in the four CTs and the City of San Luis is less than 10 percent. Therefore, the four CTs do not constitute an environmental justice population by this CEQ definition either.

In summary, Yuma County does not consist of low-income populations by either CEQ definition. CT data did not identify high concentration "pockets" of low-income populations near the San Luis I LPOE.



Sources: USCB 2012–2016b, USCB 2013a, USCB 2013b.

Figure 3-14. Low-Income Populations in Census Tracts near the San Luis I LPOE

Table 3-32. Summary of Poverty Statistics in Census Tracts near the San Luis I LPOE

Location	Percent of All People Below the Poverty Threshold	Percent of Families Below the Poverty Threshold
114.03[a]	31.8	25.2
114.05	28.3	21.1
114.06	32.0	30.5
116	23.4	20.9
Aggregate of CTs	28.4	25.4
City of San Luis	28.2	24.7

Sources: USCB 2012–2016b and USCB 2012–2016c.

[a] Proposed Action and Alternative 1 are located in CT 114.03.

3.13.1.3 Protection of Children

EO 13045 was prompted by the recognition that children are more sensitive than adults to adverse environmental health and safety risks because they are still undergoing physiological growth and development. EO 13045 defines "environmental health risks and safety risks [to] mean risks to health or to safety that are attributable to products or substances that the child is likely to come in

contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to)." Children may have a higher exposure level to contaminants because they generally have higher inhalation rates relative to their size. Children also exhibit behaviors such as spending extensive amounts of time in contact with the ground and frequently putting their hands and objects in their mouths that can lead to much higher exposure levels to environmental contaminants. It is well documented that children are more susceptible to exposure to mobile source air pollution, such as particulate matter from construction or diesel emissions (EPA 2012).

The Memorandum Addressing Children's Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act recommends that an EIS "describe the relevant demographics of affected neighborhoods, populations, and/or communities and focus exposure assessments on children who are likely to be present at schools, recreation areas, childcare centers, parks, and residential areas in close proximity to the proposed project area, and other areas of apparent frequent and/or prolonged exposure" (EPA 2012).

The analysis for EO 13045 requires the assessment of readily available demographic data and information on local, regional, and national populations. The number and distribution of children less than 19 years old in the ROI and ROC are evaluated to determine whether they would be exposed to environmental health and safety risks from the Proposed Action and Alternative 1.

As shown in Table 3-33, in general, the Yuma County population is younger than that of the state as a whole. Approximately 7.4 percent of Yuma County's population are children under the age of five and approximately 21.9 percent are between the ages of 5 and 19. The representation of children in Yuma County under the age of five is about 1 percent higher than in the state overall, and the representation of children between the ages of 5 and 19 is about 1.5 percent higher than in the state overall (USCB 2012–2016a).

Table 3-33. Youth Populations in the ROI and ROC

Location	Total Population	Percent of Children under Age 5	Percent of Children 5 to 19 Years
Yuma County[a]	203,292	7.4	21.9
Arizona[b]	6,728,577	6.5	20.4

Source: USCB 2012–2016a.

Notes: [a] ROI, [b] ROC.

Youth Populations by Census Tracts

As with minority and low-income populations, because of the site-specific nature of the Proposed Action and Alternative 1, data are used to identify high concentration "pockets" of youth populations and describe the distribution of children across Yuma County.

Pursuant to the EPA's 2012 Memorandum Addressing Children's Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act, CTs were examined to identify the age distribution in Yuma County, specifically children under the age of five in the vicinity of the San Luis I LPOE. As shown in pink in Figure 3-15, the Proposed Action and Alternative 1 is located in an area where children under 5 years represent 5 to 8 percent of the total county population. The San Luis I LPOE is shown with a yellow star outlined black.

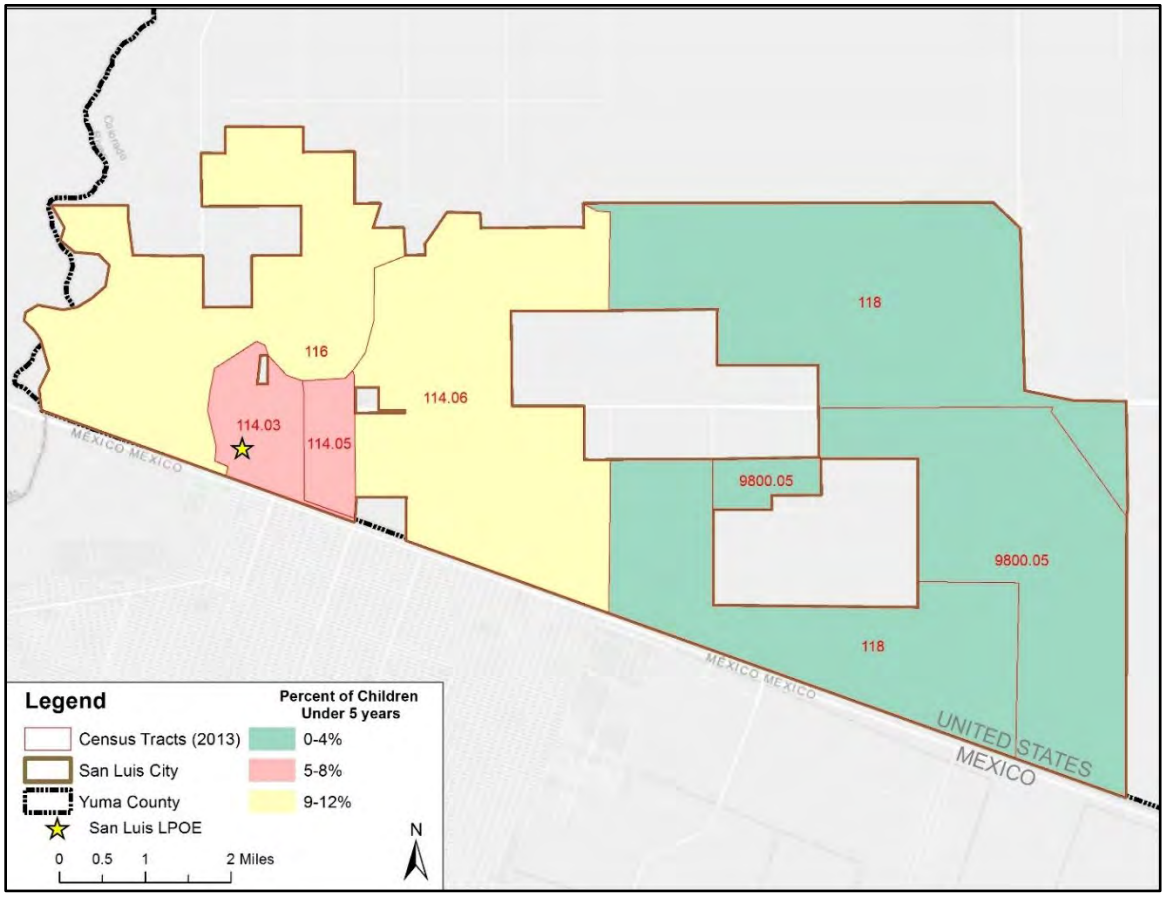


Figure 3-15. Children under Age 5 in Census Tracts near the San Luis I LPOE

As shown in Table 3-34, in general, the four CT's population is younger than that of the City of San Luis. Approximately 9.7 percent of the population in the four CTs are children under the age of five and approximately 27.2 percent are between the ages of 5 and 19. The representation of children under the age of five is about 1 percent higher in the four CTs than in the City of San Luis, and the representation of children between the ages of 5 and 19 in the four CTs is about 1.8 percent higher than in the City of San Luis (USCB 2012-2016a).

Table 3-34. Youth Populations in Census Tracts near the San Luis I LPOE

Location	Total Population	Percent of Children Under Age 5	Percent of Children 5 to 19 Years
114.03[a]	4,585	7.9	27.8
114.05	5,353	7.4	28.9
114.06	9,070	10.0	28.2
116	9,717	11.5	24.8
Aggregate of CTs	28,725	9.7	27.2
City of San Luis	31,118	9.0	25.4

Source: USCB 2012–2016a.

[a] Proposed Action and Alternative 1 are located in CT 114.03.

This CT data is compared with previously defined "pockets" of minority or low-income populations; as EO 13045 recognizes that children of environmental justice populations are more likely to be exposed to, and have increased health and safety risks from, environmental contamination than the general population. Under the Proposed Action and Alternative 1, children in areas defined as minority environmental justice populations (i.e., the four CTs) will be evaluated for disproportionate impacts as it relates to a child's health and safety.

3.13.2 Environmental Consequences

Consideration of the potential consequences for environmental justice requires three main components:

1. A demographic assessment of the affected community to identify the presence of minority or low-income and youth populations that may be potentially affected.
2. An assessment of all potential impacts identified to determine if any result in significant adverse impact to the affected environment.
3. An integrated assessment to determine whether any disproportionately high and adverse impacts exist for minority or low-income groups and youth populations present in or near the project area.

Yuma County represents the primary focus and ROI for any direct and indirect impacts to environmental justice populations that may be associated with the implementation of the Proposed Action and Alternative 1. For purposes of comparison, the State of Arizona was defined as the geographic unit of comparison and the "general" population (the ROC). Yuma County does not constitute a low-income population because low-income populations do not exceed 50 percent and are not substantially higher (i.e., more than 10 percent higher) than the percentage of low-income populations in the state. Disproportionate impacts to low-income populations in Yuma County would therefore not occur and are not discussed further in this EIS. However, Yuma County does consist of a minority population by both CEQ definitions. The four CTs closest to the San Luis I LPOE also consist of a minority population because minorities constitute more than 50 percent of the population. The potential for these populations to be displaced, suffer a loss of employment or income, or otherwise experience adverse effects to general mental and physical health and well-being is discussed in the pursuant sections to determine whether any disproportionately high and adverse impacts would be expected as a result of the Proposed Action and Alternative 1.

In compliance with EO 13045, this analysis examines local and regional demographic data, evaluates the number and distribution of children in or near the project area, and discerns whether these children could be exposed to environmental health and safety risks from the Proposed Action and Alternative 1. The analysis considers that physiological and social development of children makes them more sensitive to health and safety risks than adults. It also recognizes that children in minority and low-income populations are more likely to be exposed to, and have increased health and safety risks from, environmental contamination than the general population. Activities that result in air emissions, water discharges, and noise emissions are considered to have severe environmental health and safety risks if they were to generate disproportionately high environmental effects on youth populations within the ROI. Potential effects include health and safety concerns such as respiratory issues, hearing loss, and interruption of communication or attention in nearby residences and schools with children present.

Overall, Yuma County meets the regulatory definition of a minority population, or an environmental justice population. Places where children "learn, live, and play" in CTs 114.03, 114.05, 114.06, and 116 are the focus of this analysis for impacts as it relates to their health and safety.

3.13.2.1 Proposed Action

Minority Populations

Short-term impacts would last the duration of construction activities, i.e., 42 months. Long-term impacts refer to impacts that would occur once construction activities are complete—or after FY 2021. The types of short- and long-term impacts that are evaluated include:

- **Noise Disturbances**—Disturbances could occur from an increased level of noise created by construction equipment and vehicles associated with demolition and redevelopment activities.
- **Air Quality Impacts—**Health impacts could occur from an increase or decrease in fugitive dust and exhaust emissions and an increase or decrease in particulate matter (PM) from operation of construction equipment and earth-moving activities.
- **Congestion**—An increase or decrease in congestion and traffic and travel time could affect residents in CTs 114.03, 114.05, 114.06, and 116 accessing healthcare or recreational facilities.
- **Job Opportunities**—Social and economic benefits could occur due to the construction jobs created in the short term.

Noise Disturbances

Short-term, minor, adverse impacts would be expected to disproportionately affect resident minority populations in CT 114.03 due to noise disturbances associated with the use of heavy equipment. Adverse impacts from noise disturbances would be negligible in the long term once construction activities cease.

The demolition and redevelopment of facilities would use on-road vehicles, such as POVs, and non-road vehicles, such as excavators, cranes, graders, paving equipment, and bulldozers, that would cause noise levels to increase. Noise impacts would be felt most by residents of CT 114.03. As discussed in Section 3.10 (Noise), locations farther away from the project area would seldom experience appreciable levels of construction noise. As such, noise impacts would not likely be felt by residents in CTs 114.05, 114.06, and 116 (but would be felt by residents in CT 114.03 in close proximity to the San Luis I LPOE). To minimize the effects of noise impacts, construction would primarily occur during normal weekday business hours in areas adjacent to noise sensitive land uses such as residential and recreation areas, and construction equipment mufflers would be properly maintained and in good working order.]

Air Quality Impacts

Short-term, minor, adverse, direct and indirect impacts would be expected to disproportionately affect minority resident populations and recreationists at nearby parks due to increased air emissions from on-road and non-road vehicles during construction activities. Recreationists at the 14 parks located within approximately one mile of the San Luis I LPOE would experience direct

impacts; recreationists at parks more than one mile from the San Luis I LPOE would experience indirect impacts. Once construction ceases, air emissions and ambient pollutant concentrations from on-road and non-road vehicles and traffic would return to existing levels. In the long term, after the completion of demolition and redevelopment activities at the San Luis I LPOE, adverse direct and indirect air quality impacts would be negligible. Air quality would likely improve due to decreased wait times at the San Luis I LPOE.

Emissions, airborne dust, and soil surface disturbance from the use of on-road and non-road construction vehicles could degrade air quality in the area surrounding the San Luis I LPOE. The majority of the NO_x, SO_2, and CO emissions would be associated with vehicle and equipment exhaust. Since these emissions would occur at ground level, they would likely cause short-term increases in air pollutant emissions in the immediate vicinity of the project area. However, for purposes of this analysis, it was assumed that these emissions would not likely be transported more than one mile, except on windy days. Because the Yuma Mesa is subject to windstorms and occasional thunderstorms, dust from loose desert soil can be easily kicked up into the air during a windstorm, causing air quality to temporarily decrease. As discussed in Section 3.9, the ambient air concentration for PM_{10} in the Yuma area exceeds federal and state standards. The EPA lists Yuma County as a *nonattainment* area for PM_{10}.

Short-term air quality impacts would be felt most by residents in CT 114.03, or residents within one mile of the project area. As discussed in Section 3.9, it was assumed that the use of on-road and non-road vehicles during demolition and redevelopment activities would increase mobile source air pollutant emissions. Indirect air quality impacts could also be felt by residents in CTs 114.05, 114.06, and 116.

The use of construction equipment could also cause short-term, direct and indirect, air quality impacts on recreationists at several parks near the San Luis I LPOE. These impacts are discussed in greater detail in Section 3.14.

Congestion

Short-term, minor, adverse impacts would be expected to disproportionately affect resident minority populations due to increased congestion and, therefore, delays accessing emergency and urgent care facilities. In the long term, adverse impacts would be negligible once construction activities cease. Congestion would likely improve once construction activities at the LPOE are completed.

The Yuma Regional Medical Center is the closest hospital to the San Luis I LPOE offering emergency services. The newly expanded, 72-bed emergency department is staffed by physicians 24 hours per day, 7 days per week, and includes 2 helipads to facilitate the transport of incoming patients. It is located approximately 16 miles northeast of the San Luis I LPOE on the hospital's main campus at 2400 S. Avenue A in Yuma (Yuma Regional Medical Center 2018). The closest non-emergency medical facility to the San Luis I LPOE that provides urgent care is the San Luis Urgent Care Walk-In Clinic, about 1.5 miles north of the San Luis I LPOE in CT 114.03. Patients can be treated for things like allergic reactions; cuts, burns, and bites; falls, sprains, strains, and broken bones; minor sutures and laceration repairs; cold and flu; infections; and rash. The San Luis Urgent Care Walk-In Clinic offers options for uninsured and underinsured residents of Yuma County to receive affordable healthcare services via CAPAZ-MEX, a private medical discount network created by Regional Center for Border Health, Inc (San Luis Walk-In Center 2017).

Minority populations adjacent the San Luis I LPOE may be delayed during construction activities in reaching the San Luis Urgent Care Walk-In Clinic for treatment of (generally) non-life-threatening medical issues. Similarly, minority populations adjacent to the San Luis I LPOE may be delayed reaching the Yuma Regional Medical Center Emergency Department during construction activities; conversely, an ambulance may be delayed accessing a residence adjacent to the San Luis I LPOE. In the case of an accident, time delays due to traffic or congestion from the demolition and redevelopment activities under the Proposed Action could have serious consequences, although the likelihood of this occurrence is low.

Job Opportunities

Economic and health impacts could disproportionately benefit minority populations in search of a job. Indirect, beneficial impacts due to the creation of indirect and induced jobs associated with the Proposed Action would be minor. The social and economic benefits of indirect and induced job creation would not be permanent and would largely be reversed in the long term, after construction is complete.

Approximately 600–700 construction jobs would be created over the course of the four phases to demolish and redevelop the San Luis I LPOE. However, these jobs would not be locally sourced, and would most likely come from the Phoenix or Tucson area (GSA 2018b). While the Proposed Action would not create direct jobs, indirect or induced jobs could be created from project-related spending and worker spending. Indirect socioeconomic impacts (discussed in Section 3.12) would result from directly impacted industries purchasing supplies and materials from other industries. Indirect jobs could be created when the design and build firm makes purchases at local vendors and when workers shop at local retail stores and establishments. Induced impacts would occur when employees of the directly and indirectly affected industries spend the wages they receive. The indirect and induced jobs created would likely include relatively low-wage jobs such as restaurant workers or convenience store clerks.

Potential economic and health benefits associated with the indirect or induced jobs could disproportionately benefit minorities in the area that are in search of a job. Jobs and income are strongly associated with a number of beneficial health outcomes, such as an increase in life expectancy, improved child health status, improved mental health, and reduced rates of chronic and acute disease morbidity and mortality (HDA 2004; Cox et al. 2004).

Protection of Children

As with potential impacts to minority populations, any short-term impacts would last 42 months, and any long-term impacts would occur once construction activities are complete, or after FY 2021. This analysis considers the following types of short- and long-term impacts on children:

- **Noise Disturbances**—Increased level of noise created by construction equipment and vehicles could affect children's learning, especially near homes, schools, and recreational areas.
- **Mobile Source Air Pollutant Emissions (including traffic)**—Children living or playing near the San Luis I LPOE could be impacted by an increase or decrease in emissions. Children are especially vulnerable due to higher relative doses of air pollution, smaller diameter airways, and more active time spent outdoors and closer to ground-level sources of vehicle exhaust.

- **Congestion and Obesity Factors**—An increase or decrease in congestion in the immediate area could affect opportunities for children to exercise outdoors and the accessibility of neighborhood parks, green spaces, and recreation areas. Children living or playing in CT 114.03 could be particularly affected.

Possible impacts under the Proposed Action to youth community and recreational facilities such as childcare centers, schools, recreation facilities, and social welfare facilities geared towards families (i.e., Head Start programs) located in Yuma County would determine the characterization of impacts as posing a concern to the protection of children. Potential impacts to children at relevant youth community and recreational facilities in Yuma County are discussed below and are included based on their location and proximity relative to the project area.

Noise Disturbances

Noise disturbances due to the use of on-road and non-road vehicles during construction would not affect children's learning at any of the daycares, preschools, elementary, middle, or high schools near the project area. Short-term, minor impacts from noise would affect youth residents in CT 114.03 in close proximity to the San Luis I LPOE. Adverse impacts from noise disturbances would be negligible in the long term once construction activities cease.

As discussed in Section 3.10.2.1, increased noise levels would occur from the use of on-road and non-road vehicles during demolition and rebuilding activities. Locations farther away from project areas seldom experience appreciable levels of construction noise. As shown in Table 3-35, all daycare centers, preschools, elementary schools, middle schools, and high schools are located more than 0.4 miles from the San Luis I LPOE. As such, noise disturbance would not affect learning at any of the schools in San Luis.

Table 3-35. Schools near the San Luis I LPOE

Census Tract	Name of School	Address	Distance from San Luis I LPOE (miles)
114.03[a]	Rio Colorado Elementary School	1055 N. Main St.	0.9
	Arizona Desert Elementary School	1245 N. Main St.	1.2
	San Luis Middle School	1135 N. Main St.	1.0
	San Luis Pre-School	22751 Main St.	0.4
	Border Community Childcare	1050 Arizona St.	0.8
114.05	Ed Pastor Elementary 4	985 6th Ave.	1.1
	Bienestar Child Dev Center	1504 Liberty St.	1.3
	Gadsden Elementary School District #32	1350 E. Juan Sanchez Blvd.	1.1
114.06	Desert View Elementary School	1508 N. 10th Ave.	2.5
	Cesar Chavez Elementary School	1130 N. 10th Ave.	2.2
	Southwest Junior High School	963 8th Ave.	1.6
	Chicanos Por La Causa	1770 D St.	1.8
	WACOG San Luis Head Start	720 Juan Sanchez Blvd.	2.1

Census Tract	Name of School	Address	Distance from San Luis I LPOE (miles)
	Harvest Preparatory Academy	1044 N. 10th Ave.	2.1
	Estrellita Day Care	Mendez St.	2.2
116	San Luis Migrant Headstart	1522 E. C St.	0.8
	San Luis High School	1250 8th Ave.	1.7
	PPEP TEC—Cesar Chavez Learning Center	1233 N. Main St.	1.2
	Gadsden School	1453 N. Main St.	1.5

Sources: USCB 2012–2016a, ASLD 2014, Google Maps 2018.

[a] The Proposed Action and Alternative 1 are located in CT 114.03.

Mobile Source Air Pollutant Emissions (including traffic)

Short-term, minor-to-moderate, adverse impacts on children living, learning, and playing within a few miles of the San Luis I LPOE would be expected due to non-road vehicles used during demolition and redevelopment activities. Once construction ceases, the associated emissions would no longer occur. Vehicular traffic and ambient pollutant concentrations would improve in the long-term.

Emissions, airborne dust, and soil surface disturbance from the use of on-road and non-road construction vehicles could degrade air quality. As discussed under Minority Populations, since the NOx, SO_2, and CO emissions associated with the vehicle and equipment exhaust would occur at ground level, they would likely cause short-term increases in air pollutant emissions in the immediate vicinity of the project area. However, it is assumed that these emissions would not be transported more than a one mile, except on windy days.

As shown in Table 3-35 and Figure 3-16, several daycare centers, preschools, and elementary schools are located within one mile of the San Luis I LPOE. Adverse, short-term effects would most likely affect young children playing outside (e.g., during recess) at daycare, preschool, and elementary schools shown in Figure 3-16. In particular, children at the San Luis Pre-School, San Luis Migrant Headstart, and Rio Colorado Elementary School, located 0.4, 0.8, and 0.9 miles from the San Luis I LPOE, respectively, and could experience respiratory issues due to the increases in mobile source air pollutant emissions. Similarly, children playing at the 14 parks and recreation centers listed in Table 3-35 and shown in Figure 3-16—all of which are located about one mile or less from the San Luis I LPOE—could experience adverse impacts.

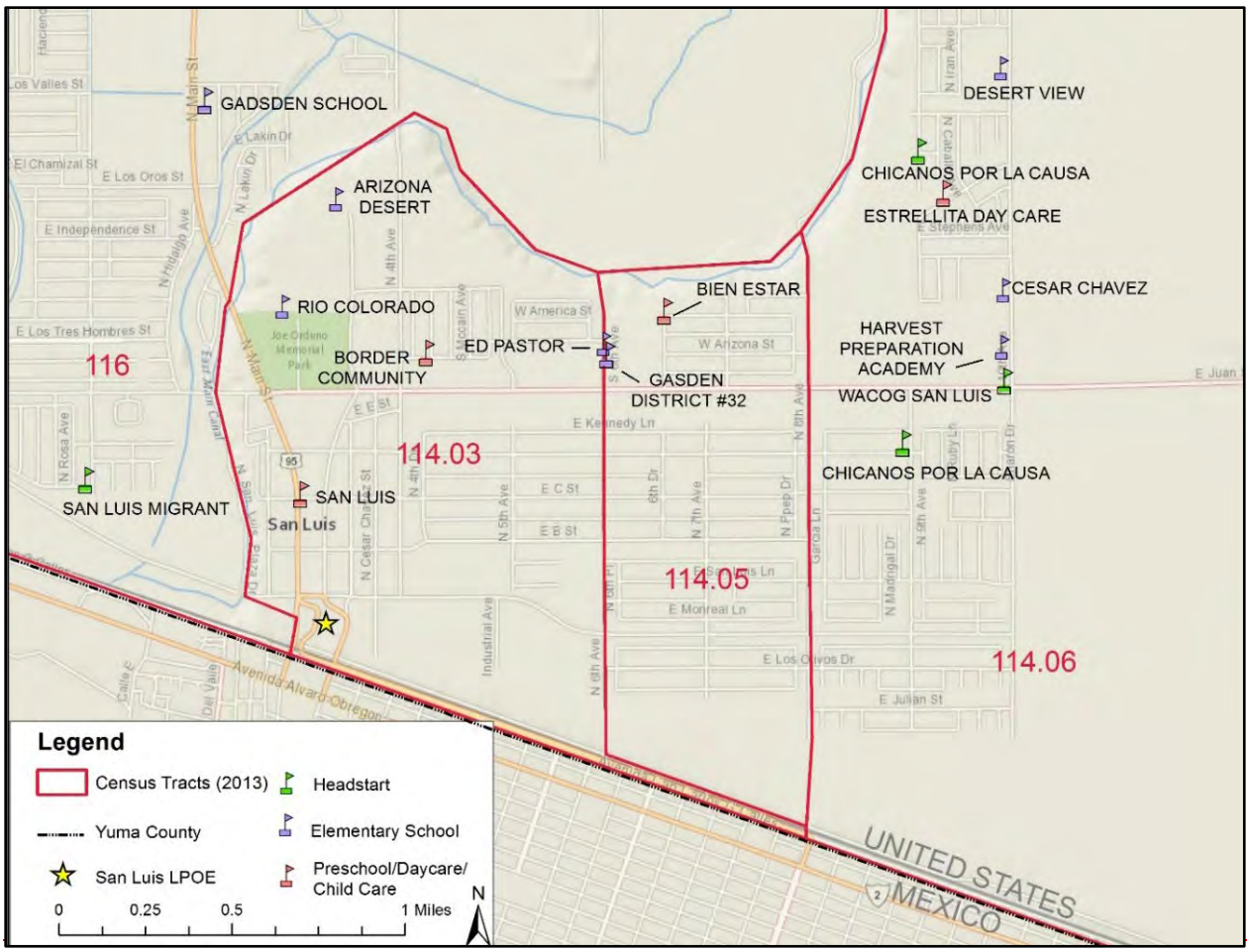
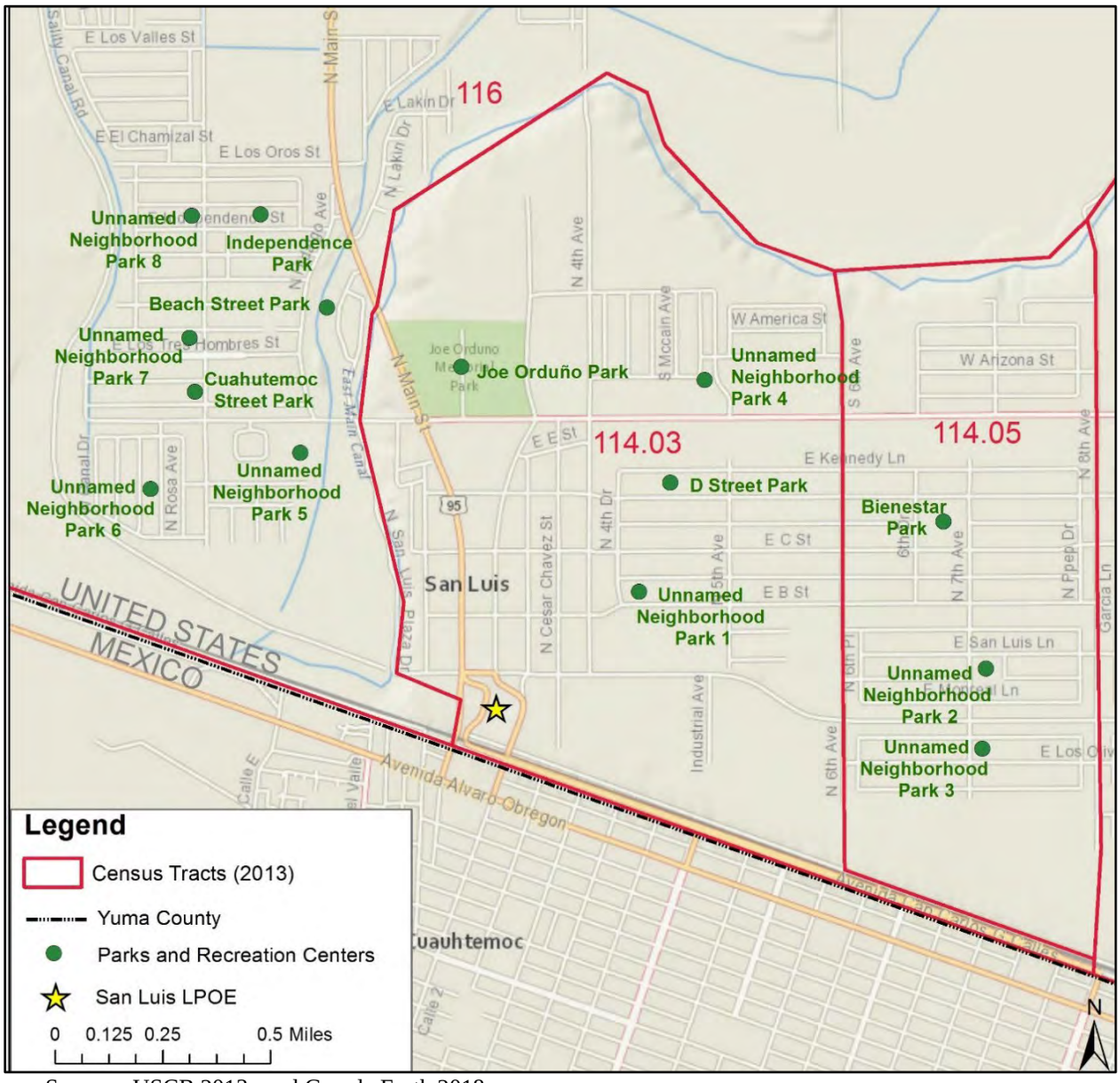


Figure 3-16. Daycare Centers, Preschools, and Elementary Schools near the San Luis I LPOE

Head Start is a comprehensive early childhood education program for children of low-income families below the age of 5 years that meet Head Start eligibility guidelines (HAF 2018). Head Start offers a broad range of individualized services in the areas of education and child development, special education, health services, nutrition, parent and family development (WACOG 2018a). The San Luis Migrant Head Start Center and Chicanos Por La Causa Head Start Centers are community-based programs for low-income pregnant women, infants, toddlers, and their families. Parents must be migrant or seasonal workers and children must be under 4 years old (HAF 2018). Both centers serve all of Yuma County, so parents accessing either center may experience delays due to increased traffic during demolition and redevelopment activities. The Western Arizona Council of Government (WACOG) San Luis Headstart Center in CT 114.06 serves approximately 100 children (WACOG 2018b). The San Luis Migrant Head Start Center is located in CT 116 and the Chicanos Por La Causa and WACOG Head Start Centers are located in CT 114.06.

Congestion and Obesity Factors

Given the number of parks and recreation centers near the San Luis I LPOE (see Table 3-36 and Figure 3-17), congestion would not be expected to reduce opportunities for children to exercise outdoors in the short- or long-term. Construction would primarily occur during normal weekday business hours and, therefore, would be less likely to affect children's ability to access parks and recreational centers—assuming parks and recreation centers are more popular during weekends.



Sources: USCB 2013a and Google Earth 2018.

Figure 3-17. Parks and Recreation Areas near the San Luis I LPOE

Table 3-36. Parks and Recreation Centers near the San Luis I LPOE

Census Tract	Name of Park	Size (Acres)	Description	Distance from San Luis I LPOE (miles)
114.03[a]	Unnamed Neighborhood Park 1	1.2	Open space, play apparatus	0.36
	D Street Park	2.2	Open space, soccer fields	0.56
	Unnamed Neighborhood Park 4	1.1	Open space, play apparatus, ramada	0.8
	Joe Orduño Park	21	Pool, recreation center, gymnasium, play apparatus, walking path, softball fields, baseball diamonds, soccer fields, basketball courts, volleyball courts, ramadas	0.9
116	Unnamed Neighborhood Park 6	1.2	Soccer field, ramadas	0.8
	Cuatemoc Street Park	1.7	Open space, ramadas	0.86
	Beach Street Park	1.2	Play apparatus	0.89
	Unnamed Neighborhood Park 7	0.9	Open space, ramada	0.9
	Unnamed Neighborhood Park 8	0.7	Open space, ramada	1.1
	Independence Park	0.67	Basketball courts, ramadas, play apparatus	1.11
	Unnamed Neighborhood Park 5	3.3	Open space, ramadas, play apparatus, soccer field, basketball court	1.2
114.05	Bienestar Park	1.2	Open space	0.92
	Unnamed Neighborhood Park 2	2.5	Open space, soccer field	0.95
	Unnamed Neighborhood Park 3	1.6	Open space, play apparatus, ramada	0.96
	Joe Cabello Park	3.1	Open space, basketball courts, walking path, ramadas, security lighting, play apparatus	1.2
114.06	Elijio Ramirez Park	4	Open space, soccer fields	1.5

Sources: City of San Luis 2011a, USCB 2013a, Google Earth 2018.

[a] Proposed Action and Alternative 1 are located in CT 114.03.

Note: Friendship Park is listed in the City of San Luis General Plan 2020 as a neighborhood park but was closed to the public in 2011 and is therefore not included in this analysis.

3.13.2.2 Alternative 1

Short-term, negligible to minor, adverse impacts on minority populations and children in Yuma County would be expected during construction activities. It is assumed that the use of heavy equipment under Alternative 1 would be less than under the Proposed Action. For purposes of this analysis, it was assumed that construction equipment would be limited to cranes to lift supplies to the roofs of buildings and paving equipment to repave the parking areas. Therefore, noise disturbances, increased air emissions, and congestion described for Alternative 1 would be less intense as those described for the Proposed Action.

Similar to the Proposed Action, economic and health impacts could disproportionately benefit minority populations in search of a job. Compared to the Proposed Action, fewer construction jobs would be created under Alternative 1. As such, indirect, negligible to minor, beneficial impacts due to the creation of indirect and induced jobs would also occur under Alternative 1, but the intensity of the impacts would be less than the Proposed Action. The social and economic benefits of indirect and induced job creation would not be permanent and would largely be reversed in the long term, after construction is completed.

In the long term, minority residents in the ROI would experience minor, adverse effects—especially in CT 114.03. Without the addition of POV lanes at the San Luis I LPOE (which would occur under the Proposed Action), wait times and, therefore, air emissions would continue to increase under Alternative 1. Congestion and traffic would continue to increase in the area, potentially delaying access to schools, parks and recreation centers, hospitals, and other community facilities.

3.13.2.3 Alternative 2

Under Alternative 2, impacts on environmental justice and protection of children would be the same as those described for the Proposed Action. Short-term, minor, adverse impacts on minority populations from construction and demolition noise and air emissions would be expected under Alternative 2. Long-term, minor, beneficial impacts on minority populations would also be expected under Alternative 2 from the decrease of POV queueing (i.e., emissions) and traffic congestion.

3.13.2.4 No-Action Alternative

Under the No-Action Alternative, conditions at the San Luis I LPOE would remain as they currently exist and no construction, renovation, or demolition activities would occur. Disproportionately high and adverse effects on minority populations would not be expected. Potential short-term impacts under the Proposed Action and Alternative 1 due to noise disturbances, increased air emissions, and social and economic benefits from indirect and induced jobs would not occur to minority populations under the No-Action Alternative. Similarly, potential short-term impacts under the Proposed Action and Alternative 1 due to noise disturbances, increased air emissions, congestion and obesity factors, and safety risks associated with construction activities would not affect children where they live, work, and play under the No-Action Alternative.

Long-term, minor, adverse effects on minority residents of San Luis—especially in CT 114.03—would be expected without the addition of POV lanes to reduce wait times and, therefore, air

emissions. Congestion and traffic would continue to increase in the area, delaying access to schools, recreational facilities, hospitals, and other community facilities.

3.14 RECREATION

Impacts to recreational resources, such as parks, trails, and open space, are important because these resources help establish communities' quality of life. The recreational value of natural resources can link residents to an area or attract new residents to an area. Proximity to nature can influence where people choose to live and how much people are willing to pay for housing (i.e., property values). Research indicates that people make regional housing and labor market decisions based in part on the availability of and proximity to public lands, such as state parks, national forests, and recreational lakes and rivers. Living near public lands provides amenities, such as convenient access to recreation and wildlife viewing. Population movement and migration into environmentally desirable areas can also be explained by the presence and density of natural landscapes (e.g., rivers and mountains) and the associated environmental amenities like clean air (Garber-Yonts 2004; Hand et al. 2008).

Landscape appearance and scenery can be important public land amenities, not just as recreational opportunity settings, but also as elements of the region's identity. Factors, such as clean air and water, scenery and natural landscape, open space, and the number of recreational opportunities, can be economic assets for local communities.

The recreational resources evaluated in this section include recreational areas, public parks, and open spaces, both within the City of San Luis and in Yuma County.

3.14.1 Affected Environment

The open space and recreation element of the City of San Luis General Plan 2020 states that "a quality recreational environment" will be provided to residents by ensuring access to "comprehensive recreational facilities" (City of San Luis 2011a). The first goal of the general plan is to maintain the municipal park system in order to meet the needs of a diverse population.

There are several parks in the City of San Luis, near the San Luis I LPOE, which are summarized below in Table 3-36. Figure 3-17 shows the location of these parks and recreation centers relative to the San Luis I LPOE. The largest park in the area, Joe Orduña Park, is a 21-acre community park located in CT 114.03, about 0.9 miles from the San Luis I LPOE. It includes a pool, recreation center, gymnasium, play apparatus, walking path, softball fields, baseball diamonds, soccer fields, basketball courts, volleyball courts, and ramadas (City of San Luis 2011a).

The City of San Luis General Plan 2020 contains as an objective to develop additional parks to connect neighborhoods with community facilities, such as schools, the San Luis Library, City Hall, trails, and other parks.

In addition to the parks and recreation facilities within the City of San Luis, Yuma County includes several environmental amenities that are within about 50 miles from the project area—including the Colorado River, Kofa National Wildlife Refuge (NWR), Lake Martinez, Fortuna Pond, Mittry Lake Wildlife Area—that contribute to the region's identity, as well as area quality of life. Cabeza Prieta NWR, the third largest national wildlife refuge in the lower 48 states, is located partly in Yuma County as well as Pima County. It is also located within the Yuma Desert, a lower-elevation section of the Sonoran Desert. Table 3-37 below describes the recreational areas in Yuma County

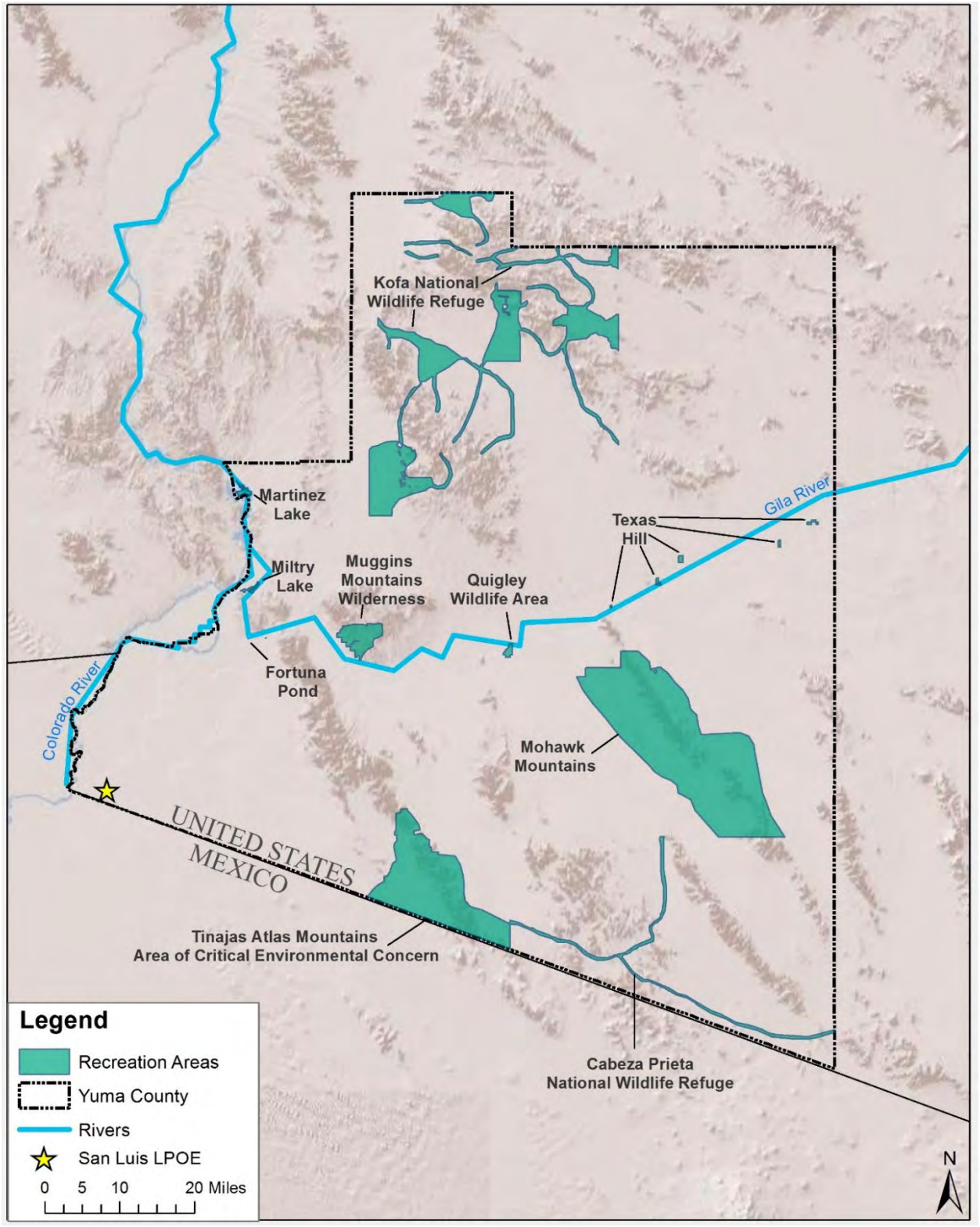
and their distance from San Luis I LPOE. Figure 3-18 shows the location of recreational areas in Yuma County relative to the San Luis I LPOE.

Table 3-37. Recreation Areas in Yuma County

Recreation Area	Size (Acres)	Description	Distance from San Luis I LPOE (miles)
Cabeza Prieta NWR	455,256	Wildlife observation and photography, hunting, camping, bicycling, horseback riding	37
Colorado River	16[a]	Boating, camping, birding, fishing, wildlife observation and photography	4
Gila River	107[a]	Boating, fishing, camping, hunting	27
Kofa NWR	562,159	Hiking, sightseeing, photography and nature observation	50
Lake Martinez	853	Camping, boating, fishing	43
Fortuna Pond	30	Fishing (rainbow trout, channel catfish)	28
Mittry Lake Wildlife Area	3,575	Public hunting and other wildlife-oriented recreation	31

Sources: City of San Luis 2011a, Yuma County 2017, USFWS 2017a and 2017b, BLM undated, Google Maps 2018.

[a] Miles in Yuma County.



Sources: Google Maps 2018 and USFWS 2017a.

Figure 3-18. Recreational Areas in Yuma County

3.14.2 Environmental Consequences

3.14.2.1 Proposed Action

Recreational resources inside the City of San Luis would experience negligible to minor, adverse impacts in the short term. Temporary construction activities would create additional noise and dust emissions and impact the visual scene of the immediate surrounding area. Children playing at the 14 parks and recreation centers listed in Table 3-36 and shown in Figure 3-17—all of which are located about one mile or less from the San Luis I LPOE—could experience short-term, negligible, adverse impacts.

The use of on-road and non-road vehicles for construction activities could also cause short-term direct and indirect air quality impacts on recreationists at several parks. Children would be especially vulnerable to higher doses of air pollution, due to having smaller diameter airways, more active time spent outdoors, and closer to ground-level sources of vehicle exhaust (USEPA 2012). Potential impacts to children are discussed in further detail in Section 3.13.2.1.

Short-term, minor, adverse direct impacts would be felt most by recreationists at Unnamed Neighborhood Park 1, a roughly one-acre park located 0.36 miles from the San Luis I LPOE. The remaining 14 parks and recreation centers listed in Table 3-36 are more than 0.5 miles from the San Luis I LPOE; therefore, direct, short-term, adverse impacts on air quality would be less intense than the impacts felt at Unnamed Neighborhood Park 1.

The Proposed Action would not require any nearby parks to be shut down during construction or operation of the San Luis I LPOE. However, the Proposed Action would require the permanent acquisition of the legal interest for the former Friendship Park site, a 6.13-acre neighborhood park that was closed to the public in 2011, and thus does not serve as a recreational resource for residents of San Luis. Therefore, no short- or long-term impacts to the availability of recreational resources would be expected.

No short- or long-term impacts to the access of recreational areas outside of the City of San Luis in Yuma County and the quality of the recreational experience would be expected under the Proposed Action. As discussed in Section 3.14.1, people generally value proximity to recreational areas, such as, the Colorado River, Gila River, Kofa National Wildlife Refuge, Lake Martinez, Fortuna Pond, and Mittry Lake Wildlife Area. Given the distance from the San Luis I LPOE to these recreational areas in Yuma County, no short- or long-term impacts on park accessibility or the recreational value and experience would be expected. Access to public lands would continue without undue restrictions and enhance the overall quality of life in the region. These natural amenities would continue to attract retirees and others to the area and the operation of the San Luis I LPOE would not be a deterrent in the long term. However, in the long term, the additional POV lanes would relieve congestion in the area and could indirectly benefit or facilitate access to recreation areas in Yuma County.

3.14.2.2 Alternative 1

Impacts on recreational resources under Alternative 1 would be similar but less intense than those expected from the Proposed Action. Construction activities would still occur under Alternative 1, but occupy a smaller footprint than under the Proposed Alternative. Therefore, additional noise

and dust emissions would be less and short-term, negligible, adverse, direct impacts would be expected.

No additional POV lanes would be constructed at the LPOE and, thus, traffic backups would continue to exacerbate into downtown San Luis. Potential impacts on park accessibility in the City of San Luis could occur from increased traffic and delays. These impacts would occur in the long term and be indirect, minor, and adverse. As with the Proposed Action, access to recreational areas outside the City of San Luis would not be affected and residents would continue to enjoy these natural amenities without restriction.

3.14.2.3 Alternative 2

Under Alternative 2, impacts on recreation would be the same as those described for the Proposed Action. Short-term, negligible to minor impacts from increased air emissions during construction and demolition activities under Alternative 2. Additionally, no short- or long-term impacts to the availability of recreational resources would be expected.

3.14.2.4 No-Action Alternative

Under the No-Action Alternative, no improvements would be made to the San Luis I LPOE. Vehicle processing wait times would likely continue to increase, leading to further traffic and congestion into downtown San Luis. This would delay access to recreation areas and resources. Therefore, long-term, minor, adverse impacts on recreational resources would be expected.

In the short-term, no construction activities would take place under the No-Action Alternative. The associated increases to noise, air emissions, and safety risks present under the Proposed Action and Alternative 1 would not occur. Therefore, no short-term impacts on recreational resources would be expected.

4. CUMULATIVE IMPACTS

4.1 INTRODUCTION

CEQ regulations implementing the procedural provisions of NEPA define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR 1508). Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time. Cumulative impacts on resources in the project area may result from the impacts of the project together with other past, present, and reasonably foreseeable projects, such as residential, commercial, industrial, and other development. These land use activities may result in cumulative effects on a variety of natural resources, such as species and their habitats, water resources, and air quality. They also can contribute to cumulative impacts on the urban environment, such as changes in community character, traffic patterns, noise, housing availability, and employment.

Past, Present, and Reasonably Foreseeable Future Actions

The cumulative effects analysis presented in this EIS is based on the potential effects (direct and indirect) of the redevelopment and modernization of the San Luis I LPOE (as described in Sections 1 through 3) combined with other past, present, and reasonably foreseeable future actions that could have effects in the project area. The past, present, and reasonably foreseeable future actions that are included in this analysis are

- The San Luis Border Patrol Road project: This project consists of improving approximately 15.6 miles of existing border patrol roads. The improvement includes expanding an approximately 15-foot wide unimproved road to a 24-foot wide all-weather road with appropriate drainage structures. The road starts 6 miles east of Avenue C and ends approximately 14 miles to west of the Tinajas Atlas Mountains. The start of the project corridor is approximately 7 miles east of the San Luis I LPOE. Construction occurred from July 25, 2016 through September 8, 2016 and January 30, 2017 through November 2, 2017.
- City of San Luis Main Street Improvement project: Completed in June 2015, this project included rerouting traffic from San Luis I LPOE away from the business district to two local roads, which were converted to one-way streets. The Main Street Improvement project was completed in an effort to relieve traffic congestion, improve traffic circulation, and enhance pedestrian safety (ADOT 2015).

  Specifically, the Main Street Improvement project included the following infrastructure improvements: repaving Main Street between Urtuzuastegui and D Street, widening sidewalks; installing new curbs and gutters, a pedestrian crosswalk, raised medians, street lights and luminaries, and handicap access ramps; adding additional parking; and improving landscaping. The project improved traffic circulation by adding a roundabout at D Street, Urtuzuastegui, and US 95 (Main Street); and creating one-way streets on 1st Avenue and Archibald Street.

4.2 GEOLOGY AND SOILS

The Proposed Action would not permanently displace geological or soil resources and impacts to soil and geological resources would be limited to the proposed project footprint. BMPs would be implemented to minimize the potential for soil erosion. Any potential geotechnical impacts would be avoided or reduced through compliance with GSA's P100 Facilities Standards and regulatory requirements. When considered with the San Luis Border Patrol Road and the City of San Luis Main Street Improvement projects, short-term, negligible, adverse, cumulative impacts on geological and soil resources would occur due to ground-disturbing activities. Given the geological makeup of Sonoran Basin and Range ecoregion, no long-term cumulative impacts would be expected.

4.3 WATER RESOURCES

Under the Proposed Action, no surface waters, WoUS, wetlands, or navigable waters would be impacted and BMPs would be implemented during construction activities to avoid sedimentation and minimize the risk of soil erosion. Therefore, no impacts on water quality or groundwater would be expected. A minimal amount of water would be required to fabricate concrete onsite during construction activities; however, this amount would be considered negligible to the total supply available. No increase in the number of vehicles and pedestrians processed via the LPOE is expected, therefore no impacts on the local water supply would be expected. Long-term, moderate, beneficial impacts on stormwater would be expected due to the installation of new stormwater structures at the LPOE. When considered with the San Luis Border Patrol Road and the City of San Luis Main Street Improvement projects, no additional cumulative impacts on water resources would be expected, as construction has already been completed for these two projects and the completed projects do not require an increase in water usage.

When considered with Alternative 1, the San Luis Border Patrol Road project and the Main Street Improvement project would result in long-term, minor, adverse, cumulative impacts as existing stormwater structures at the LPOE would not be improved and the presence of additional impervious surfaces could lead to an increase in stormwater runoff.

4.4 LAND USE AND VISUAL RESOURCES

The Proposed Action would not conflict with established or future planned land use within the City of San Luis as no change in land use at the site of the LPOE would occur and the development of the former Friendship Park would be consistent with the City of San Luis 2020 General Plan. Short-term impacts on visual resources would be minor and adverse during construction due to the visibility of construction activities and equipment. However, construction has already been completed for the San Luis Border Patrol Road project and the Main Street Improvement project, so cumulative impacts would not be expected.

The modernization of onsite LPOE facilities and development of vacant land (i.e., the former Friendship Park) in combination with improvements to the San Luis Border Patrol Road and Main Street would result in moderate long-term, beneficial, cumulative impacts on visual resources.

Impacts on land use under Alternative 1 would be less than under the Proposed Action as the legal interest for the former Friendship Park site would not be acquired and developed. Similarly, cumulative impacts on visual resources would also be less than under Alternative 1, as renovations

to the LPOE, such as new windows, roofs, and paint, would improve the visual appearance of the LPOE, but the former Friendship Park would remain vacant and littered with trash and debris.

4.5 BIOLOGICAL RESOURCES

Under the Proposed Action, vegetation would be removed from the LPOE and the former Friendship Park; however, the vegetation consists of ornamental landscaping plants. The Proposed Action would not impact sensitive biological habitat and, therefore, would not contribute to the loss of habitat in the surrounding environment and no impacts on wildlife or federally-protected species would occur. Long-term negligible, adverse, cumulative impacts would be expected as a result of the removal of vegetation under the Proposed Action and the San Luis Border Patrol Road expansion.

Cumulative impacts under Alternative 1 would be similar to those under the Proposed Action, but less severe as the legal interest for the former Friendship Park site would not be acquired, resulting in less vegetation removal.

4.6 CULTURAL RESOURCES

Construction activities could have an adverse effect on cultural resources. Ground-disturbing activities, such as blading, bulldozing, and excavation, can damage surface and subsurface properties. Similarly, an undertaking can introduce elements that can destroy, damage, or alter historically important elements of the built environment. No cultural resources or historic properties have been identified in the project area and as such, this undertaking has no potential to impact historic properties.

The APE for cumulative impacts relative to the Proposed Action is a one-mile radius around the project area. This is a standard that is used and accepted by the secretary of the Interior. There are six recorded cultural resources within this area. Five of the six sites are portions of a canal system that serves the town of San Luis. The remaining property is part of US 95. When considered with the San Luis Border Patrol Road project and the Main Street Improvement project, the Proposed Action would not be expected to result in any cumulative impacts on historic or cultural resources.

4.7 INFRASTRUCTURE AND UTILITIES

The Proposed Action would increase the demand on local utilities as onsite facilities would be redeveloped with upgraded, higher-efficiency utility systems. In addition, the Proposed Action would include subsurface grading, trenching for utility system installations, tree removal, and paving of access roads and parking lots. Short-term, negligible-to-minor, adverse impacts would be expected as the LPOE has been previously disturbed and developed. The new utility systems would streamline CBP operations at the LPOE, improve conditions for CBP personnel and visitors, and provide reliable stormwater drainage. Short-term, minor, adverse impacts on utilities due to disruption during construction activities would be expected; however, no cumulative impacts would occur as the construction for the San Luis Border Patrol Road and the Main Street Improvement projects has already been completed. Long-term, moderate, beneficial, cumulative impacts on roadways and parking lots would be expected from the construction of new parking lots, roadways, and POV lanes under the Proposed Action and new parking lots, widened sidewalks, new street lights, and the addition of a roundabout from the other cumulative projects.

When considered with Alternative 1, cumulative impacts of the projects on utilities would be minor and adverse as the projects would place additional strain on local utilities, exacerbated by utility systems at the LPOE operating beyond their useful lifespan. Cumulative impacts on infrastructure would be minor and beneficial as interior and exterior renovations of onsite facilities at the LPOE would improve the site's safety conditions. No additional paving would occur and a streamlined configuration of the LPOE would not be constructed, causing wait times and traffic congestion to persist resulting in long-term, minor, adverse impacts.

4.8 TRAFFIC

The Proposed Action would result in short-term, minor adverse impacts during construction activities and long-term, moderate, beneficial impacts from improving traffic flow into and out of the LPOE. Long-term, minor, beneficial cumulative impacts on the transportation network would be expected when combined with the City of San Luis Main Street Improvement project. No additional short-term, adverse impacts from the Main Street Improvement project or the San Luis Border Patrol Road project would be expected since the construction periods would not overlap.

4.9 AIR QUALITY

The Proposed Action would result in emissions of criteria pollutants, GHGs, and fugitive dust during demolition and construction activities. Predicted annual demolition and construction emissions would be less than the federal *de minimis* thresholds for criterial pollutants and represent a miniscule fraction of Arizona's annual GHG emissions. Air emissions generated by past projects (e.g., the San Luis Border Patrol Road project and the City of San Luis Main Street Improvement project) were likely minor and temporary and ended with the completion of construction activities. Air emissions from any future development projects within and in the vicinity of the San Luis I LPOE would be expected to be minor during construction activities; therefore, no significant adverse cumulative impacts would not be expected from potential concurrent emissions from the Proposed Action and other planned projects. Fugitive dust would be required to be controlled via state regulations during the Proposed Action and other planned projects. For these reasons, the Proposed Action would not be expected to result in significant adverse cumulative impacts on air quality or GHGs (i.e., climate change).

Under Alternative 1, impacts would be similar to but less than the potential impacts from the Proposed Action. Therefore, significant adverse cumulative impacts would not be expected when considered with other past and future development projects within the vicinity of the San Luis I LPOE. However, without the additional POV lanes and with the expected population growth in the surrounding area, the annual air emissions from vehicles idling could contribute to minor adverse cumulative impacts.

4.10 NOISE

The Proposed Action would have short-term, minor-to-moderate, localized adverse effects on the noise environment as a result of the operation of heavy equipment during demolition and construction activities. These activities would occur in the vicinity of residential, urban neighborhoods including schools, parks, and churches, so the potential for cumulative effects exists. However, construction would occur only during normal working hours (e.g., 7 a.m.–5 p.m.) and heavy machinery would be operated for short intervals. Noise disturbances from the City of San Luis Main Street Improvement project would not feel exponentially louder and exceed a

threshold of significance when considered with the Proposed Action because the two construction projects would not occur at the same time. However, residents adjacent to both the San Luis I LPOE and the City of San Luis Main Street Improvement project areas may experience a low level of irritation over a longer period of time when the construction periods from both projects are considered sequentially.

The Proposed Action would lead to shorter wait times for vehicle processing through the LPOE, resulting is less noise emissions from idling vehicles. Existing noise sources would continue to dominate the surrounding environment and, cumulatively, effects on the noise environment due to the Proposed Action would be negligible to minor.

4.11 HUMAN HEALTH AND SAFETY

Although, short-term, minor impacts on human health and safety would be expected during construction activities of the Proposed Action, adherence to federal safety regulations would minimize risk and protect workers. When considered together with the San Luis Border Patrol Road project and the Main Street Improvement project, long-term, moderate, beneficial, cumulative impacts on the health and safety of the surrounding environment would be expected. The San Luis Border Patrol Road project would improve CBP's ability to carry out its mission of interdicting unlawful people and goods attempting to encroach U.S. borders, and therefore, provide more security to the City of San Luis. The combination of the improvements from the Main Street Improvement project with the Proposed Action would reduce traffic strains on downtown San Luis and minimize the risk of vehicular and pedestrian accidents.

When considered with Alternative 1, long-term, minor, adverse, cumulative impacts would be expected as no existing facilities at the LPOE would be expanded or relocated and POV lanes would not be added. Thus, security and safety risks associated with the existing LPOE would continue. The improvements to Main Street have alleviated some traffic strain on downtown San Luis and improved pedestrian safety; however, if LPOE processing wait times continue to increase under Alternative 1, these improvements would likely be negated.

4.12 SOCIOECONOMICS

When considered in tandem with the construction activities associated with the Proposed Action, the San Luis Border Patrol Road, and City of San Luis Main Street Improvement projects, minor, adverse, beneficial cumulative impacts on socioeconomic resources would be expected.

It is assumed that the San Luis Border Patrol Road and City of San Luis Main Street Improvement projects did not cause the Yuma County population to grow permanently. When considered with the operation of the Proposed Action, short- and long-term cumulative impacts on the housing market, the quality of education in the City of San Luis, and unemployment rates and compensation of employees in the retail trade; accommodation and food services; construction; real estate and rental and leasing; and arts, entertainment, and recreation industries in Yuma County would likely be negligible. Minor, beneficial, cumulative impacts would be expected to residents close to the San Luis I LPOE as well as residents in the larger Yuma County due to improved circulation and overall air quality.

While the City of San Luis Main Street Improvement project has likely improved circulation and air quality, Alternative 1 would not add POV lanes and, therefore, wait times (and associated air

emissions) at the San Luis I LPOE would continue to increase. Similarly, congestion and traffic would continue to increase in the area, potentially delaying access to schools, recreation areas, and hospitals.

Without the addition of POV lanes under the No-Action Alternative, wait times (and associated air emissions) at the San Luis I LPOE would continue to increase and adversely impact residents in the City of San Luis and the larger Yuma County. Cumulative, beneficial impacts from indirect and induced job creation would not occur under the No-Action Alternative.

4.13 ENVIRONMENTAL JUSTICE

When considered in tandem with the construction activities associated with the Proposed Action, the San Luis Border Patrol Road and City of San Luis Main Street Improvement projects would create both minor adverse and beneficial cumulative impacts to minority and youth populations near the project area. Cumulative impacts would not be synergistic because, while the projects may produce similar types of impacts, the two aforementioned projects have already been completed and, therefore, would not occur at the same time as the Proposed Action; instead, impacts would be continuous. Adverse impacts on other resource areas associated with construction of the Proposed Action would occur, such as congestion, air quality impacts, noise, and delays in access (e.g., to schools, parks and recreation centers, and hospitals) as well as health and economic beneficial impacts from indirect and induced job creation.

When considered with the operation of the Proposed Action, the San Luis Border Patrol Road, and City of San Luis Main Street Improvement project, minor, beneficial and negligible, adverse cumulative impacts would be expected during construction activities. Residents close to the San Luis I LPOE, as well as residents in the larger Yuma County, would be expected to benefit from improved circulation and overall air quality in the area. Recreationists and children in daycares and schools located in CTs 114.03, 116, 114.05, and 114.06 would also benefit disproportionately from improved air quality.

While the City of San Luis Main Street Improvement project has likely improved circulation and air quality, Alternative 1 would not add POV lanes and, therefore, wait times (and associated air emissions) at the San Luis I LPOE would continue to increase. Similarly, congestion and traffic would continue to increase in the area, potentially delaying access to schools, parks and recreation centers, hospitals, and other community facilities.

4.14 RECREATION

When considered with the San Luis Border Patrol Road and the City of San Luis Main Street Improvement projects, the Proposed Action would result in short-term, minor, adverse, direct impacts on recreational areas in the City of San Luis during construction activities due to the additional noise and dust emissions. Construction activities would impact the air quality at nearby parks in the short term. The Proposed Action would require the acquisition of the legal interest of the former Friendship Park site, a 6.13-acre park that was closed to the public in 2011, but would not require the closure of any existing parks during construction or operational activities. Therefore, there would be no short- or long-term cumulative impacts on the availability of recreational resources.

The modernization and redevelopment of the LPOE under the Proposed Action would help alleviate traffic strain due to minimizing vehicle processing times. When considered with the improvements made to Main Street in downtown San Luis, the Proposed Action would result in indirect, minor, beneficial cumulative impacts to access to parks and open land in downtown San Luis. Recreational resources outside the city in Yuma County would not be impacted, beneficially or adversely.

Under Alternative 1 and the No-Action Alternative, no additional POV lanes would be constructed and traffic would continue to backup into downtown San Luis. Traffic backups could cause delays in accessing parks and open areas, resulting in minor, adverse cumulative impacts.

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5. UNAVOIDABLE ADVERSE IMPACTS AND COMMITMENTS OF RESOURCES

5.1 UNAVOIDABLE ADVERSE IMPACTS

Based on the analysis of the environmental consequences, the Proposed Action and Alternative 1, as discussed in detail in Section 3, would not result in any new avoidable adverse impacts. Most of the environmental consequences are either low to negligible or include avoidance and mitigations that reduce the level of potential impacts. Some adverse impacts are associated with current conditions, (e.g., traffic delays, exposure to vehicle emissions, and inadequate facilities in regard to employee and public security). The purpose of the Proposed Action is to correct or mitigate these existing adverse conditions.

5.2 SHORT-TERM USE OF THE ENVIRONMENT VERSUS LONG-TERM PRODUCTIVITY

The Proposed Action under consideration in this EIS, redevelopment of the San Luis I LPOE in its current location, would balance the short-term use of the environment with long-term traffic, security, and economic and community benefits for the City of San Luis, Yuma County, and the United States.

The environment encompassing the San Luis I LPOE is urban and does not include any sensitive natural resources (i.e., no suitable habitat for threatened and endangered species). The area is already disturbed and developed and is no longer feasibly used for natural resource management or agriculture. The long-term productivity of the site is therefore defined by its potential to serve human economic or cultural needs, including redevelopment of the site for use by the federal government or for the private parcels of land continued private-sector use.

During demolition and construction activities, environmental disruption could include localized noise, dust, and traffic impacts, although these impacts should be temporary in nature and would only persist for the duration of the activities. Disruption to the natural environment could include the introduction of impervious surfaces (i.e., additional parking lots), the removal of a small amount of vegetation and landscaping, and the loss of some vacant land (i.e., the former Friendship Park).

Disruption to the human environment could likely include a slightly changed visual environment and increased congestion on some road segments and intersections with decreased traffic on others. The disruptions would primarily affect the residents and businesses in the immediate neighborhoods adjacent to the San Luis I LPOE. The proposed phasing of construction, however, would serve to mitigate these impacts.

The short-term impacts on the environment would be offset by the numerous benefits that either action alternative would generate in the long term. The redevelopment of the San Luis I LPOE would fulfill security goals and provide mitigation of current adverse traffic conditions.

Under the No-Action Alternative, the relationship of short-term uses of the environment and long-term productivity would be unbalanced. Although the alternative would not generate incremental adverse impacts on the environment, it would also not allow for mitigation of current adverse conditions associated with the existing facility and traffic problems.

5.3 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Irreversible and irretrievable impacts would result from the consumption of resources that cannot be restored or returned to their original condition, even with mitigation.

Redevelopment of the San Luis I LPOE, which is the subject of consideration in this EIS, would involve the use of natural, physical, human, economic, and fiscal resources. The use of these resources includes adverse and beneficial impacts, some of which involve irreversible and irretrievable commitments.

Implementation of either of the action alternatives would require the utilization of substantial quantities of building materials and energy resources to construct the buildings and necessary infrastructure. While the use of these natural and manmade resources would be considered irreversible, none of the above resources is of such a limited availability or precious value that its use would adversely affect the completion of the action alternative or other regional projects. Although the energy consumption associated with the action alternatives would be both an irreversible and irretrievable commitment of a resource, the consumption would be for a limited duration and would not require system cutbacks during the phases of development.

The use of labor resources during project construction would also result in an irreversible and irretrievable commitment, although the existing labor supply would be able to accommodate project demands. In fact, the demand for labor resources would slightly lower unemployment rates in the construction industry and reintroduce labor resources into the local economy.

The commitment of the new parcels or legal interests of land to be acquired under either of the action alternatives land would be a long-term, major commitment of resources. The Proposed Action would convert a portion of an undeveloped, open space (i.e., the former Friendship Park) to an impervious area, the commitment would not necessarily be irreversible or irretrievable, because the parcel could be returned back to an undeveloped site if the LPOE were no longer needed. The impervious area would necessitate stormwater management measures and practices to reduce the adverse environmental impacts. These measures and practices are anticipated consequences of development. In addition, the development is consistent with the land use plans of the local jurisdictions.

The No-Action Alternative would involve no additional commitment of irreversible and irretrievable resources.

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Environmental Protection Agency, Region 9
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U.S. Senator Jeff Flake
Washington, D.C.

U.S. Senator John McCain
Washington, D.C.

8.2 ARIZONA STATE GOVERNMENT

Arizona Department of Transportation
Phoenix, AZ

Arizona State Historic Preservation Office
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Governor Doug Ducey
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8.3 LOCAL GOVERNMENT

City of San Luis
San Luis, AZ

City of San Luis Fire Department
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8.4 OTHER ORGANIZATIONS

No other organizations have been identified at this time. Additional organization will be added to the list if comments are received during the public review period.

8.5 INDIVIDUALS PROVIDING COMMENTS DURING THE SCOPING PROCESS

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- Kay Macuil
- Gerald Mullarkey
- Deb Powers
- Corinne Ray
- Jenny Torres
- Padinare Unnikrishna

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