Public-Private Partnerships Potential for Arizona-Mexico Border Infrastructure Projects

Executive Summary

ADOT Task Assignment
MPD 31-09

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1.0 Introduction

This study of the Public-Private Partnership Potential for Arizona-Mexico Border Infrastructure Projects originated as an action item of the Transportation, Infrastructure, and Ports Committee of the Arizona-Mexico Commission. The purpose of this project is to evaluate and determine the feasibility using public-private partnerships (P3s) to finance Arizona-Mexico border region infrastructure projects. The potential use of public-private partnerships is being explored due to traditional funding means being insufficient to finance the needed infrastructure improvements for the movement of people and freight through the Arizona-Mexico ports. This Executive Summary is a shorter version of the Final Report based on the previously completed Technical Memorandums #1 through #4.

The study Team, working with the Technical Advisory Committee and stakeholders identified sixteen infrastructure projects near the seven Arizona-Mexico border ports of entry for additional review. Based on this additional review, the Study Team has concluded that several projects may be candidates for the use of a design/build/finance public-private partnership. These projects would not generate new funding sources, but instead require the public sponsor to pledge a revenue stream over a period of years.

The Study Team did identify one potential project that has the potential to generate sufficient revenue to be a self-funding public-private partnership. This conclusion applies to SR 189/Mariposa Road connecting the Mariposa Port of Entry with I-19 in Nogales, Arizona.

2.0 Methodology

Guidance was provided to the Study Team by a Technical Advisory Team consisting of representatives from Arizona public agencies with responsibility for implementing infrastructure improvements at the seven Arizona-Mexico border ports of entry. The members of the TAC team include:

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The work was organized around four technical memorandums. These technical memorandums and their respective subjects are:

- *Technical Memorandum #1, Overview of Border Infrastructure Public-Private Partnerships*: Technical Memorandum #1 is a review and summary of current border infrastructure public-private partnerships. The overview includes the findings of a survey of public-private partnerships in existence and under development at United States land ports of entry and their connecting infrastructure.

- *Technical Memorandum #2, Description of Freight Flows*: Technical Memorandum #2 provides data from available sources on the flow of goods and freight that moves across the Arizona-Mexico border through Arizona's land ports of entry. The research identified the types of freight and its associated volumes, and the origin and destination of the freight at a macro level.

- *Technical Memorandum #3, Identification of Potential Public-Private Partnership Opportunities:* Technical Memorandum #3 identifies sixteen potential public-private partnership opportunities at each of Arizona's land ports of entry and related connecting infrastructure. These projects were identified by stakeholders and members of the Technical Advisory Committee. Potential revenue sources are identified including precedents from other land port of entry projects.

- *Technical Memorandum #4, Implementation Issues and Potential Finance Techniques for Potential Public-Private Partnerships*: Technical Memorandum #4 discusses issues associated with implementing public-private partnerships for each of the sixteen identified potential projects.

3.0 Overview of the Arizona-Mexico Ports of Entry

Arizona has nine ports of entry located on its international border with Mexico. From west to east, the land ports of entries are San Luis I, San Luis II, Lukeville, Sasabe, Mariposa Port of Entry at Nogales, DeConcini Port of Entry at Nogales, Morley Gate at Nogales, Naco, and Douglas. Each land port of entry is discussed briefly in the paragraphs that follow.

San Luis Ports of Entry

The existing San Luis port of entry was originally established in 1930 to provide trade access between Mexico and the United States. New facilities were constructed in 1984 and upgraded in 1991. This port of entry contains a commercial vehicle inspection station and related facilities, including an administrative building, six non-commercial and one commercial primary lane, twelve non-commercial secondary lanes, 14 secondary truck bay docks, two pedestrian processing lanes, and a security system. Border visitors use the port of entry for commercial and non-commercial access. A second port of entry (San Luis II) is currently under construction and scheduled to open at the end of 2009. San Luis will then have San Luis I in downtown San Luis for pedestrian and privately owned vehicle access and San Luis II approximately 5 miles to the east for commercial traffic.

San Luis I Port of Entry

Lukeville Port of Entry

Lukeville is at the southern terminus of Arizona State Route 85 and is located entirely within Organ Pipe Cactus National Monument. The Lukeville Port of Entry experiences heavy volumes of traffic from tourists traveling both south and north through the port of entry. Puerto Peñasco, Mexico (Rocky Point) is 1 ½ hours south from Lukeville, Arizona, and is a popular destination for families and college students year round. This creates a large amount of vehicular traffic on the rural highway. The Lukeville port of entry is designed to handle local tourism traffic between Arizona and the beach resort of Puerto Peñasco. Peak vacation periods have resulted in wait times exceeding five hours, with some reports of wait times in excess of seven hours on holiday weekends.

Lukeville Port of Entry

Sasabe Port of Entry

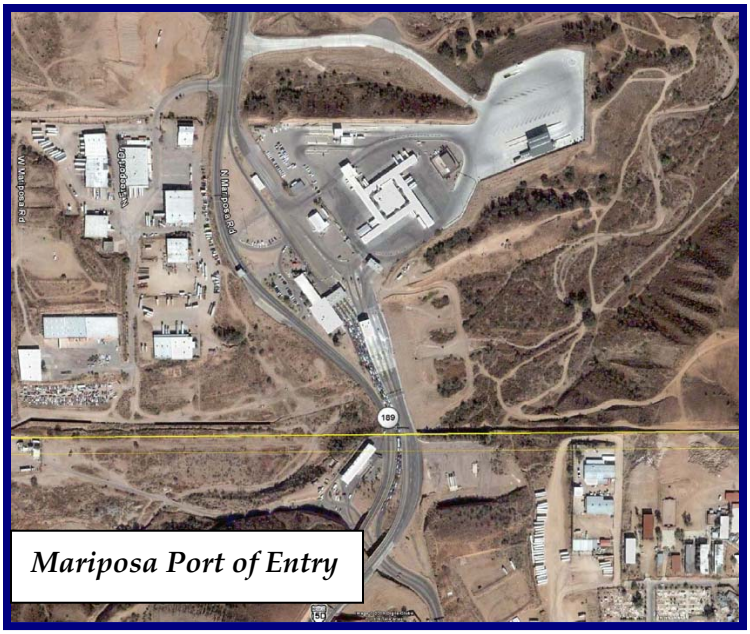
The Sasabe Port of Entry is the smallest and least-trafficked port of entry in Arizona. It has been open since 1916, but has never become a heavily used port such as those in San Luis, Nogales and Douglas. The 23,237 cars that passed through the port in the first eight months of fiscal year 2008 represent a fraction of the 2.086 million that went through the Nogales ports of entry during the corresponding period of time. Sasabe is located in a remote, sparsely populated area, and there are no paved roads leading from the port into the interior of Mexico. With the original main building built in 1936, this port of entry was dramatically improved and expanded in the early 1990's. The port of entry services primarily local traffic as the road infrastructure connecting the Mexican side to the rest of the country is very limited.

Sasabe Port of Entry

Nogales Ports of Entry

On a typical day, roughly 13,000 vehicles and 13,000 pedestrians enter the U.S. through the Nogales Ports of Entry. In 2001, there were 4,590,933 passenger vehicle crossings and 4,874,738 pedestrian crossings. This activity is divided between three border crossing locations that comprise the Nogales Port of Entry (POE):

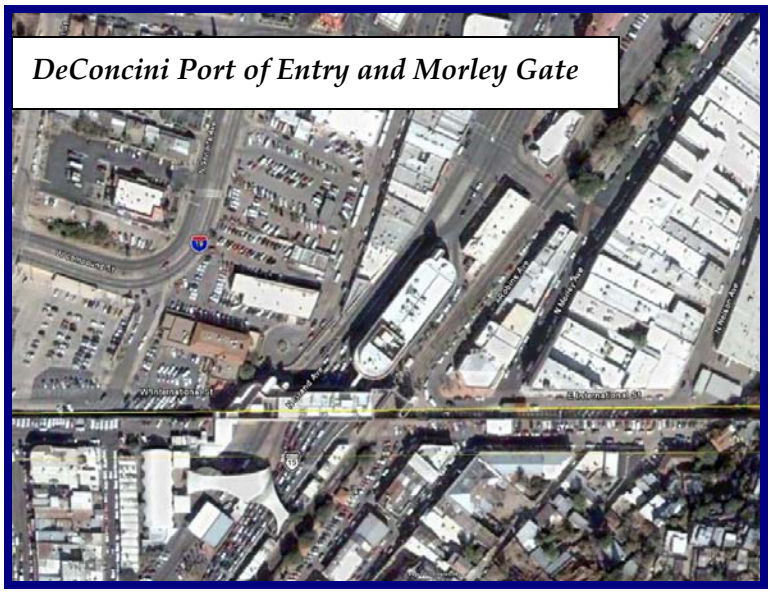
- Mariposa Port of Entry
- DeConcini Port of Entry
- Morley Gate



Mariposa Port of Entry

The Mariposa Port of Entry is located on Mariposa Road (SR 189) about one and one third miles west of the downtown Nogales and the DeConcini Port of Entry. The port is a full service facility that inspects privately owned vehicles, pedestrians and commercial vehicles (trucks and buses). It is the main commercial processing location for Arizona and handles nearly one half of all agricultural commodities entering the US from Mexico. The Mariposa Port of Entry has experienced dramatic growth in traffic volumes and the Port has been planned and programmed for reconstruction into a modern Port of Entry with ample capacity to handle the anticipated usage without undue delays in processing vehicles and pedestrians. The Reconfiguration Project, led by the General Services Administration (GSA), will serve to more than double the throughput capacity for inspection of both goods and people and will incorporate the latest in design and technology to create a state of the art facility. The project has been funded for construction with an anticipated completion date in 2014.

Grand Avenue in Nogales, Sonora, Mexico is at the northern terminus of the city's commercial district and Mexico Federal Highway 15, which originates south of Guadalajara and is the main transportation corridor along the west coast of Mexico. The DeConcini Port of Entry resides here and the crossing consists of eight gates for northbound vehicles and three lanes for southbound vehicles and a rail line runs along the east edge of Grand Avenue. The Ferromex and Union Pacific railroads connect at the border. This is Arizona's only rail crossing. Because of its location in the heart of downtown Nogales,

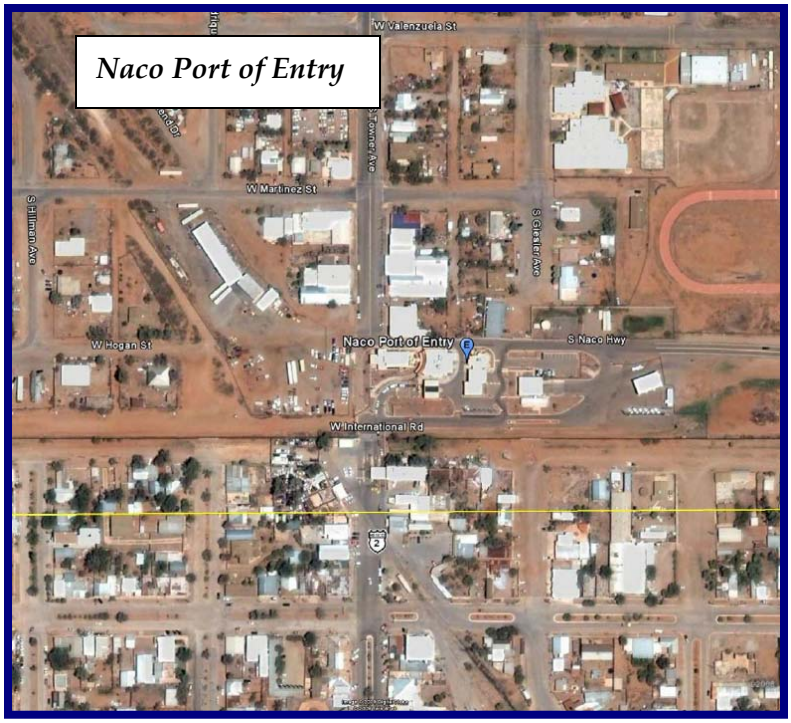

DeConcini Port of Entry and Morley Gate

it creates significant traffic congestion and presents a safety hazard for the ambos Nogales area. Solving traffic congestion and safety issues created by the rail crossing has been identified as top priorities for the local community. The Grand Avenue pedestrian gates are located in the DeConcini Building to the west of the southbound vehicle lanes. The Grand Avenue crossing is open 24 hours, seven days a week.

The eastern most crossing at Nogales is the Morley Gate, a pedestrian (only) crossing located at the end of Morley Avenue in the center of Nogales. Morley crossing is generally considered part of the DeConcini Port of Entry. There are two primary pedestrian lanes at the Morley Gate.

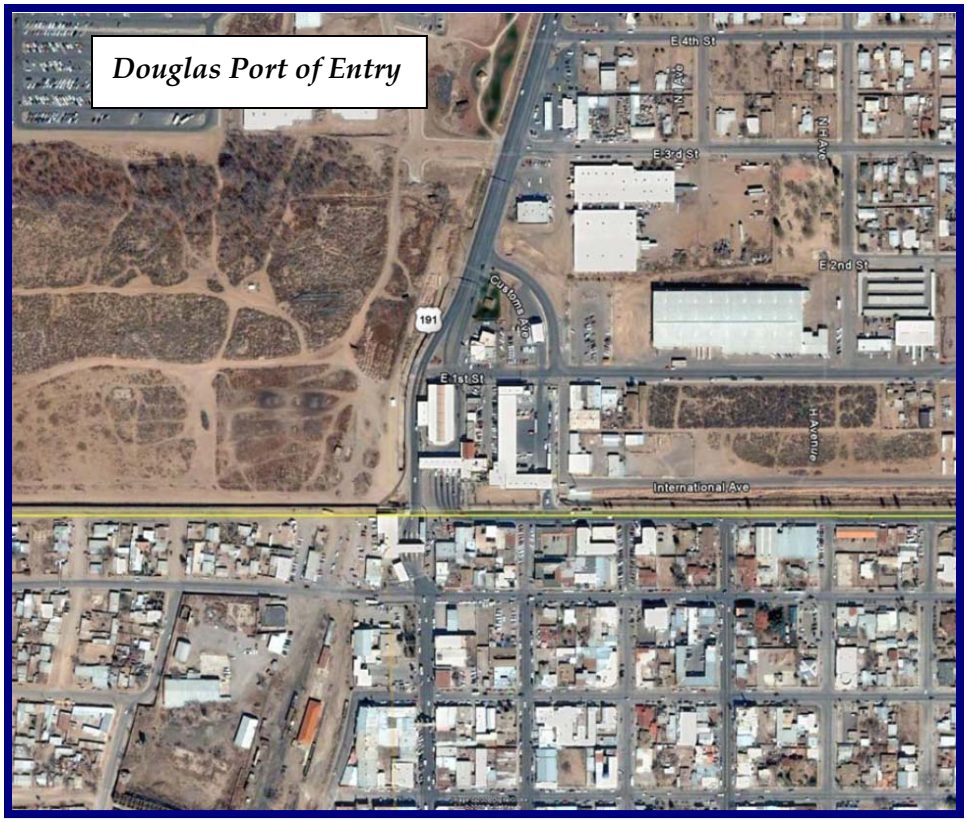
Naco Port of Entry

The Naco Port of Entry was modernized in 1994. CBP does not anticipate needing any significant improvements to this facility in the foreseeable future. The land port of entry is reported to be meeting the needs of the local traffic and the small volumes of commercial traffic through this facility.



Douglas Port of Entry

Douglas, Arizona is a small community of approximately 18,000 people that lies on the Arizona-Sonora border adjacent to the much larger city of Agua Prieta, Mexico (population 110,000). The Douglas Port of Entry is the second largest commercial port in the state with over $1 billion in trade conducted every year. However, economically, little has changed in the area over the last 20 years. At the Douglas Port of Entry, southbound truck traffic is forced to cut through the line of privately owned vehicles (POVs) in order to exit the U.S. compound and enter Mexican customs inspection, creating a serious safety situation. The port of entry lacks dedicated facilities for pedestrians and buses to access the primary inspection lanes. Improvements are planned for the Douglas Port of Entry to improve the operational characteristics. There is a proposed reconfiguration project, but it has yet to be funded.



4.0 Review of Key Border Initiatives and Innovative Finance Initiatives from FHWA

FHWA is currently engaged in several initiatives involving border coordination, port of entry expansion projects, and innovative finance. Two key initiatives are the U.S.-Mexico Joint Working Committee (JWC) on Transportation Planning and the Finance Team which has been preparing and presenting materials such as the *Financing Techniques Guide for Border Project Sponsors* presentations and workshops.

The JWC, of which ADOT and other southern border DOTs are full participants, has been meeting approximately twice a year to discuss current studies, programs and border crossing issues including innovative finance for crossing improvements. The JWC Finance Team is focused on developing techniques and materials for disseminating information on finance for border projects including innovative finance methods and public-private partnerships. They have given training and informational workshops in Texas for TxDOT for the Laredo and El Paso districts. ADOT is a good candidate for a future workshop.

5.0 Existing and Planned Use of Public-Private Partnerships and Private Sector Involvement at Border Crossings

The Study Team conducted a survey on the use of public-private partnerships at border crossings located outside of Arizona. The Study Team also identified the use of toll facilities and other revenue sources at or near border crossings. There is minimal overall existing use of public-private partnerships at border crossings around the country. However, several states are pursuing public-private partnership initiatives, greater private sector involvement, and/or innovative finance at border crossings. Some highlight examples include:

Texas: Most of the existing highway connections to Texas ports of entry are tolled (23 of 26). Most of the Rio Grande River bridge crossings are owned by either the local city or county in which they are located. The tolls are placed on the bridge facilities and are generally used to finance costs related to the bridge or other local initiatives, but not to the ports of entry themselves. Although the bridge ownership varies, most of the actual ports of entry in Texas are owned by the US General Services Administration/Customs and Border Protection (GSA/CBP) agencies. When new ports of entry are developed or expanded, the bridge owner has donated the land for the port of entry, but does not typically fund its construction or operation.

California: California does not have any existing public-private partnerships in place at its border ports of entry. However California is in the process of exploring and implementing several interesting border and toll related projects that could provide implementation ideas for border crossings in Arizona. These include the proposed Public-Public Partnership at the new Otay Mesa East Port of Entry, which includes a toll road, cross-border conveyor belts for moving aggregate, and a potential cross-border air terminal passenger facility.

New York: The state of New York currently has no public-private partnership enabling legislation; however, they do have a bridge commission and a bridge authority that are federally chartered to own and operate specific bridges bordering Canada and the United States and the immigration plazas.

Michigan: The state of Michigan currently does not have public-private partnership legislation. There are various types of ownership of Michigan border crossings ranging from privately owned, DOT owned, and proposed GSA owned. The state of Michigan proposes to build a new border crossing at the Detroit River International Bridge through the use of a public private partnership but approvals are still required.

Washington: The state of Washington has recently signed an agreement with FHWA for the Federal Border Congestion Program which will allow them access to innovative

financing and advanced ITS systems that will direct the public to border crossing facilities and provide accurate information on wait times. This agreement will also allow the DOT to examine what opportunities are currently available to them. WSDOT has instituted Free and Secure Trade (FAST) lanes which are underutilized. As a result of this, they have begun to look at using high occupancy toll (HOT) lanes with a congestion pricing program along with the FAST lanes.

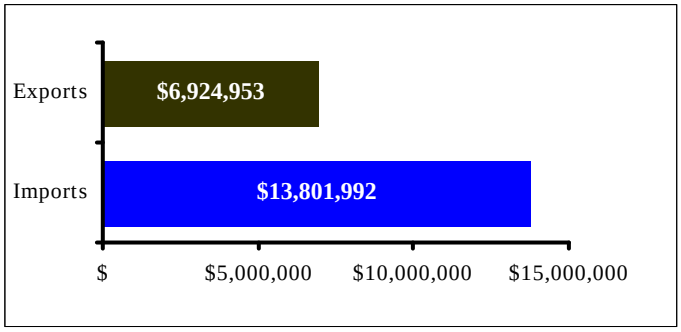
5.1 Identified Implementation Issues for Public-Private Partnerships at Border Crossings

As a result of the information obtained during the survey, the Study Team was able to identify several key implementation issues for the use of public-private partnerships at border crossings. The main issues identified by the survey participants included cooperation among agencies and stakeholders, oversight, developing sufficient revenue flow, toll collection, security, and facility ownership and operation.

6.0 Cross Border Commodity Movements between Arizona and Mexico

Export and import values for 2007 between the US and Mexico that moved only through Arizona's ports of entry are shown in **Exhibit 1**. Export value of $6.92 billion represents goods that originated in all US states that are destined to all Mexican states (southbound flows). Import value of $13.80 billion represents goods that originated in all Mexican states destined to all US states (northbound flows). The value of imports is nearly double the value of exports.

Exhibit 1: 2007 Exports and Imports through Arizona's Ports of Entry
(value in 1,000s)



Source: WSA Analysis of 2007 Bureau of Transportation Statistics

The amounts above do not include values for exports or imports of goods moving between Arizona-Mexico that could have passed through ports of entry in California, New Mexico, or Texas. Goods flows through those ports of entry are considered to be extraneous to the development of ADOT's Public-Private Partnership initiatives along the Arizona-Mexico border.

6.1 Exports to Mexico

In 2007, exports valued at approximately $6.93 billion destined for Mexico moved through Arizona's seven port of entry locations. Nogales handled the largest value of exports with $4.83 billion moved by truck and $1.11 billion moved by rail. Nogales handled over 87% of the value of the exports, San Luis handled 6.2% and Douglas handled 5.8%. Approximately 83% of the goods crossed through the Arizona's ports of entry by truck and 16% were carried by rail. Rail activity was reported only through the Nogales-DeConcini Port of Entry.

The 2010 forecast shows statewide export growth will be approximately 5%. The forecast indicates export goods will grow by 31% in 2020 over 2010, and by 27% in 2030 over 2020.

6.2 Imports from Mexico

In 2007, US imports from all Mexican States that moved through Arizona's seven ports of entry were valued at $13.80 billion. Nogales handled the largest value of imports with $8.42 billion moved by truck and $3.72 billion moved by rail. Nogales handled 88% of the value of the imports, San Luis handled 5.1%, and Douglas handled 6.4%. Approximately 73% of the goods crossed through Arizona's ports of entry via truck and 27% were carried by rail. The only rail activity reported was through the Nogales-DeConcini Port of Entry. The top 10 states receiving imports from Mexico through Arizona's ports of entry generated nearly $12.66 billion of exports and represented over 92% of the $13.80 billion total value of imports to the United States. The majority of the imports were destined for the State of Arizona, followed by Michigan and California.

The San Luis II Port of Entry will soon attract a portion of the imports that now pass through the Nogales Port of Entry. A new highway, expected to open in 2010, will parallel the Sonora coastline connecting Guaymas to San Luis Rio Colorado due south of Yuma, AZ. The 5.2% share that San Luis currently handles will increase as drivers adopt the new route. A PPP project on the Mexican side of the border to construct a new customs processing facility opposite the new San Luis II Port of Entry will benefit from this increase in truck traffic.

Forecasts for 2010, 2020 and 2030 show there will be significant increases in the value of commerce originating in Mexico destined for Arizona. The 2007 import value for Arizona was $4.70 billion. Sonora's value is forecast to grow to 27% by 2020, and to 30% by 2030. Clearly, Sonora will increasingly become the major source of commodities imported by Arizona. A complete list of all import commodity types, values, and tonnage can be found in **Appendix F** and **G** of the Final Report. Imports were also measured in tonnage and by commodity with tonnage forecast to grow 39% by 2020 for all Mexican states and another 22% from 2020 to 2030.

7.0 Public-Private Partnerships Background

Public-private partnerships are contractual agreements formed between a public agency (federal, state, or local) and a private sector entity that allows for greater private sector participation in the delivery, operation, and financing of infrastructure projects. Public-private partnerships can include projects where significant design, construction, financial, and operational risk is transferred from the public sector to the private sector. Through these types of arrangements, inherent project risks are borne by that party best suited to control and manage those risks. A public sponsor's responsibility during a public-private partnership project includes conducting upfront due diligence on potential projects, defining public objectives, selecting the appropriate public-private partnership model, conducting a fair procurement process, negotiating a well structured public-private partnership agreement, and ensuring compliance with the public-private partnership agreement over its term.

Public-private partnerships can be structured to deliver a wide range of infrastructure projects. Some of the typical types of infrastructure projects include roadways, bridges, tunnels, water/wastewater facilities, buildings, ports, airports, intelligent transportation systems, and parking facilities. Public-private partnerships can take many forms, and can be structured to meet the objectives of a project's public sponsor. As a result, the actual structure of a public-private partnership is project specific. However, there are some broad categories of public-private partnerships that have been used. These include:

- Design/build/finance
- Design/build/operate/maintain
- Design/build/finance/operate/maintain
- Concessions

7.1 Revenue Sources

One of the purposes of a public-private partnership is to attract private capital to fund public infrastructure projects. In the financial markets, there is considerable competition for these funds. Consequently, these resources get allocated based on perceived risks associated with a particular investment and the corresponding return for assuming that risk. These investment evaluations are made across and among a broad range of investment options, and infrastructure is but a relatively small subset.

The ability to attract private capital to a specific public-private partnership project is very dependent upon the nature of the revenue stream dedicated to that project. Examples of such revenue streams include user fees, tax revenues, government grants or appropriations, private contributions, lease payments, incremental tax, local option sales tax, property tax, and any combination of these sources.

8.0 Potential Public-Private Partnership Opportunities

Working with stakeholders and members of the Technical Advisory Committee, the Study Team identified sixteen projects for additional consideration as potential public-private partnerships. These projects are listed below:

1. Improvements to US 95 connecting to San Luis I
2. Improvements to US 95 Truck Route
3. Improvements to South Avenue E and SR 195
4. Proposed Industrial Park at the San Luis II Port of Entry
5. Extension of SR 195 from Interstate 8north to US 95
6. Improvements and Expansion of Juan Sanchez Boulevard
7. SR 189 (Mariposa Road) from Mariposa Port of Entry to I-19
8. Intermodal Freight Facility in Rio Rico
9. Relocation of Rail to East or West of downtown Nogales
10. Naco Road Improvements
11. US 191 Corridor
12. Chino Road Improvements and Realignment
13. Chino Road Extension
14. Alignment and Safety Improvements to SR 80 and SR 92
15. I-10 Tuscon Bypass
16. UP Nogales Branch Addition in Tuscon

9.0 Implementation Issues

The development of public-private partnership projects face many of the same implementation issues faced by other infrastructure projects. In addition to more typical issues, public-private partnership projects face a number of implementation issues absent from other infrastructure delivery methods. The most common issues that arise include the following:

- Stakeholder and public acceptance
- Coordination
- Experience
- Security and maintenance of facilities outside secure areas
- Toll operations
- Environmental issues
- Conversion of existing facilities
- Limits on advertising
- Development expenses

9.1 Traditional Funding Mechanisms

Most of today's infrastructure has been built utilizing a design, bid, build delivery mechanism. With this delivery approach the public sector remains responsible for design and construction risks in the form of cost overruns, funding and finance risks, and operational and maintenance risk. Toward the end of last century, there was an increasing acceptance and utilization of a design-build approach for project delivery, thus increasingly transferring design and construction risk to the private sector.

Under both of these delivery models, the public sector retained the responsibility for raising the necessary funding to pay for the capital costs necessary to delivery an infrastructure facility or support a financing to pay for these projects. A number of sources are utilized to provide the required funding for infrastructure projects. These traditional funding mechanisms include federal, state, or local appropriations and funds; general obligation bonding; revenue bonding; special local taxation districts or taxes; and federal, state, local, or private sector donations and matches.

9.2 Non-Tax Revenue Sources

One of the advantages of public-private partnership projects is their perceived ability to expand the revenue streams which can be used to fund infrastructure projects. While public-private partnerships are often considered to be synonymous with toll projects, there are several public-private partnership models which shift substantial design, construction and operational risk to the private sector without relying upon tolls as a revenue source.

Potential non-tax revenue sources include fees, which are based upon the benefit associated with the specific facility. These revenue sources can consist of user fees (including tolls), advertising revenue, lease payments, and port of entry access payments. Due to various factors, including projected non-tax revenues, perceived revenue risks, and startup risk, public-private partnership projects often require some public contribution or support in order to be feasible. When evaluating the potential of an infrastructure project as a public-private partnership the specific projects ability to leverage public funds is a significant criteria which needs to be taken into account.

9.3 Public-Private Partnership Financial Tools

There are several public-private partnership financing tools that can be used for border crossing improvements in Arizona. These include the Transportation Infrastructure Finance and Innovation Act (TIFIA), private activity bonds, federal section 129(a) lending, and the state infrastructure bank (HELP).

10.0 Project Specific Discussion

Of the sixteen projects identified as part of this study, projects located at three of these locations – Naco, Lukevile, and Sasabe – do not lend themselves to consideration as potential public-private partnerships.

10.1 San Luis

The potential public-private partnership projects identified in connection with the San Luis Ports of Entry include:

- Project #1: Improvements to US 95 connecting to San Luis I
- Project #2: Improvements to US 95 Truck Route to San Luis I
- Project #3: Improvements to South Avenue E and SR 195 at San Luis II
- Project #4: Proposed Industrial Park at the San Luis II Port of Entry
- Project #5: Extension of SR 195 from Interstate 8 north to US 95
- Project #6: Improvements and Expansion of Juan Sanchez Boulevard

Projects #1, 2, 3, and 6 are surface streets that provide significant local access. The fact that these routes are currently free and that the ability to control access is limited, these projects are not candidates for toll funding. If the decision is made to move these projects forward as public-private partnerships then the use of a design/build/finance model may be appropriate. However, the annual funding for these improvements will need to be identified.

As Project #4 develops it should generate revenues form various leases and user fees. It should be anticipated that these revenues will pay for the development within the intermodal center. It should not be anticipated that any significant revenues will be generated to support other area projects.

Project #5 is too short, and with too many alternatives, to operate as toll road. If the decision is made to move this project forward as a public-private partnership then the use of a design/build/finance model may be appropriate. However, the annual funding to support Project #5 will need to be identified.

10.2 Nogales - Mariposa

Of the fourteen projects located at or adjacent to Arizona's ports of entry, Project #7: SR 189 (Mariposa Road), from the Mariposa Port of Entry to I-19, has the greatest potential as a public-private partnership project. Approximately 3 miles long, there are a number of factors which lead to this conclusion:

- The majority of the trips on the project are through traffic with limited local trips.
- The expected cost of this project is in excess of $100 million. Though small for most public-private partnerships, this project is large enough that it should be able to support the development costs of a public-private partnership project.
- An 8-mile toll road, the Camino Fiscal, already connects the Mariposa Port of Entry to Mexico Highway 15 south of Nogales, Sonora. Together these two roads would form a tolled bypass of both Nogales, Sonora and Nogales, Arizona.
- Diversion of existing traffic should be minimal given that the closest alternative commercial port of entry is over eighty miles due east, has longer connecting routes, and has a port of entry that may not be able to handle significant increases in commercial traffic.
- The existence of the Camino Fiscal should lead to very reliable revenue projections since there is already a track record of tolled traffic patterns.
- The current port of entry expansion project is already funded.

Despite these advantages, Project #7 has some issues that will need to be addressed. These include:

- The Mariposa Port of Entry has not historically operated 24 hours a day for seven days a week. This limits the revenue potential for the project. It is unclear how the public-private partnership market will react to this limitation.
- The conversion of previously "free" roadway and to a tolled facility could result in resistance from public officials, trucking associations, and members of the public.
- Concerns over potential security issues in implementing a public-private partnership with private sector involvement may arise among stakeholders.
- The existence of tolls on the US side of the border could create an additional queue as vehicles stop to pay the toll for the project. This can be mitigated to an extent if ETC can be implemented. However, successful implementation will require international enforcement.

10.3 Nogales - DeConcini/Morley Gate

The potential public-private partnership projects identified in connection with DeConcini/Morley Gate include:

- Project #8: Intermodal Freight Facility in Rio Rico at DeConcini/Morley Gate
- Project #9: Relocation of Rail to the East or West of Nogales

Both projects have potential environmental issues that the public sponsor will need to take the lead in addressing and obtaining needed environmental permits and clearances. Project #8 will need environmental clearances for whatever site is selected. Project No.9 has known environmental issues with both potential identified locations for the relocated rail. Site selection and land acquisition will be key implementation challenges for public-private partnership implementation of both Projects #8 and #9.

The public benefit of the proposed projects is more indirect than other transportation improvements and a strong case for public participation will need to be made. These are projects that primarily involve indirect benefits in terms of reduced congestion, safety, and economic development for the public instead of delivering a new transportation facility.

10.4 Douglas

The potential public-private partnership projects identified in connection with the Douglas Port of Entry include:

- Project #11: US 191 Corridor
- Project #12: Chino Road Improvements & Realignment
- Project #13: Chino Road Extension
- Project #14: Alignment and Safety Improvements to SR 80 and SR 92

Projects #11 and 14 are the main transportation facilities connecting the communities of southeastern Arizona. As such they do not lend themselves to development as toll roads. Potentially these corridors may be developed as a design/build/finance public-private partnership, but annual funding for these improvements will need to be identified.

Projects #12 and 13 are dependent upon each other. As such they will need to be combined into a single project. The viability and need for these two projects is predicated upon completion of an unfunded expansion and reconfiguration of the existing port of entry. At an estimated cost of $5 to $6 million it is questionable whether the project(s) can support the expense of developing a public-private partnership project. Should the decision be made to move these projects forward as public-private partnership projects then design/build/finance model may be appropriate. However, the annual funding for these improvements will need to be identified.

10.5 Pima County Projects

In addition to the fourteen projects located in close proximity to Arizona's ports of entry, two additional projects were identified which have potential implications for cross border traffic. One of these, Project #15: I-10 Tucson Bypass/ Pima County, is subject to a separate study. Any conclusions regarding the potential for this project should be deferred until this study is completed.

Project #16: UP Nogales Branch Addition proposed as a bypass around the Tucson Rail Yard. As with Project #9, this project necessarily requires coordination with a private partner, the Union Pacific Railroad. The railroads interests will need to be taken into account in addressing the potential for this project. This single user would make it difficult for a third party to participate. Project #16 should be considered as a public-private partnership between the Union Pacific and a public sponsor or as a private sector partnership with a public sponsor providing support, but not entering into a partnership. Public sector contributions could come in the form of grant funds and in kind services or land.

11.0 Conclusions

The purpose of this study is to explore the potential for utilizing public-private partnerships to deliver infrastructure serving the seven ports of entry along the Arizona-Mexico Border. As detailed in this report, the findings and conclusions of this study are based upon the following elements:

- A survey of how other border states are utilizing public-private partnerships to address their port of entry infrastructure needs
- A review of freight flows through the seven ports of entry
- The identification of potential implementation issues associated with public-private partnerships in general, and those specific to such projects at border crossings
- The identification of both traditional funding sources and potential revenue sources which could be used to support potential public-private partnerships at the seven Arizona ports of entry
- Discussion of possible public-private partnerships

Working with stakeholders and the Technical Advisory Committee, the Study Team identified sixteen projects to evaluate as potential public-private partnerships. While the Study Team feels that many, if not all, of the identified projects could be done as a public-private partnership where the risk of funding the project remains with the public sector sponsor, it is important to recognize that the lack of an institutional framework within Arizona for the implementation of a public-private partnership may dictate against the use of this mechanism for smaller projects.

Based on the work done by the Study Team, one specific project was identified as having the potential to be self-funding as a public-private partnership – the SR 189/Mariposa Road project connecting the Mariposa Port of Entry with I-19 in Nogales, Arizona. Should it be decided to move this project forward, the next steps would be to conduct a conceptual level evaluation of the project. The elements of this evaluation would include:

- Develop a planning level layout of the project as a toll road, including looking at potential ways to deal with local access
- Develop a toll operations plan
- Conduct a conceptual level traffic and revenue study
- Develop a planning level cost estimate for the project, including toll facilities
- Develop a planning level operational and maintenance plan
- Prepare a conceptual level public-private partnership feasibility study

This next step evaluation would include the identification and discussion of project specific implementation issues that would need to be addressed in order to develop SR 189/Mariposa Road as a public-private partnership.