



Analysis of International Border Crossing Projects on the U.S.-Mexico Border

April 2019



Table of Contents

List of Figures	iii
List of Tables.....	v
Acronyms and Abbreviations	vi
Preface	ix
Executive Summary	1
Chapter 1. Border Vision.....	12
1.1 The U.S.-Mexico Border.....	12
1.1.1. <i>Border Background Information.....</i>	<i>12</i>
1.1.2. <i>Analysis of Economic and Trade Potential of the U.S.-Mexico Border.....</i>	<i>20</i>
1.1.3. <i>Vehicle and Pedestrian Crossings on U.S. -Mexico Border.....</i>	<i>23</i>
1.1.4. <i>Border Crossing Times</i>	<i>31</i>
1.2 Evolution of the Institutional Vision of Both Governments	32
1.2.1. <i>U.S.-Mexico Joint Working Committee on Border Transportation Planning.....</i>	<i>33</i>
1.2.2. <i>Customs-Trade Partnership Against Terrorism</i>	<i>34</i>
1.2.3. <i>North American Leaders’ Summit (NALS).....</i>	<i>35</i>
1.2.4. <i>21st Century Border Management Process.....</i>	<i>35</i>
1.2.5. <i>High-Level Economic Dialogue (HLED)</i>	<i>36</i>
1.2.6. <i>U.S.-Mexico Binational Bridges and Border Crossings Group (BBBXG).....</i>	<i>36</i>
1.2.7. <i>Mexican Interagency Bridge and Border Crossing Group</i>	<i>38</i>
1.2.8. <i>Evolution of the Vision</i>	<i>38</i>
Chapter 2. Border Crossing Project Development Process	41
2.1 Stakeholders	41
2.1.1. <i>Agencies Involved in Border Crossing Development</i>	<i>41</i>
2.2 General Process for New Border Crossing Projects	49
2.2.1. <i>Overview of the Mexican Process.....</i>	<i>52</i>
2.2.2. <i>Overview of the U.S. Process.....</i>	<i>54</i>
2.2.3. <i>Overview of the Binational Process.....</i>	<i>55</i>
2.3 Development Phases of New Border Crossings.....	56
2.3.1. <i>Phase I.....</i>	<i>56</i>
2.3.2. <i>Phase II</i>	<i>63</i>
2.3.3. <i>Phase III.....</i>	<i>68</i>
2.3.4. <i>Phase IV.....</i>	<i>73</i>
2.4 Expansion and/or Modernization of Existing Border Crossings	77
2.4.1. <i>Mexico Border Crossing Expansion and Modernization Process.....</i>	<i>77</i>
2.4.2. <i>U.S. Border Crossing Expansion and Modernization Process.....</i>	<i>78</i>
Chapter 3. Funding Mechanisms for U.S.-Mexico Border Crossing Projects	81
3.1 General Overview of Financial Mechanisms for U.S.-Mexico Border Crossing Projects..	81
3.1.1. <i>General Overview: Mexico</i>	<i>81</i>
3.1.2. <i>General Overview: United States</i>	<i>84</i>

3.2	Types of Funding Mechanisms Available for Infrastructure Projects.....	86
3.2.1	<i>Funding Mechanisms in Mexico</i>	86
3.2.2	<i>Public Funding Mechanisms in Mexico</i>	86
3.2.3	<i>Public-private Funding Mechanisms in Mexico</i>	92
3.2.4	<i>Funding Mechanisms in the United States</i>	98
3.2.5	<i>Funding Mechanisms by Border Crossing Project Development Phase</i>	102
3.3	Difficulties in Securing Funds and Identifying Alternatives	103
3.3.1	<i>Difficulties in Mexico</i>	103
3.3.2	<i>Difficulties in the United States</i>	105
3.4	Examples of Border Crossing Projects in the Process of Securing Funding	106
3.4.1	<i>Case Study: Otay Mesa East-Mesa de Otay II Border Crossing</i>	106
3.4.2	<i>Case Study: Trade Corridor Improvement Fund in California</i>	108
3.5	Summary of Current Border Crossing Funding Mechanisms	109
	International Crossing Management and Funding Experience in Canada.....	111
Chapter 4. Port-of-Entry Infrastructure Information System.....		112
4.1	System Requirements.....	112
4.2	Accessing the POEIS System	112
4.3	Navigating the Project Categories	112
4.4	Project Categories	114
4.5	Border Crossing Development Phases.....	116
Chapter 5. Conclusions and Recommendations		119
5.1	Border Crossing Development Process	120
5.2	Border Crossing Funding.....	126
5.3	Information System.....	131
Appendix A. Design of the Port-of-Entry Infrastructure Information System.....		132
A.1	Infrastructure Project Classifications	132
A.1.1	<i>Proposed Projects</i>	133
A.1.2	<i>New POEs</i>	133
A.1.3	<i>Binational Improvements</i>	133
A.1.4	<i>National Improvements</i>	133
A.2	Levels of User Access	134
A.2.1	<i>General Public</i>	134
A.2.2	<i>Registered Users</i>	135
A.3	Project Details.....	136
A.4	Project Process.....	139
A.5	Quick Start Guide	139
A.5.1	<i>Requirements for System Use</i>	139
A.5.2	<i>Entering the POEIS System</i>	139
A.5.3	<i>Viewing "Proposed Projects"</i>	140
A.5.4	<i>Viewing "New POEs"</i>	140
A.5.5	<i>Viewing "Bi-National Improvements"</i>	140
A.5.6	<i>Viewing "National Improvements"</i>	140
A.5.7	<i>Viewing the Diagram of Phases for a Project on the Map</i>	141
A.5.8	<i>Viewing Task Details within the Diagram of Phases of a Project</i>	141
A.5.9	<i>Beginning a Session in the System</i>	141
A.5.10	<i>Changing the Language Preference</i>	141
Appendix B. List of Proposed Projects in Database		142

Bibliography..... 156

List of Figures

Figure ES. 1 Collaborative U.S.-Mexico Binational Border Programs and Initiatives..... 2

Figure ES. 2 Trade between Mexico and the United States 3

Figure ES. 3 General Process for Development of New Border Crossings..... 5

Figure ES. 4 Financial Mechanisms for Infrastructure Projects in Mexico 8

Figure ES. 5 Financial Mechanisms in the United States 9

Figure ES. 6 Evolution of the Mexican Interagency Group into a Commission.....10

Figure 1.1 Binational Population Distribution along the U.S.-Mexico Border14

Figure 1.2 U.S.-Mexico Border Crossings18

Figure 1.3 Age of U.S.-Mexico Border Crossings.....19

Figure 1.4 U.S.-Mexico Trade by Transportation Mode, 201420

Figure 1.5 U.S.-Mexico Trade (1998–2014).....21

Figure 1.6 International Trade by Trade Region, 201322

Figure 1.7 Total U.S.-Mexico Trade by Transportation Mode23

Figure 1.8 CV, POV and Pedestrian Northbound Crossing Change Rate (1995–2014)24

Figure 1.9 Northbound Pedestrian Crossings (1995–2014).....24

Figure 1.10 Northbound POV Crossings (1995–2014)25

Figure 1.11 Northbound CV Crossings (1995–2014)25

Figure 1.12 Railcar Crossings (1996–2014).....29

Figure 1.13 Collaborative U.S.-Mexico Binational Border Programs and Initiatives.....32

Figure 2.1 General Process for Development of New Border Crossings51

Figure 2.2 Mexico: Phase I of Border Crossing Development59

Figure 2.3 United States: Phase I of Border Crossing Development.....62

Figure 2.4 Mexico: Phase II of Border Crossing Development64

Figure 2.5 United States: Phase II of Border Crossing Development67

Figure 2.6 Mexico: Phase III of Border Crossing Development.....71

Figure 2.7 United States: Phase III of Border Crossing Development.....72

Figure 2.8 CILA Participation in Border Crossing Development in Mexico74

Figure 2.9 Mexico: Phase IV of Border Crossing Development.....75

Figure 2.10 United States: Phase IV of Border Crossing Development.....76

Figure 2.11 Binational Process for Border Crossing Expansion and/or Modernization.....79

Figure 2.12 Modification of Existing Border Crossing Infrastructure for Projects Below the U.S. Budget Threshold80

Figure 3.1 Investment Cycle Phases81

Figure 3.2 Public Works Funding in Mexico.....83

Figure 3.3 Financial Mechanisms for Infrastructure Projects in Mexico.....87

Figure 3.4 Northbound Border Crossing Tolls in 2014.....93

Figure 3.5 FIBRA Issuances97

Figure 3.6 Financial Mechanisms in the United States.....99

Figure 3.7 Location of the Otay Mesa Project 108

Figure 4.1 POEIS Home Page..... 113

Figure 4.2 POEIS Navigation Bar 114

Figure 4.3 Proposed Projects Page..... 115

Figure 4.4 New POE Map 116

Figure 4.5 Diagram of Border Crossing Development Phases 117

Figure 4.6 Phases of a Project Diagram 118

Figure 4.7 Project Task Details 118

Figure 5.1 Ground Trade between the United States and Mexico 120

Figure 5.2 Basis for the Five-year Binational Border Crossing Development Plan 122

Figure 5.3 Evolution of the Current Border Crossing Mexican Group into a Commission 122

Figure 5.4 Proposed Mexican Federal Authorization in Phase II of the Process 125

Figure 5.5 Proposed Institutional Arrangement: Initial Stage..... 128

Figure 5.6 Proposed Institutional Arrangement: Second Stage 130

Figure A.1 POEIS Home Page..... 134

Figure A.2 Map of New POE Projects 135

Figure A.3 POEIS Sign In..... 136

Figure A.4 List of Proposed Projects 137

Figure A.5 Border Crossing Development Process 138

Figure A.6 Example of the Placement of a Project in the BCDP..... 138

Figure A.7 Example of Associated Task Details 139

List of Tables

Table ES. 1 Proposed U.S.-Mexico Border Crossing Projects.....	11
Table 1.1 Mexican States and Municipalities at the U.S.-Mexico Border	13
Table 1.2 U.S. States and Counties at the U.S.-Mexico Border.....	13
Table 1.3 Roadway Border Crossings at the U.S.-Mexico Border, 2016.....	16
Table 1.4 Number of Border Crossings by State at the U.S.-Mexico Border.....	18
Table 1.5 Intraregional and Interregional Trade, 2013.....	22
Table 1.6 Northbound Traffic Volumes by Border Region, 2014.....	26
Table 1. 7 Northbound CV Crossings by Metropolitan Area, 2014.....	27
Table 1. 8 Northbound POV and Pedestrian Crossings by Metropolitan Area, 2014	28
Table 1.9 Northbound Train Crossings by Port of Entry, 2014.....	30
Table 1.10 Value of Freight Transported by Rail, 2014.....	30
Table 1.11 Tons Transported by Rail, 2014	31
Table 1.12 Regional Border Master Plans	34
Table 1.13 Mexican Interagency Bridge and Border Crossing Group.....	38
Table 2.1 Mexican Federal Agencies Involved in Border Crossing Projects	42
Table 2.2 U.S. Federal Agencies Involved in Border Crossing Projects	47
Table 2.3 Typical Diplomatic Notes by Phase and Agencies Involved.....	56
Table 3.1 Cases of Border Crossing Projects Developed Through P3s in Mexico	84
Table 3.2 Stages of Final Congressional Approval of the U.S. Federal Budget	85
Table 3.3 Development Bank Products Available for Financing Border Crossing Projects in Mexico.....	89
Table 3.4 CKDs on the Mexican Stock Exchange (BMV)	97
Table 3.5 Funding Mechanisms Available for Border Crossing Projects in the Pre-construction Phase.....	102
Table 3.6 Funding Mechanisms Available for Border Crossing Projects in the Construction and Testing Phase.....	103
Table 3.7 Trade Corridor Improvement Fund Eligibility Criteria.....	109

Acronyms and Abbreviations

AAGR	Average annual growth rate	CNS	Comisión Nacional de Seguridad (National Security Commission)
A/E	Architecture / engineering	COBRA	Consolidated Omnibus Budget Reconciliation
AF	Autorización Federal (Federal Authorization)	CONAGUA	Comisión Nacional del Agua (National Water Commission)
AGA	Administración General de Aduanas (General Customs Administration)	CTC	California Transportation Commission
APHIS	Animal and Plant Health Inspection Services	C-TPAT	Customs-Trade Partnership Against Terrorism
AQI	Agricultural Quarantine Inspections	CV	Commercial vehicle
ASF	Auditoría Superior de la Federación (Federal Superior Auditor)	DAP	Donation Acceptance Program
BANOBRAS	Banco Nacional de Obras y Servicios Públicos (National Bank for Public Works and Services)	DGIRA	Dirección General de Riesgo e Impacto Ambiental (General Office of Environmental Impact and Risk)
BANXICO	Banco de México (Bank of Mexico)	DGPOP	Dirección General de Programación, Organización Y Presupuesto (General Office of Programming, Organization and Budget)
BBBXG	Binational Bridges & Border Crossings Group	DGPYP	Dirección General de Planeación y Presupuesto (General Office of Planning and Budget)
BCDP	Border Crossing Development Process	DHS	Department of Homeland Security
BTS	Bureau of Transportation Statistics	DOC	United States Department of Commerce
CALTRANS	California Department of Transportation	DOD	United States Department of Defense
CBA	Cost-benefit analysis	DOS	United States Department of State
CBP	United States Customs and Border Protection	EPA	United States Environmental Protection Agency
CIGFD	Comisión Intersecretarial de Gasto Público Financiamiento y Desincorporación (Interagency Commission on Public Finance Expenditures and Divestment)	ESC	Executive Steering Committee
CILA	Comisión Internacional de Límites y Aguas (International Boundary and Water Commission, Mexican Section)	FA	Federal Authorization
CKD	Certificado de Capital de Desarrollo (Certificate of Development Capital)	FAST	Free and Secure Trade
		FBF	Federal Buildings Fund
		FBCL	Federal Bridge Corporation Limited

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

FDA	United States Food and Drug Administration	MIA	Manifestación de impactos ambientales (Environmental impact statement)
FHWA	Federal Highway Administration	MPO	Metropolitan planning organization
FIBRA	Fideicomiso de Infraestructura y Bienes Raíces (Real Estate and Infrastructure Investment Fund)	NADB	North American Development Bank
FMCSA	Federal Motor Carrier Safety Administration	NAFTA	North American Free Trade Agreement
FOA	Felipe Ochoa y Asociados	NALS	North American Leaders’ Summit
FONADIN	Fondo Nacional de Infraestructura (National Infrastructure Fund)	NEEC	Nuevo Esquema de Empresas Certificadas (New Certified Company Plan)
FONSI	Finding of No Significant Impact	NEPA	National Environmental Policy Act
FRA	Federal Railroad Administration	NMBA	New Mexico Border Authority
GDP	Gross domestic product	OA	Office of Acquisitions of U.S. Customs and Border Protection
GICYPF	Grupo Intersecretarial de Cruces y Puentes Fronterizos (Interagency Bridge and Border Crossing Group)	OES	Bureau of Oceans and International Environmental and Scientific Affairs of DOS
GSA	General Services Administration	OFO	Office of Field Operations of U.S. Customs and Border Protection
HLED	High-Level Economic Dialogue	OMB	Office of Management and Budget
IBWC	International Boundary and Water Commission, U.S. Section	OME	Otay Mesa East
INDAABIN	Instituto Nacional de Administración y Avalúos de Bienes Nacionales (Institute of National Asset Administration and Valuation)	PDS	Prospectus development studies
INEGI	Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography)	P3	Public-private partnership
INM	Instituto Nacional de Migración (National Migration Institute)	PEF	Presupuesto de Egresos de la Federación (Federal Budget)
IP	Infrastructure project	PHMSA	Pipeline and Hazardous Material Safety Administration
IRS	Internal Revenue Service	PND	Plan Nacional de Desarrollo (National Development Plan)
IT	Information technology	PNI	Programa Nacional de Infraestructura (National Infrastructure Program)
IU	Unidad de Inversiones de la Secretaría de Hacienda y Crédito Público (Investment Unit of the Ministry of Finance and Public Credit)	POE	Port of entry
JWC	Joint Working Committee on Transportation Issues	POEIS	Port-of-Entry Infrastructure Information System
KCSM	Kansas City Southern de Mexico	POV	Privately Owned Vehicle
		PP	Presidential Permit

PROTRAM	<i>Programa Federal de Apoyo al Transporte Masivo</i> (Federal Mass Transit Support Program)	SENASICA	Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria (National Food Safety, Quality and Health Service)
RBMP	Regional border master plan	SENTRI	Secure Electronic Network for Travelers Rapid Inspection
RFP	Request for proposals	SFP	Secretaría de la Función Pública (Ministry of Public Administration)
RITA	Research and Innovative Technology Administration	SHCP	Secretaría de Hacienda y Crédito Público (Ministry of Finance and Public Credit)
RMA	Regional mobility authorities	SINAPROC	Sistema Nacional de Protección Civil (National Civil Protection System)
RPO	Regional planning organization	SPP	Security and Prosperity Partnership of North America
RTPA	Regional Transportation Planning Agency	SRA	Strategic Resource Assessment
SAGARPA	Secretaría de Agricultura, Ganadería, Desarrollo Rural y Pesca (Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food)	SRE	Secretaría de Relaciones Exteriores (Ministry of Foreign Affairs)
SANDAG	San Diego Association of Governments	SS	Secretaría de Salud (Ministry of Health)
SAT	Servicio de Administración Tributaria (Tax Administration Service)	STAC	South Texas Assets Consortium
SCT	Secretaría de Comunicaciones y Transportes (Ministry of Communications and Transportation)	STIP	Statewide Transportation Improvement Programs
SE	Secretaría de Economía (Ministry of Economy)	TCEQ	Texas Commission on Environmental Quality
SECTUR	Secretaría de Turismo (Ministry of Tourism)	TCIF	Trade Corridors Improvement Fund
SEDATU	Secretaría de Desarrollo Agrario, Territorial y Urbano (Ministry of Rural and Urban Land Development)	TIFIA	Transportation Infrastructure Finance and Innovation Act of 1998
SEDENA	Secretaría de la Defensa Nacional (Ministry of National Defense)	UI	Unidad de Inversiones (Investment Unit)
SEDESOL	Secretaría de Desarrollo Social (Ministry of Social Development)	UPM	Unidad de Política Migratoria (Migration Policy Unit)
SEGOB	Secretaría de Gobernación (Ministry of Governance and Homeland Security)	USAID	United States Agency for International Development
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources)	USDA	United States Department of Agriculture
		USDOT	United States Department of Transportation
		UTP	Unified Transport Program

Preface

As part of the objectives of the U.S.-Mexico High-Level Economic Dialogue (HLED) and the 21st Century Border Management initiatives, it was agreed that the expansion, modernization and rehabilitation of existing land ports of entry, as well as construction of new infrastructure along the border of the two countries, should be a high priority. In this context, the U.S. and Mexican Governments and the North American Development Bank (NADB) Board of Directors requested that NADB “take all actions necessary to carry out a study to assist the United States and Mexican governments in mapping port-of-entry (POE) infrastructure projects and identifying potential financing structures for those projects.”¹

A border crossing is specialized infrastructure with personnel, facilities, equipment and specific procedures to control the flow of pedestrians, vehicles and goods between two countries.² Access could be by foot, road, rail or some combination thereof. The infrastructure is designed to control migratory flows, both vehicular and commercial, based on demand. Such facilities are considered strategic because they concentrate various agencies responsible for the enforcement of federal laws relating to the movement of merchandise, people, plants and animals at the border. Frequently, border crossings are associated with cities on both sides of the border, and there may be more than one linking two cities.

The title of the study refers to “border crossings,” which for this study means the facilities and individual transportation infrastructure that connect Mexico and the United States on the border. These facilities include border crossings and bridges for the flow of pedestrians, private and commercial vehicles and rail traffic. In the United States “border crossings” refer to the infrastructure of the U.S. Customs and Border

Protection, but not private facilities and transport infrastructure.

Development of new border crossings is a complex process that involves coordination among multiple stakeholders from two countries and various government levels, as well as private-sector stakeholders. The development of a new border crossing at the U.S.-Mexico border can take, on average, between 10 and 15 years.

Trade passing through land border crossings between the United States and Mexico has grown more than four times since the implementation of the North American Free Trade Agreement (NAFTA). However, border crossing development has not kept pace with this rate of growth, creating congestion and externalities that negatively affect regional competitiveness.

During the course of this study, more than 150 border crossing projects, including both new crossings and the expansion of existing ones, were identified as initiatives and proposals from various stakeholders along the border. These projects require clear, transparent and streamlined development processes with up-to-date information for sound decision-making. Border crossing projects may also require innovative financing mechanisms that could accelerate development, while increasing regional competitiveness.

In order to meet these requirements, NADB commissioned Felipe Ochoa y Asociados (FOA) and the Texas A&M Transportation Institute (TTI) to analyze international border crossing development at the U.S.-Mexico border and identify opportunities that would

¹ North American Development Bank, Board Resolution BR 2013-29, November 14, 2013.

² Conceptual model of a border crossing and platforms to simulate its operation. Mexican Institute of Transportation. 2014.

lead to increased international trade, competitiveness and economic growth in both countries.

The study includes four specific tasks:

1. Summarize the institutional vision of both governments related to the border and border crossings (Chapter 1).
2. Map existing border crossings between the United States and Mexico, as well as those currently in the process of being implemented and those proposed for the short and long term. Review the implementation process for binational infrastructure projects and provide recommendations to expedite the process. (Chapter 2).
3. Evaluate current financing mechanisms and identify new options (Chapter 3).
4. Create an information technology (IT) system so that the pertinent federal, state and local authorities in both countries may follow up on the status of existing infrastructure, projects in the process of being implemented and new project proposals. In addition, it will serve to support the development process for regional border master plans (RBMPs). The database will be the exclusive property of the two governments and will be managed by the federal agencies assigned by the two governments (Chapter 4).

The results of this study will support the agencies of the two governments in project development; provide an institutional vision of the border and, for the first time, a joint binational project information system. This information will facilitate the implementation and development of border crossing projects.

This study does not intend to evaluate and prioritize specific projects along the border. The RBMPs, established in each region based on available project development data, identify potential border crossing infrastructure projects and prioritize them according to the methodology established in each region based on available project development data.

With this study, NADB complies with the Board of Directors' mandate to support improvement of the implementation process for new border crossing projects and provides tools to facilitate international coordination.

Note: This study was conducted from 2013 to 2015. All conclusions and results are based on policies, procedures and events from that time frame.

Executive Summary

Modernization and development of U.S.-Mexico border infrastructure plays an important role in the economies of both countries and the overall competitiveness of the region. The Governments of the United States and Mexico are committed to coordinating actions to develop border infrastructure, as defined by national priorities.

The vision that both the United States and Mexico have for their shared border has evolved over the past 20 years, as can be seen in the diverse initiatives that have been implemented during that period (Figure ES.1).

Over the last 16 years, nine border crossing were constructed, with three inaugurated between 2015 and 2016, while trade between the two countries more than tripled between 1998 and 2014, reaching US\$500 billion (Figure ES.2).³

To further elevate and strengthen this dynamic bilateral commercial and economic relationship, in 2013 the two countries established a High-Level Economic Dialogue (HLED). The HLED was envisioned as a platform to advance strategic economic and commercial priorities central to promoting mutual economic growth, job creation and regional and global competitiveness in both the United States and Mexico.⁴

It was established in 2013 and is rooted in three pillars of cooperation:

1. Promoting competitiveness and connectivity
 - Transportation
 - Telecommunications

2. Fostering economic growth, productivity, entrepreneurship and innovation
 - Joint investment promotion
 - Economic development on the border and a comprehensive economic development strategy
 - Strengthening the North American Development Bank (NADB)
 - Partnership on advanced manufacturing
 - Entrepreneurship
 - Workforce development
 - Female empowerment
3. Partnering for regional and global leadership
 - Partnering to promote development in Central America
 - Regional trade priorities
 - Transparency and anti-corruption

The objective of these pillars is to coordinate shared interests and priorities affecting the growth and competitiveness of the U.S. and Mexican economies.

The evolution of the institutional vision of the border over the past two decades can be broken into three phases.

1. **Post-NAFTA:** The vision of both countries after the start of NAFTA was to increase trade between the two countries and facilitate higher rates of investment. The manufacturing industry in Mexico grew, and

³ Source: International Trade Administration, Fact Sheet, Accessed 01/08/2017 <http://trade.gov/hled/>

⁴ Office of the Vice President. "FACT SHEET: U.S.-Mexico High Level Economic Dialogue." *The White House*. September 20,

2013. Accessed August 25, 2014.

<http://www.whitehouse.gov/the-press-office/2013/09/20/fact-sheet-us-mexico-high-level-economic-dialogue>

trade between the two countries increased at

Figure ES. 1 Collaborative U.S.-Mexico Binational Border Programs and Initiatives

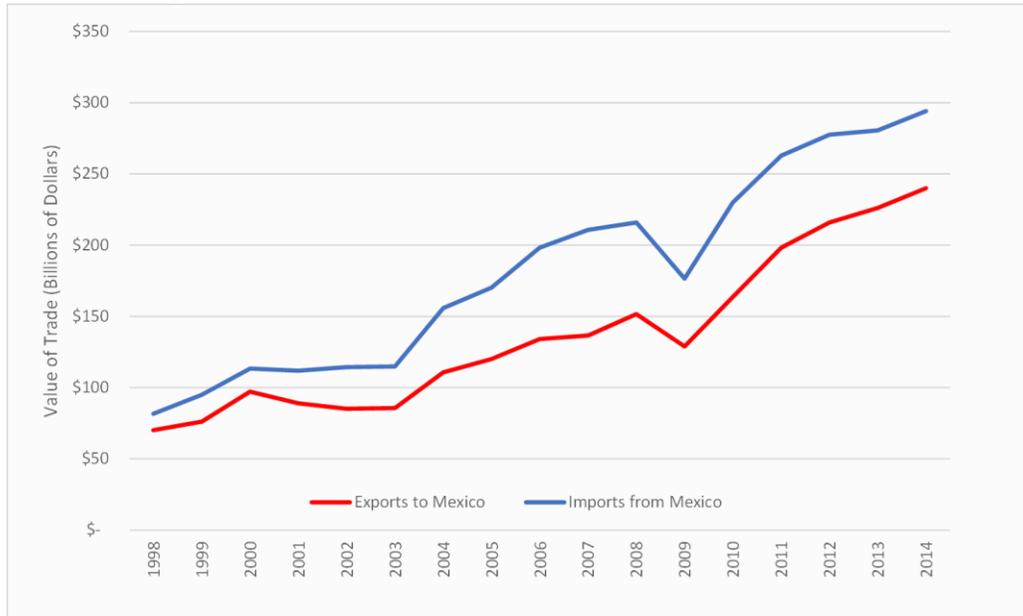


Source: Developed by FOA Consultores and TTI.

BBBXG – Binational Bridges and Border Crossings Group
HLED – High-Level Economic Dialogue
JWC – Joint Working Committee

NAFTA – North American Free Trade Agreement
NALS – North American Leaders’ Summit

Figure ES. 2 Trade between Mexico and the United States



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Freight Data.

an average annual rate of 17 percent between 1995 and 2000.

- 2. Post 9/11:** After the terrorist attacks of September 11, 2001, the United States Government intensified its focus on border security, increasing commercial and privately-owned vehicle inspections, resulting in longer wait and crossing times. The downturn of the economy and the increased border crossing times resulted in lower traffic volumes and economic impacts. The United States developed and implemented trusted traveler and trusted trader programs to integrate supply chain security, trade compliance and travel.⁵ The Free and Secure Trade (FAST) and Secure Electronic Network for Travelers Rapid Inspection (SENTRI) programs provided expedited entry for pre-approved, low-risk

travelers through dedicated lanes and kiosks at border crossings.

- 3. Post-Financial Crisis:** After the worldwide economic crisis in 2008, manufacturing industries relocated to North America, changing international trade patterns. As a result, intra/subcontinent trade has increased. The Governments of the United States and Mexico have been implementing policies and strengthening partnerships to create a more competitive trade bloc in North America.

Both countries are working toward increasing trade while continuing to secure their borders, which is reflected in the various projects that have been implemented on both sides of the border; such as the Unified Cargo Processing programs which streamline and facilitate the transportation of commercial goods between both countries, strengthening the legal transport of goods. These projects include supply chain

⁵ Source: CBP, Trusted Trader and Trusted Traveler Programs, Accessed 01/09/2017 <https://www.cbp.gov/border-security/ports-entry/cargo-security/trusted-trader>

transparency programs with all participants of the chain, which helps the secure flow of goods across the border.

The U.S.-Mexico border needs highly secure, world-class, competitive border crossings that provide services to travelers and meet their mobility requirements. This represents a major challenge to planning and implementation of border crossing projects, as each country has different planning, funding and construction processes that need to be followed.

Border Crossing Project Development Process

The development process for new border crossings involves complex tasks that require multiple actions and approvals on each side of the border. There are also milestones that require coordinated bilateral action to avoid delays and financial setbacks to the project.

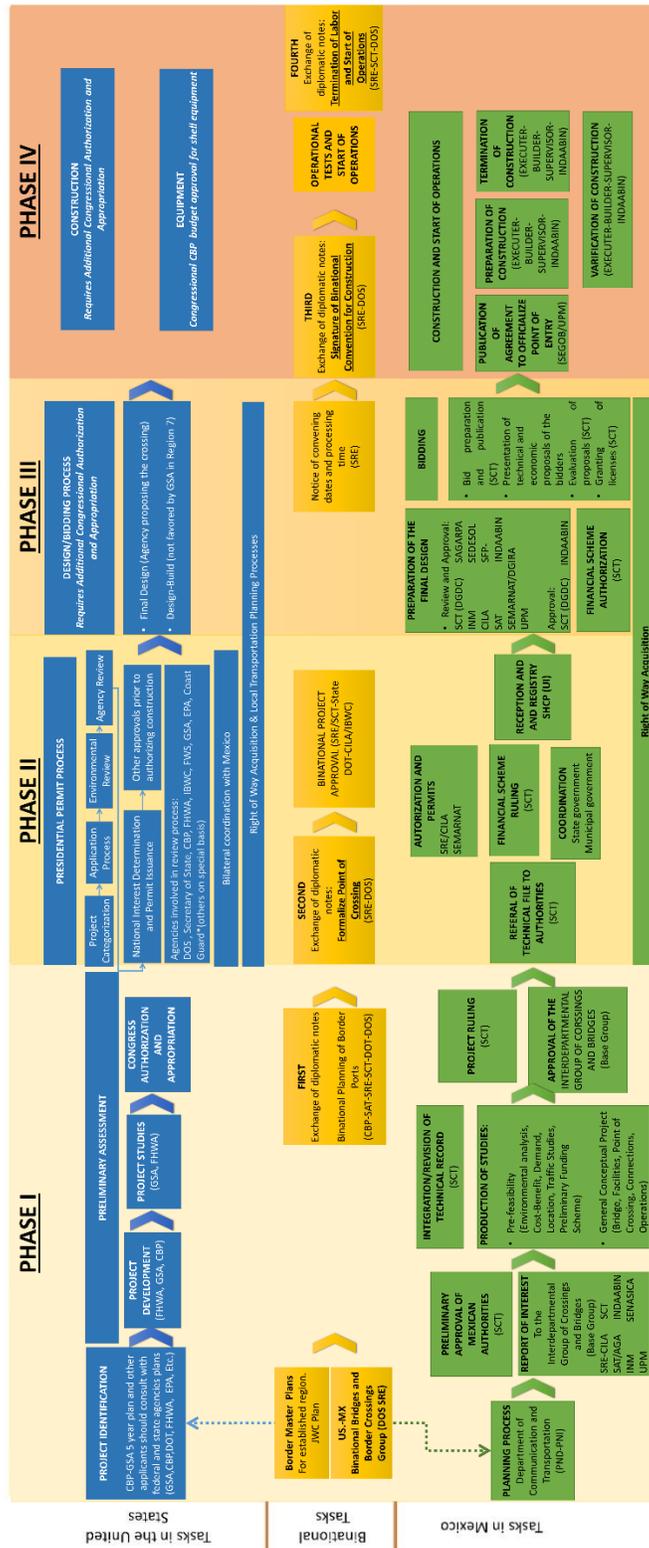
Each agency has predefined missions and objectives that sometimes differ from their counterparts in the other country. National and binational coordination

and planning is needed to minimize the impact of these differing objectives. In addition to the federal agencies involved in border crossing projects, there are regional initiatives and local organizations that participate in the binational planning mechanism.

Based on the analysis of current practices, a four-phase process for the development of new border crossings has been defined under this study (Figure ES.3). Each phase has tasks that must be completed in order to continue to the next one, except for right-of-way acquisition and Presidential Permits, which could take more than one phase to be completed. Neither country has formalized the border crossing development process, but the four major phases are:

- Phase I – Project planning and preliminary approval.
- Phase II – Technical review by agencies.
- Phase III – Final design, procurement and project assignment.
- Phase IV – Construction and operation.

Figure ES. 3 General Process for Development of New Border Crossings



Source: Developed by FOA Consultores and TTI.

General Process for New Border Crossing Projects

The development of a new border crossing project can begin in either the United States or Mexico but requires coordination with the other country for completion. In some cases, border organizations, such as border sister cities or regions, identify the need for a new border crossing or expansion of an existing one. These border regions or organizations propose new border crossing projects to the state and federal governments. There is also an entirely separate process whereby governments determine their own priorities for new border crossings.

In Mexico, the key stakeholders involved in the development of a border crossing from planning to construction and operation, play specific roles within their legal framework. The Ministry of Foreign Affairs (*Secretaría de Relaciones Exteriores* [SRE]) as the official channel of communication and coordination between the two countries, is in charge of issuing the diplomatic notes that formalize the agreements concerning the location, construction and operation of a project. The Ministry of Communications and Transportation (*Secretaría de Comunicaciones y Transportes* [SCT]), which is responsible for the transportation sector at the federal level, is in charge of the technical assessment of the project and preparing its technical dossier. The Ministry of the Interior (*Secretaría de Gobernación* [SEGOB]) is responsible for designating ports of entry for international transit. SEGOB confers with other institutions to decide where international ports of entry should be established. The Institute of National Asset Administration and Valuation (*Instituto Nacional de Administración y Avalúos de Bienes Nacionales* [INDAABIN]), which is responsible for managing the real property of the federal government, will follow the project's development through all stages, ensuring that federal design and construction regulations are met for this type of project. Once construction is completed, this agency will manage the facility. SAT, through

Customs (*Administración General de Aduanas*), is responsible for regulating customs systems and processes.

In the United States, Customs and Border Protection (CBP), the General Services Administration (GSA) and the Department of State (DOS) are the key stakeholders identified in the border crossing development process.⁶ The framework of the development process for new border crossings in the United States is similar to the one in Mexico, with one important difference—the Mexican process does not require a Presidential Permit.

Pending funding availability, the border crossing development process begins with identifying and defining the project, gathering CBP operational requirements, and developing scope and cost estimates. This initial phase includes the presentation of a feasibility study covering the project objectives, analysis of the project impacts on the rest of the country, potential environmental impacts and potential funding sources. This first phase of the project concludes with a recommendation to proceed with the application for a Presidential Permit and defines which agency will be leading the project. The lead agency's selection depends on the type of project being developed.

The second phase of the process consists of obtaining the Presidential Permit. This permit consists of a government-wide review of the project and an assessment of the project's national interest in the United States. This review includes an extensive environmental review under the United States National Environmental Policy Act (NEPA). In order to obtain the Presidential Permit, the environmental review must conclude with either a finding of no significant impact (FONSI), an environmental assessment or an environmental impact statement, as defined under NEPA law. During this phase, DOS is the lead agency for the review process and ultimately has to determine whether the project is in the national interest. If no United States government agency objects to the

⁶ For CBP-owned border crossings, CBP is the main stakeholders.

proposed project as described in the application and the environmental review has been completed, DOS will publish a notice of intent to issue a permit, followed by the Presidential Permit itself. If any government agency objects to the issuance of a permit (a rare circumstance), DOS forwards the permit application to the White House for consideration and decision by the President.

The third and fourth stages consist of the final design and construction.

A key element of border crossing development is binational coordination throughout the process. Coordination is critical for effective completion of each task of the project, especially those that require action on both sides of the border.

Diplomatic notes between the two countries and project presentations to the Binational Bridges and Border Crossings Group (BBBXG) helps establish international agreements and facilitate the processes. The process diagram presented in Figure ES.3 shows key diplomatic notes with milestones between project development phases. Some of the most relevant diplomatic notes include the first note, which expresses interest in development of a new border crossing by both countries. The second note is presented upon completion of preliminary design and feasibility studies and defines the geographic location of the new crossing. A final note is exchanged upon completion of construction and the start of operations.

Expansion and/or Modernization of Existing Border Crossing

In the United States, existing border crossings that have been identified as requiring maintenance or modification in a five-year community plan, building engineering report or other study, follow a process similar to the development of new border crossings. The main difference in the two processes is related to

the estimated total value of the project for the United States. If the value of the project in the United States is above a specified threshold, a prospectus document will have to be developed for the project.

The processes and requirements for border crossing expansion and modernization vary based on the nature of the project. In the United States, projects with a binational impact and/or involving substantial modifications to existing border crossing infrastructure require a Presidential Permit.⁷

If the project does not have a binational impact—meaning the construction or renovation is performed on one side of the border and there are no changes to traffic patterns—each country proceeds with the project and notifies the other on project progress. In Mexico, it is important to distinguish whether the proposed project affects roadways or other facilities. When the project impacts roadways leading to the border crossing, it has to be approved by SCT. When a project modifies facilities or buildings, it has to be approved by INDAABIN and/or the Tax Administration Service (*Servicio de Administración Tributaria [SAT]*).

In the United States, if the project budget exceeds a pre-established threshold, the project has to follow steps similar to a new border crossing. If the project is below this limit, GSA reviews the project and authorizes it to proceed to construction.⁸

Financial Mechanisms for Border Crossings in the United States and Mexico

Infrastructure modernization and development at the U.S.-Mexico border play an important role in the economies of both countries and the overall competitiveness of the region. The United States and Mexican Governments are committed to coordinating with each other in order to further border infrastructure development and determine binational

⁷ United States Department of State. (2007). Interpretative Guidance, Executive Order 11423. <http://www.state.gov/p/wha/rls/94946.htm>.

⁸ GSA Annual Prospectus Threshold, GSA. Retrieved from: <http://www.gsa.gov/portal/content/101522>.

priorities and their positive impact on economic development.

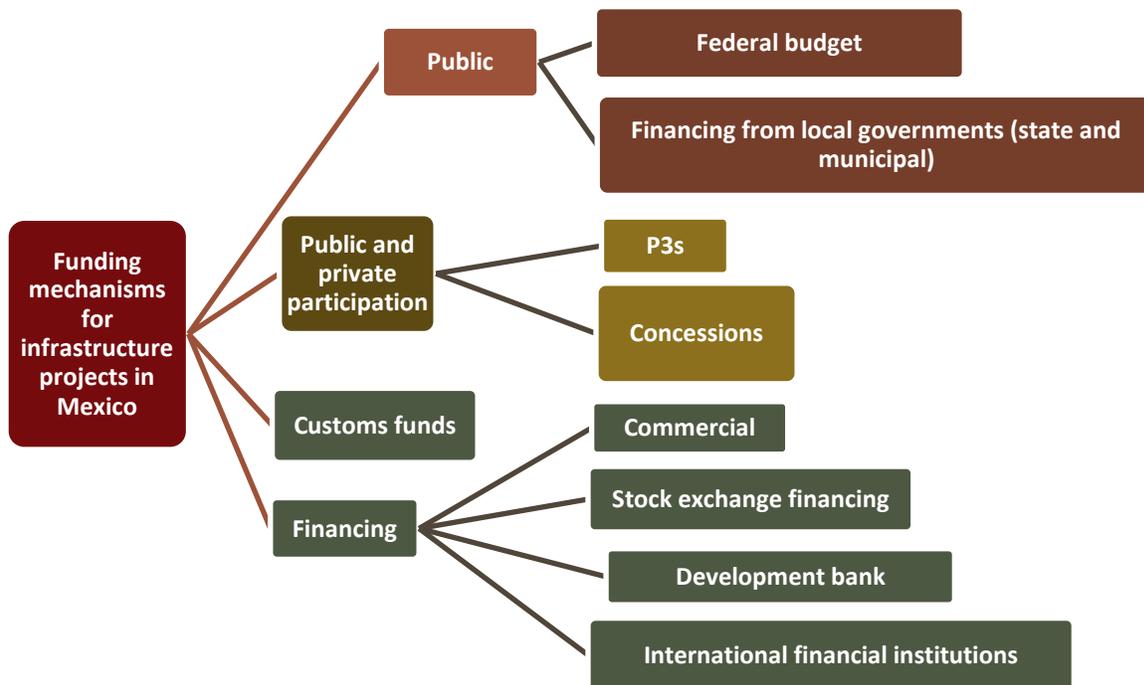
Figure ES.4 shows potential border crossing project financing alternatives in Mexico, including public sources (municipal, state and federal budgets; development banks; etc.) and private sources (various forms of public-private partnerships).

In the United States, most border crossing funding is done through appropriations from Congress (traditional mechanism). Other alternatives that have been developed include donations and public-public funding mechanisms (Figure ES.5). Under the traditional funding mechanism, GSA, as the property owner, collaborates with CBP in the operation of land border crossings. GSA's mission for border crossings is to *“develop and maintain processes, procedures and perform program oversight to ensure border crossings*

are developed consistently and to an acceptable standard.” CBP manages day-to-day facility operations through leases to GSA's infrastructure for border crossing maintenance and recapitalization. GSA and CBP prioritize capital investments at new or existing GSA-owned border crossings, as identified in the five-year plan. The President develops annual budgets with the assistance of the Office of Management and Budget (OMB), and Congress then authorizes and appropriates funds for said budget.

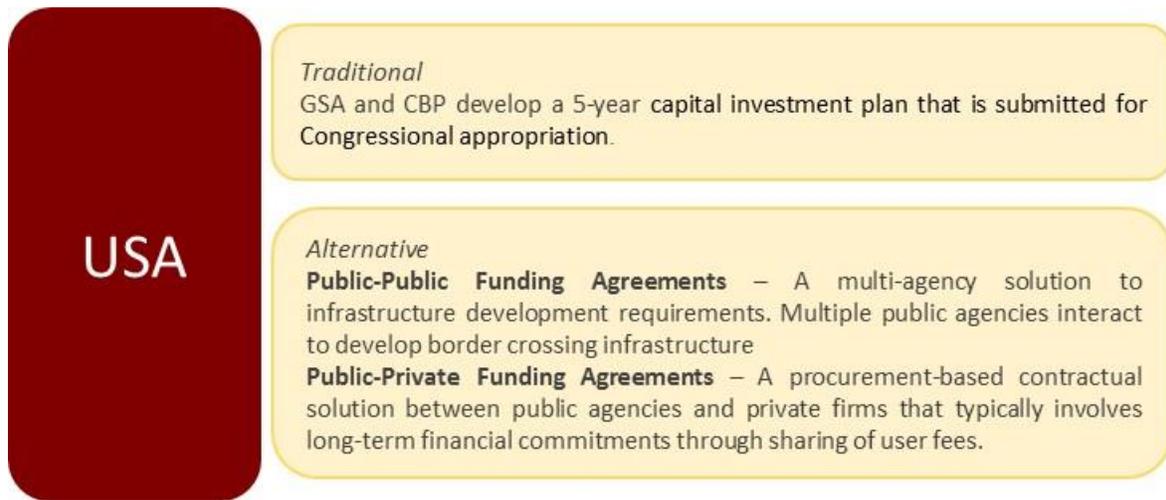
With limited federal resources, other funding sources must be identified to support most parts of a border crossing project. USDOT and state and local agencies participate in the project funding through public-private and public-public partnerships.

Figure ES. 4 Financial Mechanisms for Infrastructure Projects in Mexico



Source: Developed by FOA Consultores with information from Banco Nacional de Obras y Servicios Públicos (BANOBRAS), National Infrastructure Fund (FONADIN) and the 2015 Mexican Federal Budget.

Figure ES. 5 Financial Mechanisms in the United States



Source: Developed by TTI with information from GSA.

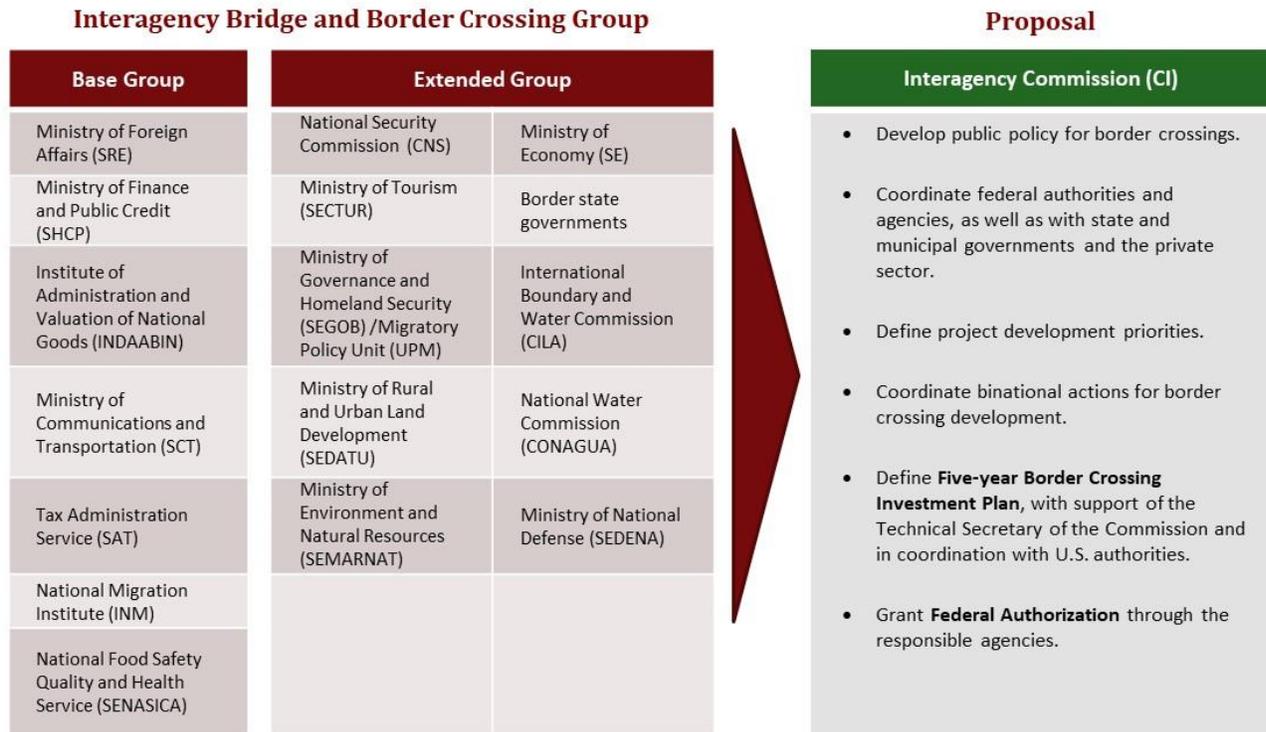
Conclusion and Recommendations

Border Crossing Development Process

The overall binational border crossing development process is not clearly defined or documented. The following actions are recommended to improve border crossing construction, expansion or modification projects along the U.S.-Mexico border.

- Agree on a standardized four-phase binational process for the development and construction of border crossings.
- Use a modified version of the RBMPs as a common binational (non-mandatory) source of project identification with more homogenous prioritization criteria and increase the institutional and technical participation of the agencies involved in project identification. Projects have to be aligned with national, regional and local planning efforts.
- The modified version of the RBMPs should be agreed by all federal, state and local agencies in both countries.
- Within the national planning framework of each country, define a five-year binational border crossing development plan, including the funding stream. This plan would define which projects could be developed under the current funding rules and which ones would be funded under the proposed binational border crossing funding mechanism.
- On the Mexican side of the border, transition the Interagency Bridge and Border Crossing Group to an Interagency Port-of-Entry Commission that would expedite project implementation (Figure ES.6).

Figure ES. 6 Evolution of the Mexican Interagency Group into a Commission



Source: Developed by FOA Consultores and TTI.

Border Crossing Financing

In order to make the financing of international bridges and border crossings more efficient, a two-phased approach is proposed. The initial phase would include strengthening current funding mechanisms in Mexico, and the second phase would entail creating binational funding mechanisms that would lead to more efficient project management.

The initial phase would require forming a trust fund in Mexico within the National Infrastructure Fund (*Fondo Nacional de Infraestructura* [FONADIN]) to consolidate funding support and lines of credit from various sources, including private capital and public-private partnerships.

During the second phase of the plan, it is recommended that a new financial mechanism be developed, the Bridges and Border Crossing Development Program, to include new projects, as well as modernization projects.

This binational program could be created under a specific trust fund in a binational institution. It would not replace existing funding mechanisms, but rather serve as an additional funding source for the development of international bridges and border crossings.

It is recommended that the program be designed taking into consideration the following factors:

- Clearly define which projects would be eligible.
- Establish minimum eligibility requirements.
- Develop a specific set of rules for funding requests for studies.
- Define the type of expenditures that would be eligible for financing through the program and establish funding caps.

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

- Define rules for projects that require operating subsidies.
- Define whether the program should require a competitive bidding process for all funded projects
- Consider incorporating other financing mechanisms into the program structure.
- Select the institutions that would participate on the trust fund credit committee to assess funding applications.
- Each project funded under the proposed Bridges and Border Crossing Development Program (which involves institutions from both countries) should have a project manager.

Information System

As part of this research project, a new information system was developed that allows users to store information regarding all border crossing projects along the U.S.-Mexico border. Border crossing projects have been classified as follows:

- Proposed projects.
- New projects.
- Binational modernization.
- National modernization.

This new system allows the information for all border crossing projects to be stored in one location. The system can be accessed via the following link: <http://biis-dev.tti.tamu.edu>.

Identified Border Crossing Infrastructure Projects

A list was compiled of border crossing infrastructure projects proposed for development in the short and medium term by federal, state and local agencies and the private sector in the United States and Mexico.

The list was developed by analyzing multiple documents, including national development plans, RBMPs, BBBXG meeting notes and other bilateral meeting documents. The identified projects are in different stages of development. A summary of the projects is presented in Table ES.1.

Projects were organized as new border crossings and modernization or expansion of existing border crossings. Expansion and modernization could be binational or national, depending on the type of project and whether it impacts both sides of the border or only one country.

Table ES. 1 Proposed U.S.-Mexico Border Crossing Projects

	List A	List B	List C	A + B - C
Project	U.S. & Mexican Governments	RBMPs	Projects Duplicated in Lists A and B	Total
New	10	21	5	26
Expansion/modernization	46	130	39	137
Binational	8	35	2	41
National	38	95	37	96
Total	56	151	44	163

Source: Mexican Ministry of Foreign Affairs (SRE), GSA, Office of Management Budget (OMB), Mexican National Infrastructure Program 2013–2018, RBMPs.

Chapter 1. Border Vision

This chapter summarizes the views of each country on trade and the border region, which is important for establishing a common working framework between the two countries that maximizes coordination efforts.

It is also important to understand how both governments use their institutions and programs to develop border crossings to reduce congestion, ensure the legitimate flow of goods and people and promote trade to increase the competitiveness of the region in a rapidly growing global economy. Identifying the institutional visions and common goals between the two countries could foster bilateral cooperation in order to increase the economic competitiveness of the border region.

The evolution of an institutional vision has always been important for both countries, but its importance increased after the implementation of NAFTA in 1994. Understanding the visions of the two governments provides an understanding of their decision-making dynamics and how objectives have evolved between 1994 and today.

The chapter is organized into three sections. The first section includes relevant data about the border region, including socioeconomic, trade and land border

crossing information. The second section presents the institutional border vision of the United States and Mexican Governments, and the third section covers observations related to how the border vision has evolved over time.

1.1 The U.S.-Mexico Border

1.1.1. Border Background Information

The U.S.-Mexico border extends 3,142 km (1,953 miles), from the Pacific Ocean at the border between Tijuana and San Ysidro to the mouth of the Rio Grande that empties into the Gulf of Mexico.⁹ The Rio Grande covers 64 percent of the total border between the two countries.¹⁰ The border region includes six states and 38 municipalities in Mexico, and four states and 23 counties in the United States (Tables 1.1 and 1.2; Figure 1.1).

⁹ Source: Ministry of Foreign Affairs (SRE).

¹⁰ Source: International Boundary and Water Commission (IBWC), SRE

Table 1.1 Mexican States and Municipalities at the U.S.-Mexico Border

Baja California	Sonora	Chihuahua	Coahuila	Nuevo León	Tamaulipas
1. Mexicali	4. Agua Prieta	14. Ascensión	21. Acuña	28. Anáhuac	29. Camargo
2. Tecate	5. Altar	15. Guadalupe	22. Guerrero		30. Guerrero
3. Tijuana	6. Caborca	16. Janos	23. Hidalgo		31. Gustavo Díaz Ordaz
	7. Naco	17. Juárez	24. Jiménez		32. Matamoros
	8. Nogales	18. Manuel Benavides	25. Nava		33. Mier
	9. Puerto Peñasco	19. Ojinaga	26. Ocampo		34. Miguel Alemán
	10. San Luis Río Colorado	20. Praxedis G. Guerrero	27. Piedras Negras		35. Nuevo Laredo
	11. Santa Cruz				36. Reynosa
	12. Sáric				37. Río Bravo
	13. General Plutarco Elías Calles				38. Valle Hermoso

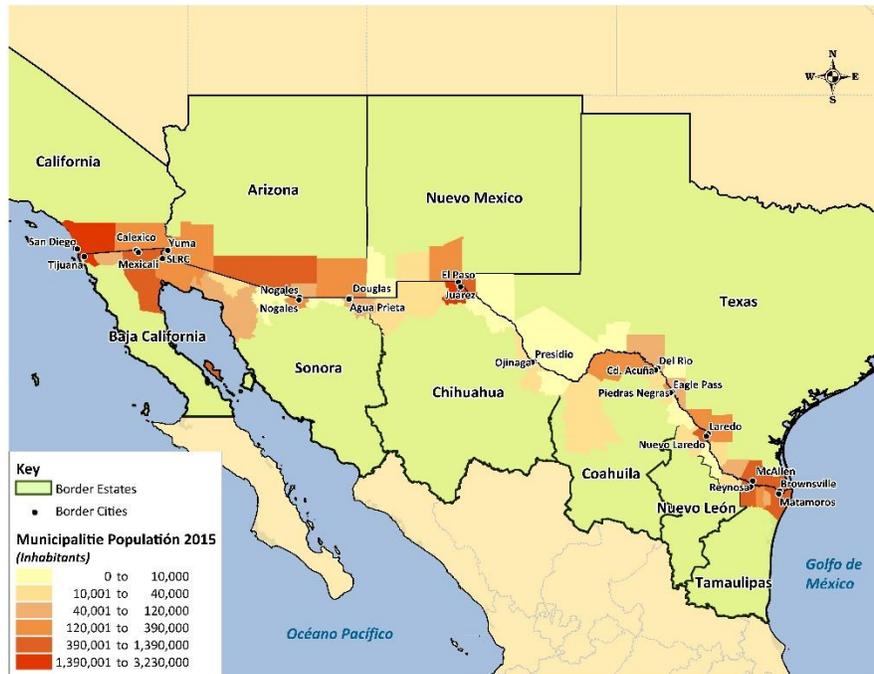
Source: Mexican National Institute of Statistics and Geography (*Instituto Nacional de Estadística y Geografía* [INEGI]). Single Catalog of State, Municipal and Local Geostatistics Areas. <http://www.inegi.org.mx/geo/contenidos/geoestadistica/catalogoclaves.aspx>

Table 1.2 U.S. States and Counties at the U.S.-Mexico Border

California	Arizona	New Mexico	Texas
1. Imperial	3. Cochise	7. Doña Ana	10. Brewster
2. San Diego	4. Pima County	8. Hidalgo	11. Cameron
	5. Santa Cruz	9. Luna	12. El Paso
	6. Yuma		13. Hidalgo
			14. Hudspeth
			15. Jeff Davis
			16. Kinney
			17. Maverick
			18. Presidio
			19. Starr
			20. Terrell
			21. Val Verde
			22. Webb
			23. Zapata

Source: United States Census Bureau. <https://www.census.gov/geo/maps-data/>

Figure 1.1 Binational Population Distribution along the U.S.-Mexico Border



Source: INEGI and United States Census Bureau.

According to 2015 statistical data, the border population is estimated to be 14.6 million inhabitants, with 7.1 million living in Mexican municipalities and 7.5 million in United States counties.¹¹ Population growth in the border region during the 2000-2015 period was 1.7 percent in the Mexican municipalities and 1.2 percent in the United States counties. This growth rate was higher than the national averages. Mexico grew at 1.5 percent and the United States grew at 0.8 percent during the same period.

The population on the Mexican side of the border region is concentrated in the state of Baja California, with 38.5 percent of the Mexican border region population, followed by 25.5 percent in Tamaulipas and 20.7 percent in Chihuahua. The rest of the population is distributed throughout the states of Sonora (9.8 percent), Coahuila (5.2 percent) and Nuevo León (0.3 percent).

In the United States, the border population is concentrated in California, with 45 percent of the U.S. border region population, followed by Texas with 33.6 percent, Arizona with 18.2 percent and New Mexico with 3.2 percent.

Figure 1.1 presents binational population distribution along the U.S.-Mexico border, in millions of people per region. Most of the border population is concentrated in three regions with 11.1 million people that represent 76.1% of the total border population. The largest concentration with 6.1 million people is in the municipalities of Mexicali, Tecate and Tijuana in state of Baja California and in San Diego and Imperial counties in California. The second largest concentration with 2.6 million of people is in the municipalities of Matamoros, Reynosa, Río Bravo and Valle Hermoso in the state of Tamaulipas, and in Hidalgo and Cameron counties in Texas. The third region is

¹¹ Source: INEGI, Tabulados y Microdatos de la Encuesta Intercensal 2015.

U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates.

formed by Juárez, Chihuahua and El Paso, Texas and Doña Ana, New Mexico, with 2.4 million people. The remaining 3.5 million people are scattered along the rest of the border.

Existing Border Crossings and International Bridges

A border crossing is specialized infrastructure with personnel, facilities, equipment and specific procedures to control the flow of pedestrians, vehicles and goods between two countries.¹² Access could be by foot, road, rail or some combination thereof. The infrastructure is designed to control migratory flows based on demand in the region. Such facilities are considered strategic because they concentrate various agencies responsible for the enforcement of federal laws relating to the movement of merchandise, people, plants and animals at the border. In some cases, border crossings are associated with cities on both sides of the border, and there may be more than one linking two cities.

During this study, various sources were identified in both countries that had diverging border crossing totals. After matching figures and criteria, we concluded that, of the 59 border crossings along the U.S.-Mexico border, 55 are in operation and four are closed (Ojinaga-Presidio rail crossing, La Linda-Heath Canyon, Miguel Alemán-Roma and Caseta-Fabens) (Figure 1.2).

Only seven of these border crossings have railroad tracks to handle the crossing of freight trains:

1. Brownsville-Matamoros
2. Laredo-Nuevo Laredo
3. Eagle Pass-Piedras Negras

4. El Paso-Ciudad Juárez (2 crossings)
5. Nogales-Nogales
6. Calexico-Mexicali
7. San Ysidro-Tijuana

The Mexican state with the largest number of border crossings in operation is Tamaulipas with 18, equivalent to 32.7 percent of the total. In the United States, Texas has 33 border crossings in operation, representing 60% of the total. Table 1.4 presents the number of border crossings in operation per state.

Border crossings have the capacity to handle the flow of various types of users, such as pedestrians, private vehicles, passenger buses, trucks and freight trains depending on the type of facilities and infrastructure with which they were built. They are also classified according to traffic type: privately-owned vehicles (POVs) or passenger vehicles (light vehicles), commercial vehicles (CVs) or trucks, mixed traffic and pedestrian traffic. Table 1.3 lists the border crossing and the type of users they currently serve.

Not all border crossings have the facilities to serve all types of vehicles. Some border crossings are dedicated exclusively to the transit of private vehicles and other to the transit of commercial vehicles. Only Nuevo Leon and New Mexico do not have railroad crossings. A few border crossings in the rest of the states have the infrastructure to move railroad cargo for foreign trade.

¹² Conceptual model of a border crossing and platforms to simulate its operation. Mexican Institute of Transportation. 2014.

Table 1.3 Roadway Border Crossings at the U.S.-Mexico Border, 2016

No	MX State	US State	Name	Cities	Pedestrians	POV	Trucks
1	Tamaulipas	Texas	Veterans International Bridge	Brownsville/Matamoros	✓	✓	✓
2			Gateway International Bridge	Brownsville/Matamoros	✓	✓	
3			B&M Bridge	Brownsville/Matamoros	✓	✓	
4			Free Trade Bridge	Los Indios/ Lucio Blanco	✓	✓	✓
5			Progreso International Bridge	Progreso/Nuevo Progreso	✓	✓	✓
6			Donna International Bridge	Donna/ Rio Bravo		✓	
7			Pharr-Reynosa Intl. Bridge on the Rise	Pharr/ Reynosa	✓	✓	✓
8			McAllen-Hidalgo-Reynosa Bridge	Hidalgo/ Reynosa	✓	✓	
9			Anzalduas International Bridge	Mission/ Reynosa		✓	
10			Los Ebanos Ferry	Los Ebanos/ Gustavo Díaz Ordaz	✓	✓	
11			Rio Grande City-Camargo Bridge	Rio Grande City/ Camargo	✓	✓	✓
12			Roma-Ciudad Miguel Aleman Bridge	Roma/ Ciudad Miguel Aleman	✓	✓	✓
13			Lake Falcon Dam Crossing	Falcon Heights/ Ciudad Guerrero		✓	
14			Juarez-Lincoln Bridge	Laredo/ Nuevo Laredo		✓	
15			Gateway to the Americas Bridge	Laredo/ Nuevo Laredo	✓	✓	
16			World Trade Bridge	Laredo/ Nuevo Laredo	✓		✓
17	Nuevo León	Texas	Laredo-Colombia Solidarity Bridge	Laredo/ Colombia	✓	✓	✓
18	Coahuila	Texas	Camino Real International Bridge	Eagle Pass/ Piedras Negras	✓	✓	✓
19			Eagle Pass Bridge I	Eagle Pass/ Piedras Negras	✓	✓	
20			Del Rio-Ciudad Acuna Intl. Bridge	Del Rio/ Ciudad Acuña	✓	✓	✓
21			Lake Amistad Dam Crossing	Del Rio/ Ciudad Acuña		✓	
22			Boquillas Crossing Port of Entry	Brewster/ Ocampo	✓		
23	Chihuahua	Texas	Presidio Bridge	Presidio/ Ojinaga	✓	✓	✓
24			Fort Hancock-El Porvenir Bridge	Fort Hancock/ El Porvenir	✓	✓	

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

No	MX State	US State	Name	Cities	Pedestrians	POV	Trucks
25			Tornillo-Guadalupe Bridge	Fabens/ Caseta	✓	✓	✓
26			Ysleta-Zaragoza Bridge	El Paso/ Ciudad Juarez	✓	✓	✓
27			Bridge of the Americas	El Paso/ Ciudad Juarez	✓	✓	✓
28			Good Neighbor Bridge (Southbound only; northbound dedicated commuter lane)	El Paso/ Ciudad Juarez		✓	
29			Paso del Norte Bridge	El Paso/ Ciudad Juarez	✓	✓	
30	Chihuahua	New Mexico	Santa Teresa	Doña Ana/ Ciudad Juarez	✓	✓	✓
31			Columbus	Columbus/ Puerto Palomas	✓	✓	✓
32			Antelope Wells	Antelope Wells/ Berrendo	✓	✓	
33	Sonora	Arizona	Douglas	Douglas/ Agua Prieta	✓	✓	✓
34			Naco	Naco / Naco	✓	✓	✓
35			Morley Gate	Nogales/ Nogales	✓		
36			Nogales Deconcini	Nogales/ Nogales	✓	✓	
37			Nogales Mariposa	Nogales/ Nogales	✓	✓	✓
38			Sasabe	Sasabe/ El Sasabe	✓	✓	✓
39			Lukeville	Lukeville/ Sonoyta	✓	✓	✓
40			San Luis II	San Luis/ San Luis Rio Colorado			✓
41			San Luis I	San Luis/ San Luis Rio Colorado	✓	✓	
42	Baja California	California	Andrade	Andrade/ Los Algodones	✓	✓	
43			Calexico East	Calexico/ Mexicali	✓	✓	✓
44			Calexico West	Calexico/ Mexicali	✓	✓	
45			Tecate	Tecate/ Tecate	✓	✓	✓
46			Otay Mesa	Otay Mesa/ Tijuana	✓	✓	✓
47			Tijuana Airport Cross-Border Terminal/ Cross Border Xpress	Otay Mesa/ Tijuana	✓		
48			San Ysidro	San Ysidro/ Tijuana	✓	✓	

Source: Secretaría de Relaciones Exteriores, 2016. U.S. Customs and Border Protection (CBP). Texas Department of Transportation Texas-Mexico international Bridges and Borders Crossing 2015. U.S. Department of Transportation, Bureau of Transportation Statistics 2016. Arizona Town Hall Research Committee. Note. Does not include the seven that provide rail service.

Table 1.4 Number of Border Crossings by State at the U.S.-Mexico Border

Border States	Border Crossings in Operation
Baja California–California	9
Sonora–Arizona	10
Chihuahua–Nuevo México	3
Chihuahua–Texas	8
Coahuila–Texas	6
Nuevo León–Texas	1
Tamaulipas–Texas	18
Total	55

Source: Secretaría de Relaciones Exteriores, 2016. U.S. Customs and Border Protection (CBP). <https://www.cbp.gov/contact/ports>
 Texas Department of Transportation Texas-Mexico International Bridges and Borders Crossing 2015

Figure 1.2 U.S.-Mexico Border Crossings



Source: Secretaría de Relaciones Exteriores, 2016. U.S. Customs and Border Protection (CBP). <https://www.cbp.gov/contact/ports>
 Texas Department of Transportation Texas-Mexico international Bridges and Borders Crossing 2015.

Historical Evolution of Border Crossings

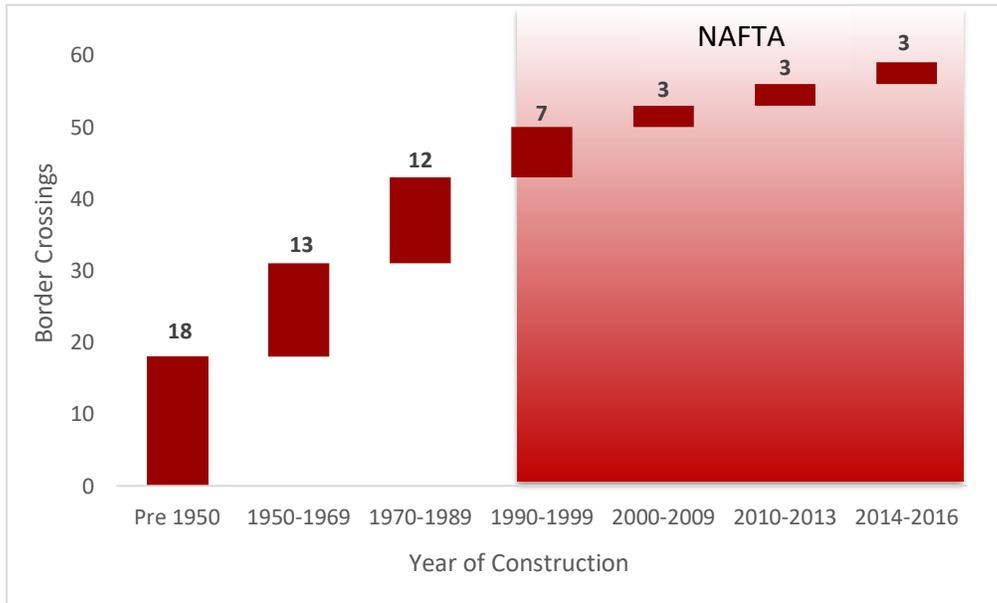
Thirty-one percent of the border crossings in operation were built prior to 1950, 42 percent were constructed between 1950 and 1990, and the remaining 27 percent were built to accommodate growing trade flows along the U.S.-Mexico border in the period following the implementation of NAFTA. Figure 1.3 presents the number of crossings built by time period. Eight border crossings were built in the 1990s and six in the 2010s.

Reconstruction and major maintenance works have been performed on the oldest border crossings so they are kept in good working condition. The border crossings with the greatest capacity and serving high volumes of demand (both for commercial and light vehicles) are those most recently constructed, mainly from 1990 to 1995.

At the time this report was reviewed, two new projects had been inaugurated: the first is Cross Border Xpress, which connects, through a pedestrian bridge, the airports of Tijuana and San Diego;¹³ and the second is the new Chaparral-San Ysidro border crossing (PedWest) that serves northbound flow to the United States.¹⁴

In addition, the facilities of four border crossings were modernized: the Los Ebanos Ferry and Lake Amistad Dam Crossing in Texas, Antelope Wells in New Mexico and Nogales-Mariposa in Arizona.¹⁵

Figure 1.3 Age of U.S.-Mexico Border Crossings



Source: Secretaría de Relaciones Exteriores, 2016.
Texas-México International Bridges and Border Crossings, 2015.

¹³ <https://www.gob.mx/sre/articulos/conexion-peatonal-aeroportuaria-tijuana-san-diego?idiom=es>

¹⁴ <https://www.gsa.gov/portal/content/139410>
¹⁵ Information provided by Texas DOT, December 2016.

1.1.2 Analysis of Economic and Trade Potential of the U.S.-Mexico Border

U.S.-Mexico Trade

NAFTA trade has played a major role in the growth of the gross domestic product (GDP) of both the United States and Mexico. Border states contribute to nearly a quarter of the total GDP of each country (22 percent in Mexico and 24 percent in the U.S. in 2012). Low-cost labor, engineering/construction services and land availability in Mexico, along with science/technology expertise, research and development, and access to capital in the United States, have made the border a highly competitive region.

A significant amount of employment in the border states is directly related to trade and transportation. In the United States, an estimated six million jobs depend directly on U.S.-Mexico trade.¹⁶

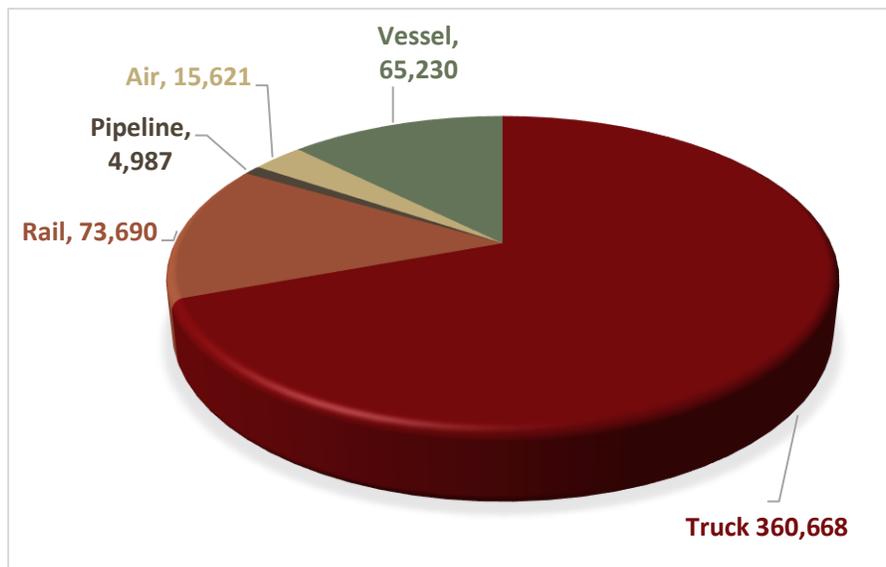
In 2014, Mexican foreign trade grew to a total of US\$797 billion, with manufactured goods accounting

for 67 percent of total trade with the United States and Canada.

Recently, a decrease in total imports from the United States and Canada has created an opportunity for other countries to increase their participation in the Mexican market. China supplied 15 percent of Mexico's purchases from abroad in 2014, while the United States accounted for 64% of Mexico's foreign trade and Canada participated with 2.7%.

More than 80 percent of U.S.-Mexico trade as measured in monetary value is handled by truck or rail through land ports of entry (Figure 1.4). Trade between the two countries doubled between 2004 and 2014 (Figure 1.5). This trend is expected to continue and will require changes to border-crossing infrastructure and processes to reduce congestion and delays that impact the competitiveness of the region.

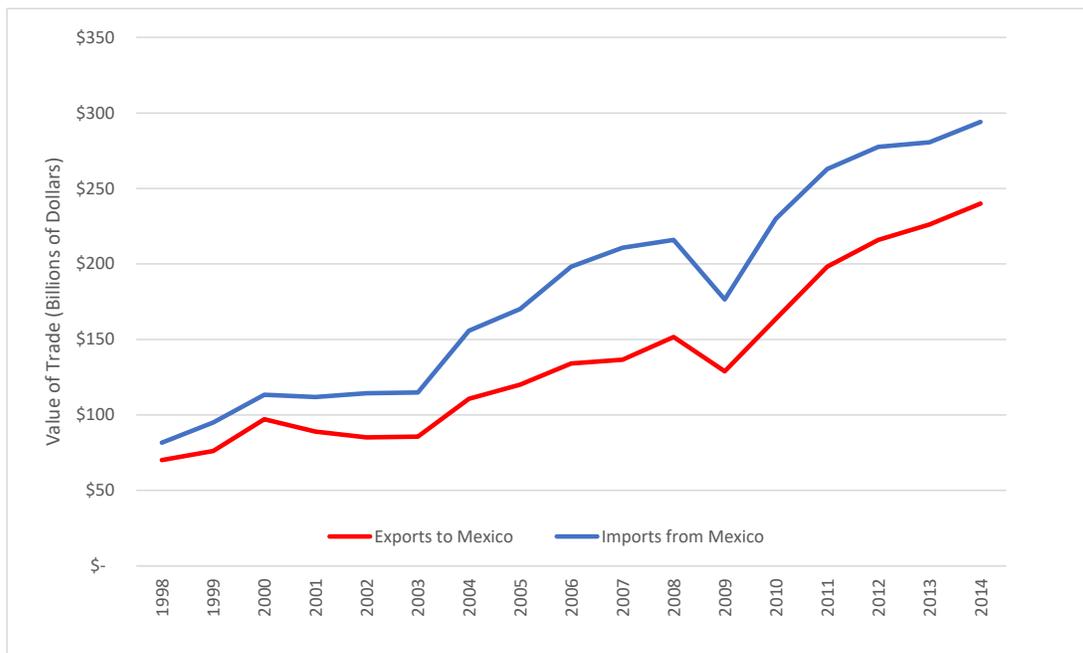
Figure 1.4 U.S.-Mexico Trade by Transportation Mode, 2014 (US\$ Millions)



Source: U.S. Department of Transportation, Bureau of Transportation Statistics
http://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

¹⁶ U.S.-Mexico Chamber of Commerce, <http://www.usmcc.org/new.php?id=110>.

Figure 1.5 U.S.-Mexico Trade (1998–2014)



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, http://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

Global Trade Analysis

International trade is concentrated in three large regions: North America, Europe and Asia. In 2013, these three trade regions accounted for 81 percent of world exports and 83 percent of imports (Figure 1.6 and Table 1.5).¹⁷

Europe had the highest value of exports and imports to/from other countries, with 36 percent of total world trade. Almost 70 percent of its trade was within European countries.

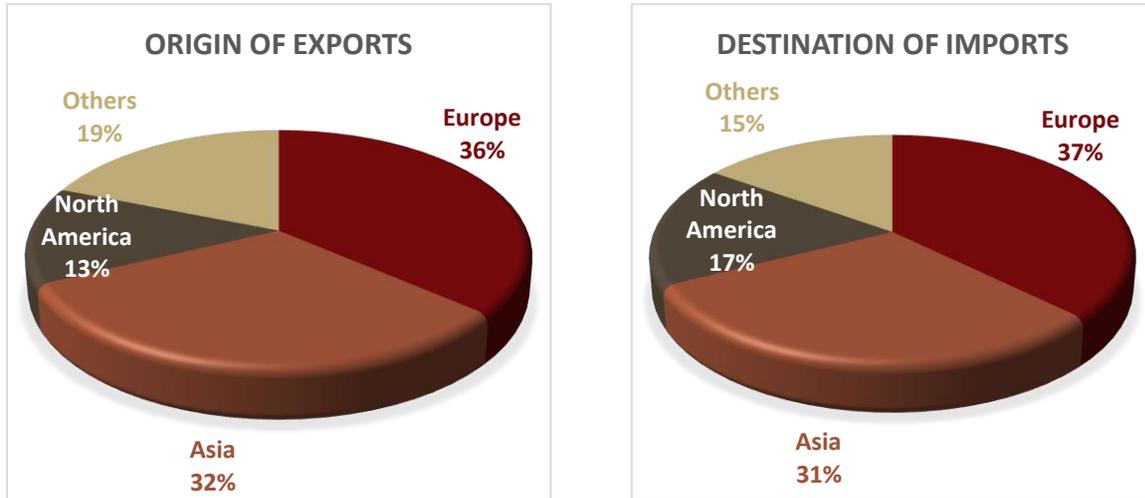
The Asian trade region is the second largest and generated US\$5.7 billion in trade, with 54 percent of it intraregional trade.

In North America, 49 percent and 38 percent of exports and imports, respectively, were interregional (Mexico, Canada and the United States).

Mexico’s main trade partners are the United States and Canada, with the United States accounting for more than 80 percent of Mexico’s trade. U.S. trade with Mexico is increasing at a faster rate than with Canada. Between 2010 and 2013, total U.S.-Canada trade increased at an annual rate of 10 percent, while U.S.-Mexico trade increased at a rate of 14 percent.

¹⁷ World Trade Organization (WTO) 2014 Statistics Database.

Figure 1.6 International Trade by Trade Region, 2013
(US\$ Billion)



Source: International Trade Statistics, WTO 2014.
https://www.wto.org/english/res_e/statis_e/statis_e.htm

Table 1.5 Intraregional and Interregional Trade, 2013
(US\$ Billions)

Region	North America	Europe	Asia	Others	World
World	\$3,082	\$782	\$6,669	\$566	\$618
North America	1,189	216	368	19	40
Europe	506	129	4,560	253	222
Asia	1,012	191	855	128	188
Others	375	245	886	166	168

Source: International Trade Statistics, WTO 2014.
https://www.wto.org/english/res_e/statis_e/statis_e.htm

Trends in manufacturing structures and supply chains have been changing recently, with production sites being built closer to consumer markets. Mexico is an important player in this “nearshoring,” due to its geographic location close to the large U.S. consumer market. Many global manufacturing companies have been establishing manufacturing centers in Mexico or expanding operations to take advantage of low logistics costs (labor), and shorter distances to the U.S. consumer market.

Other benefits that have been identified for nearshoring in Mexico include:

- 13 free trade agreements.
- Strategic geographic location.
- Stable domestic economy.
- Better supplier network.
- Less cultural differences compared to China.
- Lower transportation costs.
- Similar time zone.

- Better operation control.
- Fast-growing domestic markets.
- Demographics (48 percent of the Mexican population is under 26 years old).

Nearshoring will bring additional U.S.-Mexico cross-border traffic. As mentioned earlier, more than 80 percent of trade is handled by truck and rail. Consequently, border crossing infrastructure will need to be developed more expeditiously to maintain the competitiveness of North America against other global trading blocs. Land transport modes (truck, rail and pipelines) handled 84.5% of the total value of goods transported between the United States and Mexico in 2014, while maritime and air transport handled 15.5% (Figure 1.7).

1.1.3 Vehicle and Pedestrian Crossings on U.S. - Mexico Border

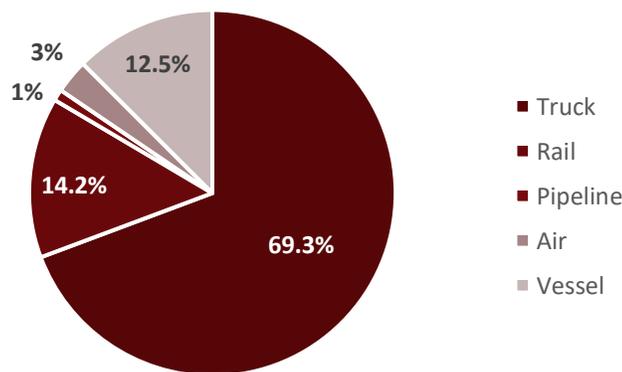
Figure 1.8 presents the percentage change in northbound crossings in the 1995-2014 period for pedestrians, POVs and CVs. In the 1995-2007 period, POV and pedestrian crossings from Mexico into the U.S.

grew substantially. However, since 2008, the number of pedestrians and POVs crossing from Mexico into the United States has declined (Figures 1.9 and 1.10). The average annual growth rate (AAGR) for pedestrian crossings was 1.2 percent in the 1995-2014 period.

In 2011, northbound POV crossings were at the lowest level since the late 1990s, with 61.2 million crossings. Violence from organized crime in the Mexican border region, especially in Tijuana, Juarez, Reynosa and Matamoros, has discouraged legitimate crossings throughout the region. Northbound POV crossings had an AAGR 0.6 percent for the 1995-2014 period.

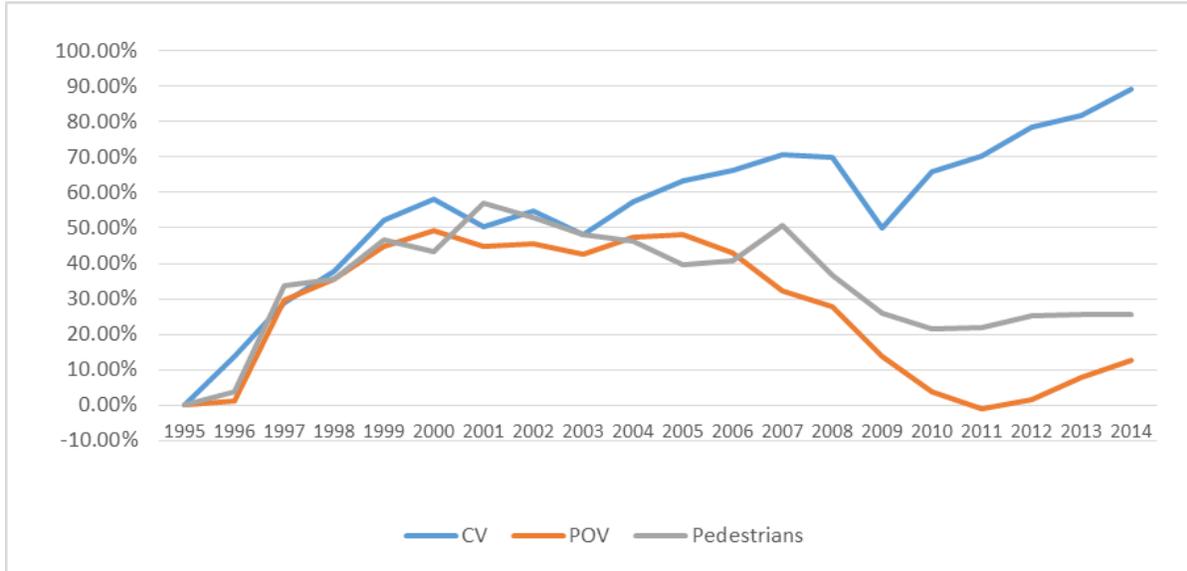
Northbound CV crossings have increased almost constantly since 1995, except for a decline in the 2008-2009 period, followed by a sharp increase in 2010 and steady growth thereafter (Figure 1.11). During the 1995-2000 period, the AAGR was 9.6 percent, and between 2010 and 2014, following the recession, the AAGR was 3.1 percent, higher than national GDP growth in Mexico (2.9 percent). The overall AAGR for the 1995-2014 period was 3.4 percent. This sustained growth, especially in border crossings operating at full capacity, will require additional infrastructure and creative schemes for a more efficient CV border crossing.

Figure 1.7 Total U.S.-Mexico Trade by Transportation Mode



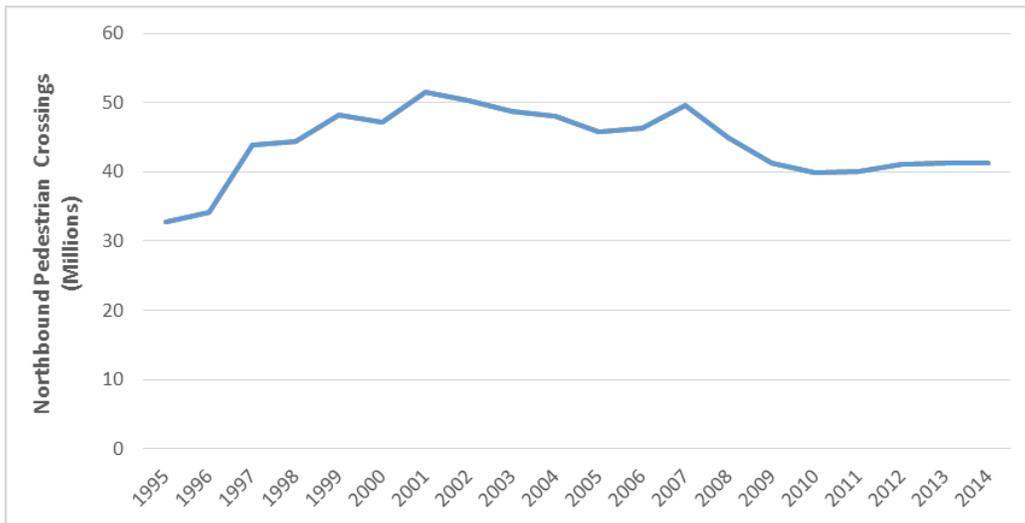
Source: Bureau of Transportation Statistics, 2014, Accessed 01/04/2017
https://transborder.bts.gov/programs/international/transborder/TBDR_QuickSearch.html

Figure 1.8 CV, POV and Pedestrian Northbound Crossing Change Rate (1995–2014)
(1995 index = 100)



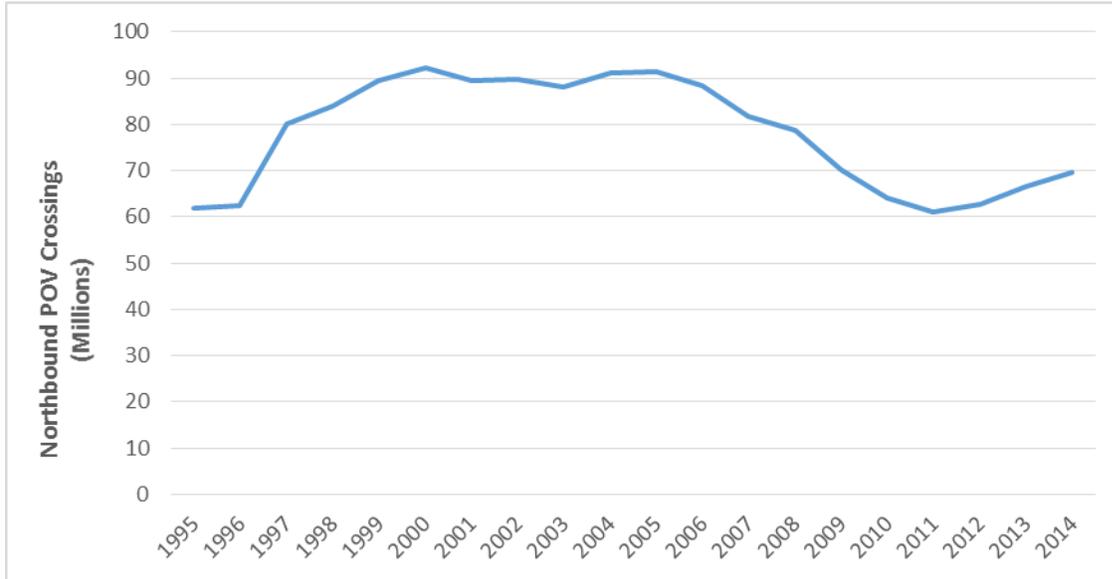
Source: U.S. Department of Transportation, Bureau of Transportation Statistics
https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

Figure 1.9 Northbound Pedestrian Crossings (1995–2014)



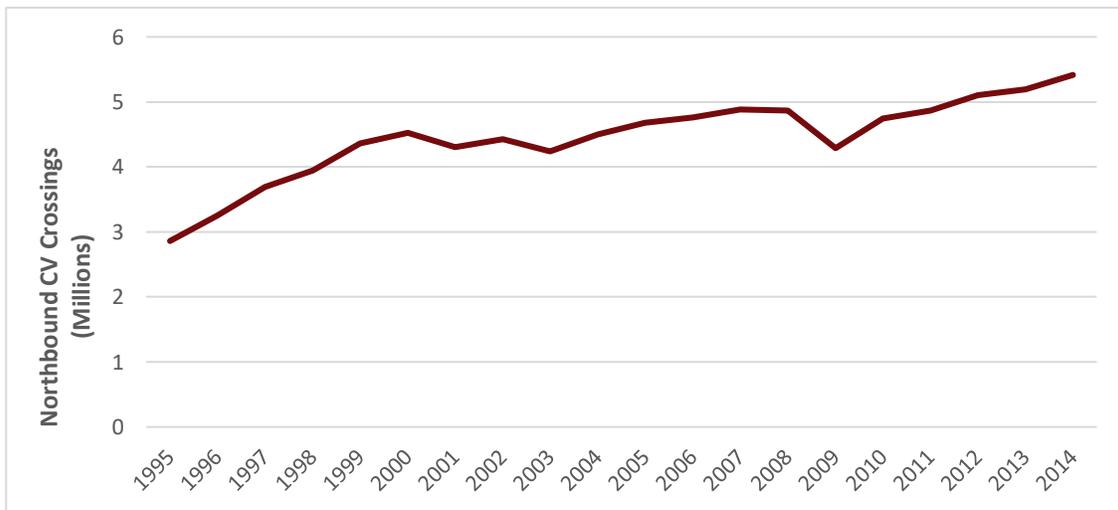
Source: U.S. Department of Transportation, Bureau of Transportation Statistics
https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

Figure 1.10 Northbound POV Crossings (1995-2014)



Source: U.S. Department of Transportation, Bureau of Transportation Statistics.
https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

Figure 1.11 Northbound CV Crossings (1995-2014)



Source: U.S. Department of Transportation, Bureau of Transportation Statistics
https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

Vehicle and Pedestrian Crossings by Port of Entry along the U.S.-Mexico Border

The dynamics of the border population and trade by CV in the region have led to a large number of vehicle crossings at the border. In 2014, 69.6 million POVs and 5.4 million CVs crossed from Mexico into the United States. Sixty-seven percent of the trucks moving northbound were loaded vehicles.

The concentration of the population on the Pacific coast led to the highest number of POV crossings at the Tijuana-San Ysidro border, while the Texas-Tamaulipas commercial corridor—the main commercial corridor between the U.S. and Mexico—accounted for the highest volume of CV crossings (Table 1.6).

Texas ports of entry handled 70 percent of total CV crossings, since this state has the largest number of ports of entry. California handled 22 percent of crossings, while Arizona handled 7 percent and New Mexico handled 2 percent. Five urban areas accounted for 80 percent of total truck crossings: Laredo-Nuevo Laredo (36 percent), Otay Mesa-Mesa de Otay (15 percent), El Paso-Cd. Juarez (14 percent), Hidalgo (McAllen)-Reynosa (10 percent) and Calexico East-Mexicali II (5 percent) (Table 1.7).

In 2014, 47 percent of POV crossings took place in Texas, followed by California with 40 percent, Arizona with 12 percent and New Mexico with 1 percent. Population concentrations at the Texas and California borders have led to a high number of POV crossings. The San Diego-Tijuana, Calexico-Mexicali, El Paso-Cd. Juárez, McAllen-Reynosa and Brownsville-Matamoros border regions, have a population of over 10 million inhabitants.

Four urban areas accounted for 52 percent of total crossings: San Ysidro-Tijuana (Chaparral) (17 percent), Cd. Juárez-El Paso (17 percent), Otay Mesa-Mesa de Otay (10 percent) and Laredo-Nuevo Laredo (8 percent).

Pedestrian crossings are concentrated in California (43 percent) and Texas (41 percent), while Arizona handled 15 percent and New Mexico 1 percent. The San Ysidro-Tijuana crossing is the largest with 19 percent of total pedestrian crossings, while El Paso-Cd. Juarez handled 16 percent, and Otay Mesa-Mesa de Otay and Laredo-Nuevo Laredo each handled 8 percent (Table 1.8). These four border crossings handled 51 percent of total pedestrian crossings.

Table 1.6 Northbound Traffic Volumes by Border Region, 2014
(Millions of Vehicles)

Region	POV	CV
Baja California-California	27.6	1.2
Sonora-Arizona	8.5	0.4
Chihuahua-New Mexico	0.8	0.1
Chihuahua-Texas	12.5	0.8
Coahuila-Texas	3.8	0.2
Nuevo León/Tamaulipas-Texas	16.4	2.8
Total	69.6	5.4

Source: U.S. Department of Transportation, Bureau of Transportation Statistics.
https://transborder.bts.gov/programs/international/transborder/TBDR_BC/TBDR_BCQ.html

Table 1. 7 Northbound CV Crossings by Metropolitan Area, 2014

State	Metro Area	Total Trucks	Loaded Trucks %
California	Total	1,187,675	69%
	Otay Mesa	810,193	75%
	Calexico East	325,243	55%
	Tecate	52,239	52%
Arizona	Total	380,751	77%
	Nogales	312,010	82%
	Douglas	33,104	53%
	San Luis	31,968	54%
	Naco	3,601	97%
	Lukeville	68	0%
New Mexico	Total	101,520	67%
	Santa Teresa	87,597	63%
	Columbus	13,923	90%
Texas	Total	3,744,622	69%
	Laredo	1,947,846	76%
	El Paso	759,125	51%
	Hidalgo	530,093	72%
	Brownsville	209,989	62%
	Eagle Pass	136,506	64%
	Del Rio	69,048	76%
	Progreso	41,416	74%
	Rio Grande City	32,459	92%
	Presidio	10,584	42%
	Roma	7,556	57%
Grand Total		5,414,568	70%

Source: U.S. Department of Transportation, Bureau of Transportation Statistics,
https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

Table 1. 8 Northbound POV and Pedestrian Crossings by Metropolitan Area, 2014

State	Metro Area	POVs	Buses	Pedestrians
California	Total	27,593,261	101,415	17,762,847
	San Ysidro	11,946,060	57,171	7,925,371
	Otay Mesa	6,910,219	41,222	3,415,957
	Calexico	4,071,666	0	4,567,333
	Calexico East	3,399,697	2,785	310,344
	Tecate	812,540	237	743,666
	Andrade	453,079	0	800,176
Arizona	Total	8,518,851	12,236	6,310,951
	Nogales	3,286,532	9,423	2,886,022
	San Luis	3,028,042	36	2,287,955
	Douglas	1,571,929	2,267	1,011,564
	Lukeville	316,429	498	44,716
	Naco	298,368	12	79,325
	Sasabe	17,551	0	1,369
New Mexico	Total	821,490	1,624	442,904
	Santa Teresa	463,799	129	175,112
	Columbus	357,691	1,495	267,792
Texas	Total	32,690,091	98,505	16,706,590
	El Paso	11,595,319	21,554	6,572,313
	Laredo	5,250,601	41,230	3,447,437
	Hidalgo	4,565,037	26,087	2,290,469
	Brownsville	4,325,554	7,625	2,232,400
	Eagle Pass	2,466,385	1,027	856,700
	Del Rio	1,347,713	0	104,252
	Progreso	1,174,447	0	760,655
	Roma	703,473	429	247,768
	Presidio	616,002	553	77,759
	Rio Grande City	359,642	0	60,193
	Fabens*	285,918	0	56,644
Grand Total		69,623,693	213,780	41,223,292

Source: U.S. Department of Transportation, Bureau of Transportation Statistics.
https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

* The border crossing in Fabens was closed in November 2014, but another was opened in nearby Tornillo in February 2016.¹⁸

¹⁸ On February 4, 2016, the Guadalupe-Tornillo International Bridge was inaugurated. This bridge connects the towns of Tornillo, Texas and Guadalupe, Chihuahua, and will replace the of international Caseta-Fabens bridge built in 1938.

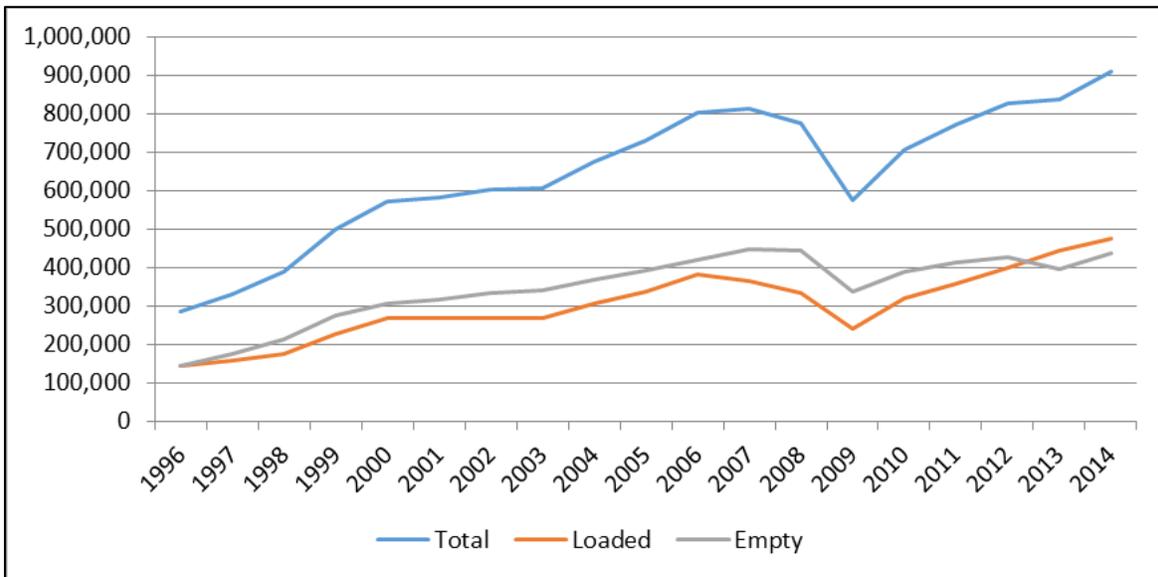
<https://www.dhs.gov/news/2016/02/04/us-and-mexican-officials-celebrate-inauguration-port-entry-and-international-bridge>

U.S.-Mexico Border Rail Crossings

A total of 909,923 northbound railcars crossed the border in 2014, with 52 percent of the cars loaded and 48 percent of the cars empty. Rail crossings at the U.S.-Mexico border had an AAGR of 21.4 percent between 1998 and 2000 as a result of the Mexican rail privatization process. In the 2000-2006 period, the AAGR was 7.6 percent, while in the 2006-2009 period negative growth due to the economic recession resulted in an AAGR of -16.0 percent. Between 2009 and 2014, rail-crossing volume rebounded with an AAGR of 9.6 percent (Figure 1.12). The AAGR between 1996 and 2014 was 6.6 percent.

In 2014, 91 percent of rail crossings between Mexico and the United States occurred in the state of Texas. The Laredo-Nuevo Laredo border crossing handled 45 percent of total crossings. Eagle Pass followed with 28 percent, and the rest was distributed between El Paso (11 percent) and Brownsville (7 percent). On average, 27 trains per day crossed the U.S.-Mexico border (Table 1.9).

Figure 1.12 Railcar Crossings (1996-2014)



Source: U.S. Department of Transportation, Bureau of Transportation Statistics, https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

Table 1.9 Northbound Train Crossings by Port of Entry, 2014

State	Border Crossing	Trains	Loaded Cars	Empty Cars
Texas	Total	8,605	430,476	393,515
	Laredo	3,758	254,849	150,227
	Eagle Pass	2,728	121,329	132,998
	El Paso	1,434	43,351	55,944
	Brownsville	685	10,947	54,346
Arizona	Total	795	42,802	32,963
	Nogales	795	42,802	32,963
California	Total	457	588	9,649
	San Ysidro	252	587	6,561
	Calexico	205	1	3,088
Total		9,857	473,866	436,127

Source: U.S. Department of Transportation, Bureau of Transportation Statistics
https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

The Laredo-Nuevo Laredo rail crossing, which serves Kansas City Southern de Mexico on the Mexican side and Union Pacific Railroad and Kansas City Southern on the United States side, is the largest border crossing, with 50 percent of total railcar crossings in 2014.

As shown in Table 1.10, the value of Mexican exports moved by rail to the United States in 2014 was close to US\$44 billion, while almost US\$30 billion worth of goods was exported from the United States to Mexico by rail. Laredo was the border crossing that had the

highest volume of Mexican exports, with 42 percent of the total value via rail. Eagle Pass handled 28 percent, El Paso 15 percent, Nogales 14 percent and Brownsville 1 percent.

Laredo was also the border crossing that registered the largest amount of Mexican imports by rail in 2014. Laredo handled 60 percent of the total value, followed by Eagle Pass with 14 percent, Nogales with 13 percent, El Paso with 9 percent, Brownsville with 3 percent, and San Ysidro and Calexico with 1 percent each.

Table 1.10 Value of Freight Transported by Rail, 2014
(US\$ Millions)

U.S. Exports to Mexico		U.S. Imports from Mexico	
Laredo	17,800	Laredo	18,375
Eagle Pass	4,191	Eagle Pass	12,354
Nogales	3,858	El Paso	6,510
El Paso	2,560	Nogales	6,185
Brownsville	764	Brownsville	499
Calexico-East	200	Calexico-East	31
San Ysidro	150		
Calexico	45		
Other border crossings	9		
Total	29,578	Total	43,955

Source: U.S. Department of Transportation, Bureau of Transportation Statistics
https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

Eighty-eight percent of Mexican rail exports (as measured in tons) passed through a bridge in Texas in 2014. Thirty-nine percent of Mexican exports crossed through Eagle Pass, 30 percent through Laredo, 12 percent through El Paso, 12 percent through Nogales, 7 percent through Brownsville and a few tons through Calexico East. Mexico exported more than 12.2 million tons of goods by rail to the United States in 2014 (see Table 1.11).

Table 1.11 Tons Transported by Rail, 2014
(Thousands of metric tons)

Exports from Mexico to the United States	
Eagle Pass, Texas	4,735
Laredo, Texas	3,674
El Paso, Texas	1,511
Nogales, Arizona	1,458
Brownsville, Texas	819
Calexico, California	46
Total	12,243

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Transborder Freight Data. https://transborder.bts.gov/programs/international/transborder/TBDR_QA.html

1.1.4 Border Crossing Times

The time required for CVs and POVs to cross the U.S.-Mexico border has increased in recent years. In particular, the crossing time for POVs has increased, while the actual volume has decreased.

The excessive time it takes to cross the border has become a huge issue that significantly impacts the border region. Findings from a study on the economic impact of wait times and delays in the San Diego-Baja California region projected that for 2017 impacts related to freight flows would cost \$2.98 billion in output losses, as well as contribute to the loss of more than 20,000 jobs on both sides of the border during the 2008-2017 period.¹⁹

The impact of crossing times varies in each region along the U.S.-Mexico border. Throughout the border, the costs estimated due to a 3.5-hour crossing delay can range from US\$5.8 billion to US\$12 billion, and job losses can be between 26,000 and 54,000 employees.²⁰

¹⁹ Economic Impacts of Wait Times at the California – Mexico Border, 2009 Update Final Report. HDR Decision Economics, January 2010
http://www.dot.ca.gov/dist11/departments/planning/pdfs/border/2010_Impacts_Border_Delay_January.pdf

²⁰ The State of Trade, Competitiveness and Economic Well-Being in the U.S.-Mexico Border Region, Erik Lee and Christopher E. Wilson, June 2011.

1.2 Evolution of the Institutional Vision of Both Governments

The United States and Mexico have developed and implemented various initiatives toward improving the economy and fostering trade in the region. The border vision of the United States and Mexico has evolved during the last 20 years, and it can be analyzed through the various programs, initiatives and agreements that have been implemented during this time period.

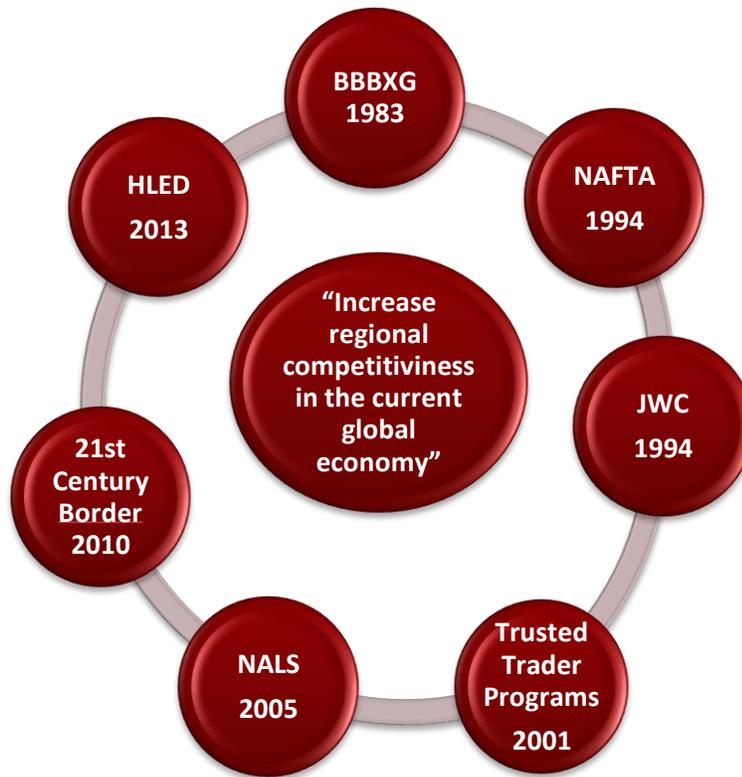
Some of the most relevant initiatives include:

- U.S.-Mexico Joint Working Committee (JWC) on Border Transportation Planning.

- Trusted Trade and Traveler Programs.
- Security and Prosperity Partnership (SPP) for North America.
- North American Leader Summit (NALS).
- 21st Century Border Management Initiative.
- U.S.-Mexico HLED.
- U.S.-Mexico BBBXG.

These programs and implementation dates are shown in Figure 1.12.

Figure 1.13 Collaborative U.S.-Mexico Binational Border Programs and Initiatives



Source: Developed by FOA Consultores.

BBBXG – Binational Bridges and Border Crossings Group
 HLED – High-Level Economic Dialogue
 JWC – Joint Working Committee

NAFTA – North American Free Trade Agreement
 NALS – North American Leaders’ Summit

1.2.1 U.S.-Mexico Joint Working Committee on Border Transportation Planning

The JWC was initiated in 1994, shortly after NAFTA, with the goals of promoting “*effective communication related to transportation planning between U.S.-Mexico Border States*” and working to “*develop a well-coordinated land transportation planning process along the border.*”²¹ For this purpose, procedures were implemented to analyze current vulnerabilities in transportation infrastructure and anticipate future changes in land transportation.²²

Among other efforts, the JWC works to:

- Establish methods and procedures to analyze current and future transportation infrastructure needs;
- Evaluate transportation demand and infrastructure impacts resulting from future changes in land transportation traffic.

The JWC meets regularly and coordinates the development of regional border master plans (RBMPs).²³

The lead organizations for this initiative are the Federal Highway Administration (FHWA) of the USDOT and its counterpart in Mexico, the Ministry of Communications and Transportation (*Secretaría de Comunicaciones y Transportes* [SCT]), in particular through the General Office of Road Development (*Dirección General de Desarrollo Carretero*). The departments of transportation of the U.S. border state and the public works departments and/or infrastructure and urban development agencies on the Mexican side are also founding members of the JWC. Other agencies

represented at the JWC are: USDOT Office of the Secretary, Federal Motor Carrier Safety Administration (FMCSA), DOS, CBP, U.S. Environmental Protection Agency (EPA) and GSA for the United States, and SRE, Customs (SAT), Ministry of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales* [SEMARNAT]), and INDAABIN for Mexico.²⁴ The JWC meets twice a year, alternating in each country.

Border planning conducted by USDOT/SCT/FHWA/FMCSA includes ports of entry, roadways serving border crossings, and transit and pedestrian facilities.²⁵ The vision of USDOT regarding border planning is to have a safe and reliable system that will allow border trade activity to continue to thrive.

Regional Border Master Plans

California and Baja California proposed the first RBMP. The JWC created a compendium of border-wide RBMPs with a comprehensive and prioritized assessment of transportation needs along the border, including at border crossings. RBMP prioritization criteria include border transportation issues, land use, environment, population and socioeconomic indicators.

RBMPs provide a rational decision-making process for evaluating and prioritizing border crossings aimed at fostering consistency among the planning processes of all the participating agencies along the border. RBMPs consider short-, medium- and long-term needs and include a prioritized list of projects based on a methodology accepted by all participants and based on the transportation and border crossing needs that must be met to support international trade and improve cross-border travel, as well as the quality of life of

²¹ “U.S.-Mexico Joint Working Committee on Transportation Planning.” USDOT: Federal Highway Administration. Accessed August 11, 2014.

<http://www.borderplanning.fhwa.dot.gov/mexico.asp>

²² Ibid.

²³ The California-Baja California Border Master Plans include representatives from Federal, State, Regional and local government entities with findings approved by all. In California, the definition of “regional” refers to MPOs and Regional Transportation Planning Agencies (RTPAs) areas of jurisdiction.

²⁴ U.S.-Mexico Joint Working Committee on Transportation Planning, https://www.fhwa.dot.gov/planning/border_planning/us_mexico/members/

²⁵ “Border Planning.” U.S. Department of Transportation: Federal Highway Administration. Office of Planning, Environment, & Realty. Accessed August 12, 2014. http://www.fhwa.dot.gov/planning/border_planning/.

residents and tourists in each region. RBMPs should be funded on a regular basis so they can be updated regularly (every 3-5 years) with new data, policies, and economic and infrastructure changes in each region.²⁶ The planning process includes the three levels of government (local, state and federal) in both Mexico and the United States.

RBMPs are a valuable planning tool for identifying border-related infrastructure needs. GSA has indicated that final decisions concerning U.S. federal land port-of-entry projects will be made based on the mission priorities of CBP and the real property asset needs of GSA. The status of RBMPs is presented in Table 1.12.

1.2.2 Customs-Trade Partnership Against Terrorism

Shortly after the terrorist attacks of September 11, 2001, the United States Government increased risk management and bolstered security protocol efforts at land ports of entry to prevent threats from crossing into

the homeland via those portals. The Customs-Trade Partnership against Terrorism (C-TPAT) was created in November 2001. This initiative is meant to create a clear and secure supply chain for organizations that bring goods into the United States by coordinating efforts between the public and private sectors in order to increase risk management and bolster security protocol efforts in the logistics supply chain. C-TPAT is a result of the recognition that homeland security includes the flow of goods (and people) and begins before threats reach physical borders.

Currently, the C-TPAT program has more than 10,000 member organizations in the trade community. Among these members are organizations that operate between the United States and Mexico, including border drayage carriers, Mexican shippers and manufacturers that export to the United States, and Mexican long-haul carriers.²⁷ These companies “account for over 50 percent (by value) of what is imported into the United States.”²⁸

Table 1.12 Regional Border Master Plans

Border Region	Date of Publication
1. Baja California-California	First plan was published in 2008 and second version was published in 2014
2. Sonora-Arizona	Published in February 2013
3. El Paso, TX/Santa Teresa, NM-Chihuahua	Published in October 2013
4. Laredo District, TX-Coahuila/Nuevo León/ Tamaulipas	Published in June 2013
5. Valle del Río Bravo-Tamaulipas	Published in October 2013
6. New Mexico-Chihuahua	Published in December 2015

Source: JWC on Transportation Planning

²⁶ U.S.-Mexico Joint Working Committee on Transportation Planning. Regional Border Master Plans. https://www.fhwa.dot.gov/planning/border_planning/us_mexico/accomplishments/master_plans/

²⁷ “C-TPAT: Customs-Trade Partnership against Terrorism.” U.S. Customs and Border Protection. Accessed August 25, 2014. <http://www.cbp.gov/border-security/ports-entry/cargo-security/c-tpat-customs-trade-partnership-against-terrorism>.

²⁸ Ibid.

C-TPAT members have access to Free and Secure Trade (FAST) lanes at land ports. FAST was created in coordination with C-TPAT to provide expedited processing at borders for organizations and individuals enrolled in the program. In order to participate in FAST, all the members of the supply chain must be C-TPAT certified, undergo background checks and meet eligibility requirements.²⁹ According to CBP, “C-TPAT importers are 4 to 6 times less likely to incur a security or compliance examination [at the border].”³⁰

Similar to the FAST program, the Secure Electronic Network for Travelers Rapid Inspection (SENTRI) is a CBP program that allows expedited clearance for pre-approved, low-risk travelers upon arrival in the United States. SENTRI participants may enter the United States by using dedicated primary lanes at land ports. All applicants undergo a rigorous background check and in-person interview before enrollment.³¹

In 2012, the Mexican Government launched the New Certified Company Program (*Nuevo Esquema de Empresas Certificadas* [NEEC]), now known as Authorized Economic Operator, which is the Mexican version of the U.S. C-TPAT and is modeled after the framework for secure trade of the World Customs Organization. The program is voluntary and offers participating companies fewer inspections and faster clearances for meeting specified supply requirements at the U.S.-Mexico border. In 2014, CBP and SAT signed a mutual recognition agreement that allows stronger collaboration between C-TPAT and NEEC.³²

²⁹ “FAST: Free and Secure Trade for Commercial Vehicles.” U.S. Customs and Border Protection. Accessed August 25, 2014. <http://www.cbp.gov/travel/trusted-traveler-programs/fast>.

³⁰ U.S. Customs and Border Protection C-TPAT Program, Office of Field Operations. “A Guide to Program Benefits.”

³¹ Secure Electronic Network for Travelers Rapid Inspection. <http://www.cbp.gov/travel/trusted-traveler-programs/sentri>.

³² United States, Mexico Sign Mutual Recognition Arrangement, CBP. October 17, 2014.

<http://www.cbp.gov/newsroom/national-media-release/2014-10-17-000000/us-mexico-sign-mutual-recognition-arrangement>.

1.2.3 North American Leaders’ Summit (NALS)

The North American Leaders' Summit is an annual meeting of the Heads of Government for the United States, Canada, and Mexico that focuses on trilateral and regional growth through trade and security.³³ A meeting was held in Ottawa, Canada in 2016, where the following initiatives regarding the four pillars of cooperation were established:

- Economic competitiveness
- Climate Change, Clean Energy, and Environment Regional and Global Cooperation
- Security and Defense

1.2.4 21st Century Border Management Process

The 21st Century Border Management Process declaration was signed in May 2010. This agreement between Mexico and the United States is intended to “promote trade and deter criminal activities.”³⁴ The 21st Century Border Bilateral Executive Steering Committee (ESC) was created to coordinate and facilitate efforts under this initiative on behalf of the 21st Century Border and is formed by representatives from the appropriate federal government agencies.

There are three working groups divided into the following areas:³⁵

- The Corridor Security Working Group coordinates policy priorities and concerns in developing a coherent U.S. Government approach that facilitates border coordination

³³ North American Leader’s Summit. <http://trade.gov/nacp/nals.asp>

³⁴ “21st Century Border: A Comprehensive Response & Commitment.” Department of Homeland Security. March 4, 2014. Accessed August 12, 2014. <http://www.dhs.gov/21st-century-border-comprehensive-response-commitment>.

³⁵ 21st Century Border: The Executive Steering Committee, September 2015. <http://www.dhs.gov/executive-steering-committee>.

in addressing smuggling corridors used to move contraband via air, land and sea.

- *The Secure Flows Working Group* is mandated to facilitate the secure and efficient flow of people and goods across U.S.-Mexico land ports of entry through better risk management, promotion and improvement of trusted traveler and shipper programs, partnerships with the private sector, development of new technology at the ports of entry and engagement in relevant capacity-building measures with the Government of Mexico.
- *The Infrastructure Working Group* is charged with developing and monitoring the implementation of a plan for land border priorities. The Working Group coordinates plans for new ports of entry, modernization of existing ports of entry and upgrades to the infrastructure feeding into them at and between ports of entry along the U.S.-Mexico border.

1.2.5 High-Level Economic Dialogue (HLED)

To further elevate and strengthen this dynamic bilateral commercial and economic relationship, in 2013 both countries established a High-Level Economic Dialogue (HLED).

The HLED was envisioned as a platform to advance strategic economic and commercial priorities central to promoting mutual economic growth, job creation and regional and global competitiveness in both the United States and Mexico.³⁶ It was established in 2013 and is rooted in three pillars of cooperation:

1. Promoting competitiveness and connectivity
 - Transportation
 - Telecommunications

2. Fostering economic growth, productivity, entrepreneurship and innovation
 - Joint investment promotion
 - Economic development on the border and a comprehensive economic development strategy
 - Making effective use of the North American Development Bank (NADB)
 - Partnership on advanced manufacturing
 - Entrepreneurship
 - Workforce development
3. Partnering for regional and global leadership
 - Partnering to promote development in Central America
 - Regional trade priorities
 - Transparency and anti-corruption

The objective of these pillars is to coordinate shared interests and priorities affecting the growth and competitiveness of the U.S. and Mexican economies.

1.2.6 U.S.-Mexico Binational Bridges and Border Crossings Group (BBBXG)

The BBBXG is the forum for proposing, planning and coordinating new and expanded border crossing projects, as well as negotiating and concentrating resources for border crossing projects between the United States and Mexico. The group was formed in 1983 and is co-chaired by SRE and DOS. The group meets three times per year: two regional meetings and one plenary meeting. The meeting locations alternate between U.S. and Mexican cities.

DOS chairs the group from the US side, as the federal agency responsible for the Presidential Permit process for border crossings, and SRE is its Mexican counterpart since it is responsible for promoting and ensuring coordination among federal agencies and institutions

³⁶ Office of the Vice President. "FACT SHEET: U.S.-Mexico High Level Economic Dialogue." *The White House*. September 20, 2013. Accessed August 25, 2014.

<http://www.whitehouse.gov/the-press-office/2013/09/20/fact-sheet-us-mexico-high-level-economic-dialogue>

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

abroad, as well as for conducting the foreign policy of Mexico.

BBBXG meetings generally consist of three separate sections: separate U.S. and Mexican delegation meetings where general issues are discussed and respective positions are formulated; a public session where bridge and land border crossing sponsors or promoters make presentations on their projects to the entire group; and a federal and state government-only technical session, where the binational group discusses the status of ongoing border crossing projects and related issues. If there is time in the agenda, the group might visit an existing or planned border crossing.

The Mexican agencies that participate in the binational group are those that make up the Interagency Bridge and Border Crossing Group (*Grupo Intersecretarial de Cruces y Puentes Fronterizos* [GICYPF])

- SRE.
- SCT.
- National Migration Institute (*Instituto Nacional de Migración* [INM]).
- INDAABIN.
- SAT.
- Ministry of National Defense (*Secretaría de la Defensa Nacional* [SEDENA]).
- Ministry of Social Development (*Secretaría de Desarrollo Social* [SEDESOL]).
- (Ministry of Economy (*Secretaría de Economía* [SE]).
- SEMARNAT.
- National Food Safety, Quality and Health Service (*Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria* [SENASICA]).

- (National Water Commission (*Comisión Nacional del Agua* [CONAGUA]).
- Mexican Federal Police.
- UPM

The U.S. agencies involved in the binational group are:

- DOS.
- CBP.
- Department of Homeland Security (DHS).
- GSA.
- Coast Guard.
- Animal and Plant Health Inspection Services (APHIS).
- Food and Drug Administration (FDA).
- USDOT / FHWA.
- Federal Motor Carriers Safety Administration.
- Federal Railroad Administration (FRA).
- International Boundary and Water Commission (IBWC), U.S. Section.
- Department of Commerce (DOC).

In addition to these federal agencies, the departments of transportation and border authorities of U.S. states, as well as the corresponding Mexican state agencies also participate in the BBBXG.

The BBBXG is a forum for external stakeholders to propose new projects and for the governmental agencies to discuss internal priorities for new and expanded border crossings. GSA and CBP do not propose projects in this forum.

Table 1.13 Mexican Interagency Bridge and Border Crossing Group

Primary Ministries	Invited Participants	
Ministry of Foreign Relations (SRE)	National Security Commission (CNS)	Ministry of the Economy (SE)
Ministry of Finance and Public Credit (SHCP)	Ministry of Tourism (SECTUR)	Border state governments
Institute of National Asset Administration and Valuation (INDAABIN)	Ministry of Governance and Homeland Security (SEGOB) / Migratory Policy Unit (UPM)	International Boundary and Water Commission (CILA), Mexican Section
Ministry of Communications and Transportation (SCT)	Ministry of Rural and Urban Land Development (SEDATU)	National Water Commission (CONAGUA)
Tax Administration Service (SAT)	Ministry of Environment and Natural Resources (SEMARNAT)	Ministry of National Defense (SEDENA)
National Migration Institute (INM)		
National Food Safety, Quality and Health Service (SENASICA)		

Source: SRE.

1.2.7 Mexican Interagency Bridge and Border Crossing Group

To support internal activities within Mexico related to the planning of bridges and border crossings, Mexico created an interagency body that promotes coordination between the federal agencies that, by law, have the ability to manage, construct, operate and maintain border crossings and other related services.

The group also communicates with the state and municipal authorities in order to establish a unified national position to present to the BBBXG. The federal agencies participating in the group are led by SRE, which requests the participation of other federal agencies that may interject on a specific issue when deemed necessary. Table 1.13 lists the agencies that form the Interagency Bridge and Border Crossing Group.

A recommendation to formalize the Mexican Interagency Bridge and Border Crossing Group and elevate it to the level of an Interagency Commission, as defined in Article 21 of the Federal Public Administration Act, will be presented in subsequent sections.

1.2.8 Evolution of the Vision

In Mexico, the National Development Plan (*Plan Nacional de Desarrollo* [PND]) frames public policy, which governs the program and budget of the entire federal administration. It serves as the federal government’s channel of communication for transmitting the vision and strategy of the Executive Office to the citizenry.

The 2013-2018 PND presents the national goals of a “*prosperous Mexico*” and an “*inclusive Mexico*,” where adequate infrastructure and access to strategic inputs will promote competitiveness and connect human capital with the opportunities generated by the economy.

The PND does not specifically mention a policy focused on the bilateral relationship between the United States and Mexico in terms of border infrastructure. However, in paragraph VI of the Plan, Section VI.5 Mexico with Global Responsibility, establishes that “*the relationship with the United States and Canada must be consolidated based on a comprehensive and long-term vision that promotes competitiveness and convergence in the region*”

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

on the basis of existing complementarities,"³⁷ by among other things promoting the "comprehensive modernization of the border area as a means of boosting bilateral exchanges."³⁸ The PND also states that "cross-border mobility of people and goods should be facilitated to boost the regional economy."³⁹

The PND likewise notes that productivity must be democratized by "strengthening the strategic alliance of Canada, the United States and Mexico through improvements in transportation logistics, border facilitation, standardization of regulations in productive sectors and the creation of new global value chains in order to compete strategically with other regions of the world."⁴⁰ In addition, it states that "border points should be equipped with infrastructure that promotes the use of non-intrusive technology to manage the flows of people and goods in an orderly manner."⁴¹

The 2014-2018 National Infrastructure Program (*Programa Nacional de Infraestructura* [PNI]) highlights the issues of congestion and delays at border crossings resulting in high costs and wait times. To address these issues, the PNI provides as a course of action under Strategy 1.1: "Develop Mexico as a logistics platform with multimodal transportation infrastructure that generates added value and competitive costs, improves security and boosts social and economic development." It also establishes the following course of action regarding the border: "Facilitate foreign trade by developing projects that expedite the flow of international freight and relieve congestion at maritime and land ports of entry."⁴²

Developing and modernizing the border to create a prosperous, safe and sustainable region is a priority for the Mexican Government.⁴³ It has decided to promote the necessary measures, working in coordination with the U.S. Government, to facilitate the secure transportation of goods and people, support regional

development and improve the rule of law to prevent the illegal flow of goods and achieve a more modern and humane migration system. The Mexican Government recognizes that its ports of entry must be modernized to improve their infrastructure and administration and will therefore allocate resources to such projects.

The mission of DOS is to shape and sustain a peaceful, prosperous, just and democratic world and foster conditions for stability and progress for the benefit of the American people and people everywhere. The agency recognizes that the border is an artificial boundary that affects the flow of people and goods since there are social and economic bonds that go far beyond the border. This mission is shared by the United States Agency for International Development (USAID). Its mission is to ensure a common path forward in partnership as the United States invests in the shared security and prosperity that will ultimately better prepare it for the challenges of tomorrow.

Both governments recognize that the U.S.-Mexico border offers an opportunity for both countries. They also recognize the importance of developing and managing the border holistically and in ways that facilitate the secure, efficient and rapid flow of goods and people and that reduce the costs of doing business between the two countries. Both the United States and Mexico benefit from expediting legitimate trade and travel through and between the two countries, especially by those who live in the border region. The two governments agree that safe, efficient, secure and compatible transportation is a prerequisite for mutual economic growth.⁴⁴

The importance and complexity of the bridges and border crossings along the U.S.-Mexico border require higher levels of coordination and cooperation between government agencies of both countries, as well as

³⁷ Plan Nacional de Desarrollo 2013-2018.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² National Infrastructure Program (NIP) 2014-2018.

⁴³ Secretary of Foreign Affairs, José Antonio Meade. Message to the press concerning U.S.-Mexico relations.

<http://saladeprensa.sre.gob.mx/index.php/discursos/2767-016>.

⁴⁴ President Obama. Joint Statement on the 21st Century Border, 2010. <https://www.whitehouse.gov/the-press-office/joint-statement-president-barack-obama-and-president-felipe-calder-n>.

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

domestic coordination between the private sector and society, who use the border crossings. Border crossings require collaboration and cooperation in system planning, operational coordination and technical cooperation. If the planning process of new or expanded border crossing projects is not coordinated, the projects may never come to fruition, reducing the competitiveness of the border region and the two countries.

The vision of the border has changed since the signing of NAFTA. The terrorist attacks of 9/11 increased U.S. risk management and bolstered security protocol efforts at the U.S.-Mexico border. Both countries are working to facilitate secure trade and travel at land

ports of entry and are coordinating their efforts through programs like the HLED.

The United States has plans to invest more than US\$60 million in nonintrusive inspection equipment to accelerate the movement of plants and animals through the issuance of electronic certificates of health from the Department of Agriculture, the Food and Drug Administration and their Mexican counterparts.⁴⁵

With these new investments and developments, it is clear that the United States seeks to strengthen its trade relations in order to increase North American economic competitiveness in the global economy.

⁴⁵ "Fact Sheet: A 21st Century Border Vision." United States Embassy. Accessed September 4, 2014.

<http://photos.state.gov/libraries/mexico/310329/16may/21st%20Century%20Border%20Vision%20May%202011%20Final-.pdf>

Chapter 2. Border Crossing Project Development Process

The development of an international border crossing project between the United States and Mexico is a complex process that requires coordinated actions by multiple stakeholders. Each federal government must coordinate the multiple departments or agencies involved with each phase of the project, including planning, negotiation, approval, funding, construction, operation and maintenance. Additionally, each stage of the process entails binational activities that require coordination between the agencies of both countries in order to ensure progress is made and delays avoided.

This chapter presents the main activities that are required in the development of a border crossing between the United States and Mexico. Two types of border crossing project development processes are discussed: new border crossings and modernization or expansion of existing border crossings.

The information used to map the border crossing development processes was obtained through research and interviews with stakeholders and agencies from both countries, with special support from DOS and SRE. Other agencies that also were interviewed include:

- United States Agencies:
 - CBP.
 - GSA.
 - USDOT-FHWA
 - IBWC, U.S. Section
- Mexican Agencies:

- SCT.
- SAT-Customs.
- INDAABIN.

This chapter is structured as follows: Section 2.1 presents the stakeholders involved in border crossing project development. Section 2.2 presents the general border crossing development process for a new border crossing, while Section 2.3 details the process. Finally, Section 2.4 describes the process for modernizing or expanding existing border crossings.

2.1 Stakeholders

2.1.1 Agencies Involved in Border Crossing Development

Mexican Agencies

The Mexican government participates in the development of new border crossings through various ministries and agencies. These public entities evaluate specific information for each stage of the process, in accordance with the established legal framework of their duties and authority, so that the project may be evaluated jointly and an official position can be issued. Table 2.1 lists the Mexican agencies involved in the development, planning, construction and operation of border crossing infrastructure projects. The table also describes the function of each agency.

Table 2.1 Mexican Federal Agencies Involved in Border Crossing Projects

Agency	Function	Responsibility in Border Crossing Projects
Ministry of Foreign Affairs (SRE)	Manages the foreign policy of Mexico and ensures the due coordination of actions abroad by federal agencies and entities of the Mexican Government.	Chairs or co-chairs bilateral cooperative mechanisms related to the border and serves as the formal channel of communication with the United States Government.
SRE – Mexican Section of the International Boundary and Water Commission (CILA)	Monitors compliance with international treaties related to boundaries and waters. Supports the Mexican Government in diplomatic negotiations of international agreements dealing with the operation and maintenance of infrastructure built under such agreements, assuring its territorial integrity, and promotes conservation of water resources.	Issues technical opinions related to the impact of infrastructure works on the border and the course of the Rio Grande, ensuring that natural flow of the river is not obstructed or changed and that the international boundary is observed. Reviews structural conditions of future bridges and makes sure that its structures receive proper maintenance for optimal operations. Verifies that projects are consistent with the terms of the various U.S.-Mexico treaties in force.
SRE – General Office for North America	Coordinates, plans, develops and evaluates activities, actions, programs and projects related to the bilateral agenda established with the United States and Canada, as well as trilateral issues related to economic, political and / or social integration. Formulates and develops strategic programs for border cooperation, supervises their execution and follows up on cooperative mechanisms to prevent drug trafficking and combat transnational organized crime.	Participates and coordinates with other agencies in the formulation of policies for border cooperation, including security and infrastructure development on the northern border, as well as in the negotiation of bilateral and regional agreements in this area. Coordinates and calls for interagency work with federal agencies and other levels of government for the development of projects, the construction and modification of border infrastructure involving bilateral relations with the United States of America. Coordinates and convenes meetings of the U.S.-Mexico Binational Bridges and Border Crossing Group to define projects and the construction or modification of border infrastructure.
Ministry of Communication and Transportation (SCT)	Promotes efficient, safe and competitive transportation and communication systems by strengthening the legal framework, defining public policies and developing strategies that contribute to the sustainable growth of the economy and the balanced social development of the country.	Plans the infrastructure required for new border crossing projects. Grants concessions for the construction, operation and maintenance of border crossings.

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

Agency	Function	Responsibility in Border Crossing Projects
Ministry of Governance and Homeland Security (SEGOB)	Supports the democratic governance and political development of Mexico by maintaining good relations between the federal government and other agencies within the country to ensure national security, social harmony and the well-being of the Mexican people.	Prepares and directs national immigration policy and oversees the country's borders and ports of entry by land, sea or air, ensuring freedom of transit in accordance with the law and in coordination with other authorities in Mexico. Coordinates actions for monitoring and protecting border facilities. Has the sole authority to establish and eliminate the points for international transit of people by land, water and air, taking into consideration the opinion of SHCP; SCT; SRE; the Ministry of Health (SS), the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) and, if applicable, the Navy. Consults with the agencies it deems advisable. ⁴⁶
SEGOB—Unidad de Política Migratoria (UPM)	Designs and proposes programs and strategies for comprehensive migration policy, in accordance with Mexican law, which facilitates migratory documentation and defends the sovereignty and security of the nation, while also respecting and protecting basic human rights.	Coordinates the development, implementation and evaluation of the National Development Plan's (<i>Plan Nacional de Desarrollo</i>) migration programs, as well as the border and migration programs established by Mexico's Immigration laws. Sets, bars and temporarily shuts down ports of entry (land, water or sea).
SEGOB – National Migration Institute (INM)	Strengthens the protection of rights and security for domestic and foreign immigrants.	Provides necessary migration services to foreigners and nationals entering or exiting the country. Monitors the entry and exit of nationals and foreigners into and out of Mexico, by reviewing their immigration documents. Safeguards the integrity of Mexican and foreign migrants, regardless of their immigration status, fully respecting their human rights as they pass through Mexico.
Ministry of Finance and Public Credit (SHCP)	Proposes, directs and controls the economic policy of the Federal Government, including revenue, taxes, spending and public debt in order to promote fair, inclusive, sustained economic growth that strengthens the well-being of Mexicans.	Determines the geographic location of Mexican customs facilities and regional offices. Sets operating guidelines for handling foreign trade goods and the movement of vehicles within bonded areas. Controls and supervises the entry and exit of goods and people through customs at the border.

⁴⁶ Migration Law, May 2011

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

Agency	Function	Responsibility in Border Crossing Projects
Customs-Tax Administration Services (SAT)	<p>Controls the entry and exit of goods, people and their means of transportation to and from the country, ensuring that external commerce regulations, as established by SHCP, is met.</p> <p>Port-of-Entry Responsibilities:</p> <p>Proposes a budget to Mexican authorities to cover costs of infrastructure improvements, development of new technology and ensuring customs offices are well-equipped.</p> <p>Proposes to establish or eliminate customs offices, points of entry and customs checkpoints.</p> <p>Approves customs office facilities and oversees activities held in administrative offices.</p> <p>In coordination with SAT, decides how public trust funds will be used.</p>	Verifies foreign merchandise as it passes through border crossings and ensures its legal operation.
SHCP –Mexican development bank (BANOBRAS) and National Infrastructure Fund (FONADIN)	<p>Support the planning, design, construction and transfer of infrastructure projects that have a social impact or economic benefits, involving private-sector participation.</p> <p>Serve as the vehicle of Mexican Government coordination for funding and developing infrastructure in the communications, transportation, water, environment, and tourism sectors.</p>	Support funding for the development and construction of border crossings.
SHCP – Investment Unit (IU)	<p>Integrates and manages the portfolio of investment programs and projects based on the evaluation, information and priorities presented by federal agencies and entities, regardless of the source of funding. Registers and cancels registration in investment portfolio programs and projects pursuant to the applicable provisions and verifies the consistency of these programs and projects with the objectives, priorities and strategies of the National Development Plan.</p> <p>Issues guidelines on investment mechanisms and expenses and on multi-year expenditures for infrastructure investment projects. Proposes the criteria for including investment programs and projects in federal budget proposals.</p>	Registers infrastructure projects that are technically and financially feasible, in the investment portfolio of the Federal Government.
Ministry of Public Administration (SFP)	Ensures that public servants adhere to the law as they carry out their duties and sanctions those that do not comply.	Develops and proposes general guidelines and procedures for the registration, allocation, disposal and retirement of

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

Agency	Function	Responsibility in Border Crossing Projects
	Directs and determines federal procurement policies. Coordinates and conducts audits of federal expenditures. Coordinates administrative development processes and the digital government. Operates and leads the Professional Career Service. Coordinates the work of internal control arms in each federal agency and evaluates the management of federal entities.	government property. Coordinates the preparation of the annual audit and inspection program for public works and services related to issuing federal permits and granting concessions or their extensions.
SFP – Institute of National Asset Administration and Valuation (INDAABIN)	Administers federal and government-owned real property. Provides valuation services for the Federal Government.	Owns, manages, maintains, protects and controls shared federal property designated for the operation of border crossings. Responsible for approving or developing final designs for the construction, reconstruction, modification or restoration of infrastructure on shared federal property under its jurisdiction. Controls and supervises the implementation of the corresponding projects and is responsible for maintaining, conserving, adapting and use of the space allocated in such properties. Issues criteria and technical specifications for building, maintaining and managing federal border crossing property. Also participates in the process for releasing rights of way by developing land valuations.
Ministry of Economy (SE)	Promotes economic productivity and competitiveness through a trade policy that fosters industry development, business and services, as well as encourages private companies and entrepreneurs. Strengthens the domestic market and attracts domestic and foreign investment.	Performs tasks to strengthen Mexican integration and competitiveness in global value chains through the negotiation, execution and administration of treaties and international trade and investment agreements, such as NAFTA.
Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) – National Food Safety Quality and Health Service (SENASICA)	Verifies, inspects and certifies animals, vegetables and products that enter the national territory by sea, air and land, ports of entry, which is a matter of national security, since the import of goods poses the risk of introducing pests and diseases that could seriously harm the agricultural sector of the country, as well as public health and the food supply.	Monitors compliance with the merchandise requirements regulated by SAGARPA within the area of responsibility of SENASICA, through inspections, verifications, certifications and, in general, any act of surveillance at points of entry and transit through the national territory.

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

Agency	Function	Responsibility in Border Crossing Projects
Ministry of Environment and Natural Resources (SEMARNAT) — General Office of Environmental Impact and Risk (DGIRA)	Monitors compliance with general environmental impact and risk policies. Evaluates and approves environmental impact statements and preventive measure reports for works or activities under federal jurisdiction.	Monitors and regulates potential environmental impacts of construction projects, and issues resolutions on Environmental Impact Statements (MIA).
SEMARNAT – National Water Commission (CONAGUA)	Preserves national waters and their inherent public resources for their sustainable management and ensures water security.	Reviews the projects and determines the impact that their construction in waterways may have on the control of the river and for protection against possible flooding. Oversees comprehensive management of cross-border watersheds and handles related international agreements.
Ministry of Tourism (SECTUR)	Develops national tourism through planning, promotion and development of tourist offerings and services, in coordination with various agencies and levels of government.	Provides tourist information for people passing through the border crossings.
Ministry of Social Development (SEDESOL)	Helps build a society in which all persons are assured enforcement of their social rights and can enjoy a decent standard of living, through a social development policy that fosters capacity building, a decent income and environment, as well as public participation and protection, with special attention for the most vulnerable social sectors.	Promotes migrant assistance programs. Land management responsibilities were transferred to the Ministry of Rural and Urban Land Development (SEDATU) in 2013.
Ministry of Rural and Urban Land Development (SEDATU)	Plans, coordinates, manages, creates and executes public policy regarding land management, decent housing, and urban and rural development. Provides legal certainty to agricultural centers.	Reviews projects to ensure they support sustainable and balanced development in the area where construction is proposed, by ensuring land use planning compliance.
Ministry of National Defense (SEDENA)	Defends the integrity, independence and sovereignty of the nation; ensures security inside the country.	Prevents and halts the flow of illicit goods and persons crossing the border.
Border state and municipal governments	Analyze project applications and issue opinions approving or rejecting new projects according to their responsibilities and interests.	

Source: Developed by FOA Consultores and TTI based on Mexican agencies information

The Mexican Government created the Interagency Bridge and Border Crossing Group (*Grupo Intersecretarial de Cruces y Puentes Fronterizos* [GICYP]) in order to coordinate all the agencies and public entities involved in border crossing development in Mexico. The group consists of 16 federal ministries and agencies, seven of which

comprise the GICYPF Base Group (see Table 1.13). It is an informational forum as the group itself does not have any power to authorize or execute projects. These powers rest solely with the individual agencies.

The interagency group also serves as a mechanism for coordination between the federal government and local and state authorities involved in border crossing

Analysis of International Port-of-Entry Projects on the United States-Mexico Border

development in order to define national positions prior to negotiations with the United States. The agencies that form the interagency group mainly participate in project negotiations and operation.

It is important to note that the GICYP currently does not have the legal structure of an interagency commission as defined in Article 21 of the Federal

Public Administration Act. In this study, it is recommended that the GICYP be given this designation, along with more institutional power.

United States Agencies

The U.S. agencies that participate in the development of border crossings are listed in Table 2.2.

Table 2.2 U.S. Federal Agencies Involved in Border Crossing Projects

Agency	Function	Responsibilities in Ports of Entry and International Crossings
U.S. Department of Transportation (USDOT)	Ensures that the U.S. transportation system meets national needs and interests and improves quality of life.	Oversees all other federal transportation agencies.
U.S. Department of State (DOS)	Promotes and shapes the world through peace, democracy, stability and progress, fostering democratic conditions that bring stability and progress that benefit the United States and the world.	Issues Presidential Permits for projects at land ports of entry. Must be notified of any proposed new border crossing projects or modifications to existing border crossings.
U.S. Environmental Protection Agency (EPA)	Develops and enforces regulations to protect human health and the environment.	Ensures that environmental quality standards along the border are met.
U.S. General Services Administration (GSA)	Oversees real estate, acquisitions and technology services for the U.S. Government.	Builds or leases and maintains most of the land ports of entry in the United States. Responsible for repairs, maintenance and management of the physical facilities. Seeks Congressional authorization and funding for projects above the prospectus threshold.
U.S. Department of Homeland Security (DHS)	Oversees national security and most of the law enforcement agencies that protect the borders (land, maritime, airports) and focuses on crime prevention/response on U.S. borders.	Coordinates activities between agencies that fall under its control, including CBP as the main operator at the border crossings.
DHS – U.S. Customs and Border Protection (CBP)	Oversees law enforcement for customs, immigration, border security and agricultural control, while also encouraging legal travel and trade.	Conducts inspections at border crossings and dictates their operation. Creates planning documents for border crossings.
U.S. Coast Guard	Oversees security of maritime ports and navigable waterways in the United States.	Has jurisdiction over the construction, modification, operation and maintenance of bridges over navigable water that connect the United States with other countries.
U.S. Office of Management and Budget (OMB)	Serves the Executive Branch in areas of budget, agency management, federal	Directs GSA in establishing annual budget priorities for border crossings. Refines and submits CBP/GSA budget requests to

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

Agency	Function	Responsibilities in Ports of Entry and International Crossings
	regulations, legislation, executive orders and presidential memorandums.	Congress as part of the President’s budget submission.
U.S. Section of the International Boundary and Water Commission (IBWC)	Monitors compliance with international treaties on boundaries and waters. Represents the United States government in diplomatic negotiations or international agreements dealing with the operation and maintenance of infrastructure under international agreements.	Reviews applications to ensure that proposed construction activities are carried out in a manner that does not change historic surface runoff characteristics at the international border.
Departments of transportation of the border states (California, Arizona, New Mexico, Texas)	Coordinate and develop comprehensive transportation policy. Coordinate and assist in the development and operation of transportation facilities and services for all modes of transport. Administer public safety programs.	Plan and obtain funding for transportation infrastructure that serves land ports of entry.
Metropolitan planning organizations (MPOs) and Regional planning organizations (RPOs)	MPO: Oversee regional transportation planning for cities with a population of 50,000 or more. RPO: Oversee transportation planning for non-metropolitan rural areas.	MPO: Include all relevant projects in transportation plans. RPO: Seek public input about own plans and disseminate information about regional projects and programs.
Cities, counties and regional planning associations	Create transportation plans and prioritize projects.	Include border crossing needs in planning documents.
New Mexico Border Authority (NMBA)	Provides leadership in the development of border crossings and advises the governor.	Oversees development and promotion of New Mexico border crossings. Promotes public-private partnerships and involves itself in New Mexico-Mexico trade. Assists businesses and individuals with border crossings.
California Air Resources Board	Reduces air pollutants in order to promote human health and ecological well-being, while considering the California economy.	Quantifies air pollutants and toxins in the border region. Conducts pollutant-related inspections of heavy-duty vehicles at the border.
Texas Commission on Environmental Quality (TCEQ)	Acts to protect public health and natural resources, as well as sustainable economic development in Texas.	Monitors air and water quality and enforces regulations in the border region.

Source: Developed by FOA Consultores and TTI with information from the agencies

U.S.-Mexico Binational Bridges & Border Crossings Group (BBBXG)

The BBBXG is the official forum for binational dialogue and for negotiating and coordinating agreements on

border infrastructure between Mexico and the United States. It has been meeting since 1983 and is co-chaired by the SRE and DOS. Meetings are held three times a year (two regional meetings and one plenary), with the

host city alternating between Mexico and the United States each year.

The Mexican members of this binational group are the agencies that form the Interagency Bridge and Border Crossing Group:

- SRE
- SCT
- INM
- INDAABIN
- SAT
- SEDENA
- SESEMARNAT
- SENASICA
- CONAGUA
- SEGOB-UPM
- SECTUR
- SEDATU
- SE
- CILA
- SHCP
- CNS

From United States, the binational group is formed by the following agencies:

- DOS
- CBP
- DHS
- GSA
- Coast Guard
- APHIS
- FDA
- FHWA
- FMCSA
- Federal Railroad Administration (FRA)
- IBWC
- DOC

In addition to those agencies, state transportation departments and border authorities participate with their Mexican counterparts in the process. Cities, municipalities and other urban areas, as well as private sector sponsors, also present proposals to the BBBXG during public sessions.

2.2 General Process for New Border Crossing Projects

The United States or Mexican Government will pursue the development of a new border crossing if the project meets the needs of both countries. The approach for the development of a new border crossing project is similar to any other infrastructure project. However, due to the involvement of multiple agencies from each country, each project requires a high level of cooperation and agreement among stakeholders.

There is no binational conjoint border crossing development process between Mexico and the United States. Legislation in each country identifies the role of each agency during the process, as well as the authorizations and permits issued by each one. In the United States, the Presidential Permit is well defined, but it is only one part of a much larger process.

The tasks required to develop a new border crossing between the United States and Mexico, from the initial planning process to operation, are similar on both sides of the border. Key milestones have been identified that require binational coordination between different agencies in each country. Frequent exchanges of diplomatic notes between the two countries is necessary to formalize agreements between the two countries and ensure project progress.

The processes and activities undertaken for the development of new border crossings vary from those required for the expansion or modernization of an

existing border crossing. The development of a new border crossing project can begin in either the United States or Mexico but requires coordination with the other country to complete the project. In some cases, border organizations, usually between sister cities or regions at the border, identify the need for a new border crossing or expansion of an existing one. These local border authorities or organizations sponsor new border crossing projects that could be proposed to become part of the various project portfolios designed to meet infrastructure priorities in both countries.

The time necessary for the Presidential Permit, environmental clearances, permitting, design and construction, as well as the lack of a clear definition for the binational border crossing project development process, causes delays and inefficiencies in the implementation of new projects. This situation, along with the backlog of projects in need of modernization and limited funding to recapitalize existing border crossings and build new ones, has resulted in new border crossing projects taking between 10 and 15 years to complete. In contrast, trade between the United States and Mexico has continued to grow, outpacing border capacity.

Based on an analysis of current practices, a four-phase process for the development of new border crossings has been defined and is proposed under this study. Each phase has tasks that must be completed in order to continue to the next one, except for right-of-way acquisition and Presidential Permits, which could take more than one phase to be completed. The proposed binational process outlines general tasks; however, in practice the process is not linear, and the development of each border crossing could be different (Figure 2.1).

2.2.1 Overview of the Mexican Process

SCT, as the agency responsible for the federal transportation sector, plays a very important role in the development of new border crossing, road and railroad projects. Taking into account the infrastructure requirements and needs of Mexico, SCT selects projects that fulfill the objectives, strategies and priorities established in the National Development Plan (PND), as well as in sectorial, institutional, regional and special programs derived from the PND.⁴⁷ Selected projects are then evaluated by the responsible agencies, to assess their viability for development. As a member of GICYPF, SCT also reports on project progress and agreements, and coordinates with other member agencies for the completion of specific activities. It is recommended that in the future SCT use RBMPs as an alternative source of reference (non-mandatory) to identify projects that meet the above criteria and can be selected for study.

According to the National Property Act, INDAABIN is the agency responsible for owning, managing, maintaining, protecting and controlling shared federal property designated for the operation of border crossings.⁴⁸ INDAABIN participates in all phases of project development. At the start, it is involved in the activities to determine the crossing point and develop the preliminary design. Later, in conjunction with SCT and other agencies, it is responsible for approving the final design of the project, ensuring an optimum and functional design of the designated service areas that will meet the needs of the tenant agencies when they begin operations. During the construction phase, INDAABIN is responsible for constantly supervising the physical progress of the infrastructure work to ensure that the project is built in accordance with the established work plan, and provides the authorizations for the operation of the project.

The role of SEGOB is also important, since it has the sole authority for designating and eliminating

international transit points for people by land, water and air.⁴⁹ This process begins with the formalization of the crossing point by the Migration Policy Unit (UPM), which consults with the SRE, SHCP, SCT, SAGARPA, Ministry of Health (SS) and Navy (SEMAR) to ensure that customs facilities are fully-equipped to carry out migration duties; including adequate space for an influx of people entering and exiting . Since the law is relatively new (2012) and does not specifically outline a process from creating new ports-of-entry, the common practice has been to carry it out in Phase II of the general procedure. During this study, comments were received from various agencies and from SEGOB, requesting that this task be reassessed and placed at the beginning of the procedure when planning the project.

Another important institution is INM, the agency responsible for ensuring that Mexican citizens and foreign immigrants fulfill the requirements for entering and exiting the country as set forth under the Mexican Migration Act.⁵⁰

SRE also plays a major role as the agency responsible for foreign policy and for representing the Mexican Government abroad, upholding the reputation of the country at all times and ensuring relations with neighboring countries are managed in accordance with Mexican foreign policy and the rules of international law.

According to Article 28 of the Federal Public Administration Act, SRE has, among other functions, the following:

1.- Promote, foster and ensure coordination of the actions of federal agencies and entities abroad; and without impairing the powers and authority of each one, manage foreign policy, participating in all kinds of treaties, agreements and contracts to which Mexico is a party.

⁴⁷ Article 44, second paragraph, of the Regulations of the Federal Law of Budget and Fiscal Responsibility

⁴⁸ National Property Act (*Ley General de Bienes Nacionales*), Article 102.

⁴⁹ Mexican Migration Act (*Ley de Migración de México*), Article 31.

⁵⁰ Ibid.

II A.- Help promote trade and tourism in the country through its embassies and consulates.

IV.- Participate in matters related to the territorial limits of the country and international waters.

Likewise, Article 2 of the Internal Regulations of SRE establishes its functions:

I. Execute the foreign policy of Mexico;

II. Promote and coordinate the actions of federal agencies and entities abroad, in accordance with the respective powers and authority of each one; ...

IV. Participate in all kinds of treaties, agreements and contracts to which Mexico is a party.

Specifically, Article 21 of the internal regulations establishes the following functions for the General Office for North America:

XIX. Participates and coordinates with other agencies in the formulation of policies for border cooperation, including security and infrastructure development on the northern border, as well as in the negotiation of bilateral and regional agreements in this area; ...

XXII. Coordinate and call for interagency work with relevant federal agencies and other levels of government for the development of projects, construction and modification of border infrastructure in bilateral relations with the United States of America; ...

XXIII. Coordinate and convene meetings of the U.S.-Mexico Binational Bridges and Border Crossing Group to define projects and the construction and modification of border infrastructure.

The general process for new border crossing project development has four distinct phases:

Phase I: Project Planning and Preliminary Approval.

Based on an idea and/or interest from a private sponsor or public agency at the municipal, state or

federal level, SCT makes a preliminary assessment of the project. If the project is feasible and/or there is general interest in the country to develop it, SCT creates a technical file, and pre-feasibility studies are developed by the Mexican agencies that will help them make decisions about the project.⁵¹ Upon completion of the studies, SCT evaluates the feasibility of the project taking into account the opinions issued by the Mexican authorities based on those studies. If the decision is made to continue with the project, it must be incorporated into the planning mechanism so that it can pass to the next phase and be evaluated by the Investment Unit (IU) of SHCP. The federal government issues a diplomatic note formalizing the crossing point.

Phase II: Technical Opinions of Project and SCT Evaluation.

The studies are sent to the corresponding agencies for approval, including CILA, SEMARNAT and IU. These agencies will issue their respective opinions after reviewing the technical, legal, economic and environmental feasibility of the project. The federal government also informs the state and municipal governments involved to begin coordination with them. SCT receives feedback and reviews the financial structure of the project to determine whether it will be developed with public funding, grants or through other financial mechanisms. If the project demonstrates socioeconomic benefits and technical feasibility, it is granted a registration code, included in the investment portfolio in the Federal Budget proposal, and moves on to the next phase.

Phase III: Final Design, Procurement and Award of Project Contract.

The final design is developed and, upon approval by SCT, the work plan is defined. SCT must also define and approve the project financing and implementation plan prior to initiating the procurement process. If the project is developed under the Public-Private Partnership Law (P3 Law), the final design does not need to be defined prior to bidding, as the project could be procured through a design-build contract and the developer could be responsible for

⁵¹ Analysis and evaluation of requirements and infrastructure needs identified in national strategies (PND, PNI).

obtaining the required permits, licenses or authorizations.

Phase IV: Construction and Operation. Before project construction begins, rights of way should be secured. The final schedule is defined, and the project is constructed based on the approved design. Once the construction is concluded, operational tests are performed on both sides of the border. Before the start-up of operations, a point-of-entry declaration must be issued. The last step of the process is a diplomatic note that acknowledges the completion of construction and formalizes the start-up of operations.

2.2.2 Overview of the U.S. Process

The process for the development of new international border crossing projects in the United States follows a general process similar to the one in Mexico, with minor differences. GSA, in collaboration with CBP, prioritizes investments to modernize and upgrade existing border crossings. CBP follows a multi-step process to identify which GSA-owned border crossings are in the most need of capital investment and works with GSA to develop a five-year capital investment plan that it submits to Congressional appropriators. GSA relies on the priorities established in CBP's five-year plan for portfolio upgrades. The CBP's five-year plan contains the list of priorities, including the expansion and modernization of existing land ports along with new port construction.⁵²

Based on an analysis of current practices, a four-phase process for the development of new crossings has been defined under this study (Figure 2.1). Each phase has tasks that must be completed in order to continue to the next one, except for right-of-way acquisition and Presidential Permits, which could take more than one phase to be completed. Neither country has formalized the border crossing development process, but the four major phases are:

Phase I: Prospectus Development and Preliminary Approval. The first phase is identifying and defining the project, capturing CBP's operational requirements and developing the project scope. CBP and GSA conduct a multi-step prioritization process that identifies agency needs at existing and proposed new border crossings that are part of the GSA and CBP five-year plans. Public-and private-sector stakeholders can also propose a border crossing project. However, they should consult with relevant federal and state agencies to understand the application process and address possible concerns at an early date.⁵³ This phase includes the preparation of a feasibility study that describes the project objectives, the impact that the project is expected to have on the rest of the country, the potential environmental impacts and potential sources for funding. This first stage concludes with OMB approval, Congressional authorization and the Presidential Permit application. A lead agency is selected, and this selection could be EPA, GSA or FHWA, depending on the type of project.

Phase II: Presidential Permit (PP). The second phase consists of obtaining the PP. Applications for a PP are submitted to DOS, which assesses national interest for the proposed project and circulates the project application for interagency review. In addition, an extensive environmental review under the U.S. National Environmental Policy Act (NEPA) is required. In order to obtain the Presidential Permit, the environmental review must conclude with either a finding of no significant impact (FONSI), an environmental assessment or an environmental impact statement, as defined under NEPA law. Once DOS has made a finding that the project is of national interest, it notifies other agencies and publishes a notice in the *Federal Register*. If no agencies object, DOS then issues a PP. If an agency objects to the permit issuance, DOS forwards the permit application to the President for his consideration and decision.

⁵² General Services Administration, 2014, Port of Entry Infrastructure: How Does the Federal Government Prioritize Investments? Accessed 01/10/2017, <https://www.gsa.gov/portal/content/194547>

⁵³ Department of State, August 5, 2016, Accessed 01/14/2017, <https://www.state.gov/p/wha/rls/fs/2016/260876.htm>

Phase III: Design & Procurement. Depending on the source of funding for the project and on whether the project is above the GSA prospectus threshold, different processes might be followed. However, generally, GSA will approve the final design and start the procurement process. The project could also be let through a design-build option, where the design and construction are done concurrently. This alternative is more efficient in terms of the project development schedule.

Phase IV: Construction and Outfitting. During this phase of the project the actual construction takes place. Upon construction completion, the respective inspection facilities are outfitted with CBP/SAT inspection technology / equipment. Operators take over control of their facilities. Finally, tests are performed to assure that the border crossing operates properly.

2.2.3 Overview of the Binational Process

The two countries maintain a relationship of cooperation and mutual understanding, which helps overcome some of the major challenges associated with the development of border crossing projects. Therefore, in-depth coordination of binational activities between departments and agencies of both countries should be considered the linchpin of a project that will lead to the proper completion of all activities required at the various stages of development. The timeliness of authorizations on both sides of the border must be very precise. However, this has not always been the case, as some projects have been initiated without the expected binational coordination, resulting in project delays and higher costs, impacting the original project budget.

Diplomatic notes are exchanged between the two countries, and regular communication through the BBBXG helps facilitate the processes. The key diplomatic notes are highlighted in the general process diagram, which indicates the key milestones between phases. These milestones should be monitored because, although the two countries have different

processes, at the very least the progress of project development is expected to concur reasonably in terms of the four phases. Other notes are exchanged throughout the process; however, they are not critical to the process and are not included in the diagram. Among the most important diplomatic notes is the first one, in which both countries explicitly express interest in developing a new border crossing. The second note specifies the geographic location of the new border crossing. The third diplomatic note formalizes the construction agreement, and the fourth diplomatic note is the notice of construction completion and the start-up of operations at the new border crossing.

In addition, throughout the process, it is common to exchange diplomatic notes that do not necessarily mark milestones; however, they are needed to formalize communication and binational activities resulting from the processes. Moreover, through the BBBXG, notifications between the two countries on project progress are made to address issues affecting its development.

Table 2.3 summarizes the most common diplomatic notes exchanged by phase. It is important to note that each project development process is different, and the diplomatic note exchange could vary.

At the end of the process, operation tests are conducted by agencies of both countries to ensure that vehicle flows work as planned. Mexican agencies that will be operating at the border crossing coordinate with INDAABIN, and U.S. agencies coordinate with GSA, in order to make any necessary adjustments for the efficient operation of the facilities. Some of the key items that are verified are:

- Coordination of operations for expected vehicle and pedestrian flows.
- Technical standards of operation.
- Safety requirements.

Table 2.3 Typical Diplomatic Notes by Phase and Agencies Involved

Phase	Activity	Document	Mexico			USA	
Phase I	Interest in new border crossing construction by both countries	1st diplomatic note	SRE	SCT		DOS	
Phase II	Agreement on the geographic location of the new border crossing	2nd diplomatic note	SRE			DOS	
	Binational approval of new border crossing		SRE	SCT	CILA	DOS	IBCW
Phase III	Bidding for construction	None	SRE			DOS	
Phase IV	Bilateral construction agreement and signing	3rd diplomatic note	SRE			DOS	
	Construction completion and start-up of border crossing operations	4th diplomatic note	SRE	SCT		DOS	

Source: Developed by FOA Consultores and TTI.

- Technical and physical equipment tests.
- Identifying and fixing any issues with installed equipment.

Once tests are completed, the opening date is agreed and the final diplomatic note is issued.

2.3 Development Phases of New Border Crossings

This section describes the tasks that each country undertakes for each phase of the process, starting with the Mexican tasks and then the United States tasks.

Each phase of project development includes several specific tasks that need to be conducted by the various stakeholders that participate in the process.

2.3.1 Phase I

During the initial phase, projects for new border crossings are identified and analyzed. The origin of the project varies and could come from a RBMP, be part of a local binational initiative or the federal portfolio (i.e., PNI

or PND). If both countries agree, diplomatic notes are exchanged expressing interest in planning the new border crossing.

Mexico: Project Planning and Preliminary Approval

This section describes the different tasks undertaken in Phase I of a new border crossing project in Mexico. It is important to note that the description assumes that SCT is the lead on the project, which is the most common practice. It should also be noted that SEGOB, through UPM, is authorized by the Mexican Migration Act to designate and eliminate international transit points for people by land, water and air, with the prior consensus of other Mexican agencies. Therefore, it has to review and define a position regarding the project upon request. In this phase, the following stages were identified.

Mexico: Planning

The project begins with the idea to build and operate a new border crossing between the United States and Mexico. The project sponsor may be an independent individual or entity or a local, state or federal

government agency of either country. The project sponsor contacts one of the Mexican agencies involved in the planning and construction of new border crossings (SRE, SAT, INDAABIN, SCT) to propose the project and seek preliminary approval from SCT. As the head of the transportation sector in Mexico, SCT analyzes feasibility of the project and national interest in the new border crossing. If it is feasible and/or in the national interest of Mexico, SCT approves the project and informs the GICYPF Base Group to initiate the project development follow-up process.

In some cases, preliminary studies of the overall border crossing vision or its technical, legal and environmental pre-feasibility, as well as project demand, are performed. As the project is analyzed, revisions to the overall concept may be required, generating feedback loops until a viable concept is ready for development in next step.

Mexico: Integration and Review of Technical Files

Once SCT agrees to study the project, it creates a technical file or dossier, which is used to manage a series of specific studies as follows:

Crossing Point Location

The project sponsor or SCT must present several studies that justify development of the project in the defined location. Once the studies have been approved by the relevant Mexican agencies and other entities, they are presented to SCT for final review. The required studies include:

- Environmental analysis (directed to SEMARNAT). The study evaluates the potential environmental and human health impact of the project and identifies ways to reduce negative impacts, substantiating the environmental viability of the project.
- Zoning (directed to SEDATU/municipal and state governments). Project plans are compared to local, state and national

development plans to ensure consistency with other land use plans. The risk atlas of the locality, if it exists, must be consulted to determine whether there are any risks associated with the proposed border crossing site due to the presence of potential natural disturbances and identify the type, frequency and intensity of such phenomenon. Risk scenarios and their potential impact must be evaluated to avoid building in dangerous areas. The alignment of the project with state and municipal urban development plans is also reviewed.

- International boundaries and waters. If applicable, CILA issues permits for surveying within the floodplain in the area in which the project will be built. CILA also reviews information on hydraulic design, embankments and potential water-related impacts at the construction site. This authorization applies only when the project is located on the banks of the Rio Grande or Colorado Rivers.
- Roadway integration (SCT / municipal and state governments). Topographic studies are performed to establish the feasibility of the project. Construction plans connecting the project to local and regional road networks are also proposed.
- Operational structure (directed to INDAABIN). Right-of-way acquisition plans are analyzed and, if necessary, the right-of-way holder must demonstrate proof of ownership.

General Conceptual Design

The project sponsor or SCT prepares a document that provides the general description of the project, as well as justification for its construction. The document must include the location of the new project, schematic plans of the area and preliminary design of the support facilities and connections to the roadway system serving the border crossing. SCT is the agency

responsible for technical analysis of the project, as well as evaluating the design of the border crossing facilities, in conjunction with INDAABIN, which according to the National Property Act is responsible for managing the project once it is in operation.

The migration control areas must be approved by INM, which as the foremost authority at the point of entry, will have to ensure that the project includes adequate facilities and sites so that its personnel can operate and carry out their functions.

Preliminary Design Review by the United States

The general details and description of the project is reviewed by the U.S. agencies to ensure that the project is feasible on both sides of the border. After the review, both countries sign a notice of intent in which they agree to carry out the necessary studies and governmental processes in each country.

Preliminary Financial Structure

SCT analyzes and proposes a financial structure for the new border crossing. First, the most suitable financing mechanism is defined, whether through a public works budget, public works financing, a design-build concession or a public-private partnership and, if applicable, the level of public support required. If necessary, SHCP and the Business Unit of FONADIN-BANOBRAS review the proposed structure. At the end of this phase, a preliminary financial structure, all the funding sources and the expected financing conditions should be defined.

Mechanism for Planning Programs and Investment Projects

The agency sponsoring the project must include it in its planning document and implementation program, in accordance with the established guidelines under the current regulations.⁵⁴ The priority of its execution must be defined in these documents, based on the criteria established by law, so that the project can be considered in the short-, medium- and long-term investment needs of the agency. The selected project must be consistent with the objectives, strategies and priorities contained in the National Development Plan, as well as in the sectoral, institutional, regional and special programs deriving from it. In accordance with current regulations, the implementation program and planning document must be validated and sent to SHCP IU.

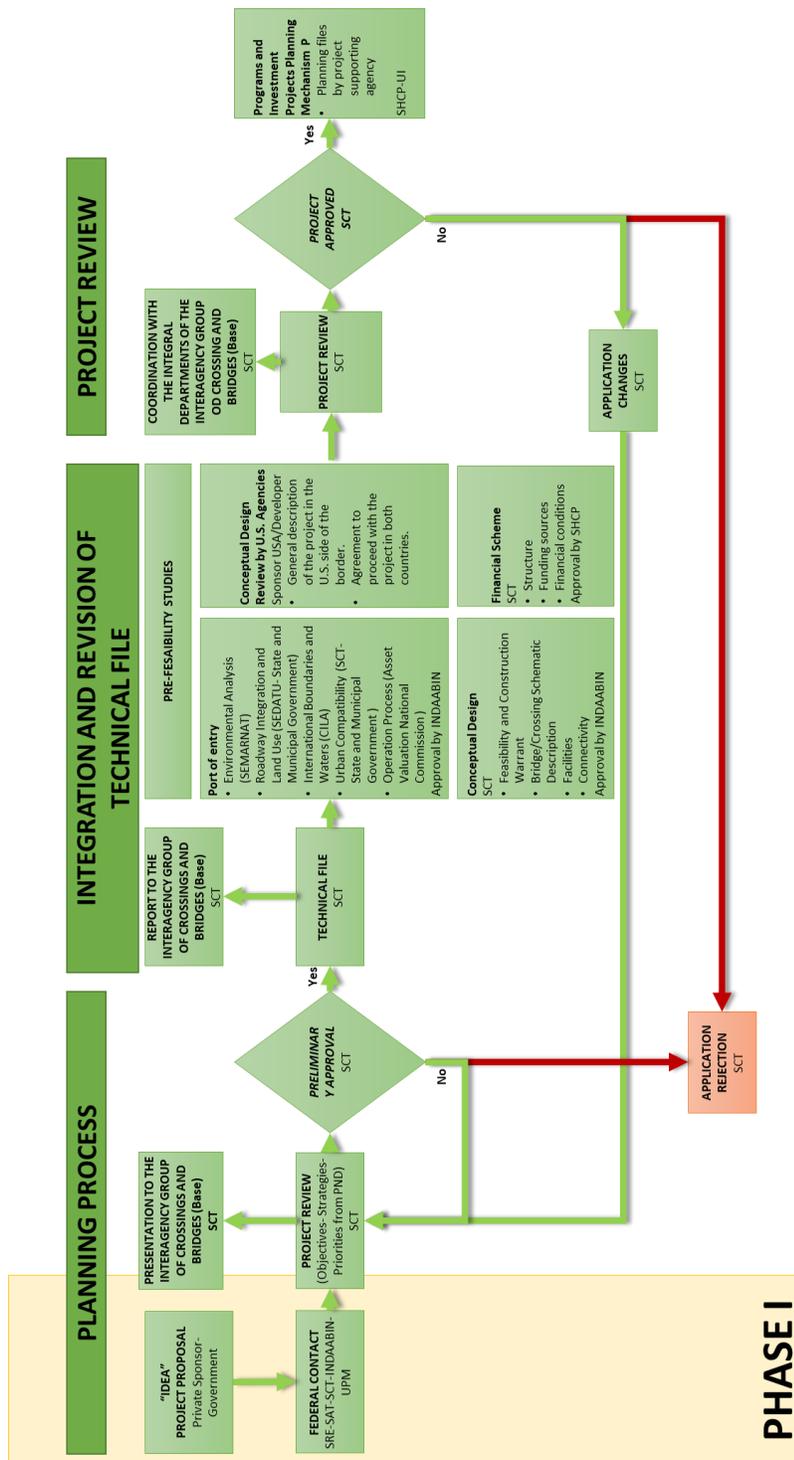
Mexico: Project Review

SCT reviews the studies to determine the feasibility of the project for its approval and, if necessary, requests additional information to supplement its analysis. If the study is rejected, additional studies could be developed to demonstrate feasibility. The GICYPF is kept informed of the progress of the project during this phase.

At the end of this phase, the first set of diplomatic notes, expressing interest in developing the new border crossing, are exchanged. Figure 2.2 depicts the first phase of border crossing development in Mexico.

⁵⁴ Guidelines for determining the information requirements that must be included in the planning mechanism of investment programs and projects.

Figure 2.2 Mexico: Phase I of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

United States: Project Identification

Projects in the United States are developed through the coordination of multiple agencies for the funding, construction, maintenance and operation of bridges and border crossings. This section covers the initial phase of identifying projects and the preliminary planning process on the U.S. side of the border, as described in Figure 2.3.

A combination of federal, state and local activities impact the development of a project prior to requesting a Presidential Permit from DOS. Border crossing projects are mostly identified from a five-year plan developed by GSA and CBP. New border crossing projects can originate from various federal, state or local sources, although there are two major sources for most border crossing projects: federal agencies and local agencies or the RBMPs. These projects are discussed and analyzed by the BBBXG. Local and state officials can pursue border crossing projects by consulting with federal agencies, such as GSA and CBP.

CBP creates a five-year plan that contains projects from its field offices and other agencies. This five-year plan ranks identified needs, contains sensitivity analyses on the ranking of needs, assesses project feasibility and risk, and provides a capital investment plan.⁵⁵ The five-year plan also identifies the projects that should progress through the stages identified in the next section, the first of which is determining whether the project falls above or below the prospectus threshold.

⁵⁵ U.S. General Services Administration. Port of Entry Infrastructure: How Does the Federal Government Prioritize Investments. <http://www.gsa.gov/portal/content/194547>.

United States: Preliminary Assessment

Threshold Level Review

GSA has a predetermined project cost threshold. For projects with a budget over this established value, a prospectus (project case) must be prepared and approved by the Senate and the House of Representatives.⁵⁶

In 2014, the threshold was US\$2.85 million, so in most cases, new border crossings will exceed the threshold, while modifications and repairs will fall below the threshold.⁵⁷ The process for projects below this threshold is presented later in this chapter in the section on modifications to existing border crossing infrastructure.

Project Development

GSA is tasked with evaluating CBP's projects in the five-year plan and setting a budget based on funding constraints, using feasibility studies, alternative designs and cost estimates.

GSA does not act alone when determining whether to develop a potential border crossing project. It consults DOS to determine if a project serves the national interest and reviews preliminary environmental assessments. Similarly, GSA can coordinate with EPA on the environmental assessment process and federal and state departments of transportation to assess highway infrastructure needs near potential ports.

⁵⁶ GSA Annual Prospectus Threshold, GSA. Retrieved from: <http://www.gsa.gov/portal/content/101522>

⁵⁷ Ibid.

Prospectus Development Studies

Planned future projects are selected from the five-year plans for further development. Prospectus development studies (PDS) incorporate data and findings from the plan, the building engineering report (modernization projects) and other preliminary planning studies. After a thorough examination of requirements and options, GSA makes an informed decision about approval and requests funding from Congress for proposed projects. The results are better prospectuses with a more accurate and realistic scope, requirements, implementation strategies and cost estimates.

Benchmark Cost Assessment

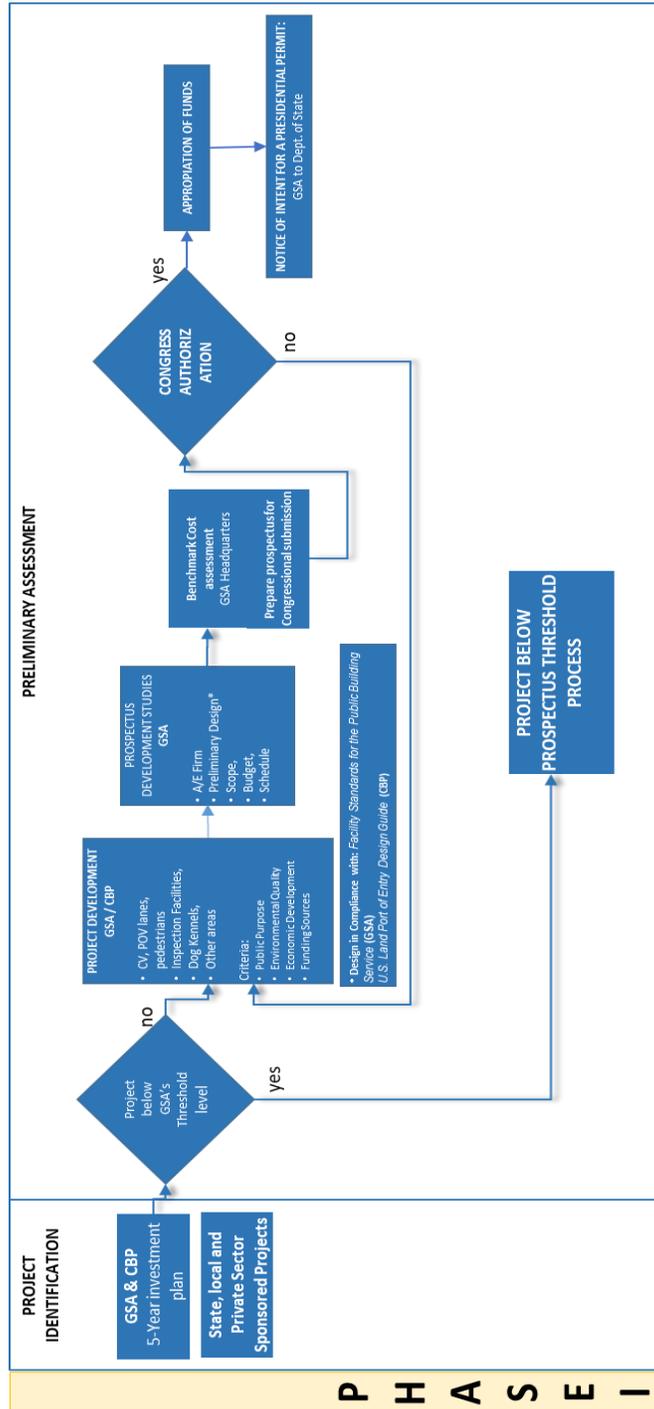
GSA compares the cost estimates to benchmarks and makes an investment decision. OMB reviews each project as part of GSA's budget request, and Congress authorizes projects and appropriates project funds as part of the federal budget cycle.⁵⁸

Congressional Authorization

The traditional congressional authorization is a two-step process. The first step is seeking design authorization/appropriation, followed by a second step where GSA seeks authorization/appropriation for construction.

⁵⁸ GSA, Design and Construction Delivery Process, Accessed/01/14/2017, <https://www.gsa.gov/portal/content/100803>

Figure 2.3 United States: Phase I of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

2.3.2 Phase II

Mexico: Authorizations and Permits

Phase II of the project, as shown in Figure 2.4, begins when SCT sends the studies developed in Phase 1 to the other agencies so that each one may review them and, if applicable, approve them within their sphere of competence. During the second phase, there is also a second exchange of diplomatic notes, in which the geographical location of the new border crossing is formalized. This phase of development is characterized by the harmonization of the project on both sides of the border.

The project studies are reviewed by the following federal agencies:

- CILA.
- SEMARNAT.
- SHCP IU.

Review and Approval by CILA

CILA ensures that the project complies with the international treaties relating to land boundaries and international waters, as well as with any environmental issues. CILA also conducts an analysis of the technical characteristics of the project and takes a position for or against it.

Review by SEMARNAT

SEMARNAT analyzes whether the project complies with general environmental impact and risk policies, and issues an opinion on the environmental impact assessment of the project (including access roads) and the mitigation measures recommended to address any environmental risks. At this point, SEMARNAT does not issue a final decision.

Review and Approval by SHCP IU

The agency sponsoring the project, which has integrated it into its Planning Document, sends the corresponding socioeconomic study to SHCP IU for its evaluation. The study must clearly indicate the economic and social benefits of the project for the country and should include a cost-benefit analysis,

specifying the main conclusions regarding technical, legal, economic and environmental feasibility, as well as traffic capacity and travel demand analyses with a binational origin/destination matrix justifying project construction, along with other sector-specific studies. SHCP IU will review and validate the socioeconomic benefits of the project. If it meets the established guidelines, the project will be given a registration code and included in the IU project portfolio, which will allow funding to be assigned for its execution and its eventual appropriation if approved by the Chamber of Representatives.

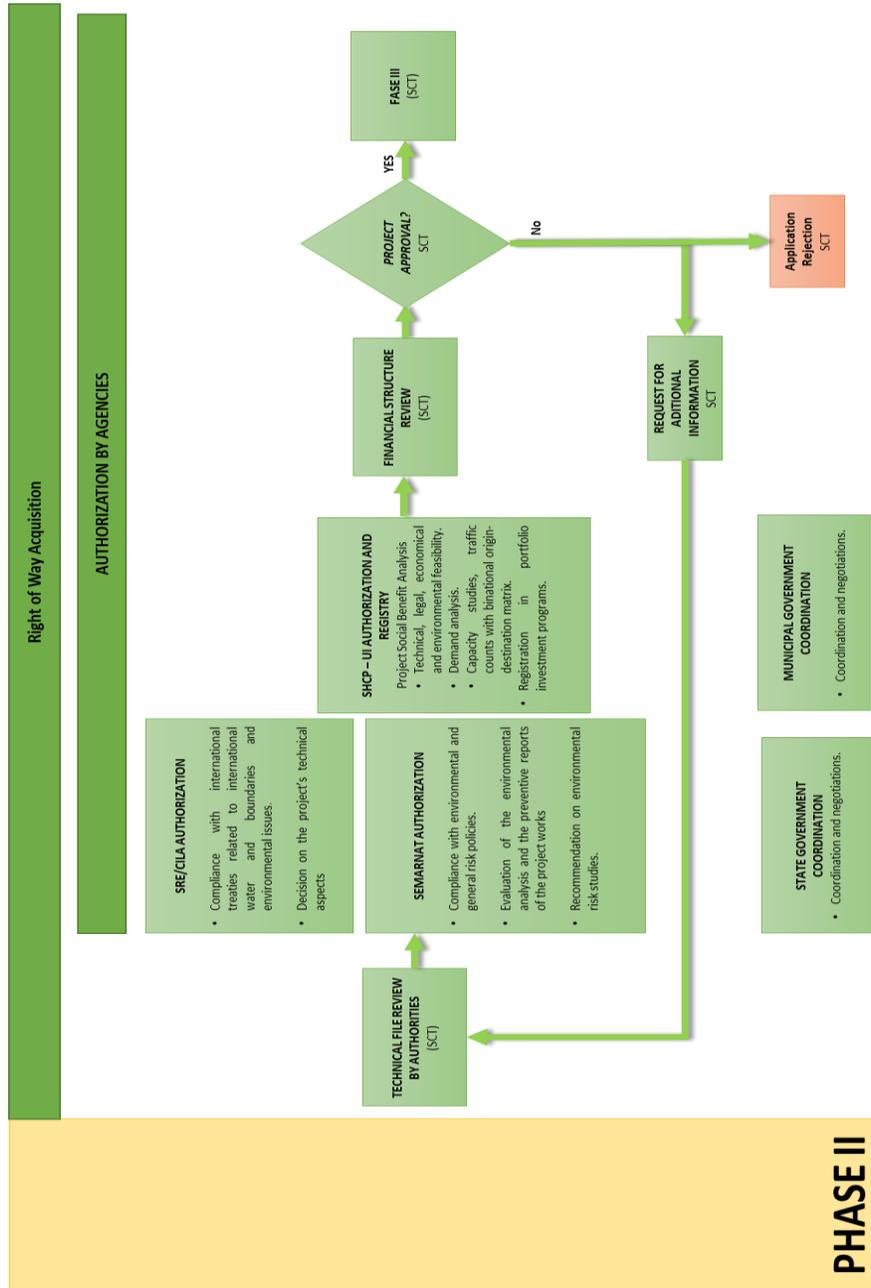
SCT Coordination with Municipal and State Governments

SCT informs the relevant municipal and state governments of its interest in constructing a new border crossing in order to initiate coordination between all levels of government.

At this stage, decisions regarding land ownership and the strategy for obtaining rights of way can be made with state and municipal authorities. Acquisition of rights of way is essential for project construction and must be completed before scheduling the final construction schedule can be defined.

Once SCT receives the comments and/or approval of the other agencies, it completes the project evaluation and revisits the preliminary financial plan. Once the results have been analyzed, SCT approves or rejects the project and proposes in greater detail the type of construction and operation that the project will follow.

Figure 2.4 Mexico: Phase II of Border Crossing Development



Source: Developed by FOA Consultores and TTI

United States: Presidential Permit

Once the new border crossing project goes through the initial phase, the project sponsor(s) apply for a PP from DOS. It is important to note that the PP process is applicant driven. DOS evaluates whether the project is in the national interest and circulates the permit application to all agencies involved in the border crossing development process as defined in Executive Order 11423. The Secretary of State has the authority to review border crossing project applications and to issue PPs for border crossing construction, connection, operation or maintenance. This process is outlined in Figure 2.5.

The function of DOS is to lead a consensus-building process with agency stakeholders. Localities should determine projects and identify funding sources prior to seeking a Presidential Permit. Stakeholders may prioritize border crossing goals differently. For example, CBP might view security as paramount, while another agency might prioritize facilitating an easy and efficient flow of goods. Consensus building includes communication with Mexico, who is an important trade partner. For both the United States and Mexico, the general goal is to maintain and improve border infrastructure and processes through sound communication among the agencies.

The Secretary of State works with the following agencies to determine whether the project is of national interest.

- USDOT (FHWA, FMCSA, and when appropriate FRA and the Pipeline and Hazardous Material Safety Administration [PHMSA]).
- Department of Defense (DOD).
- GSA.
- DHS.
- CBP.
- EPA.
- IBWC.

- Coast Guard, if project is an international bridge.

Step 1: Project Categorization

Using the interpretative guidance in Executive Order 11423, the project is classified according to its complexity and size. Three colors are used to classify projects:

- Red: All new and extensive modifications for existing border crossings.
- Yellow: Permanent modifications on existing border crossings that affect Mexican operations.
- Green: Minor changes in the proximity of the border that are not expected to affect Mexican operations.

Step 2: Application Requirements

The required components of the application are as follows:⁵⁹

- Identifying information.
- Facility description.
- National interest (information on why the project is of national interest).
- Similar facilities in the area.
- Traffic information.
- Construction plan.
- Financing and estimated cost.
- Mexican approval.
- Other U.S. approvals.
- Historic preservation (if required).
- Environmental justice.

Step 3: Environmental Review

As part of its PP application review, the lead agency conducts an environmental review process if issuance of a PP has the potential to significantly impact the environment. Its Bureau of Oceans and International Environmental and Scientific Affairs (OES) determines

⁵⁹ U.S. Department of State, Applying for Presidential Permits for Border Crossing Facilities (Mexico)

whether such a review is necessary and, if so, leads the preparation of an appropriate document.

While the National Environmental Policy Act of 1969 (NEPA) does not apply to Presidential Permitting, as a matter of policy, DOS acts consistently with NEPA in conducting environmental reviews. NEPA calls for agencies to evaluate and disclose environmental impacts of proposed actions and ensures that environmental factors are included in the decision-making process. NEPA gives agencies a structured, analytical decision-making framework that integrates environmental, social and economic factors.

NEPA-consistent reviews vary based on such factors as the nature, size, scale and details of the project, so no two reviews are the same. While DOS has a great deal of flexibility in determining the best process to use, three commonly used environmental review processes are:

- A U.S. federal agency prepares an environmental document consistent with NEPA, and DOS takes into account the environmental impacts of the proposed facility and project construction, to determine if the department can adopt it as the environmental review for the application review process;⁶⁰
- DOS and a state environmental agency prepare a joint environmental document together, which is consistent with both NEPA and state environmental law;
- A private sponsor applies for a Presidential Permit, and DOS selects and oversees a third-party contractor who prepares the environmental document for the project at the expense of the sponsor.

Step 4: Agency Review and Public Comment

Once the application is complete, DOS will instruct the applicant to provide copies, including all environmental and other documentation, to relevant federal and state agencies for their comment. DOS will also publish a notice in the *Federal Register* inviting public comment on the project.

If during the environmental review DOS finds no significant impact, a FONSI report will be published. Otherwise, additional environmental impact reports are needed before the project is further considered.

Step 5: National Interest Determination and Permit Issuance

Executive Order 11423 specifies certain federal officials with whom DOS must consult when reviewing a permit application. DOS may also consult with other federal, state and local government officials, as well as consider all views expressed, including public comments, before making a decision on a permit.

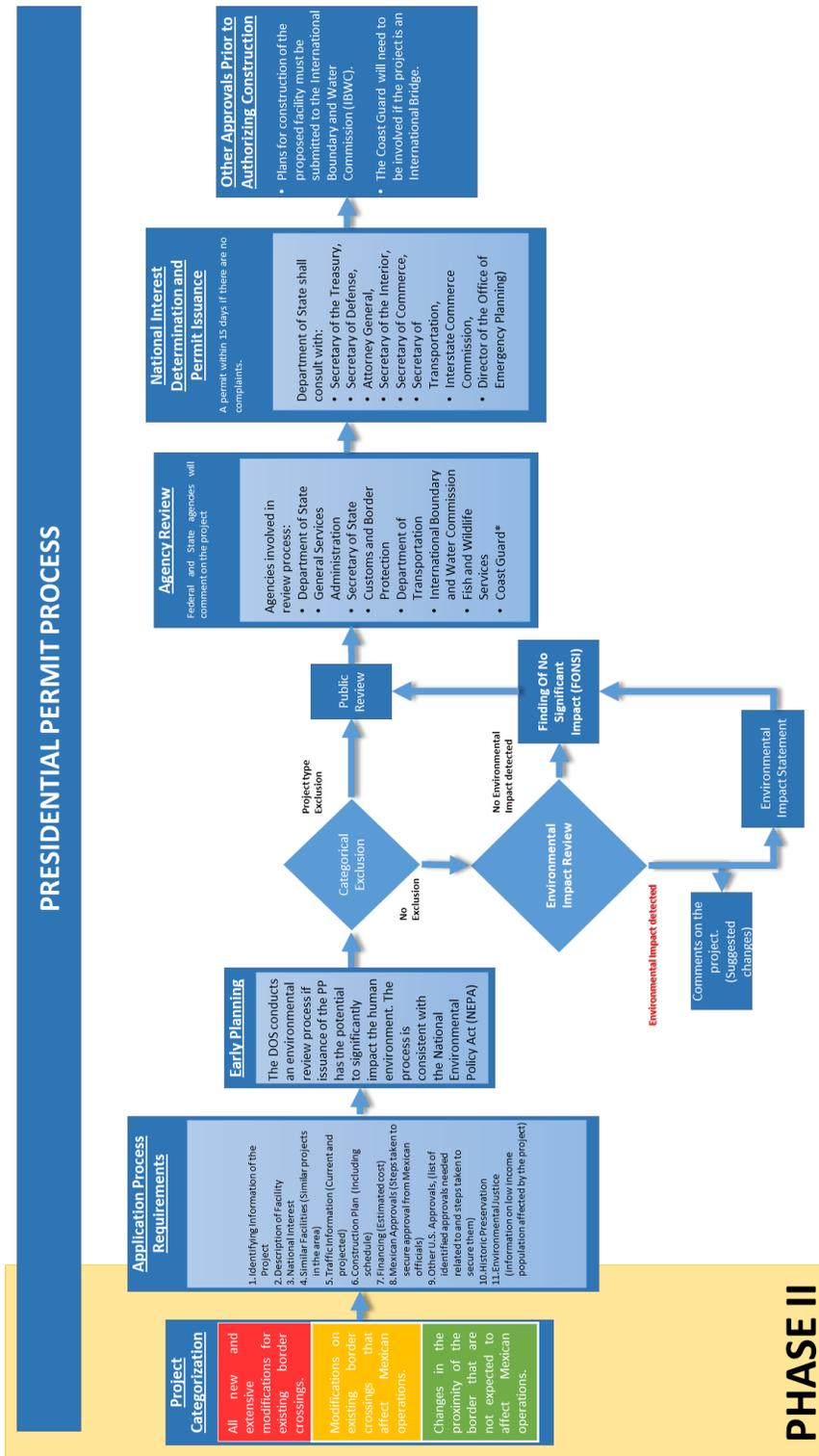
DOS informs federal agencies of its intention to issue a Presidential Permit. Assuming there are no objections from any of the officials specified in the executive order, DOS will issue the Presidential Permit 15 days thereafter. In the event of an objection, the Secretary of State will refer the matter directly to the President for a final decision.

Step 6: Other Necessary Approvals Prior to Authorizing Construction

The Coast Guard has jurisdiction over the construction, modification, operation and maintenance of any bridge connecting the United States with a foreign country.

⁶⁰ DOS, Applying for PP for Border Crossing Facilities, 08/05/2016, Accessed 01/14/2017, <https://www.state.gov/p/wha/rls/fs/2016/260876.htm>

Figure 2.5 United States: Phase II of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

Plans for construction of a proposed facility must also be submitted to IBWC for its approval. IBWC will assess whether the effects of the facility will be consistent with existing bilateral arrangements between the United States and Mexico. Its review and approval process for border crossings along the land boundary include ensuring that proposed construction activities are accomplished in a manner that does not change the characteristics of historic surface runoff on the international border.

DOS describes the role of IBWC in most Presidential Permits as follows: *“Before beginning construction the permittee shall: conclude satisfactory arrangements with appropriate federal and state agencies that will provide the assurance to the USIBWC that the facilities will not in any way present an obstruction or deflection to the normal flows or flood flows designated by the USIBWC in the reach of the international part of the Rio Grande; acquire the appropriate permits and licenses from the USIBWC for crossing the levee; and, obtain the concurrence of the United States Commissioner of the USIBWC that the project is consistent with the terms of boundary and water treaties between the United States and Mexico and other international agreements in force.”*⁶¹

IBWC will not approve any construction near the international boundary in the United States that increases, concentrates or relocates overland drainage flows into either country, or contributes to water quality, erosion and sediment problems. This requirement is intended to ensure that developments in one country will not cause damage to lands or resources in the other country.

Step 7: Bilateral Coordination with the Mexican Government

Communication between Mexico and United States is established via SRE and the embassies. Diplomatic notes are exchanged at various stages of the process to

communicate permit authorizations and other information.

2.3.3 Phase III

This phase includes two major processes: the development of the final design and the bidding and letting of the construction works. At the beginning of the bidding process, SRE informs the U.S. Government of the procurement dates and project schedule. Phase III of the Mexican and U.S. processes for new border crossing development is illustrated in Figures 2.6 and 2.7, respectively.

Mexico: Final Design

The financial structure of the project defines the type of process that will be followed for design and procurement. If the project is to be developed through a P3, the procurement process could be carried out based on the preliminary design with the developer tasked with developing the final design as part of the P3 contract. The typical structure under other implementation plans is to develop the final design first and use it as the basis for a request for proposals (RFP) for construction or to grant a concession under a build-operate-maintain contract.

The final design must ensure that the interior spaces and the size of the area designated for construction of the new border crossing, meet the operational needs for the type and number of vehicles to be served. The Border Port of Entry Design Manual, published by SCT, provides technical information for calculating and designing current and future space and facility needs associated with maneuvering commercial vehicles through the border crossing. It also includes criteria and recommendations for taking into consideration urban and land planning criteria in the region in which the border crossing will be located, and provides elements for estimating the internal capacity of the

⁶¹ Article 11 of Presidential Permit 05-01: Tornillo-Guadalupe New International Bridge, <https://www.state.gov/p/wha/rls/95194.htm>. Article 11 of Issuance of an Amended Presidential Permit Authorizing the

Construction, Operation, and Maintenance of an International Bridge Near McAllen, TX, at the International Boundary Between the United States and Mexico, <https://www.state.gov/p/wha/rls/124465.htm>.

border crossing and its corresponding access infrastructure.⁶²

The manual presents several layouts of the various elements that comprise a commercial border crossing. They are illustrated, as examples, since every layout will need to be adjusted to the characteristics of the border crossing location with respect to the city, topography, regional differences in freight, land availability and unique developer criteria.⁶³ As part of this manual, it is recommended that a methodology for estimating the size of interior spaces for the administrative offices of the tenant agencies, as well as the migration control facilities where INM can monitor incoming and outgoing citizens and foreigners and inspect their documentation be developed.

The final design must comply with current environmental laws. Therefore, the timely development of the environmental impact statement, known by its acronym MIA, is essential. The MIA is a document that describes environmental conditions prior to the project and assesses the potential impact of the construction and operation of the project on the environment and human health. The MIA must include prevention, mitigation or compensation measures. This document may provide development alternatives that are compatible with preserving the environment and managing natural resources.⁶⁴

SCT or the project developer under the supervision of qualified INDAABIN staff is responsible for developing the final design of the border crossing and its construction schedule in accordance with the timeline specified in the technical proposal. To guarantee that the federal building functions as planned, a common agenda must be established among the tenant agencies that will use the facility in order to determine the optimum

functional design of the service areas and meet all operational needs once the border crossing opens.

SCT and INDAABIN are responsible for reviewing and approving the final design. The design is also reviewed by SAT and CILA, who may issue comments and recommendations. The approval of IBWC/CILA will be formalized through a document signed by the U.S. and Mexican commissioners.

To ensure the efficient operation of the facilities built at the new border crossing, the Mexican agencies that will provide the services, will coordinate with INDAABIN to make design changes and obtain authorization to begin construction of the facilities. Once the final design is approved, SCT notifies the GICYPF. The acquisition of all rights of way and property rights must be obtained during development of the final design.

Currently, the National Civil Protection System (*Sistema Nacional de Protección Civil* [SINAPROC]) does not participate directly in the GICYPF. However, according to the General Law of Civil Protection, the Mexican Government is responsible for reducing potential risks and taking any actions necessary to identify and recognize vulnerabilities in the zones under its jurisdiction. It should also promote the incorporation of the Enterprise Risk Management in local and regional development, establishing strategies and policies based on a risk analysis in order to prevent future risks and to take actions to mitigate existing risks.⁶⁵ Therefore, it is suggested that SINAPROC review the final design so that its recommendations can be incorporated and mechanisms can be created to prevent and mitigate the risks detected when the new border crossing initiates operations. The mechanisms proposed by SINAPROC should be efficiently and jointly coordinated with all other plans and programs designed to address the risks detected on both sides of the border.

⁶² Border Port of Entry Design Manual (*Manual de Diseño de la Infraestructura de Transporte para los Puertos Fronterizos*), SCT, September 2000.

⁶³ Ibid.

⁶⁴ SEMARNAT. Environmental Impact and Types. (*Impacto Ambiental y Tipos*).

<http://www.semarnat.gob.mx/temas/gestion-ambiental/impacto-ambiental-y-tipos>.

⁶⁵ General Law of Civil Protection (*Ley General de Protección Civil*).

Mexico: Procurement

Prior to initiating procurement, SCT must define the financial structure and implementation plan for the project. If the project is implemented through a P3 scheme, the procurement process will be carried out in accordance with the provisions of the applicable law to award the project to a private developer through a service contract in which all or part of the infrastructure is provided by the private sector.

The bid documents must take into account the technical annexes of the project, the type of construction contract to be awarded and the values for evaluating the proposals. When the bid documents are ready, a notice is published, and a summary of the notice is also sent for publication to the official federal gazette, *Diario Oficial de la Federación*.

This process ends once the proposals received have been evaluated, and SCT has selected the winning bid. SCT issues its decision in favor of the winning bidder and arranges to sign the contract and other documents in accordance with the P3 law, including the concession agreement, if applicable.

Land and right of way acquisition should be completed by this stage.

United States: Final Design and Pre-Construction

Preliminary Design

This stage of the development process starts with the acquisition of the project site so the final design can be developed. The design process starts with the advertisement for an architecture/engineering (A/E) firm and other necessary professional services. An A/E firm is selected and design work on the project begins.

Design, Review and Approval

GSA reviews the design to verify compliance with the following GSA and CBP standards:

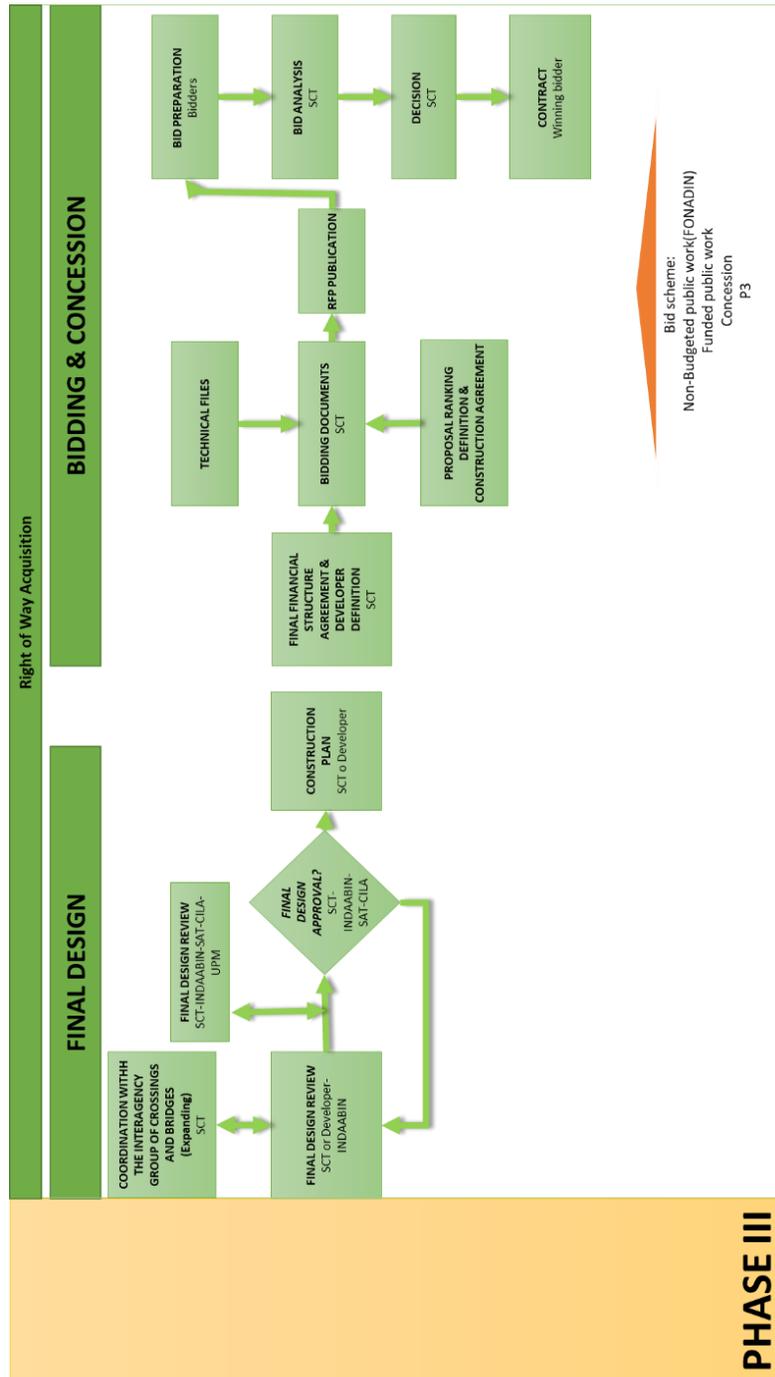
- *GSA P-100: Facilities Standards for the Public Buildings Service.*
- *U.S. Land Port of Entry Design Guide.*

After the design verification process is finalized, GSA approves the project.

Pre-construction Activity

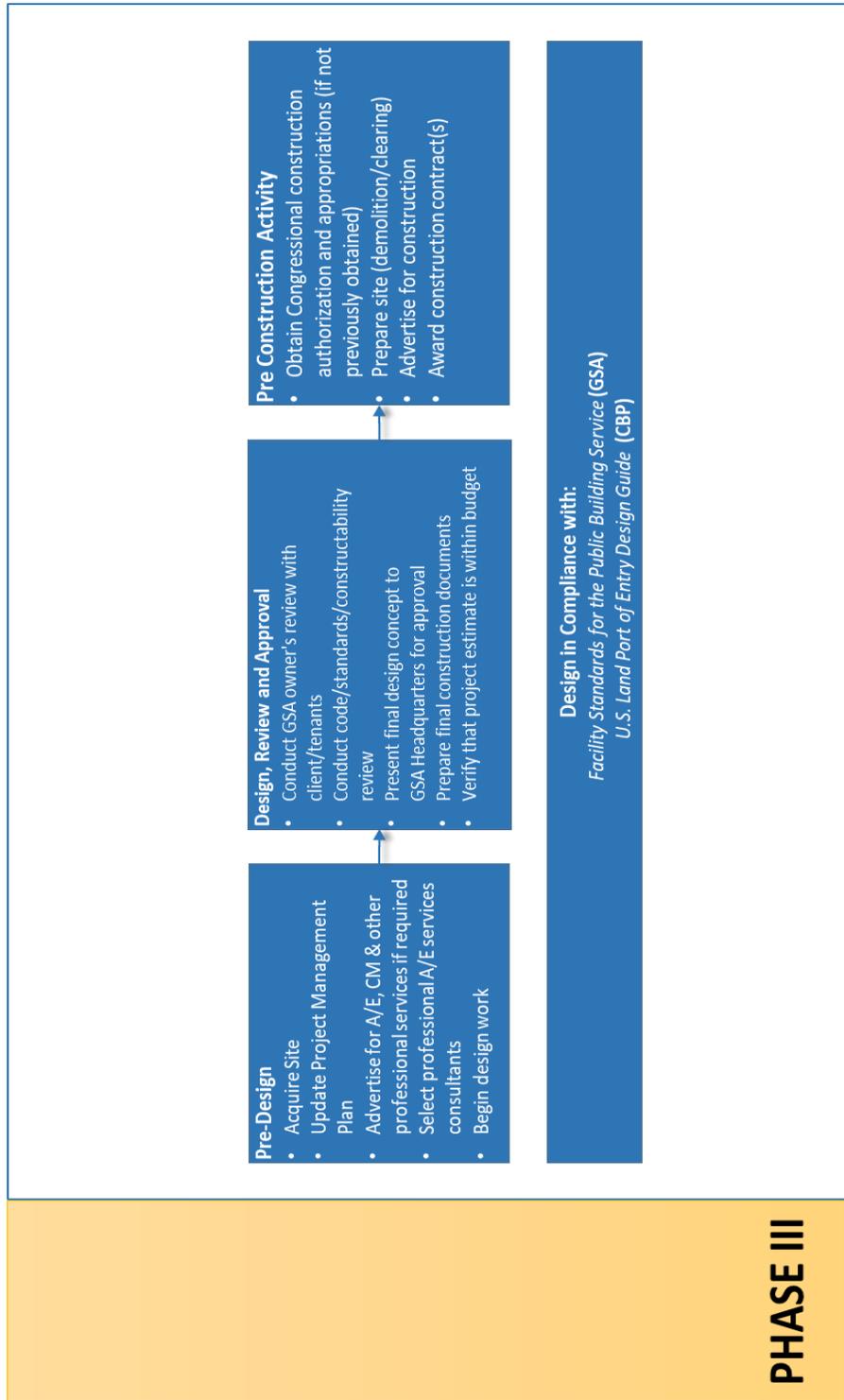
This process includes two main activities: obtaining Congressional approval to start site preparations and advertising to bid out the construction contracts. Construction contracts are awarded at the end of this process.

Figure 2.6 Mexico: Phase III of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

Figure 2.7 United States: Phase III of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

2.3.4 Phase IV

During this phase, the new project is built according to the specifications outlined in the procurement processes. Operational tests are also performed during this phase of the project. Given the coordination and previous work of both countries during earlier phases, the most efficient and effective procedure is to construct the border crossing on both sides of the border simultaneously in order to avoid delays.

The third diplomatic note is exchanged at the beginning of the fourth phase. The third note formalizes the construction of the new border crossing. At the end of this phase, the fourth diplomatic note, with the notice of construction completion and the start-up of operations, is exchanged.

Mexico: Construction and Operation

In order for this process to begin, the official declaration of the point of entry requested by SRE from UPM must have been formalized, by publishing a resolution in the official federal gazette, *Diario Oficial de la Federación*, issued by SEGOB through UPM, which has the exclusive authority, with the prior input of SHCP, SCT, SRE, the Ministry of Health (*Secretaría de Salud* [SS]), the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (*Secretaría de Agricultura, Ganadería, Desarrollo Rural y Pesca* [SAGARPA]) and, if applicable, the Navy, to designate or eliminate points of entry for the international transit of people by land, sea or air.⁶⁶ The environmental impact statement (MIA) issued by SEMARNAT is also required to start this phase.⁶⁷

The contractor coordinates with SCT, CONAGUA, Civil Protection, SAGARPA, CILA, INDAABIN and state and municipal authorities to obtain the construction permits and licenses required for the new border crossing. The project must be validated by the agencies listed above.

If the new border crossing involves the construction of a new bridge, CILA will continue to review activities related to bridge construction (Figure 2.8). For example, CILA will be responsible for reviewing and approving any type of temporary structures that may be necessary or the demolition of existing structures. It is also responsible for determining the location of the international boundary on the new bridge structure. If the new border crossing does not involve any water sources, CILA will simply supervise and monitor the construction process.

The following supervision tasks must be completed by the lead development agency during this phase:

- Verify construction schedule presented by the contractor.
- Supervise construction to verify that it is being carried out in accordance with the design and technical specifications.
- Approve work as performed and provide quality control. Upon completion, certify quality and authorize payment.
- Oversee administration of financial resources.
- Verify compliance with existing labor laws and safety regulations, as well as environmental regulations.
- Review project progress and problems on both sides of the border.

Project progress information will be shared with the GICYPF and the BBBXG, as well as INDAABIN. Once construction is completed, a certificate of completion will be issued and included in the technical dossier. It will serve as the basis for the exchange of the third diplomatic note. INDAABIN will perform a final verification prior to final acceptance of the project. The fourth diplomatic note sets the date and formalizes the

⁶⁶ Mexican Migration Act, Article 31.

⁶⁷ General Law of Ecological Balance and Environmental Protection, Article 35.

start-up of border crossing operations. Figure 2.9 describes Mexican agency involvement in this process.

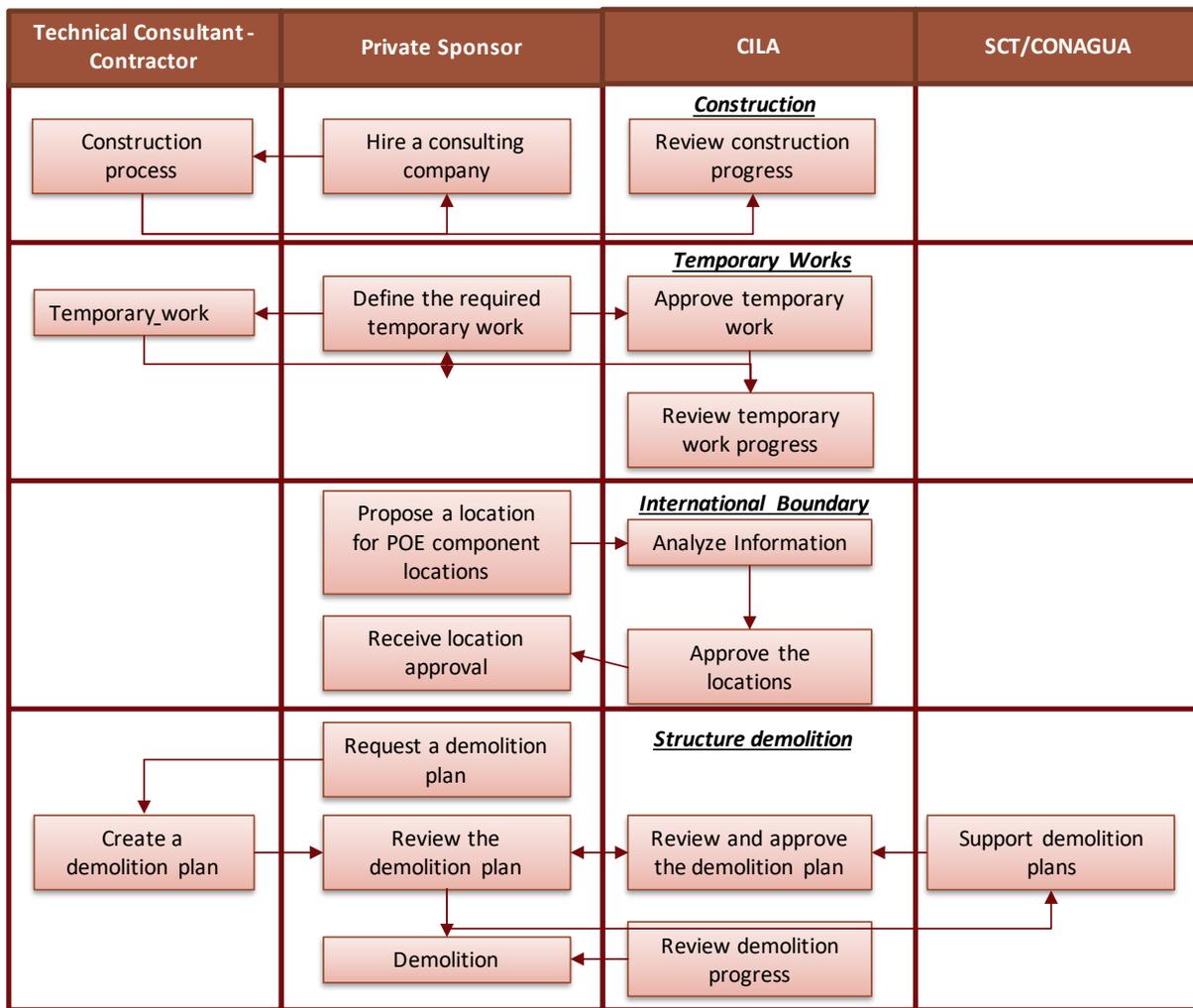
United States: Construction Development

The project construction phase must follow federal and local construction regulations, guidelines and specifications. This construction process includes the installation of utilities and services, as well as

preparation for occupancy of the building, including the testing of facilities.

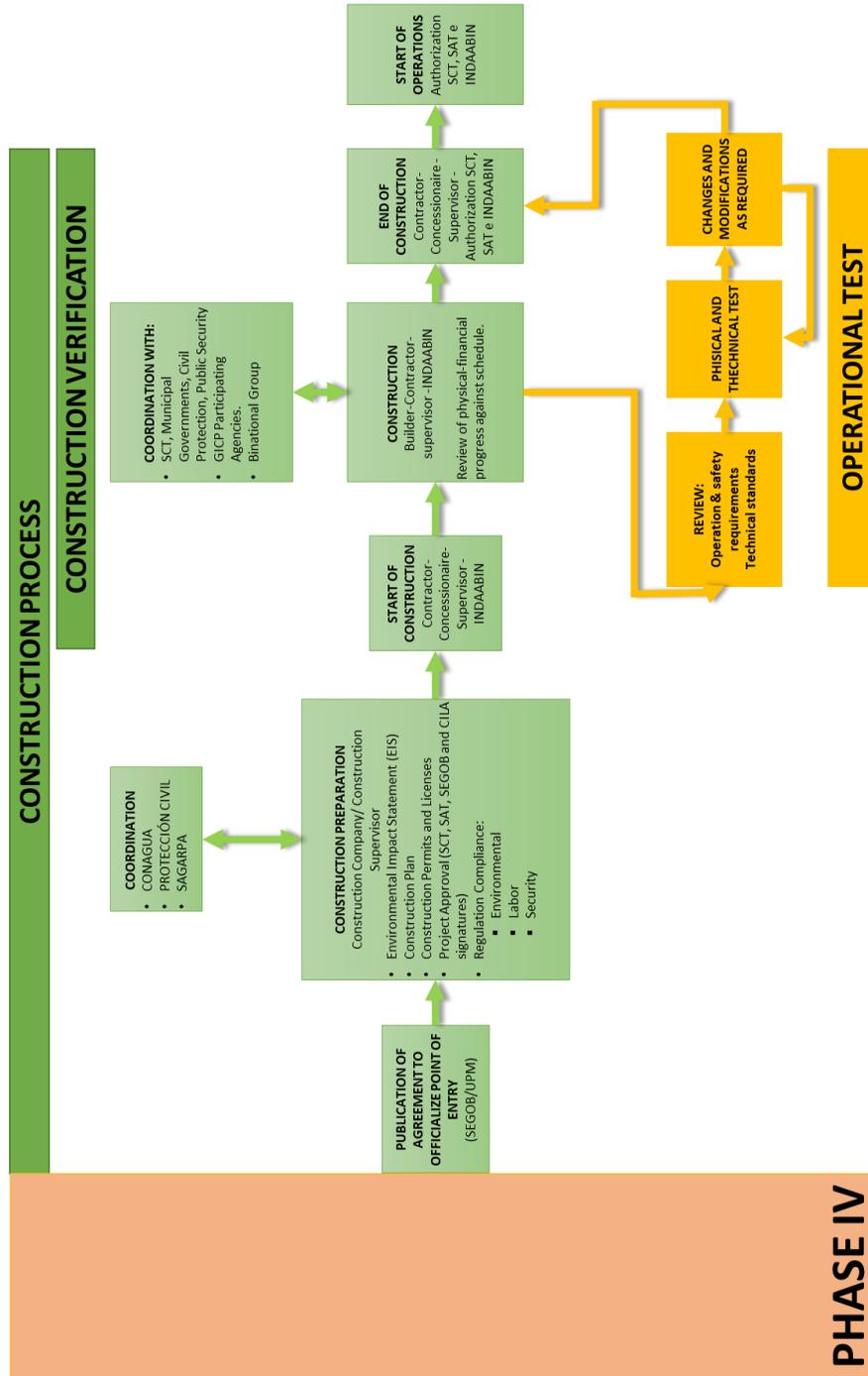
Once construction and preparation for the tenants has been completed, the border crossing is turned over to the property manager and GSA's involvement ends (Figure 2.10).

Figure 2.8 CILA Participation in Border Crossing Development in Mexico



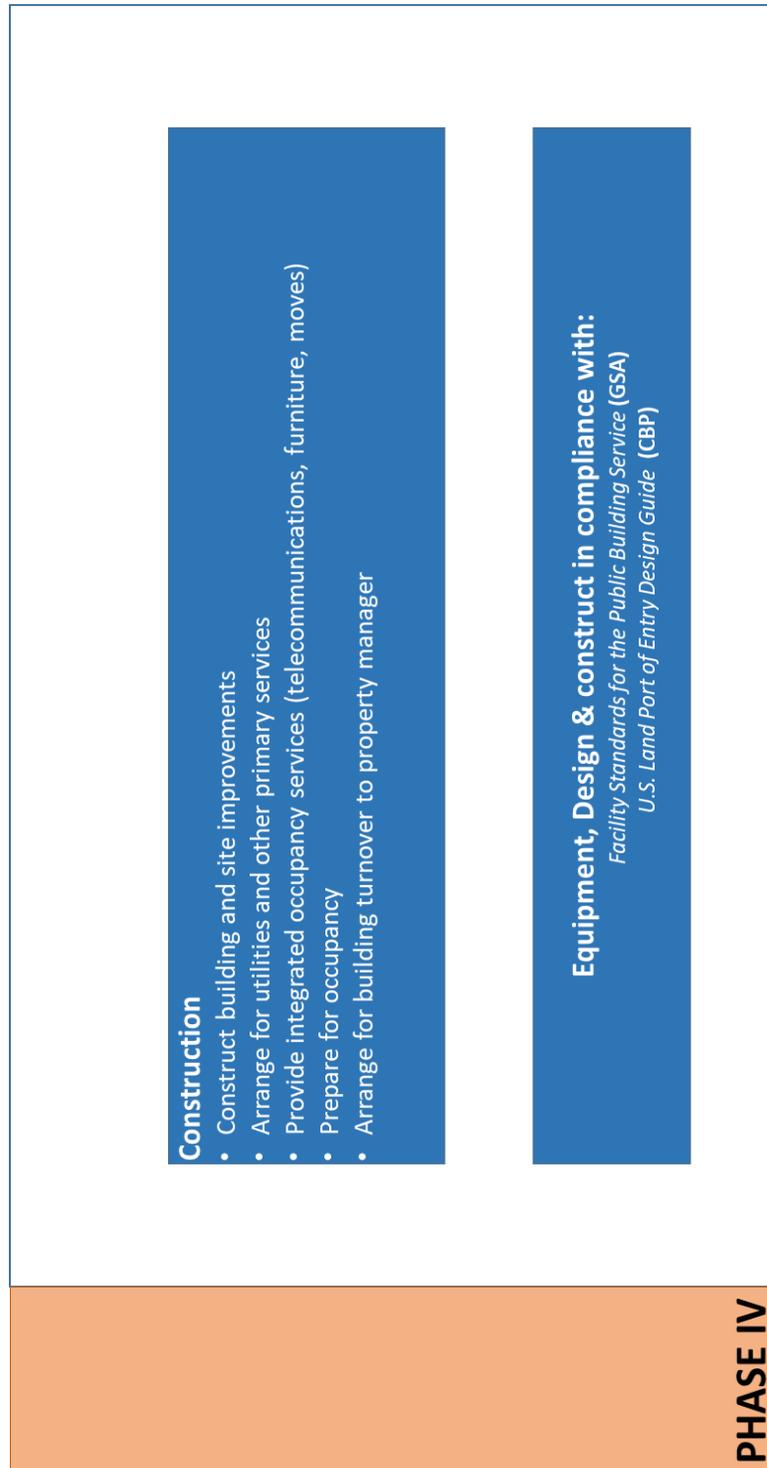
Source: Developed by FOA Consultores with information from CILA (Mexican Section of IBWC).

Figure 2.9 Mexico: Phase IV of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

Figure 2.10 United States: Phase IV of Border Crossing Development



Source: Developed by FOA Consultores and TTI.

2.4 Expansion and/or Modernization of Existing Border Crossings

Border crossing expansion and modernization projects involve fewer steps than new projects. Phase I of the process is usually more streamlined since planning takes fewer steps. In some cases, modifications may also be included from the outset of project construction as part of its modernization or maintenance program. Fewer agencies from both sides of the border participate in these projects, which usually allows for more dynamic coordination among agencies, resulting in faster project completion.

The processes and requirements for expansion and modernization of border crossings vary based on the nature of the project. For the purpose of this study, “expansion” is defined as works impacting both sides of the border, while “modernization” includes works impacting only one side of the border.

In Mexico, according to the Guidelines for Registration in the Investment Program and Project Portfolio, an expansion and/or modernization project is an investment project per se, and a socioeconomic evaluation is required, which entails initiating the process to register the project in the investment portfolio of the federal government.

In the United States, a project will require a Presidential Permit if it involves “substantial change” to an existing border crossing as defined by Executive Order 11423 and outlined below:⁶⁸

- Expansion beyond the existing border crossing area, including inspection facilities and grounds, access and ancillary areas.
- Changes in border-crossing ownership that were not included in the Presidential Permit.

- Permanent changes to the type of vehicle (freight vehicles, light vehicles, pedestrians, etc.) that either (a) are not consistent with what is covered in the Presidential Permit, or (b) were not established under the Presidential Permit.
- Any other changes that may have an inaccurate definition of facilities covered in the Presidential Permit.

2.4.1 Mexico Border Crossing Expansion and Modernization Process

As shown in Figure 2.11, the process begins when there is a need to modify or expand the facilities or roadways of any of the 58 border crossings between the United States and Mexico. A conceptual design of the project is developed by the agency concerned, together with INDAABIN if the property falls under its jurisdiction. INDAABIN will check that the project fosters better operating conditions for the applicant, as well as the other occupants of the federal building. At this stage, the determination is made as to whether the project will have a binational impact on operations in both countries.

If the project has a binational impact, then coordination with the United States will be necessary and the initial step is to determine whether a Presidential Permit is required. If the project does not require a Presidential Permit, it proceeds to the development phase, where the final design is proposed and the financial structure is determined.

The federal authorizations that are required will depend on the nature of the project. SCT will have to approve the project if it entails roadway construction regulated under the Federal Law of Roads, Bridges and Transportation. INDAABIN, as the administrator federal property and assets, will have to approve any project involving modifications to or use of space inside federal

⁶⁸ U.S. Department of State. Interpretative Guidance on Executive Order 11423. (2007). <http://www.state.gov/p/wha/rls/94946.htm>.

property assigned to public agencies, in accordance with its procedures and regulations for approving and implementing projects in shared federal property and the provisions of the National Property Act.⁶⁹

Once the final design is approved and agreed with INDAABIN, SHCP IU reviews the social and economic benefits of the project. If it complies with guidelines, it will be given a registration code, and resources for its execution will be assigned once the Chamber of Representatives ratifies it. At this stage, the funding structure and project developer are also defined.

Upon approval of project implementation, the works to rehabilitate, expand or modify the property begin and a technical dossier is created in which change orders and other as-built details are recorded. Upon project completion, a final report will be presented with all of the technical information related to the construction of the project, and delivery of the certificate of acceptance of the completed facilities will be scheduled.

2.4.2 U.S. Border Crossing Expansion and Modernization Process

In the United States, existing projects that are identified as requiring maintenance or modification through the five-year plan, building engineering reports or other studies, follow a process similar to the development of new border crossings.

General differences in the process depend on the estimated total value of the project. GSA has a set threshold value.⁷⁰ For projects that exceed this established value, a prospectus (project case) must be created and, when necessary, approved by the U.S. Congress. Projects below this threshold value do not require prospectus development studies and follow a different process, which is illustrated in Figure 2.12.

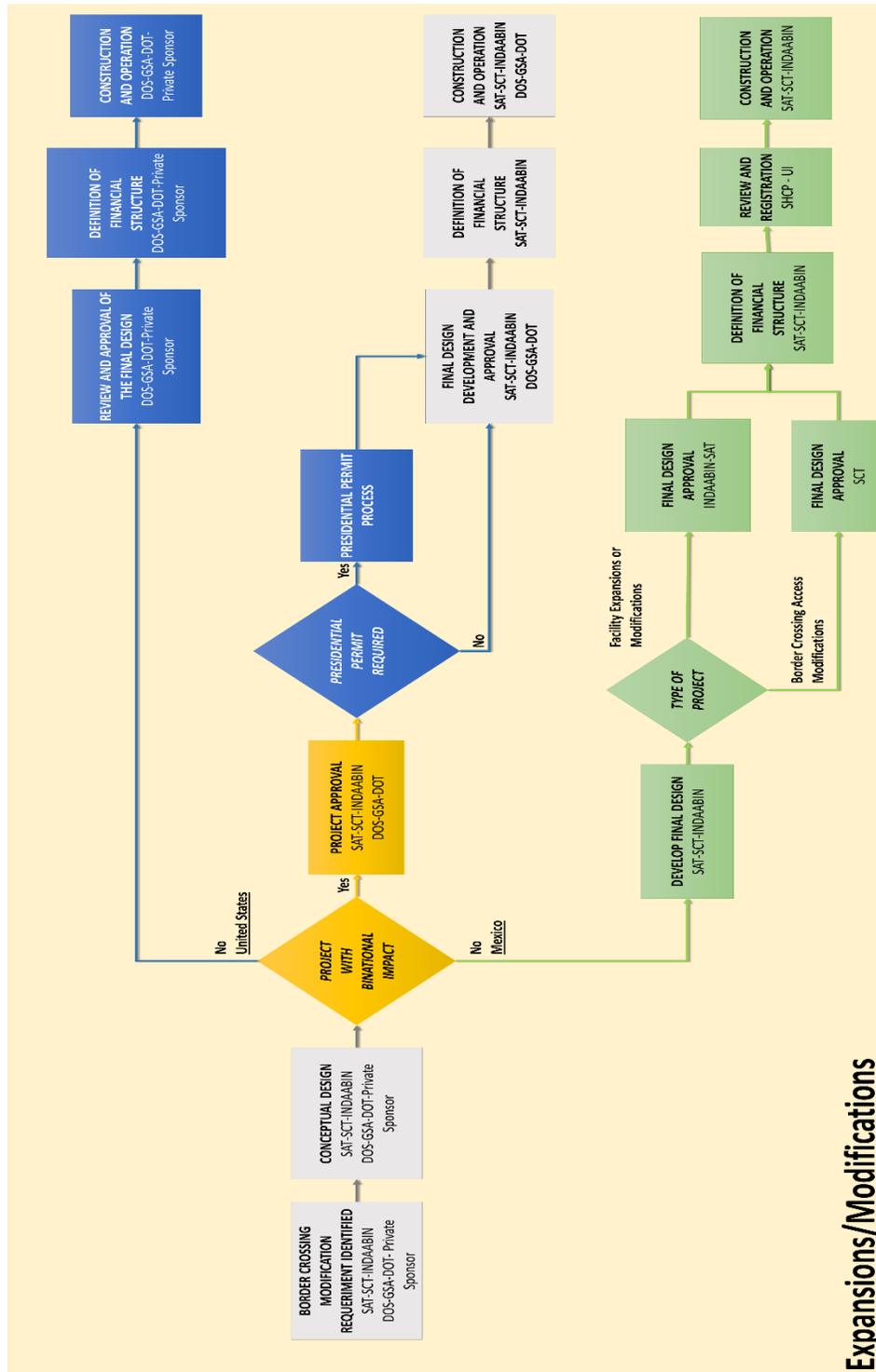
The process for projects above the threshold is very different from projects below the threshold. The latter process follows these steps:

- GSA determines if the project falls within a 10 percent margin of the threshold level. If it does, a special review by GSA specialists is undertaken to verify that the project will not exceed the threshold limit. The project proceeds to the construction phase or to the prospectus development process after a GSA determination.
- If the project does not fall within 10 percent of the limit, GSA evaluates the project and issues a determination that the project does not exceed the limit.
- The project undergoes a final review and then proceeds to the construction phase.

⁶⁹ Official Letter DGAPIF/643, August 18, 2014 from the Office of Federal Asset Management (*Dirección General de Administración del Patrimonio Inmobiliario Federal*).

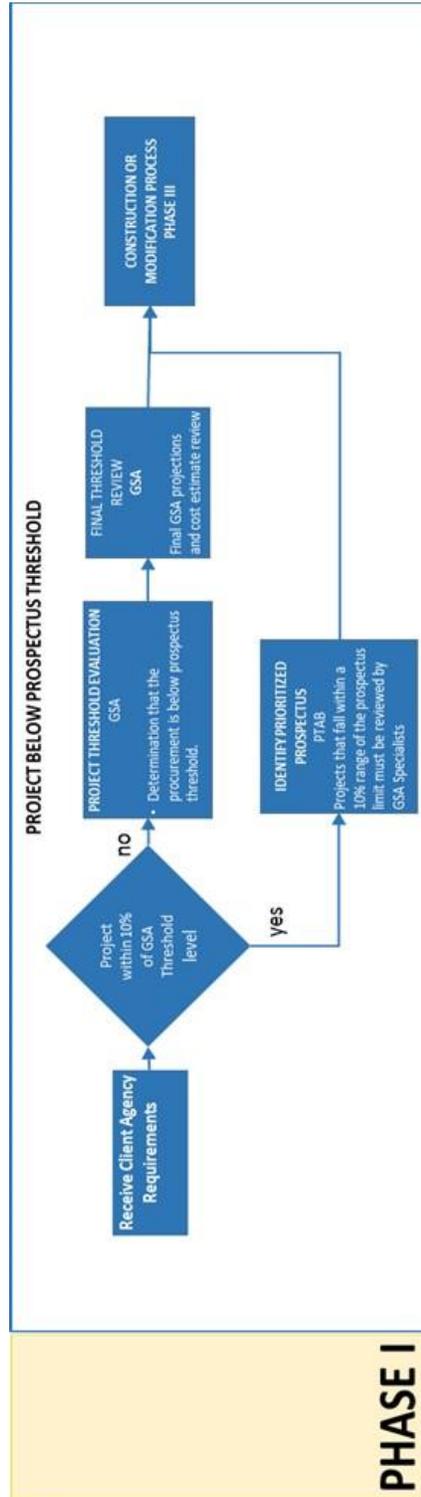
⁷⁰ GSA Annual Prospectus Threshold, GSA. Retrieved from: <http://www.gsa.gov/portal/content/101522>

Figure 2.11 Binational Process for Border Crossing Expansion and/or Modernization



Source: Developed by FOA Consultores and TTI.

Figure 2.12 Modification of Existing Border Crossing Infrastructure for Projects Below the U.S. Budget Threshold



Source: Developed by FOA Consultores and TTI.

Chapter 3. Funding Mechanisms for U.S.-Mexico Border Crossing Projects

A key factor in the development of any infrastructure project is the funding. Recently, the United States and Mexico have been exploring innovative ways to fund border crossing development, expansion or modernization, including mechanisms that allow them to diversify funding sources and share risks.

This chapter focuses on identifying financial mechanisms for border crossing projects in both countries. It provides a general overview of the financing sources available for U.S.-Mexico border crossing projects, existing legal regulations, the level of difficulty in funding these types of projects and current projects that are in the implementation phase using these financing mechanisms. The scope of this analysis is limited to land ports along the U.S.-Mexico border.

Understanding traditional financing practices for these types of projects on both sides of the border, as well as recent innovative financing mechanisms being implemented by SHCP and SCT in Mexico and by CBP and GSA in the United States, provide a foundation for identifying and developing additional funding sources and methods.

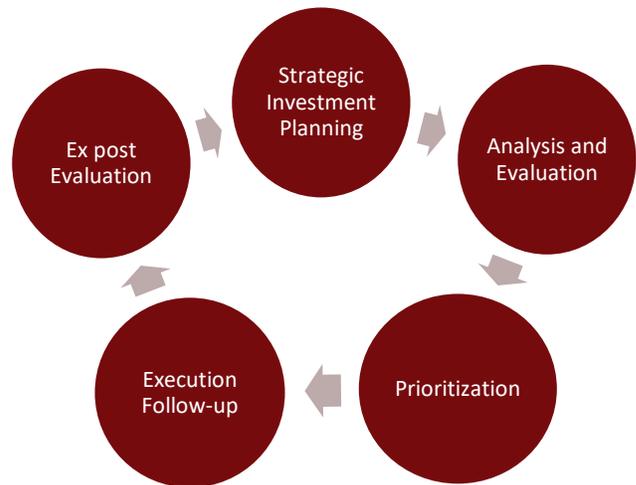
In this context, at the end of this section a new project financing mechanism is proposed that would help foster a more efficient and coordinated binational process for developing border crossings.

3.1 General Overview of Financial Mechanisms for U.S.-Mexico Border Crossing Projects

3.1.1 General Overview: Mexico

Development of border crossing infrastructure projects in Mexico entail multiple phases and activities before the financial plan is approved. These projects are usually funded through a public works financing mechanism, which requires that the project be registered with the SHCP IU, so that the project expenses may be included in the federal budget. The public works financing mechanism consists of five phases (Figure 3.1).

Figure 3.1 Investment Cycle Phases



Source: Developed by FOA Consultores with information from the Deputy Office of Expenditures of SHCP IU.

These five phases have the following sub-processes:

1. Strategic Investment Planning

Sub-process: Planning. The planning mechanism is a document defining the investment objectives, strategies and priorities for the short, medium and long term, in accordance with the provisions of the National Development Plan and the corresponding sector, institutional, regional and special programs. Federal ministries and other public entities are involved in drafting the plan.

Sub-process: Procurement. This sub-process begins with the bid notice or request for proposals for implementing the infrastructure project and, if applicable, the related services. The process ends with contract award and signing or its cancellation. The following elements are established in the bid documents and/or project contract: general description of the works or services, the location of the project and conditions for payment.

2. Analysis and Evaluation

Sub-process: Evaluation. Projects to be evaluated and related studies to be performed are identified in this phase in order to understand the impact of their benefits and associated costs to the public. Federal agencies participate in this phase.

3. Prioritization

Sub-process: Registration. Socioeconomic assessments for the selected projects are sent to SHCP IU to verify compliance with the established guidelines. If the project complies with them, it is registered in the investment portfolio in order to be included in the federal budget.

Sub-process: Allocation. The Executive Office prepares the draft budget, which encompasses all the projects approved by SHCP IU, and is aligned with national objectives, strategies and priorities. The draft budget

must be ready by September 8th of each year and is then submitted to the Chamber of Representatives, which has until November 15th to review, discuss and approve the budget. Upon approval, the draft budget is returned to the Executive Office for publication in the official federal gazette, *Diario Oficial de la Federación*, as the Federal Budget Approval Decree [*Decreto Aprobatorio del Presupuesto de Egresos de la Federación*] no later than 20 calendar days following its approval. Once funding has been allocated, federal agencies may use them to implement the approved projects.

4. Execution Follow-up

Sub-process: Implementation/Construction. This sub-process includes the activities related to obtaining the permits necessary to carry out the project, as well as all project implementation activities (construction, modifications, services). Payments are also made in accordance with the financial plan or schedule, or subject to the delivery of completed works.

Sub-process: Operation and Maintenance. Operation and maintenance activities are performed in accordance with the operation program and consistent with the terms and technical specifications established in the corresponding contract. Environmental protection requirements must be met, as well as other applicable federal, state and local laws. Payment for services, support and any other contractual fees will also be made.

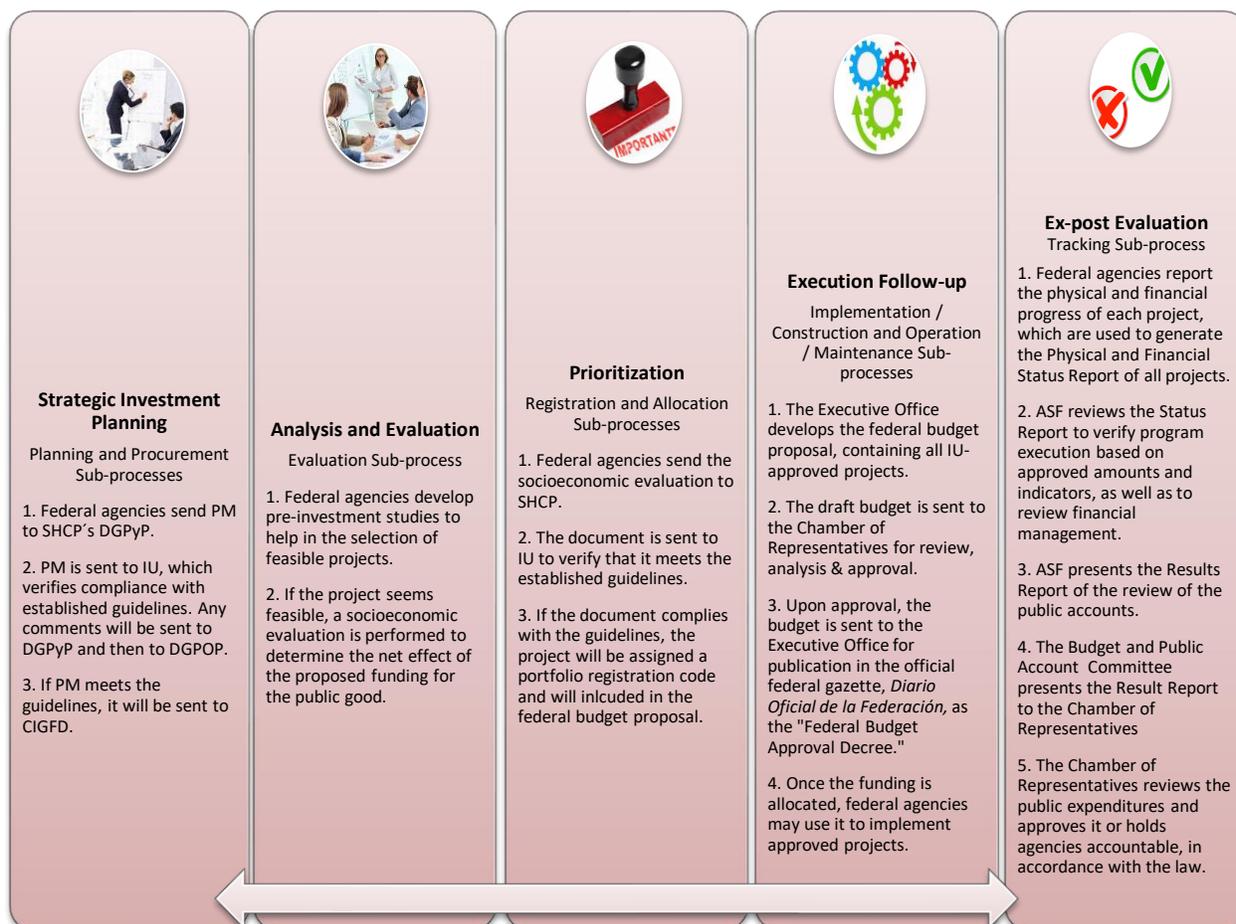
5. Ex-post Evaluation

Sub-process: Tracking. At this stage the project is monitored through controls and audits of project funding and physical progress. Periodic evaluations are performed as indicated in the contract or by law.

Border crossing projects have also been developed through concessions. Some examples of concessions are shown in Table 3.1.⁷¹

⁷¹ Public-Private Partnerships Law, Article 10: “P3s... may be used... by granting permits, authorizations or concessions for the provision of related services...”

Figure 3.2 Public Works Funding in Mexico



ASF: General Accounting Office (*Auditoría Superior de la Federación*)

CIGFD: Interagency Commission on Public Expenditures, Financing and Divestment (*Comisión Intersecretarial de Gasto Público, Financiamiento y Desincorporación*)

DGPpP: General Office of Planning and Budget (*Dirección General de Planeación y Presupuesto*)

DGPOP: General Office of Programming, Organization and Budget (*Dirección General De Programación, Organización Y Presupuesto*)

IU: Investments Unit of SHCP

PM: Planning Mechanism

SHCP: Ministry of Finances and Public Credit (*Secretaría de Hacienda y Crédito Público*)

Source: Developed by FOA Consultores with information from the Deputy Office of Expenditures of SHCP IU.

Table 3.1 Cases of Border Crossing Projects Developed Through P3s in Mexico

Project	Investment Amount (Millions of Pesos)	Location	Scheme	Date of Concession	Startup of Operations
Tamaulipas/Texas, Reynosa International Bridge/McAllen/Anzalduas	890	Reynosa, Tamaulipas	Concession granted to Marnhos Group	July 27, 2007	December 15, 2009
Sonora/Arizona, San Luis Rio Colorado/San Luis II	112	San Luis Rio Colorado, Sonora	Concession granted to Concesionaria y Operadora del Puente Internacional Cucapá S.A. de C.V.	November 27, 2007	November 4, 2011
Tamaulipas/Texas, International Bridge/Rio Bravo-Donna	307	Rio Bravo, Tamaulipas	Concession granted to the Tamaulipas State Government	March 14, 2008	December 14, 2010

Source: Developed by FOA Consultores.

3.1.2 General Overview: United States

Federal Funding

GSA and CBP traditionally work together on the development of border crossing infrastructure. GSA's mission with respect to border crossings is to *“develop and maintain processes, procedures and perform program oversight to ensure border crossings are developed consistently and to an acceptable standard.”*⁷² CBP's mission is to safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the nation's global economic competitiveness by enabling legitimate trade and travel.⁷³ GSA is responsible for acquiring the necessary resources and permits needed for construction, while CBP pays for the operation of border crossings from its own budget, as well as pays rent to GSA for maintenance and recapitalization of border crossings. Federal agencies coordinate with the state transportation departments in the development of transportation infrastructure serving the border crossings.

The typical process for developing a new border crossing starts with CBP and GSA producing five-year plans in which the selected projects are listed, and then feasibility studies are performed to develop project prospectuses. GSA and OMB review the estimated cost of the project, which is eventually submitted for Congressional approval.

Congress approves the final budget and distributes the appropriated funds. Congress performs the following four stages, with the last three occurring concurrently. Table 3.2 provides a description of each stage:⁷⁴

1. Adoption of the budget resolution.
2. Passage of appropriation bills.
3. Consideration of reconciliation legislation.
4. Consideration of authorization legislation.

⁷² Land Ports of Entry. General Services Administration. Last updated March 4, 2014. Accessed November 22, 2014. <http://www.gsa.gov/portal/content/104472>.

⁷³ CBP's Mission Statement. <https://www.cbp.gov/about>

⁷⁴ Stages of the Congressional Budget Process. House of Representatives Committee on the Budget. Accessed November 12, 2014. <http://budget.house.gov/budgetprocess/stages.htm>.

Table 3.2 Stages of Final Congressional Approval of the U.S. Federal Budget

Stage	Function
Adoption of the budget resolution	The House and Senate committees will hold hearings on the budget and will develop the framework used to consider spending and revenue levels for the next fiscal year.
Passage of appropriation bills	The House will then begin considering the actual appropriation of the budget based on the discretionary spending allocation developed in the previous stage.
Consideration of reconciliation legislation	If the spending and revenue levels were established in the first stage require a change in any law, then the committees have to report which legislation requires statutory changes.
Consideration of authorization legislation	Congress considers the measures authorizing the appropriation of funds on the programs each fiscal year.

Source: Stages of the Congressional Budget Process, House of Representatives Committee on the Budget.

USDOT provides funding and financing for the transportation components of border crossing projects through such programs as the Transportation Infrastructure Finance and Innovation Act (TIFIA). TIFIA helps states by providing credit assistance for projects with regional and national significance.⁷⁵ The USDOT FASTLANE (Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies) program provides grant funding to states, metropolitan planning organizations (MPOs), local governments and local special-purpose districts, including port authorities for projects to address critical freight issues on highways and bridges.⁷⁶

Current practice for new border crossings is to include, when possible, federal truck inspection facilities. FMCSA and FHWA have joint ownership of the Border Infrastructure Program (BIP), which provides grant funding for the development of border crossing infrastructure to states along the southern border with Mexico, including but not limited to vehicle inspection

facilities, automated border crossing infrastructure, and inspection bays and parking areas.⁷⁷

Federal Buildings Fund and Border Infrastructure

Funding for most capital infrastructure projects comes from GSA's Federal Building Fund (FBF). Sometimes, other sources of funding are also appropriated, such as the American Recovery and Reinvestment Act of 2009. This act earmarked US\$5.5 billion to improve energy standards in existing federal buildings, as well as construct new high performance courthouses and land ports of entry.⁷⁸ As of May 2015, the following southern border projects had been funded through the American Recovery and Reinvestment Act:⁷⁹

- California: Otay Mesa United States Land Port of Entry (US\$12,752,609).
- California: San Ysidro Land Port of Entry (US\$6,003,421).

⁷⁵ TIFIA Program Overview. U.S. Department of Transportation. <https://www.transportation.gov/tifia/overview>

⁷⁶ FASTLANE Grants FAQs. US Department of Transportation. <https://www.transportation.gov/buildamerica/fastlanegrants/frequently-asked-questions>

⁷⁷ "Border Infrastructure Program-Solicitation of Grant Application for the Border Infrastructure Program." Federal Highways Administration.

http://www.fhwa.dot.gov/planning/border_planning/borders/bordmemo.cfm

⁷⁸ Stout, Kurt. A Look at the Federal Buildings Fund. Capital Markets. <http://www.capitolmarkets.com/budget/a-look-at-the-fbf/>.

⁷⁹ Recovery Act: Federal Buildings Fund Investments. U.S. General Services Administration. <http://www.gsa.gov/portal/content/105326>.

- Arizona: Nogales West Land Port of Entry (US\$173,808,334).
- Arizona: San Luis-San Luis II Border Station (US\$1,402,145).
- New Mexico: Columbus United States Land Port of Entry (US\$709,394).
- New Mexico: Santa Teresa U.S. Border Station Administration Building (US\$9,874,176).
- Texas: Brownsville U.S. Border Station Los Tomates Administration Building (US\$9,323,063).
- Texas: McAllen U.S. Border Station Anzalduas Administration Building (US\$4,627,985).

The American Recovery and Reinvestment Act has brought important attention and funding to border infrastructure projects, but most of the funds earmarked in the bill have been obligated or already spent.⁸⁰

3.2 Types of Funding Mechanisms Available for Infrastructure Projects

3.2.1 Funding Mechanisms in Mexico

In Mexico, there are diverse sources of funding for infrastructure projects, and specifically border crossing infrastructure projects. These sources include public funds (federal, state and municipal budgets; development banks, FONADIN, etc.) and private funds through a P3. Figure 3.2 outlines the various financial mechanisms available to fund infrastructure projects in Mexico, including border crossings.

3.2.2 Public Funding Mechanisms in Mexico

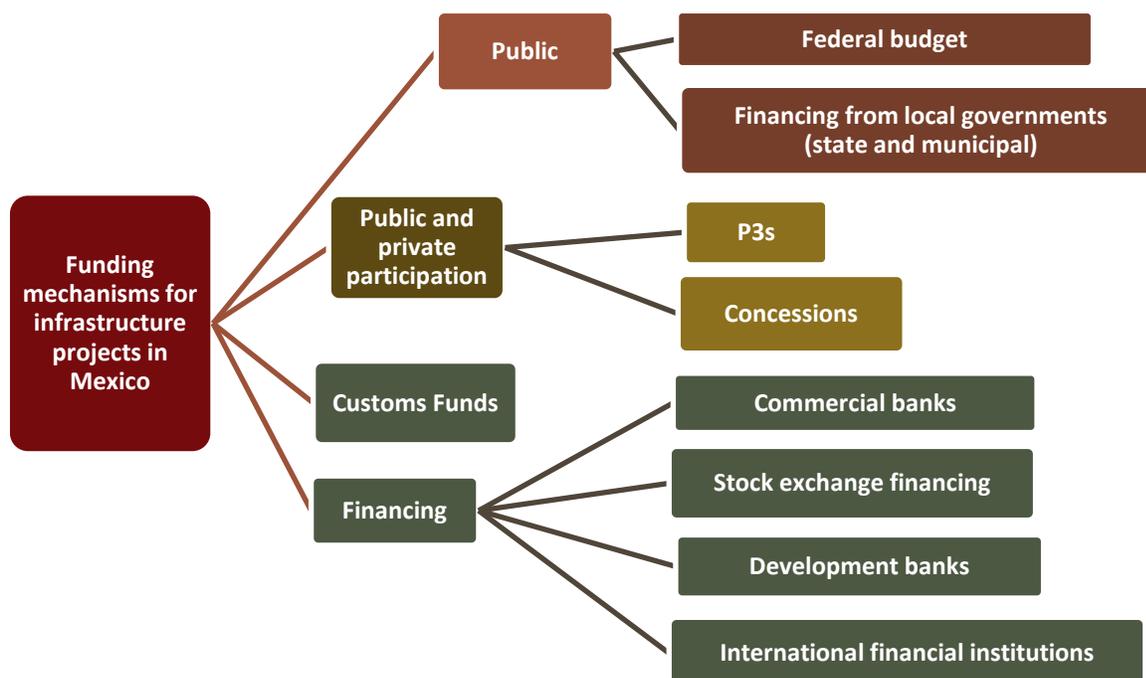
The federal budget proposal is prepared annually by the Executive Office and is approved by the Chamber of Representatives. The public spending policy is outlined in the budget in accordance with the current National Development Plan and related sector and special programs. The federal budget organizes expenditures in accordance with the objectives established in the National Development Plan. One of the main objectives of this plan is to maintain the current operating processes of the government or expand the scope of operations (i.e., public property and infrastructure).

Within the federal budget, border crossing projects are considered economic infrastructure projects since they entail the construction, acquisition and/or expansion of fixed assets for the production of goods and services in the tourism, communications, and transportation sectors. This classification includes all long-term infrastructure projects referred to in Article 18, paragraph 3, of the General Law of Public Debt (*Ley General de Deuda Pública*), and Article 32, paragraph 2, of the Federal Budget and Treasury Accountability Law (*Ley Federal de Presupuesto y Responsabilidad Hacendaria*); as well as rehabilitation and maintenance projects aimed at extending the useful life or expanding the capacity of fixed assets aimed at producing goods and services in the aforementioned sectors.

Infrastructure investments, and in particular investments in border crossing infrastructure, are classified as capital expenditures in the federal budget, and include public investments made by decentralized agencies and public-sector corporations for border crossing construction, expansion, maintenance and conservation.

⁸⁰ Stout, Kurt. A Look at the Federal Buildings Fund. Capital Markets. <http://www.capitolmarkets.com/budget/a-look-at-the-fbf/>.

Figure 3.3 Financial Mechanisms for Infrastructure Projects in Mexico



Source: Developed by FOA Consultores with information from *Banco Nacional de Obras y Servicios Públicos (BANOBRAS)*, the National Infrastructure Fund (FONADIN) and the 2015 Federal Budget.

Financing from Local Governments (States and Municipalities)

States and the Municipal Governments have diverse funding mechanisms for investment projects, and specifically for infrastructure. While it is not common in Mexico for these levels of government to fund border crossing projects all on their own, they can support the development of projects through capital contributions or revenue fees such as for rights of way, complementary works, among others. To fund works, state governments may use the proceeds from their share of federal tax revenue, as well as federal grants, including those described below.

Fund for Strengthening States (Fondo para el Fortalecimiento de la las Entidades Federativas [FAFEF]) and Fund for Strengthening Municipalities (Fondo para el Fortalecimiento de los Municipios [FORTAMUNDF]). These funds are allocated for different objectives, including infrastructure development, especially street

paving, public lighting, sewer and storm water systems, and other urban and public infrastructure projects. Among the objectives of these funds is the development of physical infrastructure investment, acquisition of goods to equip infrastructure built or acquired and indirect expenses related to investment programs or projects, as well as allocating funding to support infrastructure projects jointly funded with public and private resources. FAFEF and FORTAMUNDF funding is administered by the state or municipal government and, therefore, could be used to develop complimentary infrastructure in border crossing projects.

Social Infrastructure Contribution Fund (Fondo de Aportaciones para la Infraestructura Social [FAIS]). This fund is divided into two sub-funds: State Social Infrastructure Contribution Fund (*Fondo de Aportaciones para la Infraestructura Social Estatal [FAISE]*) and Municipal Social Infrastructure Contribution Fund (*Fondo de Aportaciones para la*

Infraestructura Social Municipal [FAISM]). Although this fund focuses on social infrastructure projects, as stipulated in its general operation guidelines, up to 15% of FAISE or FAISM funds may be used for roadway construction, paving, cladding, gutters and sidewalk. These resources can be considered for infrastructure projects in the event that the other elements needed in poverty-stricken areas lacking basic services are taken into account and thus improve the welfare of the communities.

Development Banks

The purpose of development banks is to maximize access to financial services for those who have limited access to traditional or commercial financial services. The financial reforms passed by Congress on November 26, 2013, allow the institutions to meet this goal by establishing a mandate to facilitate access to credit and financial services in their respective markets, replacing a more rigid mandate, which just prioritized the conservation of state assets, thus inhibiting funding for development.

Mexican development banks provide funding for the development of high-impact projects, such as roads, ports, airports, border crossings and more.

The Mexican development bank, *Banco Nacional de Obras y Servicios Públicos* (BANOBRAS), is a state-owned enterprise, with legal personality and assets. Its purpose is to finance or refinance projects related directly or indirectly to public or private investment in public infrastructure and services. Regarding infrastructure, it funds projects with high social returns that foster competitiveness and national development.

BANOBRAS offers the following products:

- Direct credit.
- Syndicated loans.
- Stock guaranties.

- Liquidity programs for public works contractors.

On the other hand, the National Infrastructure Fund (FONADIN) is a vehicle for coordinating infrastructure funding within the federal government, primarily in the communications, transportation, water, environment and tourism sectors. It supports the planning, promotion, construction, maintenance, operation and transfer of infrastructure projects that have a positive social or economic impact, in accordance with the applicable programs and budgeted resources.

FONADIN relies on diverse products designed to strengthen the financial structure of infrastructure projects in Mexico. These products could be applied to the development of border crossings. From project inception to completion, FONADIN offers financial instruments, such as guaranties and subordinate loans, to make projects attractive for private financing. FONADIN provides financial support only if there is private collaboration in the form of financial resources. FONADIN offers the following products:

- Contributions.
- Grants.
- Guaranties.
 - Securities guaranties.
 - Credit guaranties.
 - Performance guaranties.
 - Political risk guaranties.
- Subordinate loans.
- Venture capital.
- Financial instruments through sectorial programs.
- Funding for studies.

Table 3.3 describes the available products and types of assistance that FONADIN and BANOBRAS have to finance border crossing projects and/or other aspects of their development.

Table 3.3 Development Bank Products Available for Financing Border Crossing Projects in Mexico

Product	Provided by	Description
Grants and subsidies	FONADIN	<p>FONADIN provides grants to federal entities and agencies to finance investments in the development of infrastructure projects such as border crossings, based on the following eligibility criteria.</p> <ul style="list-style-type: none"> • The project has a self-reliant payment source. • Its procurement process complies with Article 134 of the Mexican Constitution and applicable laws. • Private sector should participate. • Feasibility studies demonstrate the technical viability and net positive social impact of the project and justification for financial assistance from FONADIN. • The project is registered in the SHCP Investment Unit. • The project has been approved by the FONADIN Evaluation and Financing Subcommittee. • The requested assistance should not exceed 50% of the total project investment, except in fully justified cases approved by the FONADIN Technical Committee. • In case of a concession, the concessionaire should provide a minimum of 20% of total investment. <p>To maximize private-sector participation in infrastructure projects that have high social impacts, such as border crossing projects, and that have a low return on investment, FONADIN provides subsidies based on the following eligibility requirements.</p> <ul style="list-style-type: none"> • The project has a self-reliant payment source. • The project has private-sector participation. • It is registered in the SHCP Investment Unit. • It demonstrates that projected cash flows will be insufficient to provide a reasonable return to private investors. • Feasibility studies demonstrate that the project will be technically, socially and financially feasible once the subsidy is granted. • There is positive feedback from the Evaluation and Financing Subcommittee. • The subsidy requested is not more than 50% of the total project investment, except in fully justified cases approved by the Technical Committee. • If applicable, the concessionaire is contributing at least 25% of the total project investment.
Direct investment in concessions	FONADIN	<p>FONADIN can support the funding of infrastructure projects and obtain the concession rights, permits and authorizations to build, manage, operate, maintain and operate the investment project, which will later become part of the Concession Assets; that is, all the assets for which FONADIN has been granted a concession certificate or contract by</p>

Product	Provided by	Description
		the respective authority for their construction, operation, use, maintenance and/or conservation.
Guaranties	BANOBRAS and FONADIN	<p><u>Security Guaranties</u>: These guaranties are provided to facilitate the placement of negotiable instruments in the stock market for the financing of infrastructure projects (which could include border crossings) in order to share the risks inherent to such projects with the investors.</p> <p><u>Credit Guaranties</u>: These guaranties are provided for infrastructure projects with financial mechanisms involving banks and financial intermediaries. Commercial and development bank loans made to federal or local public sector entities or private-sector contractors who receive a concession, such as for border crossing infrastructure development, are eligible.</p> <p><u>Performance Guaranties</u>: These guaranties are provided to assume the risks inherent in the construction and start-up of projects.</p> <p><u>Political Risk Guaranties</u>: This type of guaranty is provided in order to absorb the inherent risk associated with acts of authority, as determined by the Technical Committee of FONADIN, which may affect the viability of a project as defined by the corresponding legal instruments. These types of guaranties can be attractive in binational projects, such as border crossings.</p>
Credit	BANOBRAS and FONADIN	Credit is provided for projects with a subordinate debt structure, which will help improve cash flows and debt coverage for the commercial bank loans or securities that will be issued to finance the infrastructure project.
Venture capital	FONADIN and BANOBRAS	<p>BANOBRAS and FONADIN are authorized to make complementary, minority capital contributions on a provisional basis to provide sufficient capital resources to execute infrastructure projects like border crossings. Potential beneficiaries are defined as follows:</p> <ul style="list-style-type: none"> • Private-sector entities that receive from a federal, state or municipal government a concession, permit or other contract that enables public-private partnerships for the construction, operation, use, conservation and/or maintenance of infrastructure projects. • Investment funds specifically dedicated to infrastructure projects.
Funding for studies	FONADIN	<p>FONADIN supports the development of infrastructure projects by providing reimbursable and non-reimbursable funds for studies and technical assistance, in order to enhance their viability and chances for implementation. This funding can be used to develop border crossing feasibility studies.</p> <ul style="list-style-type: none"> • <u>Reimbursable Funding</u> is provided for studies related to infrastructure projects that are expected to generate a financial return on investment. • <u>Non-reimbursable Funding</u> for up to 50% of the total investment is provided to public-sector entities for studies and other assistance related to infrastructure projects with a high social return, but little or no financial return in order to facilitate their evaluation and structuring. In the event that the project is implemented and becomes financially profitable, the funding will become part

Product	Provided by	Description
		<p>of the investments in the project, and FONADIN will be reimbursed based on a previously agreed payment structure.</p>
<p>Stock mechanisms</p>	<p>BANOBRAS</p>	<p>Structured investment instruments are securities issued for the purpose of raising funds to invest in or finance national activities or infrastructure projects. The two primary instruments are outlined below:</p> <ul style="list-style-type: none"> • <u>Infrastructure and Real Estate Investment Fund (Fideicomiso de Infraestructura y Bienes Raíces [FIBRA])</u>: These are vehicles for financing real estate. They provide regular payments and might generate capital gains. These instruments may be used to finance real property related to border crossings, such as guardhouses, warehouses, inspection areas, etc. Key requirements include the following: <ul style="list-style-type: none"> ○ Creating a trust that will receive and hold the real estate to be developed. ○ Obtaining a certification from expert structural engineers. ○ Obtaining a real estate valuation. ○ The property must be leased and cannot be disposed of for at least four years. • <u>Certificate of Development Capital (Certificado de Capital de Desarrollo [CKD])</u>: Their purpose is to finance infrastructure projects, both greenfield and brownfield projects. There are two types of issuances: <ul style="list-style-type: none"> ○ <i>CKD A</i>—Investment in securities from various companies. ○ <i>CKD B</i>—Investment from one company, frequently used for specific infrastructure projects. <p>For a border crossing project to be funded by a CKD, the following actions must be considered:</p> <ul style="list-style-type: none"> ○ Create a trust that will issue bonds on the Mexican Stock Exchange and be managed by a trustor who will administer the proceeds. ○ Establish a technical committee that will set policies for investment of the proceeds. ○ Make the minimum initial contribution established in the bond indenture, equivalent to 20% of total contribution. ○ Present a business plan, including the terms and conditions for investing in the border crossing project, and for asset management. ○ Prepare an annual schedule specifying investment and divestment dates and, if applicable, the consequences in the event of default. CKDs generally have a defined term, ranging between 6 and 30 years. ○ Have a specialist provide an initial independent appraisal of the CKD for the border crossing project, who will estimate on a quarterly basis the fair value of the investments, the cash flows to be generated, the value of the assets, comparable transactions, etc. Second, have a professional price provider evaluate the CKD based on data from the expert appraiser and market information.

Product	Provided by	Description
		<p>In Mexico, the issuance and placement of CKDs is strictly regulated in order to avoid default. The regulations apply to both the issuers and the investors willing to buy the bonds. By the end of 2015, the Mexican market had 59 CKDs representing \$94.51 billion pesos, mainly in the following sectors: industry and services (34.1%), real estate (37.2%) and infrastructure (28.7%). For 2016, 10 more CKDs were expected to be issued.</p>

Source: Developed by FOA Consultores.

Mexican Customs Funds

Revenue from Mexican customs is sent to the Federal Treasury and then assigned to a trust specifically created for border projects. These funds can be used for a wide variety of projects, including employee housing construction or border crossing expansion or reorganization.

Project Finance Schemes Using Border Crossing Revenue

Under this scheme, the payment source is the cash flow generated by tolls collected at border crossings, which is part of the concession to private-sector stakeholders that have the right to charge tolls in order to recoup their investment in the construction of a new border crossing or the expansion of an existing one. Some bridges managed by the government also charge tolls. The map in Figure 3.4 shows the various toll rates charged at international bridges on the Mexican side of the border (northbound traffic).

3.2.3 Public-private Funding Mechanisms in Mexico

Public-private Partnerships (P3)

Under the concession model, the government grants rights to a private firm to provide a predefined service. Some border crossings currently operate under this scheme.⁸¹

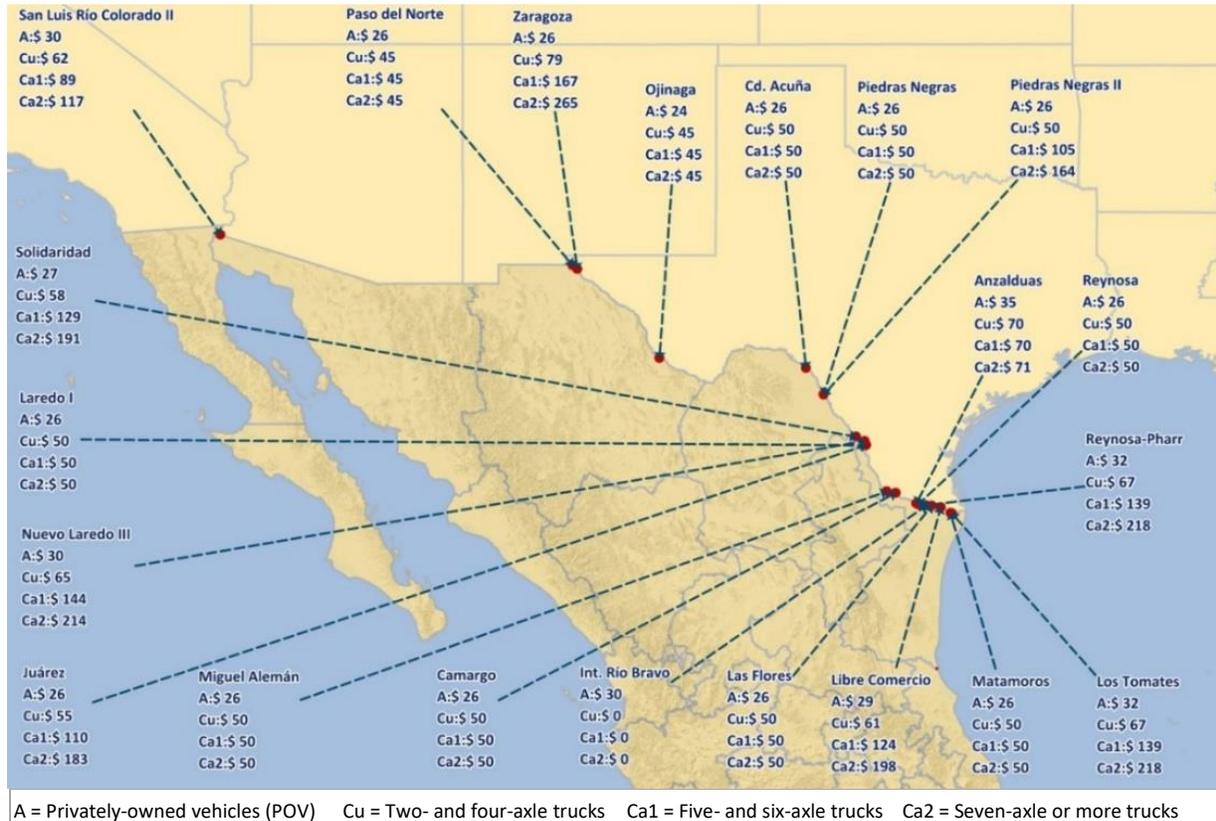
P3s have proven to be a good alternative for contracting infrastructure projects over the years. This funding mechanism combines experience, innovation and risk-sharing between the public and private sectors. The various P3 funding options have made these mechanisms more popular in light of the global financial crisis. P3s are used in both the developing and the developed worlds.

The recent enactment of the Public-Private Partnership Law in Mexico, published in the Official Journal of the Federation, provides more certainty to P3s as financial mechanisms for infrastructure development. According to the law, P3s shall be understood as follows:

- *Simple P3 Project.* The funds for payment of the services and costs of infrastructure investment, operation, maintenance and conservation come entirely from the federal budget.

⁸¹ Mexican Law of Public-Private Partnerships, Article 10: "P3s... may be used... by granting permits, authorizations or concessions, for the provision of related services..."

**Figure 3.4 Northbound Border Crossing Tolls in 2014
(Mexican Pesos)**



Source: Developed by FOA Consultores with information from the Department of Highway Development (*Dirección General de Desarrollo Carretero*) of SCT. http://aplicaciones4.sct.gob.mx/sibuac_internet/ControllerUI?action=cmdRepDatosOperSel

- **Mixed P3 Project.** The funds for payment of the services and costs related to infrastructure investment, operation, maintenance and conservation come from the public sector, either through the federal budget, FONADIN or other non-budgetary federal resources.
- **Self-supporting P3 Project.** Funds come from private contributions or project revenue.

Based on the above categories, federal participation in P3 projects may take one of two forms: 1) directly from the federal budget or 2) from other federal resources outside the federal budget.

There is one other way to identify investment projects that could be attractive to the public sector: unsolicited

proposals. Pursuant to chapter 3 of the P3 law: “Any party interested in carrying out a P3 project may submit a proposal to the appropriate federal agency,” as long as it serves an area of interest of the federal government. Article 27 establishes that unsolicited proposals shall be submitted with a preliminary feasibility study that includes:

- Project characteristics and technical feasibility;
- Description of authorizations required for project implementation (especially land use and any acquisition issues);
- Legal feasibility of the project;

- Socioeconomic and financial feasibility of the project; results of the social benefits study;
- The suitability of implementing the project under a P3 modality instead any other scheme (see P3 Manual);
- Estimated cost of the investment and contributions from public and private parties; and
- Basic characteristics of the proposed P3 agreement.

Unsolicited proposals do not obligate the agencies nor do they grant the proposal sponsor any additional rights other than the right to participate in the procurement process if the proposal is accepted. If the sponsors are not awarded the contract, they also have the right to be reimbursed for some of the expenses incurred in developing the proposal and related studies. In addition, the sponsors may receive credit (extra points) in the evaluation of their bids.

P3 Manual

On November 22, 2012, SHCP issued the Manual on How to Determine the Social Benefits of a Project and the Suitability of Developing a Project under the P3 Modality (P3 Manual). This manual describes the methodology that must be followed to develop a P3 project in Mexico:

- Identification and Pre-selection:
 - Preliminary studies.
 - Socioeconomic appraisal (cost-benefit analysis).
 - P3 eligibility index.
- Structure/Contract Method:
 - Project structure (technical, financial).
 - Value-for-money assessment.
- Contract Documents and Budget Requirements:
 - Contract.
 - Risks.
 - Respective government approval requests.

In order to select and approve a project for the P3 modality, SHCP has developed guidelines for performing the socioeconomic assessment and value-for-money analysis, as well as applying the eligibility index.

For a project to be approved under a P3 scheme, its feasibility must be determined in accordance with Article 14 of the P3 Law, which stipulates that the following elements must be analyzed:

I. Description of the project and its technical feasibility;

II. Real and personal property and rights necessary for development of the project;

III. Authorizations that may be required for development of the project;

IV. Legal feasibility of the project;

V. Environmental impact of the project, the preservation and conservation of the ecological balance and, if applicable, the effects on natural or protected areas, human settlements and urban development, as well as its feasibility in these areas. This initial analysis will be different from the corresponding environmental impact statement (MIA) pursuant to the applicable regulations;

VI. The social benefits of the project;

VII. Estimated investment and contributions, non-budgetary and in-kind, both federal and private, as well as state and municipal, if applicable;

VIII. The financial and economic feasibility of the project; and

IX. The suitability of carrying out the project through a public-private partnership, including an analysis of other options.

With respect to point IV above, it should be noted that socioeconomic feasibility is assessed through a cost-benefit analysis (CBA) aimed at demonstrating that the project can generate a net social benefit under reasonable assumptions. The CBA methodology is based on a detailed study of the current situation

(without the project), which serves to identify the problem to be solved, analyzes alternative solutions, including low-cost and diverse options, and ultimately demonstrates that the proposed project is the best alternative for solving the problem.⁸²

All of the foregoing information will be presented to the Chamber of Representatives, and SHCP will publish the following information:

- a) Project name;
- b) Procurement No. and/or ID No. in the electronic government procurement system, CompraNet;
- c) Name of the entity responsible for the P3 procurement process;
- d) Name of the developer;
- e) Term of the P3 agreement;
- f) Total amount of the project;
- g) Amount of payments scheduled and executed during the life cycle of the project;
- h) Indicators associated with the social, financial and economic benefits of the project, in terms of the P3 Law;
- i) Results of the evaluation to determine the suitability of carrying out the project through a P3 modality;
- j) Other information deemed relevant by SHCP.

Additionally, the project must demonstrate that it qualifies as a P3 through the eligibility index (EI).⁸³ The EI is calculated based on a questionnaire that is applied to public officials that know the project. Questions about the characteristics of the project include such topics as institutionality, market competition (availability of multiple private providers), procurement, stakeholders, macroeconomics, complexity and size. The suitability of carrying out the

project through a P3 modality is evaluated using a scoring system of fixed weights.

The last step in the P3 approval process is to evaluate the capacity of the project to generate “value for money” or its efficiency gains compared to traditional public procurement. This evaluation is performed through a public-private comparison that includes estimating the total life cycle cost of the project through the traditional public works funding mechanism (federal budget) and the P3 model. Finally, the two cost estimates are compared to obtain the value for money, which is the difference in cost, adjusted for risk, between public development of the project and P3 development. A positive value indicates that the project with private-sector participation will produce greater efficiencies and benefits, in which case it is recommended that the project be executed as P3.

Advantages of the P3 Regulatory Framework in Mexico

The P3 Law establishes a regulatory framework to promote investment and economic development and regulates the conditions of the public-private relationship in developing infrastructure, providing greater certainty and legal security for both parties.

The most appropriate mechanism for funding border crossing infrastructure projects in Mexico is the P3 model. Under this financial structure, public participation could be funded through grants, subsidies, loan guaranties or fiscal incentives to encourage private-sector participation, while the private-sector partner could participate with private loans or stock instruments, such as a FIBRA and/or CKD.

In addition, from the point of view of the public entity, a border crossing project under the P3 mechanism would be a way of transferring project risks to the entity best able to manage the assigned risk. A border

⁸² SHCP published guidelines to develop the investment program and project cost-benefit analysis, available at: http://www.shcp.gob.mx/LASHCP/MarcoJuridico/ProgramasYProyectosDelInversion/Lineamientos/costo_beneficio.pdf

⁸³ Manual on How to Determine the Social Benefits of a Project and the Suitability of Developing a Project under the P3 Modality, <http://www.hacienda.gob.mx/EGRESOS/ppi/ProyectosAPP/Manual%20APP%20221112.pdf>

crossing project developed under the P3 modality is expected to achieve an optimal risk distribution, acceptable to both public and private entities. Each risk would be assigned to the party best suited to controlling or mitigating it. Public agencies would work to ensure that optimal risk allocation is achieved at the lowest possible cost, while private investors would seek to maximize their profit within acceptable limits.

Another advantage of P3 development in border crossing projects is that there is greater assurance of advantages over other forms of financing, as provided in Article 2 of the P3 Law. One of the main advantages of using a P3 mechanism is that the public-sector participants would have access to various financing options (such as development bank loans from BANOBRAS, grants for studies, guaranties, etc.). Moreover, the private sector brings greater efficiency enhanced by its experience, knowledge and technology, further benefitting project development.

Likewise, as bilateral projects with long-term contracts, border crossings would fuel competition between companies and industrial sectors in both countries.

The legal framework provides for the rights and obligations of the developer as set forth in Article 94 of the P3 Law. Flexibility in procurement (Article 68 of the P3 Law) allows public agencies to select from among two or more responsive proposals the one that offers the best financial conditions for the government (Article 54 of the P3 Law), which could increase employment and national or regional development.

For all of the above reasons, P3 mechanisms would be a suitable model for the development of border crossings.

Commercial Banks

Like development banks, commercial banks have also developed infrastructure investment instruments, such as FIBRAs and CKDs, which in this case are issued by the private sector. FIBRAs and CKDs are issued on the Mexican Stock Exchange (BMV). CKDs provide greater flexibility and new investment options for both investment institutions (brokerages, commercial banks, etc.) and qualified investors.

CKDs are intended to support infrastructure projects (highways, airports, ports, railways, electricity). To issue a CKD, several elements must be considered, one of which is that they are regulated under the Securities Market Law and listed on the BMV, and therefore must comply with the corporate governance requirements defined for publicly listed companies. Table 3.4 shows the CKDs listed the BMV, which have been extremely attractive investment instruments for investors.

FIBRAs are investment instruments intended to finance the acquisition or construction of real property, for the purpose of leasing or acquiring the right to receive income from the property. The profits from FIBRAs may be in the form of dividends; that is, the income received from the transaction through the return on the FIBRA on the BMV and ultimately, capital gains on the property.

FIBRAs promote real estate development in Mexico, providing liquidity for developers, as well as promoting financing through the stock exchange. As of November 2015, ten FIBRAs were listed, with a capitalization value of US\$15.25 billion.⁸⁴ Figure 3.5 shows the historical amounts issued through FIBRAs.

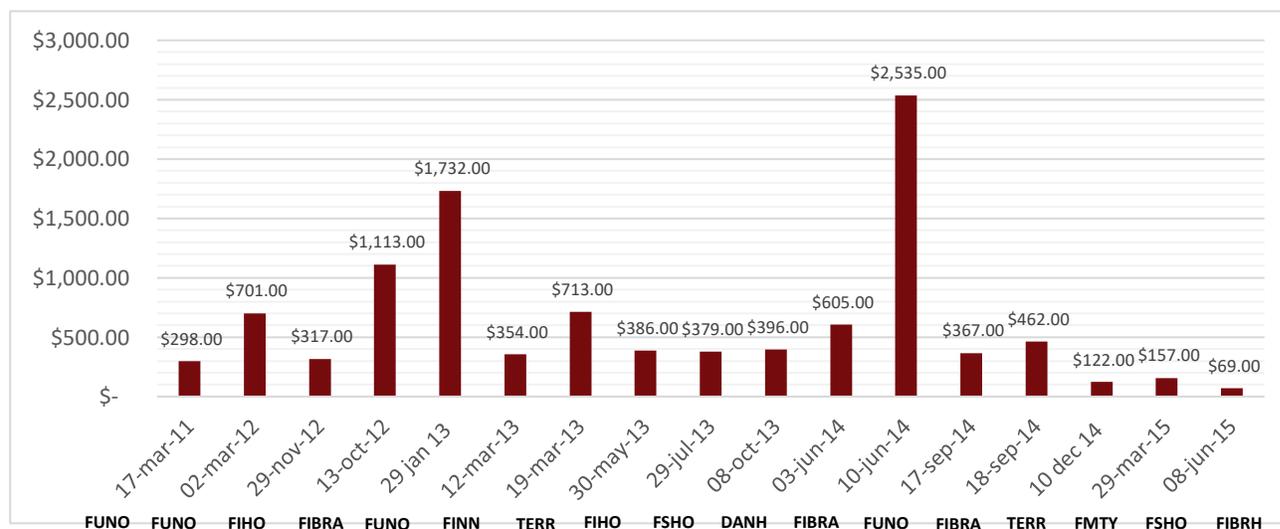
⁸⁴ Source: Capital 414.

Table 3.4 CKDs on the Mexican Stock Exchange (BMV)

Code	Name	Type	Amount (Millions of Pesos)
RCOCB	RCO	Infrastructure	\$ 6,550
MIFMXCK	W amex	Private capital	1,417
FIMMCK	Macquarie	Infrastructure	3,415
ADMEXCK	Atlas Discovery	Private capital	1,161
NEXXCK	Nexus	Private capital	2,631
PMCPCK	Promecap	Private capital	2,503
ICUADCK	I2	Infrastructure	2,737
MHNOS CK	Marhnos	Infrastructure	1,000
EMXCK	EMX	Private capital	1,530
AGCCK	Northgate	Private capital	1,704
LATINCK	Latin Idea	Private capital	615
PBFF1CK	PineBridge	Private capital	1,884
GBMICK	GBM	Infrastructure	2,628
NEXX6CK	Nexus	Private capital	1,495
ACONCK	Acon	Private capital	400
ICUA2CK	I2	Infrastructure	2,800
EXICK	EXI	Infrastructure	1,224
DATCK	Atlas Discovery	Private capital	1,548
DATPCK	Atlas Discovery	Private capital	\$41
PMCAPCK	Promecap	Private capital	1,415
FFLA1CK	PMIC LATAM	Private capital	656
FFLA2CK	PMIC LATAM	Private capital	400
INFRACK	CKD Infraestructura	Infrastructure	3,443

Source: Developed by FOA Consultores with information from 414 Capital.

**Figure 3.5 FIBRA Issuances
(US\$ Millions)**



Source: Developed by FOA Consultores with information from 414 Capital.

Bilateral and Multilateral Financial Institutions

Financing mechanisms for infrastructure projects are also available through bilateral or multilateral financial Institutions, which could be accessed for border crossing projects, depending on the characteristics of the project. Among these institutions, we can mention the following mechanisms and/or financing programs.

Inter-American Development Bank

Funding through its Structured and Corporate Financing Department, is designed to finance infrastructure projects without the need for a government guaranty. These funds can be accessed by any entity in the private sector that wishes to present an infrastructure project, specifically in the areas of energy, water and wastewater, transport and communications.

North American Development Bank

NADB provides financing for infrastructure projects located within 300 kilometers south of the border in the six Mexican States of Baja California, Chihuahua, Coahuila, Nuevo León, Sonora and Tamaulipas and within 100 kilometers north of the international boundary in the four U.S. States of Arizona, California, New Mexico and Texas. Financing may be provided in a number of ways, including: direct loans, Interim financing and participation in municipal bond issues or as part of a syndicate.

Additionally, NADB may provide technical assistance for the development of infrastructure projects. Limited grant support may be available for studies and other development activities such as final design.

Latin American Development Bank

- Structured Financing. The objective is to finance operations related to infrastructure, preferably those that are guaranteed by a concession contract granted by the national

government. This financing is provided to public and private investors associated in entities that promote projects.

- Loans. This financing has several modalities, including: loans for business and working capital, loans for projects and limited guaranties. Loans are provided at different phases of project development, under certain circumstances, and in the context of a comprehensive credit relationship. Infrastructure projects that can be financed include telecommunications, transportation, roads, energy generation and transmission, and water and wastewater systems, as well as projects between member countries.
- Co-financing. The purpose of this mechanism is to provide additional funding resources to the member countries for large projects, by combining loans and grants for individual projects or programs, with or without sovereign risk.

3.2.4 Funding Mechanisms in the United States

The two most common funding mechanisms in the United States are shown in Figure 3.6.

1. The first alternative is traditional border crossing funding with federal appropriations as described in Section 3.1.2
2. The second option is alternative funding, through either multi-agency collaboration (public-public agreements) or P3s in order to obtain funds from various sources for the development of a new border crossing. Donation acceptance programs from GSA or CBP are examples of alternative funding sources. Other examples include the public-public process that is being implemented at the Otay Mesa East-Mesa de Otay II border crossing.

Figure 3.6 Financial Mechanisms in the United States



Source: Developed by TTI with information from GSA.

The Donation Acceptance Program (DAP) is the legal mechanism and process by which to gain formal federal approval for the funding of border crossing improvements delivered as a result of a partnership, whether public-public or public-private. The DAP operates under Section 559 Donation Acceptance Authority. CBP requests partners to participate during proposal development to improve the quality of the proposals.

2. Concept review: Decline/continue;
3. Design & cost estimation;
4. Proposal review: Rejection/referral to GSA central office;
5. Central office review & commissioner decision; and
6. Property acquisition or project execution.

Alternative Sources of Funding

GSA Donation Acceptance Process

GSA can accept unconditional gifts of property in support of any project or function within its jurisdiction. Donations are handled through GSA's Public Buildings Service (PBS) Division, which initiates the process in the region. Proposals may include personal and real property, as well as services such as the construction of improvements, repairs and modifications. For these types of donations, a design and cost estimate package is submitted through the DAP process, which consists of six-phases:

1. Receipt of interest: Concept of development;

CBP Donations Acceptance Program

Section 560 of the Consolidated and Further Continuing Appropriations Act of 2013 (included under Section 559 the following year) and Section 559 of the Consolidated Appropriations Act of 2014 established a process to validate proposals using donations as resources and funds to complete border crossing projects.

Based on this framework, CBP, in consultation with GSA, created the Donation Acceptance Program (DAP), which administers all operations regarding possible interactions developed under this new mechanism. This program allows CBP to accept donations of real or personal property or non-personal services to be used for construction of a new or existing port of entry.

DAP is a means of coordinating with communities and other stakeholders to identify and implement business solutions for various border management needs. The theory behind this mechanism is that private-sector involvement will expedite the implementation process of various projects, as well as align the mission of the construction of these border crossings with the surrounding community.⁸⁵

Since CBP does not have the legislative authority to collect tolls to fund border crossing infrastructure, it is now turning to local governments and private businesses for aid in developing infrastructure through P3s. DAP serves as a core process for validating alternative funding proposals and the underlying donations provided in support of the construction of border crossing infrastructure.

The CBP donation acceptance process is comprised of three distinct phases preceded by a period of front-end engagement and guidance to help prospective partners gauge the viability of their concept or proposal. The various steps of DAP are:

- *Pre-proposal*: CBP connects with and educates external stakeholders and prospective partners with information regarding the program, the donation acceptance process, proposal success factors and other helpful guidance. In addition, CBP provides external stakeholders and prospective partners with front-end feedback regarding the operational and technical viability of their proposals.
- *Phase I Proposal Evaluation & Selection*: CBP and GSA conduct a preliminary review to identify operational concerns, legal implications, IT implications and areas that require further clarification. The prospective partner responds to clarification request, and then the agencies reach consensus on

proposal recommendation. Senior leadership reviews/approves proposal recommendation, and approval is announced with a notification letter.

- *Phase II Proposal Planning & Development*: CBP, GSA and Partner negotiate and sign a Memorandum of Understanding (MOU) formalizing planning and development activities, funding obligations, roles and responsibilities. The conceptual proposal is then developed into an executable project, and CBP, GSA, and Partner confirm project execution readiness.
- *Phase III Donation Acceptance Agreement*: CBP, GSA and Partner negotiate and sign the Donations Acceptance Agreement formalizing the terms and conditions under which CBP, GSA or both may accept a donation. Then CBP, GSA, and Partner proceed to project execution.

In determining a proposal's operational and technical merit in Phase I, CBP and GSA assesses a number of factors, including the proposal's impact on current and future CBP operations, its ability to facilitate throughput and reduce wait times, financial feasibility, and real estate and environmental implications, among others. The full list of operational criteria cover:⁸⁶

- Operational impact.
- Operational benefits.
- Funding strategy.
- Health & safety.
- Economic & community benefits.
- Community support.
- Other agency support for operations.
- Project duration & timeline.

⁸⁵ CBP Outlines Reimbursable Services Program” Airports Council International—North America. Accessed November 22, 2014. <http://www.aci-na.org/content/cbp-outlines-reimbursable-services-program>

⁸⁶ “Proposal Guidance.” U.S. Customs and Border Protection. <https://www.cbp.gov/border-security/ports-entry/resource-opt-strategy/public-private-partnerships/donation-acceptance-program/proposal-guidance>

The technical evaluation criteria cover:⁸⁷

- Financial feasibility.
- Legal implications.
- Real estate implications.
- Environmental & cultural resource implications.
- Technical feasibility.
- Planning implications.
- Proposal support.

In December 2013, under Section 560 authority, CBP selected two border crossing entities, out of five applicants, for partnership in a pilot program: City of El Paso, Texas, and South Texas Assets Consortium (STAC). STAC is comprised of several border crossings, including Laredo, Rio Grande City, Pharr, McAllen and Cameron County. The City of El Paso and CBP signed a US\$1.5 million contract, primarily to cover the salaries of more CBP officers to operate more lanes at crossings.⁸⁸

On January 4, 2016, Congress approved the Cross-Border Trade Enhancement Act of 2016, amending the Homeland Security Act of 2002, to provide alternative financing arrangements for the provision of certain services, the construction and maintenance of infrastructure at land border ports of entry, and other purposes.

Section 482 of the Cross-Border Trade Enhancement Act of 2016 establishes the Port of Entry Donation Authority for real and personal property. The CBP Commissioner, in consultation with the GSA Administrator, may enter into an agreement with any entity to accept a donation of personal property, money or non-personal services to be used for activities of the Office of Field Operations related to a new or existing federal government-owned land port of entry. Expenses may be related to furniture, fixtures,

equipment or technology, including the installation or deployment of such items, as well as their operation and maintenance. Donations may also be accepted for land acquisition, design, construction, repair or modification, as well as operation and maintenance of such port of entry facility.

Donations for a new federal government-owned land port of entry are allowed if the fair market value of the donation is US\$50,000,000 or less; and if the fair market value, including any personal and real property donations in total, of such port of entry when completed, is US\$50,000,000 or less.⁸⁹

State Transportation Improvement Funds

State governments may also have their own funding mechanisms for transportation infrastructure serving the border crossing. For example, the California Transportation Commission (CTC) implemented the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, which allocated US\$2 billion a year for infrastructure improvements along federally designated "Trade Corridors of National Significance."⁹⁰ This program, known as the Trade Corridors Improvement Fund (TCIF), was approved under Proposition 1B on November 7, 2006.

The projects eligible for funding under Proposition 1B include, but are not limited to:

- Highway capacity improvements.
- Freight rail system improvements.
- Port capacity and efficiency projects.
- Truck corridor improvements.
- Improvements that maximize state access to federal border infrastructure funds.

⁸⁷ Examples of each criteria are included in the DAP Framework located at www.cbp.gov/dap

⁸⁸ Martinez, Aaron. "El Paso City Officials, CBP Sign Agreement to Reduce Bridge Wait Times." *El Paso Times*. January 24, 2014. Accessed November 18, 2014.

http://www.elpasotimes.com/news/ci_24982324/city-officials-cbp-sign-agreement-reduce-bridge-wait.

⁸⁹ Congress, 2016, H.R. 875-Cross-Border Trade Enhancement Act of 2016. Accessed 03/03/2017 from <https://www.congress.gov/bill/114th-congress/house-bill/875/text>

⁹⁰ Trade Corridor Improvement Fund. California Transportation Commission. Last updated 8/20/2014. Reviewed on Nov. 20, 2014. <http://www.catc.ca.gov/programs/tcif.htm>

- Airport ground access improvements.

Funding for Border Crossing Support Infrastructure

As mentioned earlier in this report, the actual border crossing facilities are usually funded by federal sources. Support infrastructure, including road access networks, vehicle inspection facilities and right of way for these facilities is usually funded by state or local sources.

States and counties on the U.S. side of the border have access to various credit instruments and may issue bonds with discounted rates and terms. TIFIA loans are

commonly used for this type of project. States, counties, cities and regional mobility authorities (RMAs) can issue bonds guaranteed by toll revenue. At the Texas-Mexico border, most of the international crossings are tolled, and the revenue goes to the city or development agency.

3.2.5 Funding Mechanisms by Border Crossing Project Development Phase

Tables 3.5 and 3.6 outline the funding mechanisms available for border crossing projects by phase.

Table 3.5 Funding Mechanisms Available for Border Crossing Projects in the Pre-construction Phase

Phase	Funding Mechanisms	
	Mexico	United States
I. Planning	<ul style="list-style-type: none"> • Federal budget • State and municipal budget • Unsolicited proposal 	<ul style="list-style-type: none"> • Local and state budget • Private financing from project sponsor
II. Authorization and Permits	<ul style="list-style-type: none"> • Federal budget • State and municipal budget • Development bank 	<ul style="list-style-type: none"> • Sponsor financing (private, local or state) • Federal budget
III. Design and Procurement	<ul style="list-style-type: none"> • Development bank • Unsolicited proposal 	<ul style="list-style-type: none"> • Federal budget • Sponsor financing (private, local or state)

Source: Developed by FOA Consultores.

Table 3.6 Funding Mechanisms Available for Border Crossing Projects in the Construction and Testing Phase

Phase	Funding Mechanisms	
	Mexico	United States
IV. Construction and Testing	<ul style="list-style-type: none"> • Development bank • P3s as concessions • Unsolicited proposal • FONADIN • Venture capital funds • Specialized infrastructure investment funds 	<ul style="list-style-type: none"> • Federal budget • P3s • Sponsor financing (private, local or state) • Public-public agreements

Source: Developed by FOA Consultores.

3.3 Difficulties in Securing Funds and Identifying Alternatives

3.3.1 Difficulties in Mexico

The difficulty that entities encounter when trying to fund infrastructure projects in Mexico depends on the financial mechanism.

Public-Sector Funding

The primary difficulty with public funding is the scarcity of budgetary resources for developing infrastructure projects, such as border crossings, which affects the quality of the infrastructure being developed. Frequently in Mexico, the first budgetary cuts to be made are to infrastructure maintenance projects. The lack of budgetary resources means that infrastructure projects need to be included in both sector and national strategies. Border crossing projects must be included in national development plans, as well as in the investment plans or programs of the various government entities involved. The difficulties facing public infrastructure financing are summarized below.

Budgetary Difficulty

Scarcity of budgetary resources for studies to demonstrate the technical, financial and

socioeconomic viability of the new project, and subsequently, for its execution.

Development Banks

The following elements do not necessarily constitute a difficulty, but most are necessary to make the projects bankable or attractive for investors. Nevertheless, if due care is not taken with these elements, they could lead to difficulties in financing an infrastructure project:

- Creation of, and contributions to, reserve funds for infrastructure projects, which in some cases reduces the liquidity of the projects.
- Credit ratings, which often require the participants to meet minimum investment levels.
- High up-front fees at the time of funding and during the operation of the infrastructure project.
- Limitations on the amount of total investment allowed in the project.

Private-sector Funding

Of the many difficulties faced by the private sector, the most pressing are:

- In some cases, the inability to raise large amounts of capital.
- Limited interest in infrastructure project investment.
- High costs and time needed to obtain funding.
- High financing costs reflected in high interest rates.
- Relatively high capital costs.
- Delayed return on investment.
- Lack of experience, especially in border crossing projects.

Technical, Legal, Environmental and Social Difficulties

In addition to the funding difficulties, there are risks and difficulties in other areas in the development of infrastructure projects, as briefly described below.

Risk Analysis

In accordance with current regulations, the main risks that would impact the project must be analyzed, as established in the following regulatory documents:

- In accordance with current regulations and specifically the Guidelines for Preparing and Presenting Cost-Benefit Analyses of Investment Programs and Projects published by SHCP, the risks inherent to the project must be identified, along with the probability of occurrence, their impact on project implementation and operation, and any necessary mitigation actions.
- Article 92, section X, of the P3 Law establishes the distribution of risks among the parties—technical risks in constructing the infrastructure; financial risks in cases of force

majeure, unforeseen events or any other circumstances—which must in all cases be balanced. This provision identifies the risks that could be assumed by the public sector, such as:

- Contractual risks: Regulatory, permits and authorizations.
- Commercial risks: Demand elasticity.
- Social and environmental.

The risks that can be assumed by the private sector, include:

- Technical risks: Design, operating cost overruns
- Financial: Capital requirements, repayments, financing, etc.

And finally, those that may be shared by both parties, such as force majeure.

Technical Difficulties

These types of difficulties may arise during project planning, either at the technical study stage which might demonstrate that the project is not technically feasible, or in some cases during project implementation:

- The project fails to meet the necessary technical requirements for operation.
- Raw materials, labor or other inputs necessary for project implementation and/or operation are unavailable.
- Defects in the technical design of the project.
- Increased cost of inputs, which could affect the quality of the necessary inputs for construction.

Legal Difficulties

These difficulties may arise prior to and during project implementation:

- The studies required under current legislation have not been performed.

- The project is carried out under a legal and/or regulatory framework that does not provide legal certainty.
- Lack of necessary authorizations for project implementation: rights, licenses, permits, etc.
- Problems acquiring land and rights of way.

Environmental Difficulties

Environmental difficulties include:

- Difficulties in defining the environmental characteristics of the area impacted by the proposed project, due to the accessibility of the area or the lack of necessary permits.
- Changes in project scope, which would require reassessing the environmental impact on the area.

Social Difficulties

The social difficulties that could arise, are:

- Difficulties and unforeseen impacts on vulnerable groups, such as indigenous populations.
- Difficulties reaching an agreement or consensus when the project is presented to the public: local communities, *ejido* land tenants, etc.

3.3.2 Difficulties in the United States

Public-private Partnerships

In general, P3s require a revenue stream to pay for the private-sector portion of the investment, in the event

that the public portion of the investment is not funded through loans. However, border crossing infrastructure at the California, Arizona and New Mexico borders is usually not tolled.

In 2014, CBP and GSA announced that they would begin the Donation Acceptance Program to support border crossing infrastructure needs.⁹¹ However, specific selection criteria must be met to qualify for participation in the program. Applicants submit their proposals to the Donation Acceptance Authority, which evaluates them based on two separate sets of criteria: operational evaluation criteria and non-operational evaluation criteria.

State Transportation Funds

As mentioned previously, most border crossings on the Texas-Mexico border are bridges with tolls. These tolls provide a source of revenue to pay for the infrastructure and the operation of the facilities. The other three U.S. border states do not have international bridges; therefore, border crossings are usually not tolled.

However, there are several mechanisms that could be used at the state or local level to fund the roadway infrastructure serving the border crossing, as well as innovative mechanisms to fund the border crossing itself. Examples of innovative border crossing financing are described in the next section under the case studies of the Otay Mesa East border crossing and the Trade Corridors Improvement Fund in California.

⁹¹ Section 559 Donation Acceptance Authority: Proposal Evaluation Procedures & Criteria Framework. U.S. Customs and Border Protection. General Services Administration, p. 6, accessed 12/5/2014.

<http://www.cbp.gov/sites/default/files/documents/DAA%20Proposal%20Evaluation%20Procedures%20%26%20Criteria%20Framework%20Public%20FINAL.pdf>

3.4 Examples of Border Crossing Projects in the Process of Securing Funding

Numerous proposals have been identified from various sources, including RBMPs, for the construction of new border crossings, including:

- Otay Mesa East-Otay Mesa II between San Diego County, CA and Tijuana, B.C.
- New crossing between the Bridge of the Americas and Ysleta-Zaragoza International Bridge in El Paso, Texas.
- Colombia-Webb International Rail Bridge to be located between Texas and Nuevo Leon.
- New commercial port facility between Douglas, Arizona and Agua Prieta, Sonora.
- Billy the Kid border crossing to be located between Socorro and San Elizario in El Paso County, Texas.
- Flor de Mayo International Bridge to be located between Brownsville, Texas and Matamoros, Tamaulipas.
- Naco Rail border crossing border crossing between Arizona and Sonora.
- Nogales area (east)—new border crossing between Arizona and Sonora.
- Longoreño Bridge, to be located south of the Port of Brownsville, Texas and north of Ejido Longoreño in Matamoros
- Truck-only lane for the Solidarity Bridge between Laredo, Texas and Colombia, Nuevo Leon.
- Del Rio-Ciudad Acuña II between Texas and Coahuila.
- Nogales West between Arizona and Sonora.
- New rail border crossing between San Luis, Arizona and San Luis Rio Colorado, Sonora.
- Puerta de Anza (Nogales, Sonora).

- Kansas City Southern de Mexico (KCSM) international rail bridge between Laredo, Texas and Nuevo Laredo, Tamaulipas.
- Laredo V-Nuevo Laredo IV (Project 45) between Texas and Tamaulipas.

Of these proposals, the only project that has been successful in securing funding for a portion of the project is the Otay Mesa East-Mesa de Otay II crossing between California and Baja California. This new mixed-traffic (CV and POV) border crossing will connect Tijuana and San Diego County through the existing road network.

Some customs modernization projects are also being considered for development by SHCP:

- Comprehensive restructuring of the Zaragoza customs facilities in Ciudad Juárez, Chihuahua.
- New Guadalupe-Tornillo Border Crossing investment project, under the Ciudad Juárez Customs Office.
- Restructuring of the import area at the Otay Mesa Border Crossing, assigned to the Tijuana Customs Office.
- Restructuring of the export area of the Mexicali II Border Crossing.
- Restructuring and expansion of the Customs Office in Ojinaga, Chihuahua.

In order to illustrate the complexities associated with planning and funding new border crossings, the Otay Mesa East project is outlined below.

3.4.1 Case Study: Otay Mesa East-Mesa de Otay II Border Crossing

This project was proposed to alleviate bottlenecks at existing border crossings, which are causing congestion and delays in personal and business travel representing significant economic and productivity losses, as well as to foster growth in trade flows through this region.

The coordinating agencies for the construction of the Otay Mesa East Border Crossing are CBP, GSA, USDOT, FHWA, the California Department of Transportation (CALTRANS) and the San Diego Association of Governments (SANDAG). In Mexico, the agencies include SCT and the Baja California and Tijuana governments.

The proposed project consists of:

- Development of a new border crossing in the Tijuana-San Diego region.
- Development of a toll road (SR 11) on the U.S. side of the border, which will connect the new border crossing with the existing Interstate Highway System in the area.
- The creation of a new commercial vehicle inspection facility for trucks entering California from Mexico.

The new cross-border facility will form part of a connection between the Tijuana-Rosarito corridor, with links to the Tijuana-Tecate and Tijuana-Ensenada highways. They will be the main routes in and out of the border crossing area on the Mexican side of the border. Figure 3.7 shows the proposed project location.

Financing

This project is of special interest because of the financing methodology used to develop the border crossing. The estimated cost of the entire project is around US\$800 million.

The expected revenue from the tolls at the Otay Mesa East Border Crossing is the backbone for funding the project. The binational planning team has proposed some unique characteristics for the development of the project:

- Tolls will be collected at a single location for both northbound and southbound traffic, and resources will be split between the two countries. This will reduce operation cost.
- The project will have an adjustable toll rate with hourly adjustments per vehicle type and border crossing demand.
- The toll rates will be adjusted to try to reduce wait times up to 20 minutes from the back of the lane to the first inspection booth in the United States.

This innovative mechanism has no precedent on the U.S.-Mexico border.

Figure 3.7 Location of the Otay Mesa Project



Source: SR 11/Otay Mesa East Port of Entry, Expanding Binational Prosperity. San Diego Association of Governments. Retrieved from: http://www.sandag.org/uploads/projectid/projectid_56_18840.pdf.

3.4.2 Case Study: Trade Corridor Improvement Fund in California

For the roadway infrastructure that serves border crossings, California has developed the Trade Corridors Improvement Fund (TCIF). To obtain funding, certain criteria must be met.

First, the regions eligible for funding are the Bay Area Corridor, Central Valley Corridor, Los Angeles/Inland Empire Corridor and San Diego/Border Corridor. To qualify for funding in a respective corridor, the applicant must provide a project funding plan and demonstrate the public benefit of the project.

Additionally, the applicant must show that private-sector revenue streams are not available and that TCIF is necessary. According to CTC, "TCIF should not

supplant revenues otherwise available through existing private sector revenue streams."⁹²

As part of the TCIF qualification process, the applicant must provide the following information:

- Description of project delivery plan, including potential obstacles during project development and construction.
- Description of non-TCIF funding (source and amount).
- Description and quantification of the improvements in trade corridor due to the project.
- Description and quantification of the environmental effects of the project.

⁹² Adoption of Program Guidelines for the Trade Corridors Improvement Fund (TCIF). California Transportation Commission. December 12, 2007. Accessed December 2, 2014.

http://www.catc.ca.gov/programs/TCIF/TCIF_Guidelines_112707.pdf.

Table 3.7 Trade Corridor Improvement Fund Eligibility Criteria

Screening Criteria	
	<ul style="list-style-type: none"> • Project is included in trade infrastructure and goods movement plans adopted by regional transportation planning agencies.
	<ul style="list-style-type: none"> • Project can demonstrate a 1:1 funding match (local, federal or private funds).
	<ul style="list-style-type: none"> • Project contributes to corridor or air basin emission reduction of pollutants.
	<ul style="list-style-type: none"> • Project will stimulate economic activity, enhance trade value and preserve/create jobs.
Evaluation Criteria	
Freight System Factors:	<ul style="list-style-type: none"> • <u>Throughput</u>: Provides for increased volume of freight traffic. • <u>Velocity</u>: Increases speed of freight traffic moving through distribution system. • <u>Reliability</u>: Reduces unpredictability of travel time.
Transportation System Factors:	<ul style="list-style-type: none"> • <u>Safety</u>: Increases safety of the public, industry workers and traffic. • <u>Congestion Reduction</u>: Reduces daily hours of delay. • <u>Key Transportation Bottleneck Relief</u>: Relieves key freight system bottlenecks that indicate the necessity for infrastructure advancements. • <u>Multimodal Strategy</u>: Employs or supports multimodal strategies to increase port and transportation throughput while reducing truck vehicle miles traveled. • <u>Interregional Benefits</u>: Serves state or national corridor needs.
Community Impact Factors:	<ul style="list-style-type: none"> • <u>Air Quality Impact</u>: Reduces emissions of diesel particulate, CO₂, NO_x and other pollutants. • <u>Community Impact Mitigation</u>: Reduces negative impacts on communities. • <u>Economic/Jobs Growth</u>: Stimulates economic activity, enhances trade value and preserves/creates jobs.

Source: California Transportation Commission, TCIF Guidelines.

CTC selects projects using the screening and evaluation criteria outlined in Table 3.7. The screening criteria determine whether a proposal will move to the next stage of the evaluation process.

After CTC selects a project for the TCIF program, a project baseline agreement is executed, which describes the scope, benefits, delivery schedule, budget and funding plan. Within six months of initiating the project, the California Department of Finance will review the budget.

3.5 Summary of Current Border Crossing Funding Mechanisms

This chapter outlined available funding alternatives and the difficulties in funding the development of border crossing projects, as well as possible binational solutions. There are also several differences between existing funding mechanisms in the two countries, which complicates project development and implementation.

In Mexico, the new impetus towards P3s supported by a specific new law enacted in 2012 is attracting public and private funds to border crossing projects. Recently, several new funding and capital mechanisms have emerged through the stock exchange in the form of FIBRAs or CKDs. So far, no FIBRA or CKD has been established or issued for a border crossing; however, several roadway infrastructure and transportation projects have made use of these instruments. For example:

- CKD RCO: Red de Carreteras de Occidente, S.A.P.I.B. de C.V.
- CKD FIMMCK: Macquarie Mexico Infrastructure 1, S.A.P.I. de C.V., Macquarie Mexico Infrastructure 2, S.A.P.I. de C.V., MMIF Compañía Controladora, S.A.P.I. de C.V.
- CKD ICUADCK 10: Infraestructura Institucional I2 S. de R.L.
- CKD MARHNOS: Inmar del Noreste, S.A. de C.V.
- CKD GBMICK: Corporativo GBM, S.A.B. de C.V.
- CKD ICUA2CK: Infraestructura Institucional, S. de R.L. de C.V.

By the end of 2015, the Mexican market had 59 CKDs representing \$94.5 billion pesos (US\$5.2 billion), mainly in the industry and services, real estate, and infrastructure sectors.

It is worth noting that in Mexico paying tolls to use roadways is a well-established practice and can be an important revenue source for the payment of loans and the return on investments. The participation of FONADIN, through public grants to complement federal budgets, also constitutes an important revenue stream. Moreover, customs equipment grants, administered by SAT, can be used to modernize customs infrastructure.

In the United States, a recent trend towards using alternative funding sources, such as P3s for border crossings has emerged, which complements traditional federal sources. Section 559 authorizes CBP and GSA to receive donations from the private sector and government entities for border crossing construction, modification, operation and maintenance. The application assessment is based on operational and non-operational criteria.

The formalization of binational border planning mechanisms through the RBMPs and the BBBXG have generated a portfolio of projects that the public expects will be developed to boost competitiveness and economic growth. While the portfolio must be refined to identify projects that can be developed based on the priorities of the two countries, individually and jointly, existing funding mechanisms cannot ensure the resources necessary for their implementation. Therefore, it is necessary to continue to develop new funding mechanisms, such as the ones proposed in Chapter 5.

International Crossing Management and Funding Experience in Canada

At the U.S.-Canada border, changes in the management, operation, and construction of international crossings have recently been implemented. These changes are an innovative way of managing and funding crossings.

Federal Bridge Corporation Limited

Management of the Canadian half of Blue Water Bridge, which connects Michigan to Ontario, was passed from a local board to the Federal Bridge Corporation in Ottawa on February 1, 2015. The local Blue Water Bridge Board in Point Edward has been disbanded and a new board has been assembled in Ottawa.⁹³

Federal Bridge Corporation Limited (FBLC) was created under the Canadian Business Act in 1998. The corporation was originally created in order to absorb the non-navigational assets of the St. Lawrence Authority, which was dissolved shortly after FBLC was created.

Since its creation, FBLC has acquired four bridges across Ontario:⁹⁴

- Blue Water Bridge in Point Edward, Ottawa.
- Thousand Islands International Bridge in Lansdowne, Ottawa.
- Sault Ste. Marie International Bridge in Sault Ste. Marie, Ottawa.

- Seaway International Bridge Crossing in Cornwall, Ottawa.

FBLC was created in order to provide the highest level of stewardship so that Canada's international bridges and associated structures are safe and efficient for users. FBLC's business mandate includes the following three tasks:⁹⁵

- The design, construction, acquisition, financing, maintenance, operation, management, development, repair, demolition or reconstruction of bridges or other related structures that link the Province of Ontario to the United States.
- The design, construction acquisition, financing, maintenance, operation, management, development, repair, demolition or reconstruction of other bridges or other related structures, as the Governor in Council may deem appropriate.
- Any business, undertaking, or other activity incidental to any bridge or related structure contemplated above.

⁹³ Morden, Paul. "Federal Bridge Corporation Takes Over Blue Water Bridge." *Sarnia Observer*. February 3, 2015. <http://www.theobserver.ca/2015/02/03/federal-bridge-corporation-takes-over-blue-water-bridge>.

⁹⁴ Summary of Canadian Operations. The Federal Bridge Corporation Limited.

<http://www.pontscanadabridges.ca/en/who-we-are/corporate-status-and-assets/>.

⁹⁵ Mandate. The Federal Bridge Corporation Limited. <http://www.pontscanadabridges.ca/en/who-we-are/mandate/>.

Chapter 4. Port-of-Entry Infrastructure Information System

This chapter is intended to serve as a brief guide to the Port of Entry Infrastructure Information System (POEIS).

The main purpose of the POEIS is to manage information regarding border crossing infrastructure activities along the U.S.-Mexico border. The system is publicly available to any user that has Internet access and is interested in border crossing infrastructure projects.

The user manual indicates the system features available for public use. The system will be available to any user, without the need for a username or password. These public users will not require any type of authentication, and the information available to them is limited. User registration is required to obtain further access to the system and to execute changes in the system, update information, etc.

POEIS information providers will be responsible for verifying that the information complies with the Mexican law regarding transparency and access to government information (*Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental*), especially with respect to classified and/or reserved information.

The system has the flexibility to incorporate any additional information that may be required, such as the operational characteristics and existing infrastructure at each border crossing, as well as the information necessary to link projects receiving federal funding to the Investment Program and Project

Portfolio. The system operator will be responsible for verifying and updating the data provided.

4.1 System Requirements

To access the system, a user needs:

- Internet connection.
- Modern web browser.

4.2 Accessing the POEIS System

The steps required to use the POEIS system are:

1. Verify Internet connection.
2. Open browser.
3. Enter the web address biis-dev.tti.tamu.edu into the address bar.⁹⁶

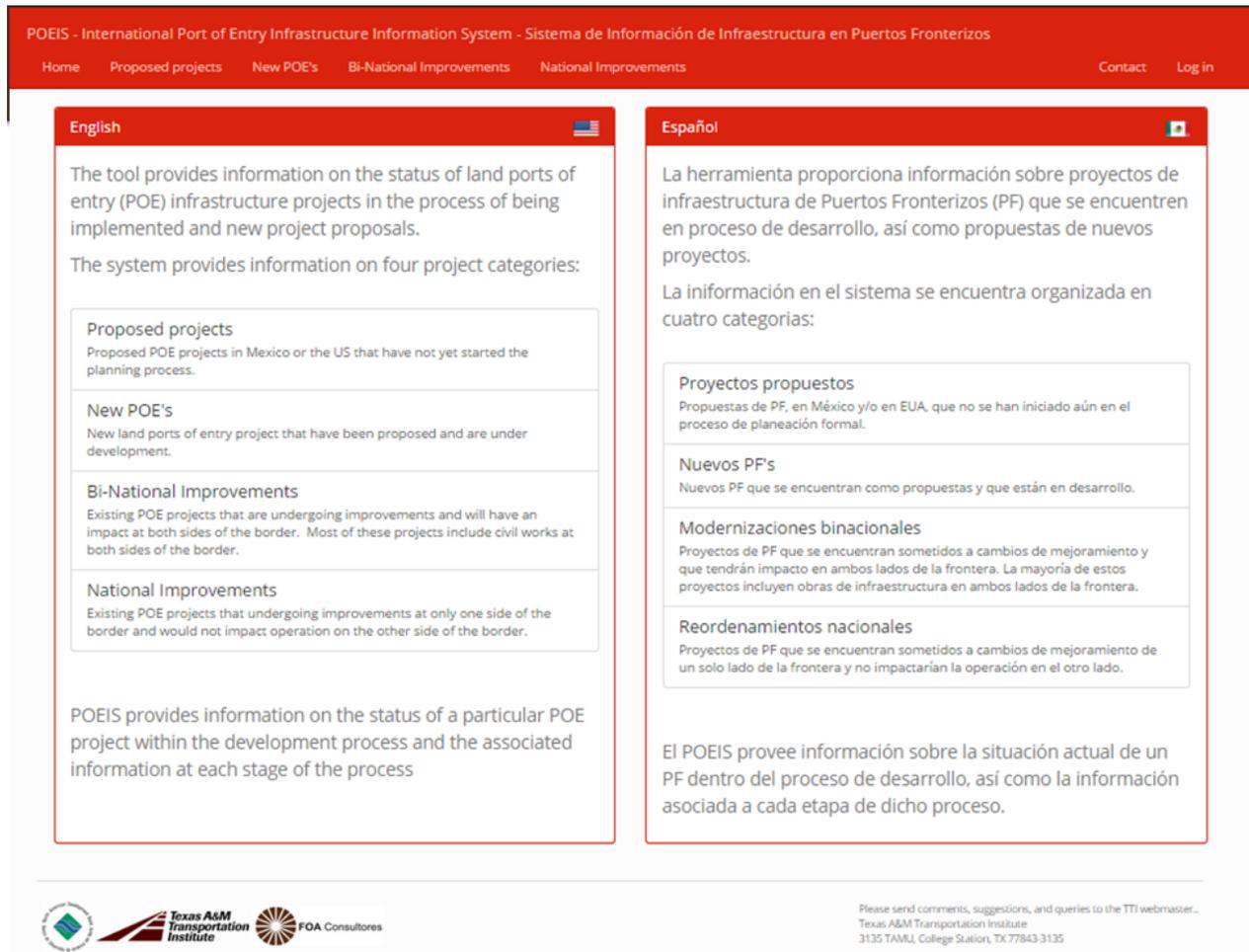
4.3 Navigating the Project Categories

Once the user enters the POEIS system, a page similar to the one illustrated in Figure 4.1 will show on the screen.

In the center of the page, there is an introduction to the system. The introduction is presented in English on the left and Spanish on the right. Clicking on either introduction will automatically set the language preference for the rest of the session. The language preference may be changed through a link on the navigation bar.

⁹⁶ This is a temporary web address. The final address will be available in the future.

Figure 4.1 POEIS Home Page



Source: Developed by FOA Consultores and TTI.

Each introduction shows a table with the four categories of projects contained within the system. For more information about the different project types, refer to Appendix A, *Design of the Port of Entry Infrastructure Information System*.

Navigation Bar

At the top of the home page, the user will find a red navigation bar (see Figure 4.2). This bar appears at the top of all the screens throughout the system. On the

navigation bar, the user will find links to each of the project categories contained within the site. In addition, the navigation bar has options to return to the home page, go to the contacts page or start a new session. Once the user has selected a language preference on the home page, a language option will appear on the navigation bar, which will allow the user to switch between languages at any point during the session. Upon clicking the desired language on the navigation bar, the page will automatically reload in the desired language.

Figure 4.2 POEIS Navigation Bar



Source: Developed by FOA Consultores and TTI.

4.4 Project Categories

The page for “Proposed Projects” functions differently than the rest of the project pages in the system. When the user selects this category, a page similar to that shown in Figure 4.3 will appear on the screen. On this page, there is a table that shows the name of the projects, a brief description of each project, the U.S. state and Mexican state for the project, and the source or sponsor of the project.

At the top of this table, there is a search box that can be used to quickly filter through the list for a specific project. To perform a search, the user should follow these steps:

1. If the user knows the name of the project, or a keyword related to the project, it should be typed into the “Search by Name” box. Otherwise, that box should remain blank.
2. If the user knows the U.S. state of the project, it should be selected in the “US State” box. Otherwise, that box should remain blank.
3. If the user knows the Mexican state of the project, it should be selected in the “MX State”

option. Otherwise, that box should remain blank.

4. Once the required fields are filled in, the user should click the “Search” button.

The list of proposed projects can be organized based on the various fields. To sort the table by a specific field, the user clicks on the title of the field to be used for sorting, and the table will automatically reorganize the projects.

For the other project categories, the user will be redirected to a page similar to the one shown in Figure 4.4. The page will show a map of the U.S.-Mexico border with markers indicating the projects related to the category selected by the user. For the “Bi-National Improvements” category, the markers will be blue; for “National Improvements,” the markers will be green; and for “New POEs,” the markers will be red.

The map functions are similar to Google Maps®, which means that the user can scroll and zoom using the mouse based on search needs. In the upper right-hand corner, there is a search bar that can be used to quickly locate a project within the map.

Figure 4.3 Proposed Projects Page

POEIS - International Port of Entry Infrastructure Information System - Sistema de Información de Infraestructura en Puertos Fronterizos

Proposed projects New POE's Bi-National Improvements National Improvements Contact Log in Español English

Proposed projects

POE projects in Mexico or the US that are in the conceptual phase.

Filter results

Search by name - State in US - - State in Mexico - Clear Search

Page 1 of 3

1 2 3 »

Name	Description	State in US	State in MX	Source / Proponent
Camargo - Rio Grande	Este proyecto continúa en etapa conceptual	Texas	Tamaulipas	Stakeholder
Díaz Ordaz - Los Ebanos (El Chalan)	Este proyecto continúa en etapa conceptual	Texas	Tamaulipas	Stakeholders
Díaz Ordaz-Sullivan	Este proyecto continúa en etapa conceptual	Texas	Tamaulipas	Stakeholders
El Chaparral - San Ysidro	Peatonal Las Americas	California	Baja California	Caltrans
Ferroviario Colombia-Webb	Este proyecto continúa en etapa conceptual	Texas	Nuevo León	Stakeholders
Ferroviario Jerónimo-Sta Teresa	Reubicación de las vías ferroviarias que actualmente atraviesan la zona urbana de Ciudad Juárez, a una zona localizada a 5 km del cruce fronterizo existente en Jerónimo-Santa Teresa.	Texas	Chihuahua	Stakeholders
Freight Suttle Service (FSS)	Este proyecto continúa en etapa conceptual	Texas	Chihuahua	Stakeholders

Page 1 of 3

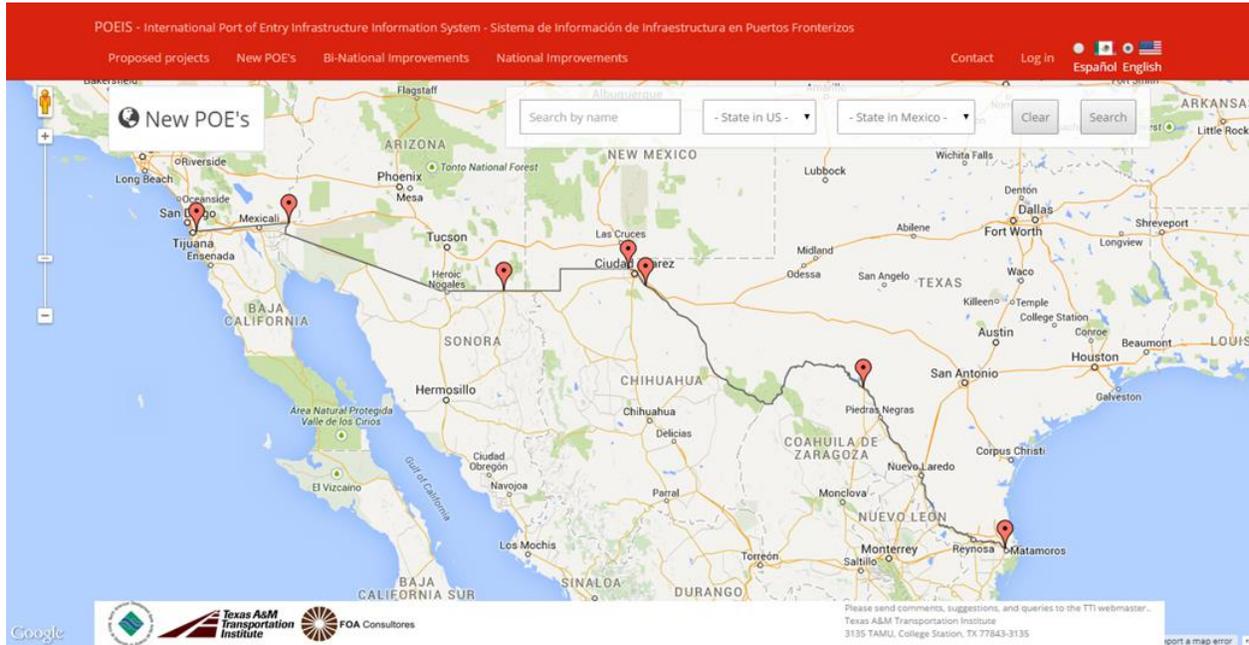
1 2 3 »




Please send comments, suggestions, and queries to the TTI webmaster...
 Texas A&M Transportation Institute
 3135 TAMU, College Station, TX 77843-3135

Source: Developed by FOA Consultores and TTI.

Figure 4.4 New POE Map



Source: Developed by FOA Consultores and TTI.

To use the search function on this page, the user should follow the steps below:

1. If the user knows the name of the project or a keyword related to the project, the “Search by Name” option should be selected in the search box.
2. If the user knows the U.S. state where the project is located, the “US State” option should be selected in the search box.
3. If the user knows the Mexican state where the project is located, the “MX State” option should be selected in the search box.
4. Once the boxes have been filled in, the user should click the “Search” button.

Once the search is finished, the system will eliminate the markers on the map that do not coincide with the search parameters entered by the user. To show all projects on the map, the user can click the “Erase”

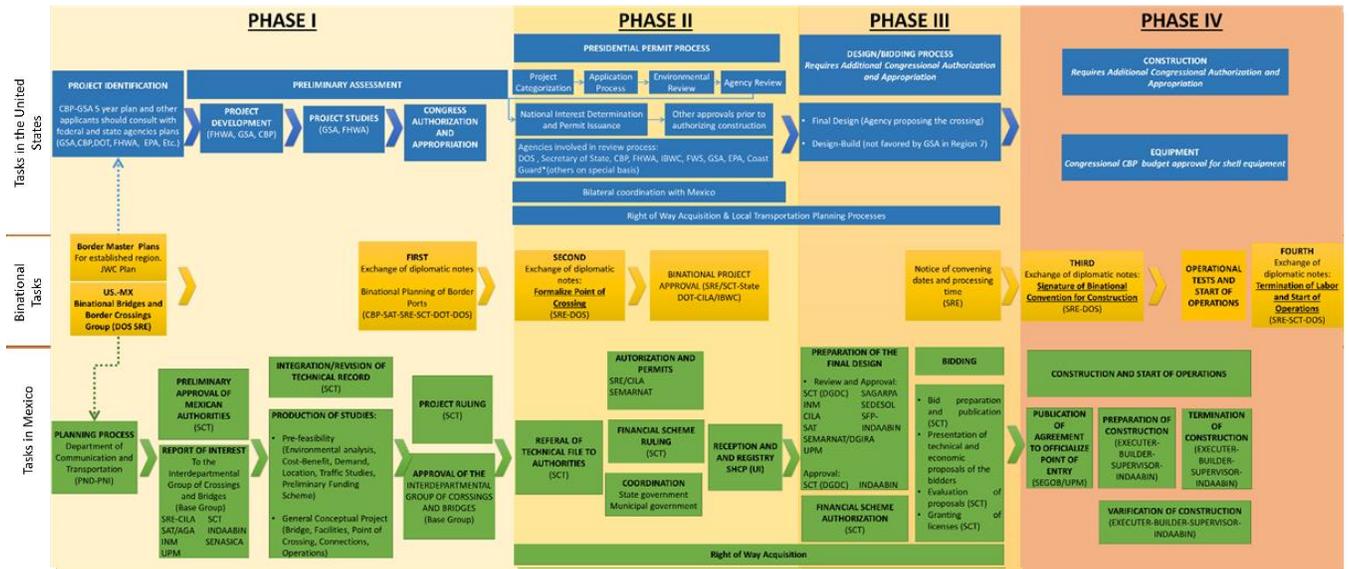
button, and the system will automatically reset and show all the projects in the selected category.

4.5 Border Crossing Development Phases

For projects that fall under the categories “New POEs,” “Bi-National Improvements,” and “National Improvements,” there is a diagram of the tasks involved in developing each project. These tasks are divided into three sections corresponding to the three types of processes for project development: activities in the United States, activities in Mexico, and binational processes. The diagram shown in Figure 4.5 is also divided into various columns corresponding to the different phases of the project. Task lists can be generated from this diagram for each project. For more information on this diagram, refer to Appendix A, *Design of the Port of Entry Infrastructure Information System*.

Figure 4.5 Diagram of Border Crossing Development Phases

Source: Developed by FOA Consultores and TTI.



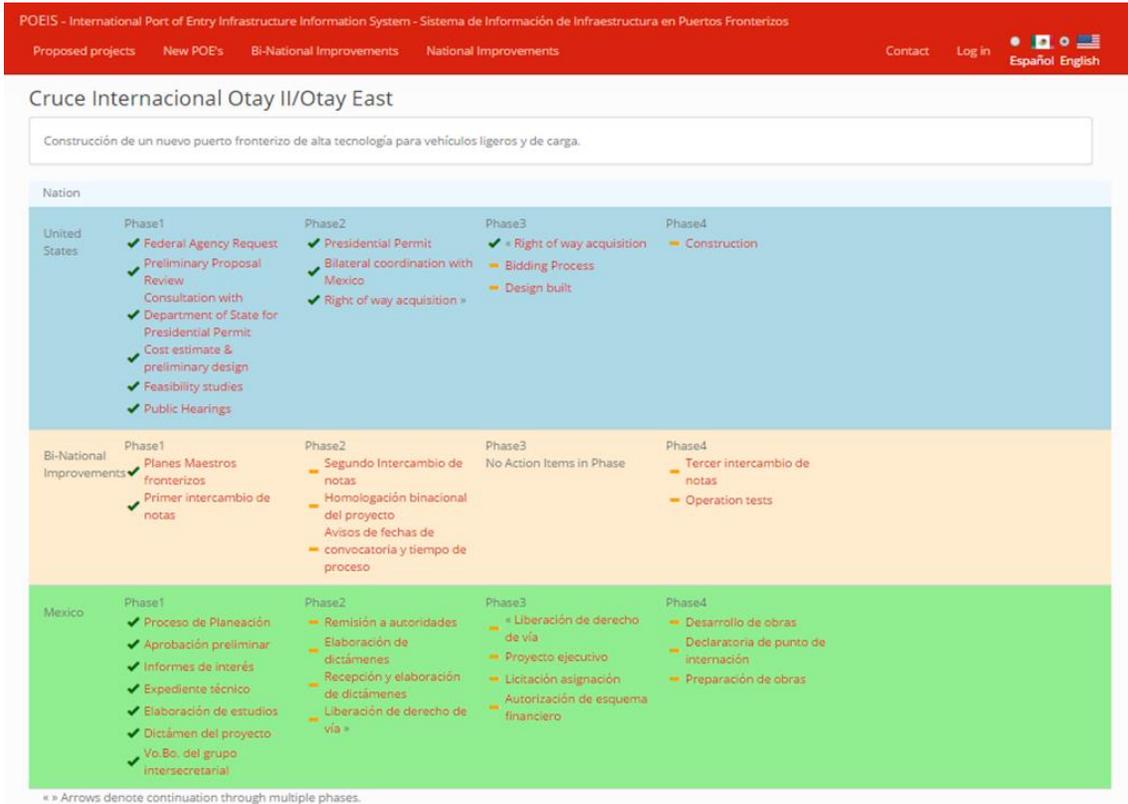
Once a project on the map is selected, the user will be directed to a page similar to the one shown in Figure 4.6. Those tasks that are conducted in more than one phase will be marked by the following symbols: “«” and “»”.

When the user selects a task, a page detailing the selected task will be shown (Figure 4.7). On this screen,

the user can see the details for each individual task. This information may be plain text or attachments.

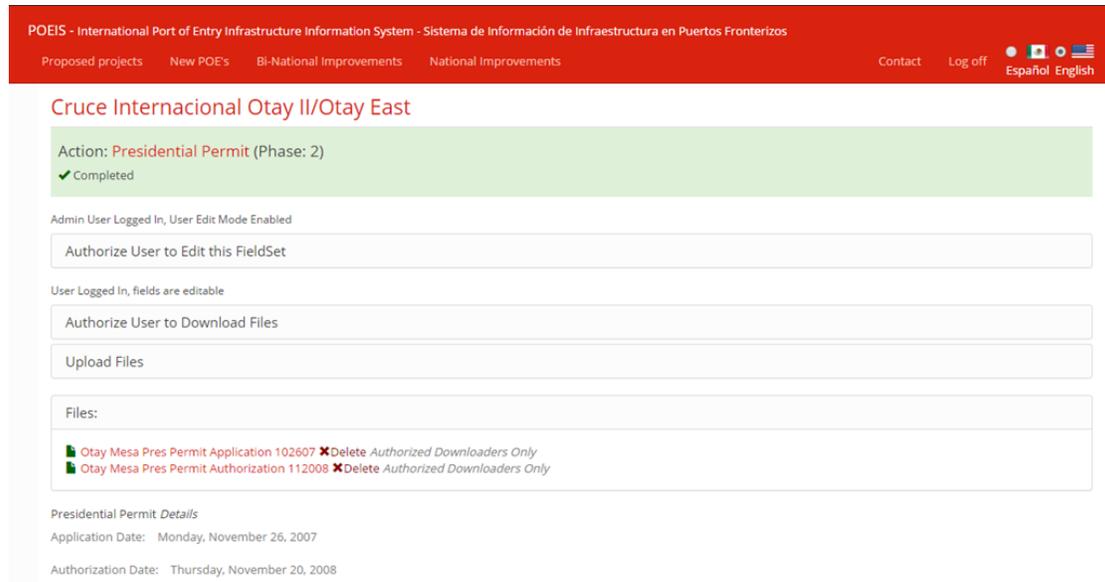
Appendix A presents a description of the system design and a quick guide of the system. Appendix B presents the list of projects in the “Proposed Projects” category.

Figure 4.6 Phases of a Project Diagram



Source: Developed by FOA Consultores and TTI.

Figure 4.7 Project Task Details



Source: Developed by FOA Consultores and TTI.

Chapter 5. Conclusions and Recommendations

When analyzing the U.S.-Mexico border region, it is important to acknowledge the economic differences between the two countries. Mexico is a developing economy, while the United States is one of the most important economies in the world. Nevertheless, the economic and commercial activities that take place in the border region are extremely important to both nations.

The vision of the border has changed throughout the last two decades and can be characterized in three stages:

- 1. Post-NAFTA:** The vision of both countries at the start of NAFTA was to increase trade between the two countries and facilitate higher investment rates. The manufacturing industry in Mexico grew, and trade between the two countries increased at an average annual rate of 17 percent between 1995 and 2000.
- 2. Post 9/11:** After the terrorist attacks of September 11, 2001, the United States Government intensified its focus on border security, increasing commercial and privately-owned vehicle inspections, resulting in longer wait and crossings times. The downturn of the economy and the increased border crossing times resulted in lower traffic volumes and economic impacts. The United States developed and implemented trusted traveler and trusted trader programs to integrate supply chain security, trade compliance and travel.⁹⁷ The Free and Secure Trade (FAST) and Secure Electronic Network for Travelers Rapid

Inspection (SENTRI) programs provided expedited entry for pre-approved, low-risk travelers through dedicated lanes and kiosks at border crossings.

- 3. Post-Financial Crisis:** After the worldwide economic crisis in 2008, manufacturing industries relocated to North America, changing international trade patterns. As a result, intra/subcontinent trade has increased. The Governments of the United States and Mexico have been implementing policies and strengthening partnerships to create a more competitive trade bloc in North America.

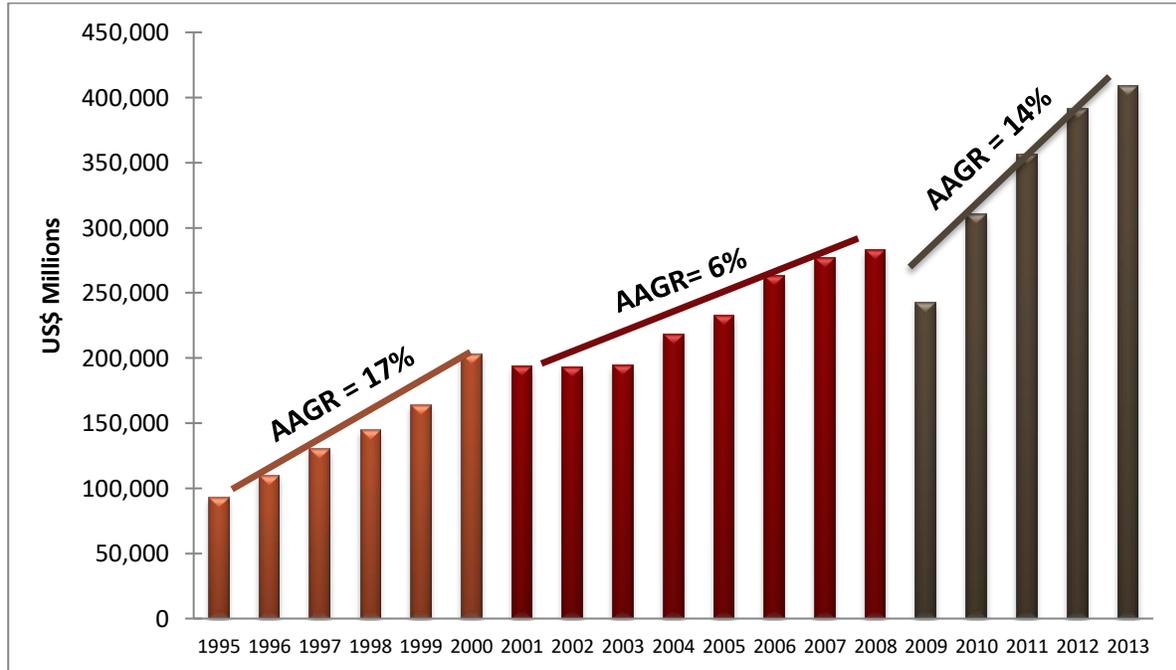
Figure 5.1 illustrates these three stages and their impact on cross-border trade at the U.S.-Mexico border.

The current and future importance of the border region—with more than 14 million people and an economy that represents nearly a quarter of the GDP of both countries—requires a competitive binational zone that promotes trade without compromising security.

In order for the region to remain competitive, border crossing infrastructure needs to keep pace with cross-border trade and traveler crossings volumes, while maintaining a high level of security. The challenge is to establish a streamlined binational planning and joint implementation process that respects internal decision-making processes in each country.

⁹⁷ Source:CBP, Trusted Trader and Trusted Traveler Programs, Accessed 01/09/2017 <https://www.cbp.gov/border-security/ports-entry/cargo-security/trusted-trader>

Figure 5.1 Ground Trade between the United States and Mexico



Source: USDOT BTS Transborder Freight Data.

5.1 Border Crossing Development Process

The overall binational border crossing development process is not clearly defined or documented. This report has identified and documented the most relevant tasks on each side of the border for planning and developing new border crossings and expanding existing ones, as well as the binational coordination efforts required. A four-phase process that outlines the development of new border crossings and explicitly states the activities required by each country is presented in this report.

Based on the research conducted during this study and comments from stakeholders of both countries, it is clear that the border crossing implementation process is not linear and varies greatly based on the nature of each project. This variation and the lack of clear definition opens the door for construction delays or lack of continuity in the project development process.

In the United States, the Presidential Permit process is relatively well structured. However, the definition of a lead federal agency, including for the environmental review, is not clearly documented, which could lead to confusion by border crossing sponsors, as well as delays in the overall process.

In Mexico, the border crossing project development process is not documented. It is difficult to determine the roles and hierarchy of the agencies involved. The authorization process on the Mexican side is not defined. This ambiguity can lead to delays and red tape since requirements are not clearly specified.

The following actions are recommended to improve the construction, expansion or modification of border crossings along the U.S.-Mexico border.

1. **Agree on a standardized, four-phase binational process (planning, authorization, procurement and construction/start of operation) for developing new border crossings and expanding and/or modifying existing ones.**

2. **Use a modified version of the RBMPs as the main binational source of project identification (not mandatory).** The current RBMP processes would require modifications to expand the technical and institutional range of agencies involved in project identification. USDOT has taken the lead on RBMP development along the U.S.-Mexico border, thereby establishing the first binational institutional mechanism for identifying and prioritizing projects.

These plans would foster consistency in the planning processes of the agencies involved along the entire the border. Another advantage is that the planning processes include various representatives from the three levels of government (local, state, and federal) in the U.S. and Mexico, who will have the opportunity to select projects consistent with the programs, objectives, goals and actions proposed by each current and future federal administration.

These plans include a wide range of criteria for ranking border crossing projects and their access, such as regional accessibility; land use; environmental issues; population; and short-, medium- and long-term socioeconomic indicators. The RBMP mechanism should be updated on a regular basis (every five years) with new data including changes in policies, the economy and infrastructure in each region.

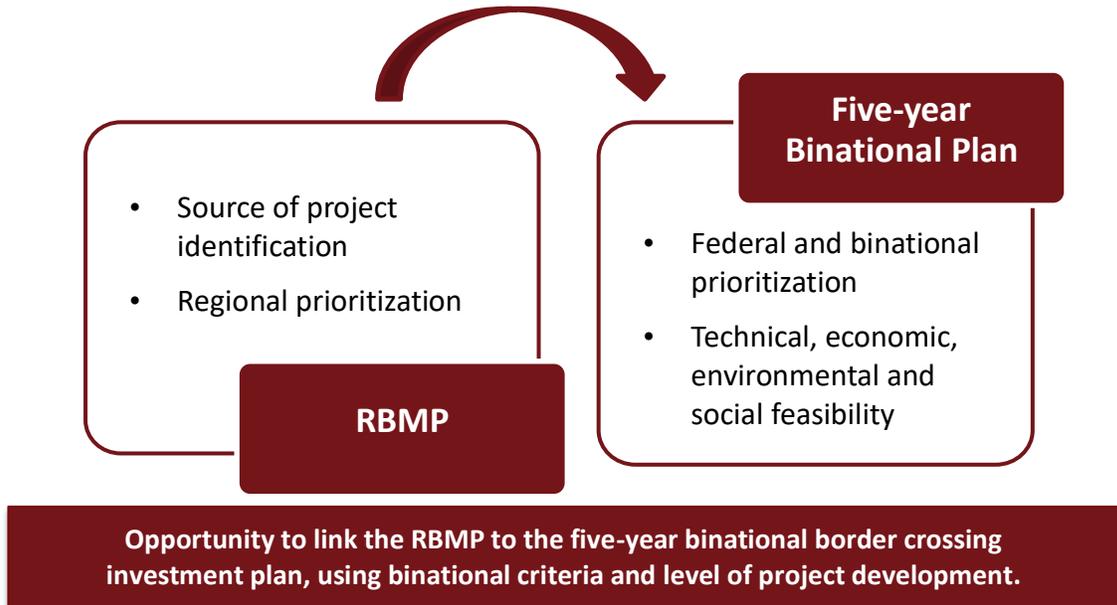
One area of opportunity for improvement is to have all the agencies involved define homogeneous prioritization criteria for new border crossing projects. Another area of opportunity is to broaden the spectrum of institutional and technical participation of the agencies involved border crossing development. It should also be mandatory to include any border crossing project proposal in an RBMP by a mutually agreed date.

3. **Define a five-year binational border crossing development plan, including funding streams.** Since the RBMPs rank projects based on local priorities, it is important for both federal governments to agree on a binational project plan based on national priorities and the bilateral agenda. Discussing a prioritized list of U.S. border crossings with Mexico would help to develop a list of binational projects that would be the core of the proposed five-year binational border crossing development plan. The five-year plan should be updated on a rolling basis.

Figure 5.2 shows the proposed process for developing the five-year border crossing development plan. This plan would also define which projects could be developed under the current funding rules and which ones would be funded under the proposed binational border crossing funding mechanism. Some projects would be funded under the typical U.S. annual funding structure, and others would be part of the binational funding scheme. Initially, each country could develop its own five-year plan and eventually turn it into a joint one.

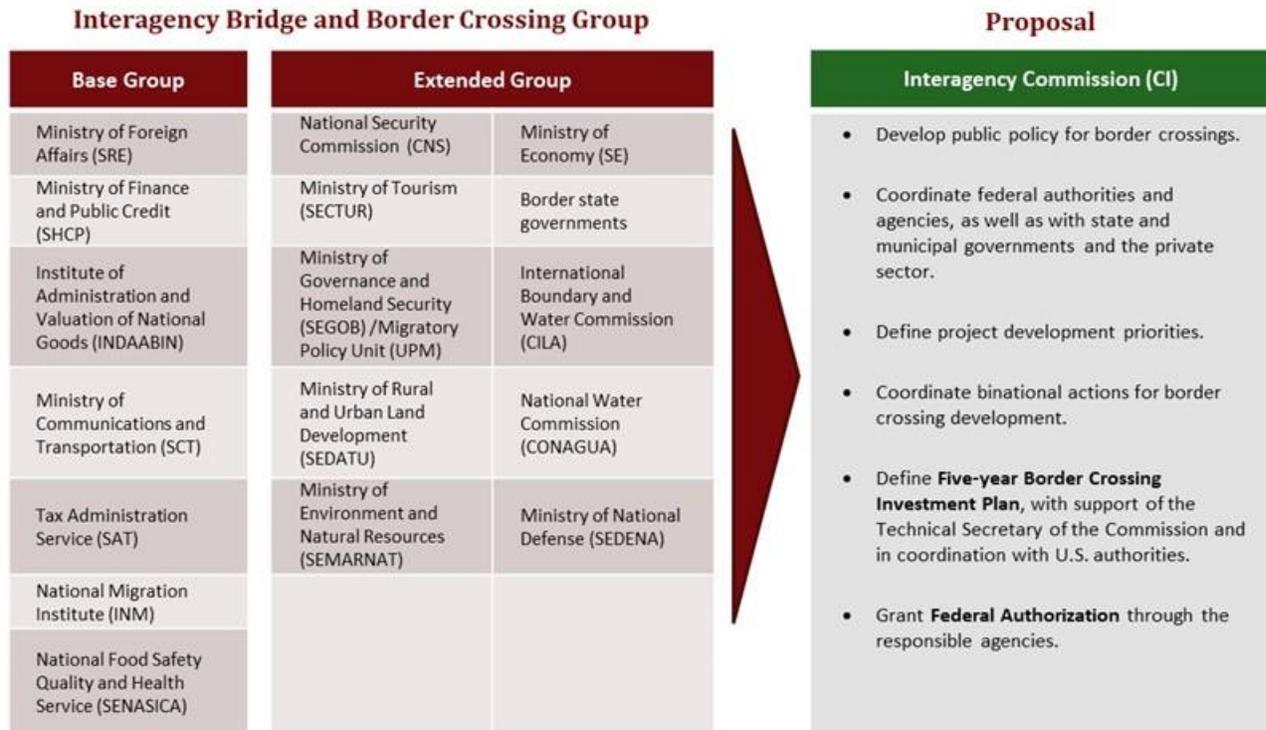
4. **On the Mexican side of the border, transition the current border crossing group into an Interagency Border Crossing Commission,** which would expedite project implementation (see Figure 5.3). The current Interagency Bridge and Border Crossing Group (GICyPF) is a mechanism for communication and coordination that can evolve into a formal interagency commission under the provisions of Article 21 of the Federal Public Administration Act. The Base Group and the Mexican Section of IBWC would support the Mexico in approving the technical aspects of border crossing projects. It is recommended that the new commission be chaired by SRE, and that SCT be the Technical Secretary.

Figure 5.2 Basis for the Five-year Binational Border Crossing Development Plan



Source: Developed by FOA Consultores and TTI.

Figure 5.3 Evolution of the Current Border Crossing Mexican Group into a Commission



Source: Developed by FOA Consultores and TTI.

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

According to Article 21 of the Federal Public Administration Act, the President of Mexico may form interagency commissions to deal with issues involving several federal agencies. Below are a few of the current interagency commissions of the Mexican federal government:

- Interagency Commission on Government Expenditures, Financing and Divestment.
- Interagency Commission for Implementation of the Crusade against Hunger
- Interagency Commission for Development of Digital Government.
- Interagency Commission to Prevent, Punish and Eradicate Human-trafficking and to Protect and Assist Victims of this Crime.
- Interagency Commission on Climate Change
- Interagency Commission on Biosafety of Genetically Modified Organisms.

Operation of Interagency Commissions. The Mexican President may establish interagency commissions for matters requiring the intervention of several ministries. The commissions may be temporary or permanent and are chaired by the Mexican President. They are created by an executive order, and their rules of operation are issued by the Ministries that form the respective commission.⁹⁸

The functions of the interagency commissions are generally consulting; formulating and implementing national policies; and evaluating, monitoring and coordinating actions in matters requiring the involvement of several federal agencies, such as border crossing infrastructure.

In the case of border crossings and in accordance with the provisions of the Federal Public Administration Act, the interagency commission could be formed by the ministries that currently make up the GICyPF. Once the commission has been created, other government-controlled public entities could be integrated. In addition, permanent guests could be included that could participate in sessions of the commission with voice, but no vote. Permanent guests could include:

- Economic development ministries of the states where border crossings are located.
- Industrial and business chambers.
- Freight carrier chambers and groups.
- Academic institutions.

The activities of the interagency commission would be limited to those set forth in the executive order that establishes it and in its operating rules, which must take into account the limits of the powers and authority of the member agencies. The operating rules would define:

- The ministry that will preside over the commission, which we recommend should be SRE.
- The members that will form the commission.
- The rank of the civil servants that will represent each member agency.
- Permanent guests who would participate with voice, but without vote.
- The functions of the commission.
- The creation of working groups.
- The functions of each working group.
- The functions of each member agency.
- The frequency of commission sessions.

⁹⁸ Article 21 of the Federal Public Administration Organic Law.

The commission would not have legal personality nor patrimony, so it would only be able to act through its member agencies.

Although the GICyPF has been working well, it should be structured as an interagency commission in accordance with the law, which would allow all participating agencies to work together within their respective areas of responsibility and with formal participation at the BBBXG. Moreover, the GICyPF is not regulated under any Mexican law, providing another reason to formalize collaboration under the proposed interagency commission.

5. ***In Mexico, create a process similar to that of the U.S. presidential permit.*** The process could be in the form of a Federal Authorization for new border crossing projects, in accordance with the powers and authority of each agency within the Base Group (Figure 5.3).

It is clear that the planning processes are not linear and vary widely from project to project. In the United States, the Presidential Permit process is legally established with activities and requirements clearly defined. However, in Mexico, the authorization process is not explicitly documented, which may cause delays and red tape in border crossing development.

The Federal Authorization should be established in accordance with the powers and authorities of the Mexican agencies involved in developing new border crossings, which would provide greater certainty and structure to the authorization process and instill greater confidence for capital investments, as well as ensure the new border crossing is defined from a binational standpoint.

It is recommended that SRE, through its General Office for North America, be in charge of the

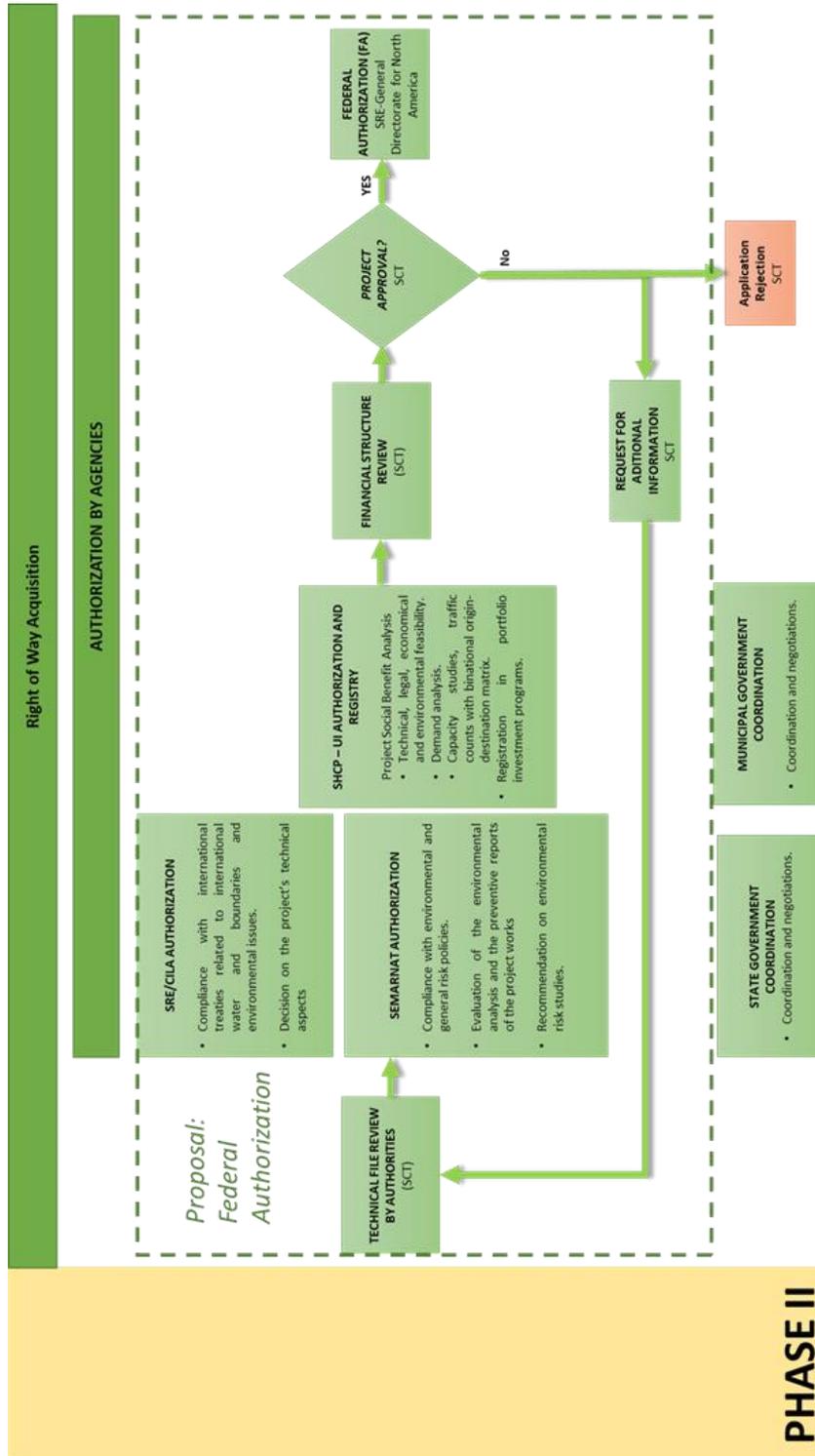
Federal Authorization. In fact, SRE is responsible for foreign policy and representing the Government of Mexico abroad, looking out for the reputation of the country and making sure that relations with neighboring countries is consistent with Mexican foreign policy and the rules of international law.

The granting of permits and authorizations must be coordinated by a single federal agency that can represent Mexico before foreign authorities, in order to prevent independent actions by other federal, state or municipal agencies and entities that might hinder negotiations or agreements with the United States Government. The risk of contradictory actions would also be avoided.

The Federal Authorization would encompass all phase II authorizations (Figure 5.4). Upon their completion, an official authorization document would be issued. To link the Federal Authorization to the Presidential Permit, diplomatic notes should be exchanged when both are complete.

Under current immigration law in Mexico, SEGOB, through UPM, has the exclusive power and authority to assign and remove international points of entry for people by land, water and air, taking into consideration the opinion of SHCP, SCT, SS, SRE SAGARPA and, if applicable, the Navy, as well as other agencies as deemed necessary. Under the current process, this power is only taken into account when the project is about to be constructed, diminishing its importance and relegating it to just another formality, based on comments from UPM during review of this study. It is recommended that this step be included as part of the proposed Federal Authorization and that its legal importance in this new process be made clear to the Mexican agencies.

Figure 5.4 Proposed Mexican Federal Authorization in Phase II of the Process



Source: Developed by FOA Consultores and TTI.

6. **Execute a cooperative agreement** with the various federal government agencies involved in the four phases of border crossing development.

For the efficient and orderly development of a project culminating in Federal Authorization, we believe it is absolutely essential that a cooperative agreement be signed by the various agencies involved in this process, as well as by the applicable states and municipalities.

The agreement would establish the commitments assumed by each participant; the manner in which those commitments will be met; the time estimated for meeting them; the manner and order in which the agencies will interact in order to prevent conflicts with or impediments to the actions of the other agencies.

For the execution of the cooperative agreement, we recommend, based on the provisions of Article 21, Sections XIX and XXII, of SRE's internal regulations, that the General Office for North America be responsible for calling the different agencies and coordinating the development and signing of the agreement.

In the event that states and municipalities are involved, the agreement should be published in the official federal gazette, *Diario Oficial de la Federación*, in accordance with the provisions of Article 36 of the Planning Law.

5.2 Border Crossing Funding

Experience in the development of new border crossing projects, and more recently with the Otay Mesa East project, clearly shows that new binational funding mechanisms are required to support joint and concurrent development of binational infrastructure. Some of the key elements that the proposed new mechanisms should have are outlined below.

- **A specific, border crossing funding program.** Ideally, this program should be binational in

nature and could be based on the experience of FONADIN with specific ad-hoc programs. In the initial phase, each country could have an individual program that would evolve into a single binational program that could be housed in a binational development bank.

- **Funds from both governments.** The program would provide funding in the form of loans and/or grants, depending on the needs of each project.

It is recommended that the Border Crossing Development Program be established as a new funding mechanism. The objective of the proposed program would be to promote border infrastructure investment, by attracting private sector and multilateral funding, and encouraging co-financing with federal, state, and local agencies. As a result, this program would increase the competitiveness and efficiency of the border region and promote high-level binational policy, as established in the HLED.

An example of a successful program is the Federal Mass Transit Support Program (PROTRAM) created by FONADIN, which promotes mass transit projects in major cities in Mexico to address urban mobility problems and promote their sustainable development with increased productivity and a better quality of life for their residents. As of April 2013, PROTRAM had helped support about \$91 billion pesos in financing for mass transit projects.

These types of programs can be created as a public trust, either government-owned or as a "non-entity," to achieve their objectives. They usually have limited objectives, focused on the funding and development of specific projects that are evaluated based on the verification of predetermined requirements that must be met by the applicants.

Since the primary activities of FONADIN include promoting infrastructure in Mexico by providing reimbursable and non-reimbursable financing and fostering the participation of the private sector, it could

serve as the vehicle for creating a program that could be used for to fund border crossing projects.

However, the program could be created in any existing trust at BANOBRAS, the Mexican foreign trade bank (*Banco de Comercio Exterior S.N.C.* [BANCOMEXT]) or the Mexican industrial development bank (*Nacional Financiera* [NAFIN]), provided that the objectives and activities of the trust are compatible with border crossings or after any applicable amendments have been made to the trust.

The characteristics, advantages and disadvantages of this kind of program coincide with those of the trusts used in their current operations. A new contract would not be required for its creation, only the agreement of the respective technical committee.

In the initial phase of the program, current funding mechanisms would be strengthened as follows:

- (i) In Mexico, create a border crossing development and modernization program to consolidate lines of credit and financial support from various sources, including private capital through P3s.
- (ii) In the United States, promote the use of P3s for border crossing projects.
- (iii) Jointly define the project funding requirements that must be met in each

country in order to access financing, which would benefit eligible projects by ensuring consistency in development plans on both sides of the border, while maintaining separate funding sources.

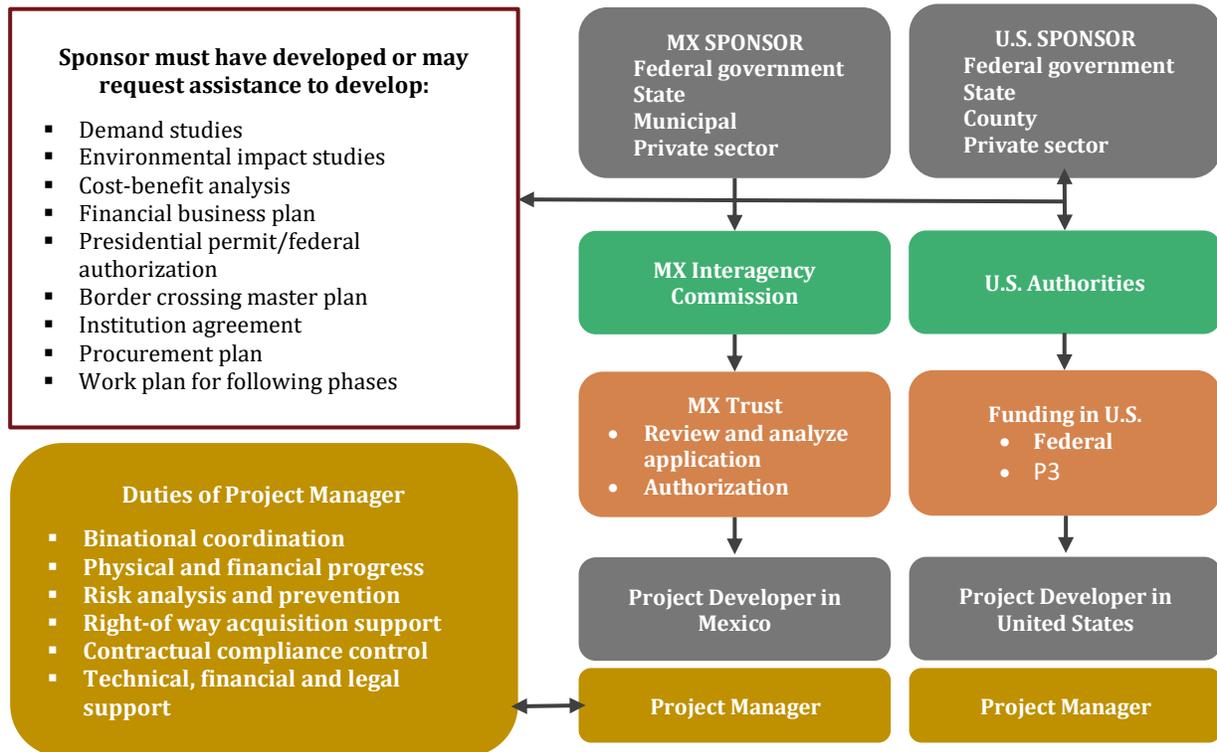
- (iv) A project manager would be named in each country, and the two who would be in constant communication to ensure coordinated and timely project development on both sides of the border.

Figure 5.5 describes the proposed institutional organization during the initial phase of the program.

As mentioned in Chapter 2, it is recommended that an Interagency commission be created in Mexico with the federal agencies responsible for border crossing projects. This commission would determine the policies and procedures of the trust fund and program in Mexico during the initial phase.

The creation of the specialized program would be in accordance with the legal provisions relating to trusts contained in Articles 46, Section XV, 79, 80, 81, 82, 83, 84 and 85 of the Financial Institutions Act and in Title Two, Chapter V, Section I of the General Law of Negotiable Instruments and Credit Operations.

Figure 5.5 Proposed Institutional Arrangement: Initial Stage



Source: Developed by FOA Consultores and TTI.

In the second phase, the Border Crossing Development Program could become part of a binational development bank, able to finance the development of new border crossings or high-impact modernization of existing ones, providing a variety of support for studies and project investment in accordance with the operating rules of the program.

This program would not replace existing funding mechanisms. It is intended to serve as an additional funding source for border crossing development.

Public-sector agencies would be eligible for support if their projects comply with the program objectives, including new international crossings and bridges, major expansion or modernization of existing border crossings, access roadways and other infrastructure and equipment necessary to implement a border crossing in an urban environment.

Projects seeking funding would have to meet minimum eligibility requirements, which could become more stringent as the program evolves. Likewise, pre-feasibility studies and project management activities could be funded following predefined guidelines.

It is recommended that the binational program finance border crossing projects that have their own revenue streams, such as tolls. Likewise, a mechanism should be created to manage these projects at the binational level, in order to reduce operating and administrative costs by eliminating duplicate structures in each country and creating a single, more efficient, binational clearinghouse that would distribute funding based on the financial plan, including payments to the source of funding. As a result, revenue from both the Mexican and U.S. side would be consolidated in a single cash account. Surplus revenue would be used to service debt or pay dividends to public or private investors.

The program would operate under a Technical Committee, which in the first phase would be formed by officials from each government separately and in the second phase with the participation of officials from both governments, with ad-hoc subcommittees for planning, regulations, standardization, funding, etc. Committee members would approve the program design, as well as the funding for individual projects which will be evaluated through the Credit Committee.

It is recommended that the program be designed taking into account the following considerations:

- Clearly define which projects would be eligible for support.
- Establish the minimum eligibility requirements, such as being included in an RBMP, having a minimum investment amount, developing certain studies, etc.
- Develop a specific set of rules for funding studies.
- Define the type of expenditures that would be eligible for funding through this program.
- Define whether or not the program will have funding ceilings relative to the total amount of project investment, and whether there should be caps on non-reimbursable support.
- Define procedures for projects that could require future operating subsidies. Technically, the program should only support capital investments,

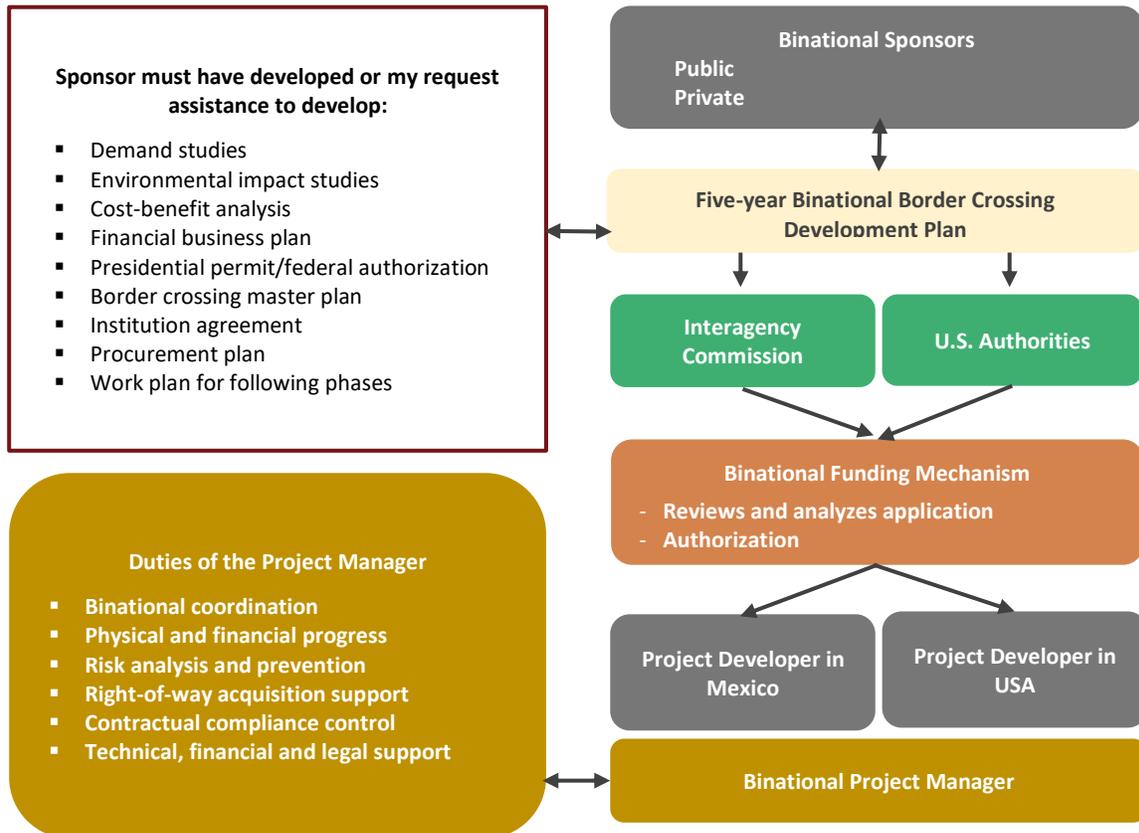
not operating costs. However, the program could fund projects that require subsidies as long as the sponsor has other sources to cover operating costs.

- Define whether the program should require a competitive bidding process for all funded projects.
- Consider mechanisms for incorporating other funding sources into the project structure (specifically, funding mechanisms aimed at reducing carbon emissions).
- Define the agencies that would participate in the Credit Committee that will evaluate funding applications.

As an integral part of this mechanism, it is recommended that a binational project manager be contracted for every project funded under the program. The binational project manager would support the implementation of each project, coordinating border crossing development tasks on both sides of the border. Having a binational project manager would provide continuity during project development, regardless of public administration changes in either of the two countries.

Figure 5.6 outlines the proposed institutional organization for the second phase of the program.

Figure 5.6 Proposed Institutional Arrangement: Second Stage



Source: Developed by FOA Consultores and TTI.

It is important to note that the new border crossing development and modernization trust has to be different from that of FONADIN for the following reasons:

1. Funding for the proposed trust will come from sources other than those used for FONADIN, specifically border crossing tolls, budgetary funding earmarked for border crossing development by both federal governments, donations, etc.
2. Given the specialized nature of the proposed trust, the members of its technical committee would not be the same as those that make up the FONADIN committee.

The FONADIN Technical Committee is composed of: (i) three representatives from SHCP with voice and vote, one of which is the chair; (ii) two representatives from SCT with voice and vote; (iii) one representative from SEMARNAT with voice and vote; (iv) one representative from the Ministry of Tourism with voice and vote; (v) one representative from BANOBRAS with voice and vote; (vi) the governors of three states with voice and vote, and (vii) one representative from the Ministry of Public Administration (SFP) with voice but no vote.

For the proposed trust, representatives from the Mexican government that are part of the Interagency Commission would initially form

the technical committee. In the second phase, the committee members would include representatives from both federal governments and the binational development bank, which would be possible at FONADIN.

In the second phase of the process, members representing the U.S. federal government on the committee would oversee the resources from the U.S. government, including the original contribution to the trust fund and funding approved for specific projects, in order to verify that the funds are being used as specified, as well as follow up on project development on the U.S. side of the border in accordance with federal and local laws.

3. The objectives of the proposed trust do not completely coincide with those of FONADIN.
4. The participation of a binational development bank is not included in the current operations of FONADIN; however, the participation of that type of financial institution is important for the development and modernization of border crossing infrastructure.
5. The creation of the new trust fund does not require staffing; therefore, there would be no duplication of staffing functions. Given the

specialized activities within each trust fund and the lack of staffing at FONADIN, which is also a trust fund not an agency, there would be no duplication of functions or staff.

5.3 Information System

To expedite the transfer of information on border crossing projects, a tool has been developed to store information on the status of each border crossing project. The main purpose of this system is to manage information regarding border crossings.

Border crossing projects have been divided into four categories.

- Proposed projects.
- New border crossings.
- Binational improvements.
- National improvements.

Information on the activities completed and currently in process for each can be stored in this system and accessed through the following website:

<http://biis-dev.tti.tamu.edu>.⁹⁹

⁹⁹ The software is installed in a development webpage that currently works in the TTI network. Once a decision is made

defining where to house the software it will be transferred to a final webpage.

Appendix A. Design of the Port-of-Entry Infrastructure Information System

This appendix is intended to present the design details of the Port-of-Entry Infrastructure Information System (POEIS). This system was developed as part of the Analysis of International Port-of-Entry Projects on the U.S.-Mexico Border, which was conducted on behalf of the North American Development Bank by FOA Consultores and the Texas A&M Transportation Institute (TTI), within the framework of the Mexican federal law on transparency and access to government information. The main purpose of this system is to manage information regarding port-of-entry (POE) infrastructure activities along the U.S.-Mexico border. The system is available to anyone with Internet access who is interested in U.S.-Mexico border crossing infrastructure projects.

The system is designed as a web-based platform and is accessible from almost any electronic device with an Internet connection and browser. One of the main advantages of this platform is its easy access, regardless of geographic location or time zone, which allows the information contained in the system to be available and easily updated at all times.

The unit of information within the POEIS is an infrastructure project (IP), classified in one of four categories. Each classification has specific variables that can be updated, edited or deleted by registered users based on the needs of the project and user permissions.

The POEIS relies on a session manager to identify each user accessing the system and to assign him or her a specific session. This process allows the system administrator to assign rights to specific users or a specific level of user, who can then edit the information contained in the system. This control over editing rights

makes the data within the system more reliable and trustworthy. The level of user access and session rights is also described in this document.

The primary function of the system is to identify each activity and allocate it to one of the project development phases described in the Border Crossing Development Process (BCDP) proposed in Chapter 2 of this report. The system is capable of storing information on each project based on the parameters entered by the user, as well as updating the progress of each project over time.

The Government of Mexico has experience with similar systems, having implemented an information system for projects with public-private partnerships that can be accessed at www.proyectosmexico.gob.mx. The G-20 also has an initiative to maintain project information through the Global Infrastructure Hub Project Pipeline, which currently includes nine countries and can be consulted at <http://pipeline.gihub.org>.

A.1 Infrastructure Project Classifications

Border infrastructure projects can be registered in the POEIS and will be classified under the following four types of infrastructure projects:

- Proposed projects.
- New POEs.
- Binational improvements.
- National improvements.

There are some border crossing projects that do not fall under any of these four categories and thus will not be included in the system.

The primary purpose of this classification is to identify the current status of a project and track its progress over time, including its initial and final status within the BCDP. Users can search for information by filtering through these categories. The filters for these categories will be available on the home page and can be modified based on the needs of the user.

A.1.1 Proposed Projects

Projects that have been proposed but do not have the formal documentation needed to be included in the Border Crossing Development Process (BCDP), as well as proposals that have not been confirmed, will be registered under this category. The information stored in the system for this category may include only the proposed project location and sponsor.

A.1.2 New POEs

Projects in this category must meet the requirements to be included in the BCDP and, eventually, once the

process is completed, will result in the construction and operation of a completely new POE. These projects can be allocated in a specific phase within the BCDP. They require an independent series of actions from both countries, as well as some binational actions.

A.1.3 Binational Improvements

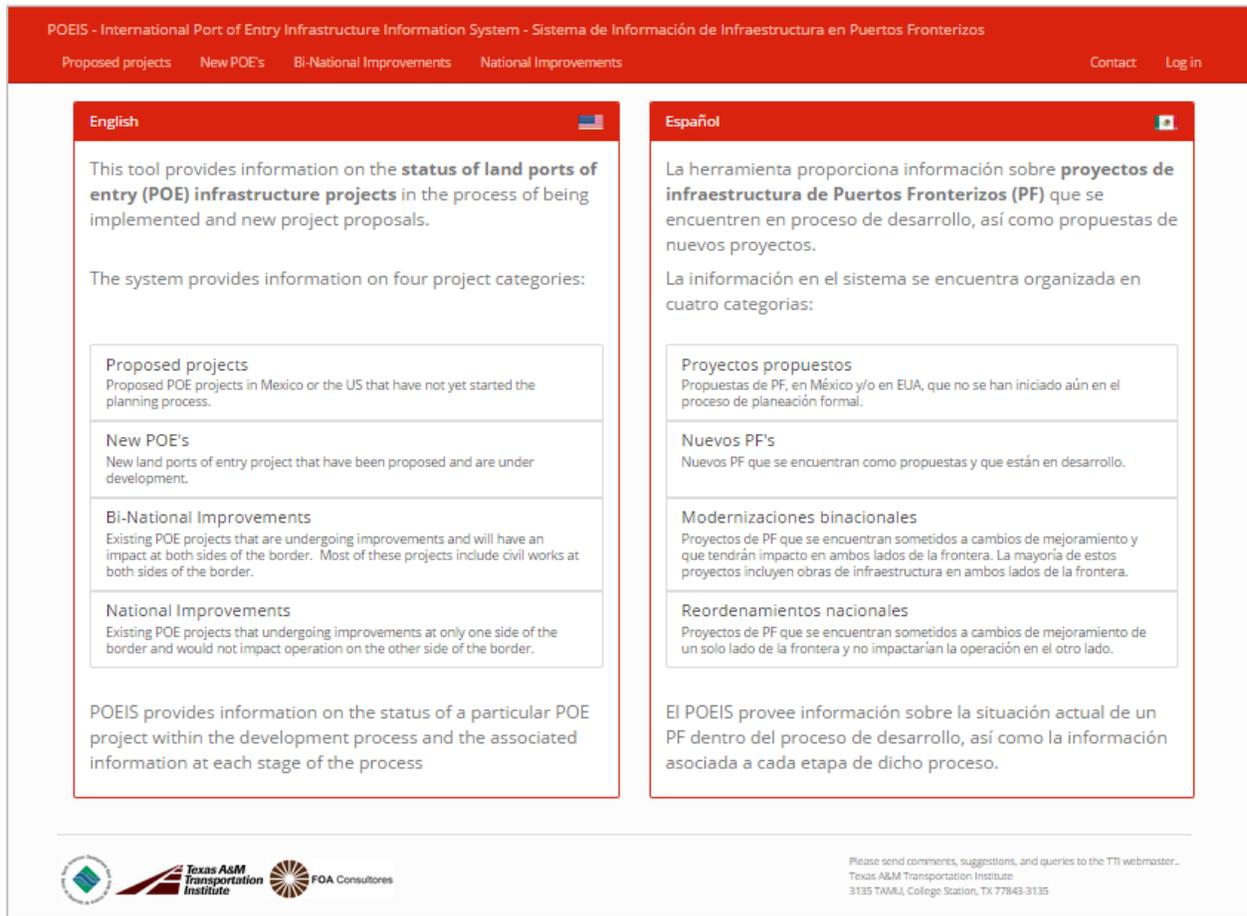
Projects in this category represent POEs that are already in operation, have the documentation needed to be included in the BCDP, and whose development will impact both sides of the U.S.-Mexico border. These projects can be for the expansion or modification of existing POE infrastructure.

A.1.4 National Improvements

This category represents projects for existing POEs that will impact only one of the two border countries. These projects can include the expansion or modification of facilities on one side of the border.

The four types of projects will have similar functionality options, which will be described later in this appendix.

Figure A.1 POEIS Home Page



Source: Developed by FOA Consultores and TTI.

A.2 Levels of User Access

There are three different types of sessions corresponding to the set of privileges granted the user within the system. Regardless of the type of session, the home page will look like the image in Figure A.1. On this page, the user can choose any of the four project categories. The information is displayed in English on the left side and in Spanish on the right.

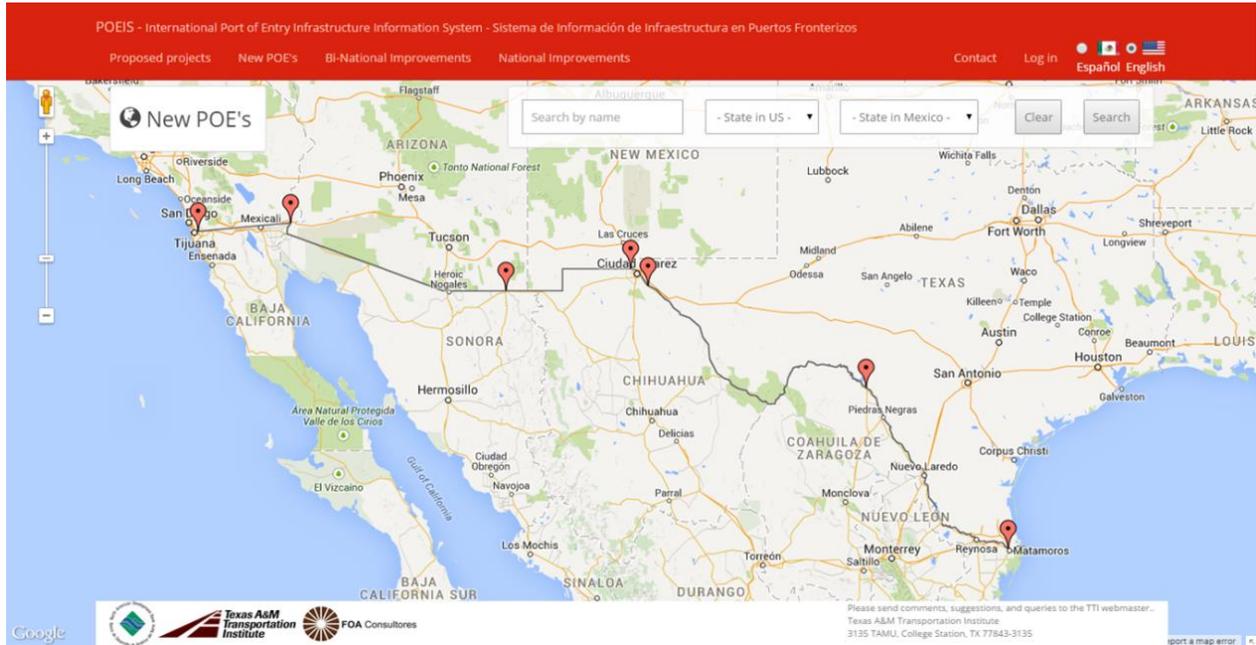
A.2.1 General Public

The default session for the system is set as a public session. No prior user registration is necessary for this type of

session, nor is a login required. Public sessions only contain public information, and the user does not have the authority to make any changes within the system.

Once a user in a public session chooses a project category, he or she is directed to a page that shows all projects under the selected category. When a user chooses “New POE,” “Bi-National Improvements” or “National Improvements,” the results are shown as a map of the U.S.-Mexico border. Each point on the map is a specific color depending on the project category. Proposed projects will not be shown on the map.

Figure A.2 Map of New POE Projects



Source: Developed by FOA Consultores and TTI.

A menu bar will be available at the top of each page where the user can easily access the projects within the selected category. For example, when a user clicks on “New POEs,” a map showing where new POE projects are located will be displayed, as shown in Figure A.2. By clicking on a point on the map, the user will be directed to a page with the details of the selected project.

There are filters and project searches available on the home page, as well as the page with the list of projects. In the case of searches, for example, the user can look for the name of a specific POE, and the system will show the POEs that match the user’s search. If the results need to be filtered, the user can establish certain parameters, such as searching by a specific state within Mexico or the United States. In this way, the user can search for a project on the map or through a filtered search.

In order to disseminate the system widely, users are able to access a public session without having to contact one of the agencies involved. Any form of

Internet browser is compatible with the public session, regardless of the user type.

A.2.2 Registered Users

The registered user session is designed for experts in areas related to border infrastructure. All of the stakeholders involved in this Analysis of International Port-of-Entry Projects on the U.S.-Mexico Border are candidates to receive a registered user account. In general, the responsibilities of these users include documenting and updating project information in the system, adding and/or modifying projects in the system and validating the information in the system.

There is a “Sign In” link in the upper right-hand corner of the POEIS home page. Clicking on the link will direct the user to a login page, which will ask the user for the registered email address and password, as shown in Figure A.3.

Figure A.3 POEIS Sign In

Source: Developed by FOA Consultores and TTI.

In order to obtain the information necessary to log in, users must contact the system administrator and provide an email address and a password. The project sponsors will define who is authorized to request access to registered user sessions. Once the user registration is created, the email address and password may be used to access the system and begin a session with the privileges described in this section.

Once the user logs in to the registered user session, the system home page will be displayed. Similar to the public session, a registered user can select a border crossing project on the map and will be directed to the page with the details of that crossing project. Depending on the privileges granted, the user will be able to edit certain information in the system. The user may or may not have the required privileges to modify and save information in the system. The system administrator will define these privileges, and users should direct requests for privileges to the project manager.

The system also has the capacity to filter information depending on the session type. A registered user may have the privileges necessary to view, or even edit, non-public information. Certain characteristics and variables of each border crossing project may not be available for public disclosure, which means that users cannot view these fields in a public session. A user must be registered to view or edit these fields.

In summary, the registered user has access to all public user functions and information, in addition to certain restricted data that may not be publicly available. Registered users may also be granted permission to edit general information about the border crossing project.

A.3 Project Details

The IPs that fall under the “Proposed Projects” category are the only ones that are not represented in the project development phase diagrams of the system

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

because they have not yet entered this stage. By clicking on the “Proposed Projects” link on the home page, the user will be directed to a page similar to the one shown in Figure A.4.

On this page, any user can see the projects that fall under the proposed project category. Similar to the main search, the user will find search options and filters at the top of the screen. Registered users will be able to edit and add information in this section.

As an additional tool, the POEIS can place each POE in one of the phases of the BCDP, which is shown in Figure A.5. The projects in the “Proposed Projects” category cannot be placed within the BCDP, and therefore do not have any of the options outlined in this section.

The phase-by-phase breakdown and the details of the diagram for each project can be accessed in the project

documentation. In general, each phase is broken down into three types of processes: United States, Mexico, and binational. These processes refer to the assignment of tasks to each party involved in the development of a new or existing POE. Each of the three process categories is independent and can show how border crossing development is advancing along each separate track.

When the user selects a project on the map, a screen like that shown in Figure A.6 will appear. In this case, the checked boxes indicate completed tasks.

Projects under the “National Improvements” category will only show the section of the diagram where the activities will take place. For example, an improvement project in the United States will only show one row of tasks (blue).

Figure A.4 List of Proposed Projects

POEIS - International Port of Entry Infrastructure Information System - Sistema de Información de Infraestructura en Puertos Fronterizos

Proposed projects New POE's Bi-National Improvements National Improvements Contact Log in Español English

Proposed projects

POE projects in Mexico or the US that are in the conceptual phase.

Filter results

Search by name - State in US - - State in Mexico - Clear Search

Page 1 of 1

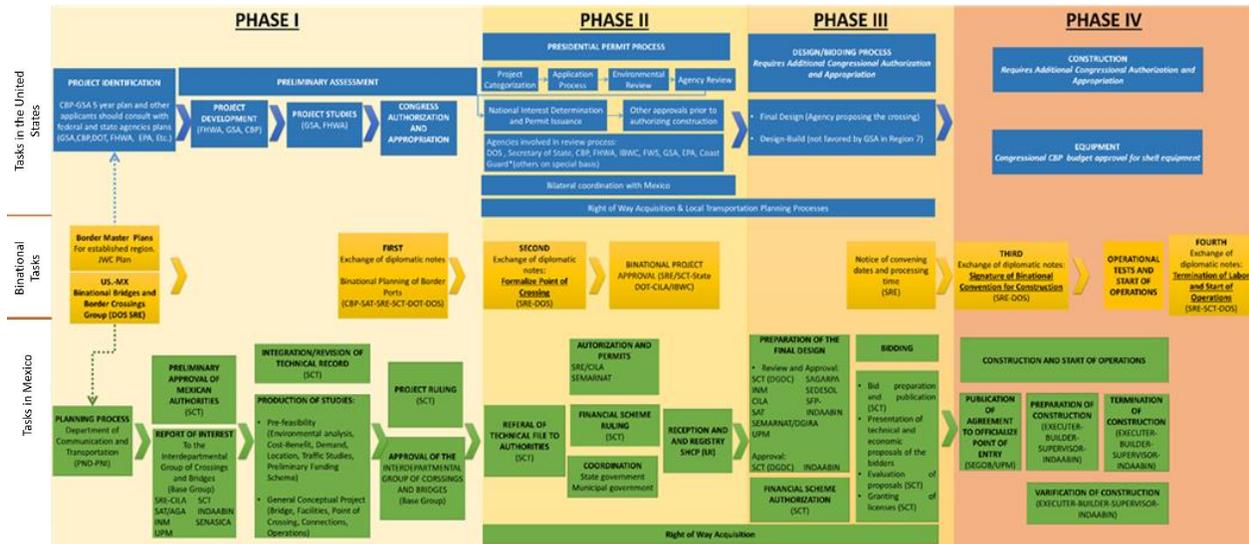
Name	Description	State in US	State in MX	Source / Proponent
Ferrovial Vehicular B&M	Reconfiguración del puerto: se dejarán de utilizar las vías y se adaptarán como carriles para el cruce de vehículos ligeros en modalidad SENTRI cuando entre en operación el Puente Ferroviario Matamoros-Brownsville. También contempla convertir los patios fiscales en áreas comunes y construir espacios culturales.	Texas	Tamaulipas	Listado SRE
Ferrovial Jerónimo-Santa Teresa	Reubicación de las vías ferroviarias que actualmente atraviesan la zona urbana de Ciudad Juárez, a una zona localizada a 5 km del cruce fronterizo existente en Jerónimo-Santa Teresa.	New Mexico	Chihuahua	Listado SRE
San Luis Rio Colorado-San Luis II	Proyecto para permitir el flujo de vehículos ligeros por el puerto	Arizona	Sonora	Listado SRE
Zaragoza - Ysleta	Transbordador de Carga Universal (vehículo automatizado montado sobre un riel elevado, dedicado al transporte de carga, con capacidad de 14 mil contenedores por día).	Texas	Chihuahua	Listado SRE

Page 1 of 1

Please send comments, suggestions, and queries to the TTI webmaster.
Texas A&M Transportation Institute
3135 TAMU, College Station, TX 77843-3135

Source: Developed by FOA Consultores and TTI.

Figure A.5 Border Crossing Development Process



Source: Developed by FOA Consultores and TTI.

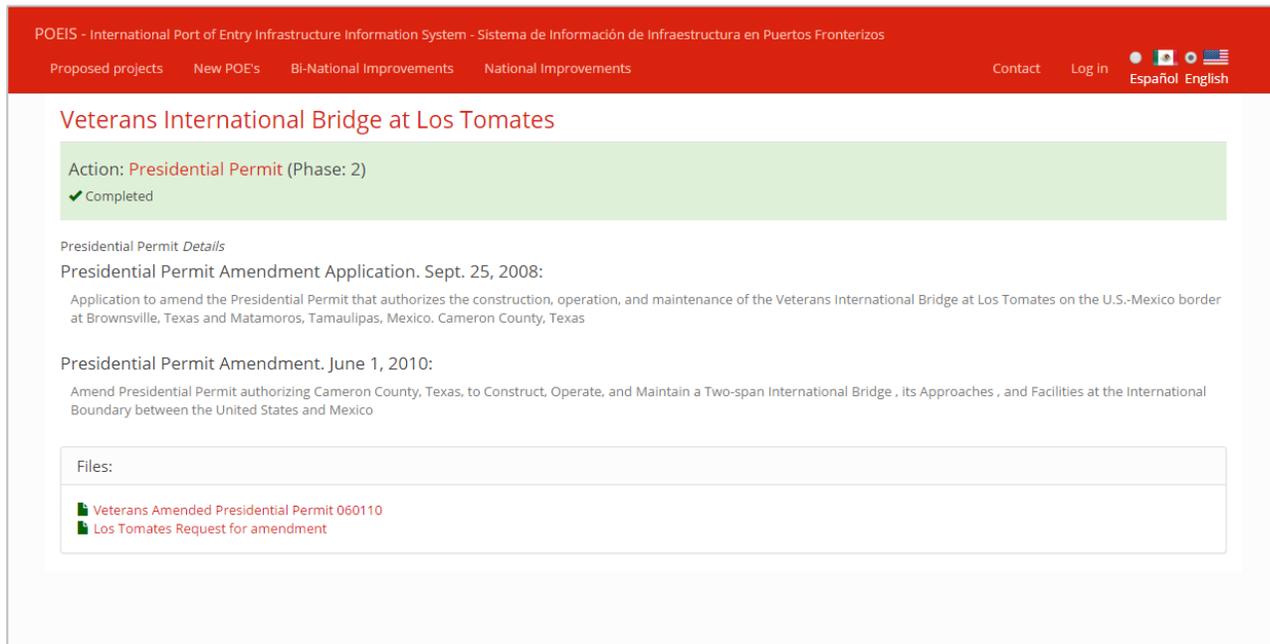
Figure A.6 Example of the Placement of a Project in the BCDP

Nation	Phase1	Phase2	Phase3	Phase4
Mexico	<ul style="list-style-type: none"> Proceso de Planeación Aprobación preliminar Informes de interés Expediente técnico Elaboración de estudios Dictámen del proyecto Vo.Bo. del grupo intersecretarial 	<ul style="list-style-type: none"> Remisión a autoridades Elaboración de dictámenes Recepción y elaboración de dictámenes Liberación de derecho de vía 	<ul style="list-style-type: none"> Liberación de derecho de vía Proyecto ejecutivo Licitación asignación Autorización de esquema financiero 	<ul style="list-style-type: none"> Desarrollo de obras de vía Declaratoria de punto de internación Preparación de obras
Bi-National	<ul style="list-style-type: none"> Planes Maestros fronterizos Primer intercambio de notas 	<ul style="list-style-type: none"> Segundo intercambio de notas Homologación binacional del proyecto Avisos de fechas de convocatoria y tiempo de proceso 	<ul style="list-style-type: none"> [Add New Action] 	<ul style="list-style-type: none"> Tercer intercambio de notas Pruebas operativas
United States	<ul style="list-style-type: none"> Federal Agency Request Preliminary Proposal Review Consultation with Department of State for Presidential Permit Cost estimate & preliminary design Feasibility studies Public Hearings 	<ul style="list-style-type: none"> Presidential Permit Bilateral coordination with Mexico Right of way acquisition 	<ul style="list-style-type: none"> Right of way acquisition Bidding Process Design built Construction 	<ul style="list-style-type: none"> [Add New Action]

= Denotes continuation through multiple phases.

Source: Developed by FOA Consultores and TTI.

Figure A.7 Example of Associated Task Details



Source: Developed by FOA Consultores and TTI.

A.4 Project Process

Each box on the BCDP diagram represents a task within one of the four phases of border crossing development. Every completed task must be properly documented in the system. In each task box (see Figure A.6), users are able to select a completed task and review the related documentation for that task. Registered users with sufficient privileges will be able to select an uncompleted task and mark it as completed when the documentation is entered into the system. These users will then be redirected to a page where they can upload the required documentation to change the task status to complete. Documentation can be entered as plain text or attachments.

A user with view-only privileges will be able to review the documentation, both in plain text and attachments, for each task. Registered users with editing privileges will be able to modify the text associated with the task, as well as upload or remove attachments. In this case, clicking on the selected task will direct the user to a

page with a list of details associated with the task (see Figure A.7). On this screen, the registered user will be able to find, add and modify attachments and text fields. A registered user with sufficient privileges has the option to document the specific project task.

A.5 Quick Start Guide

A.5.1 Requirements for System Use

- Internet connection.
- Modern Internet browser.

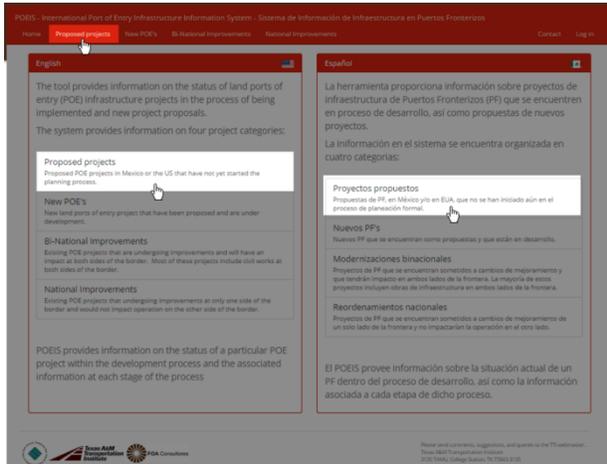
A.5.2 Entering the POEIS System

1. Verify Internet connection.
2. Open Internet browser.
3. Enter the web address **biis-dev.tti.tamu.edu** into the address bar.

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

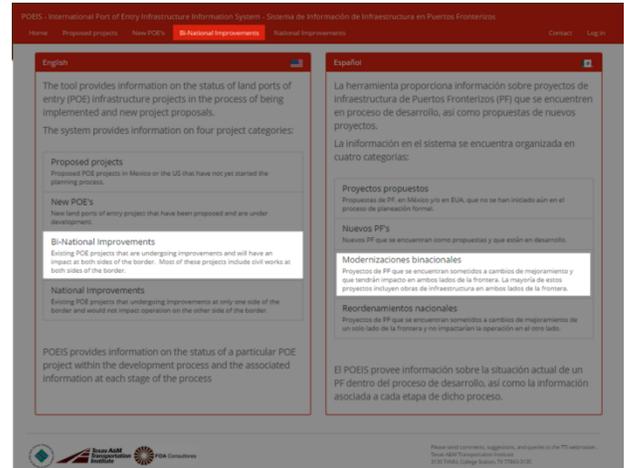
A.5.3 Viewing “Proposed Projects”

1. Enter the POEIS system.
2. Click on either of the links highlighted in the following image.



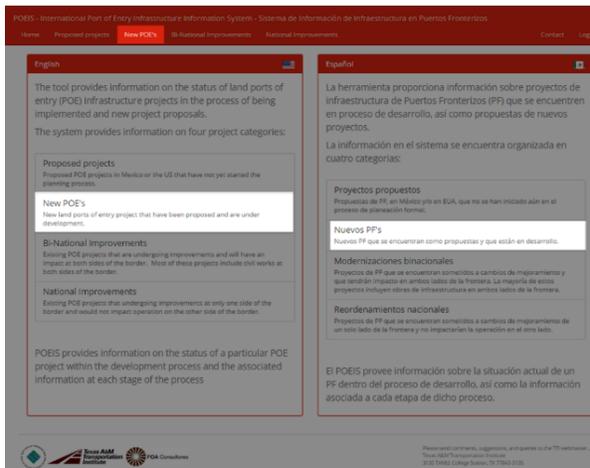
A.5.5 Viewing “Bi-National Improvements”

1. Enter the POEIS system.
2. Click on either of the links highlighted in the following image.



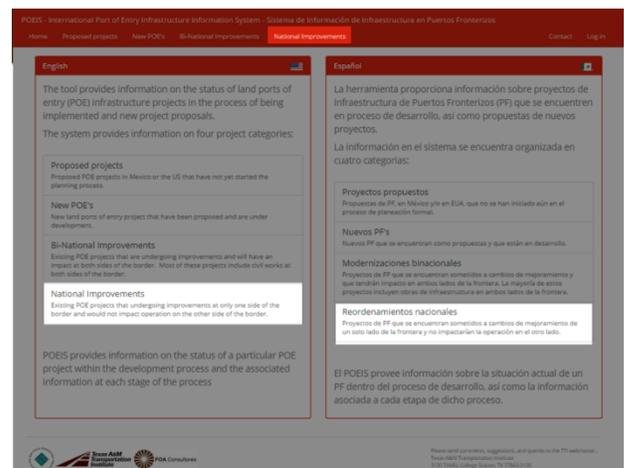
A.5.4 Viewing “New POEs”

1. Enter the POEIS system.
2. Click on either of the links highlighted in the following image.



A.5.6 Viewing “National Improvements”

1. Enter the POEIS system.
2. Click on either of the links highlighted in the following image.



A.5.7 Viewing the Diagram of Phases for a Project on the Map

1. Select the category corresponding to the desired project.
2. Locate project on the map.
3. Click the project marker on the map.
4. Click on the name of the project.

A.5.8 Viewing Task Details within the Diagram of Phases of a Project

1. Enter the diagram of phases for the desired project.
2. Find the task in the diagram.
3. Click on the name of the task.

A.5.9 Beginning a Session in the System

1. Locate the “Begin Session” link in the upper right-hand side of the screen.
2. Input username and password.

A.5.10 Changing the Language Preference

1. Locate the language bar on the upper right-hand side of the screen.
2. Select the preferred language.

Appendix B. List of Proposed Projects in Database

The projects and their data are presented in the original language in which they were received.

ID	Source	Project	Description	Date	Type	MX State	US State
80	PNI 2014-2018/SRE List	Guadalupe-Tornillo	Acceso y Puente Internacional Guadalupe-Tornillo. Construcción del puente internacional sobre el Río Bravo, de aprox. 178 metros de longitud, así como la construcción del Entronque “La Ribereña,” que servirá de conexión entre la carretera federal MEX2, El Porvenir-Ciudad Juárez, a la altura del km 43+000 y el puerto fronterizo.	18/06/2015	Binational	CH	TX
81	SRE List/Laredo District/Coah/N L/Tamps BMP	Ciudad Acuña-Del Río	New Puente Acuña II-Del Río. Se pretende trasladar a este puerto las operaciones comerciales que actualmente fluyen por el de Acuña–Del Río I.	18/06/2015	New	CO	TX
82	SRE List	Agua Prieta-Douglas	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	SR	AZ
83	SRE List	Agua Prieta-Douglas	SAT Proyecto de expansión que contempla la ampliación a cuatro carriles de carga, separación de vehículos ligeros, peatones y repatriados, así como la adecuación de los edificios de aduanas.	18/06/2015	Binational	SR	AZ
84	SRE List	Algodones-Andrade	INDAABIN Plan de reordenamiento.	18/06/2015	National Expansion	BC	CA
85	SRE List	Anapra-Sunland Park	Anapra–Sunland Park.	18/06/2015	New	CH	NM
86	SRE List	Ciudad Acuña-Del Río	Proyecto para ampliación del puerto y la modernización de las instalaciones aduaneras y patios fiscales. Es promovido por el Municipio de Ciudad Acuña (con aval del SAT).	18/06/2015	Binational	CO	TX
87	CILA	Colombia-Webb	Ferroviario Colombia-Webb.	18/06/2015	New	NL	TX
88	California-BC BMP	Calexico East	To relieve POV congestion at Calexico West, it is proposed that as many as six POV lanes and primary inspection booths be added at Calexico East, as envisioned in the original master plan for the facility, increasing the port’s NB POV throughput by 75%. The project’s scope includes six northbound primary POV inspection lanes and prefabricated booths with associated canopy, electrical service, lighting, HVAC and conduit for license plate reader, radiation monitors, and other IT cabling.	18/06/2015	National Expansion	BC	CA

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
89	SRE List	Córdova–Las Américas	SAT Proyecto ejecutivo para el reordenamiento de sus patios fiscales. Se espera desarrollar entre 2016 y 2017.	18/06/2015	National Expansion	CH	TX
90	California-BC BMP	Calexico East	It is proposed that as many as three NB commercial lanes and primary inspection booths and an exit control booth be added at Calexico East. The project’s scope includes three northbound primary truck inspection lanes and booths with associated canopy, electrical service, lighting, HVAC and conduit for license plate readers, VACIS, and other IT cabling.	18/06/2015	National Expansion	BC	CA
91	SRE List	Anzaldúas International Bridge	Instalaciones de Inspección de Carga. SAT desarrollará el proyecto ejecutivo y SCT aportará los recursos. Las obras incluyen la segmentación de un carril para El Paso de transporte de carga vacío, dos módulos para la entrada y salida de los patios fiscales y una “pequeña” plataforma de revisión.	18/06/2015	National Expansion	TS	TX
92	California-BC BMP	Calexico West	CBP & GSA have together developed a scope of work that would double the throughput of the existing pedestrian processing area at modest cost, pending funding of the major expansion and reconfiguration of Calexico West. The CBP/GSA concept would increase the number of inspection stations from six to 12.	18/06/2015	National Expansion	BC	CA
92	California-BC BMP	Calexico West	The existing facilities are undersized relative to existing traffic loads and no longer meet current standards in terms of inspection officer safety and border security. The project involves construction of new pedestrian and POV inspection facilities, expanding the port onto the site of the former commercial inspection facility.	18/06/2015	National Expansion	BC	CA
94	California-BC BMP	Calexico West	The second phase will include construction of the remaining six of 16 total northbound POV lanes, southbound POV inspection islands, booths, canopies and concrete paving, an administration building, an employee parking structure, and a pedestrian processing building with 12 northbound pedestrian inspection stations.	18/06/2015	National Expansion	BC	CA
95	LRGV-Tamps BMP	Anzaldúas International Bridge	Improve mobility and decrease wait times for northbound vehicles by adding four additional non-commercial lanes. Construct northbound commercial import lot facilities and lanes. This is a cooperative effort with government agencies.	18/06/2015	National Expansion	TS	TX

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
96	El Paso/Santa Teresa-Chih Border Master Plan	Between Bridge of the Americas and Ysleta-Zaragoza International Bridge	Create new commuter POE (POVs and pedestrians) between the Bridge of the Americas and Ysleta-Zaragoza International Bridge as recommended by the Camino Real Border Improvement Plan.	18/06/2015	New	CH	TX
97	LRGV-Tamps BMP	Anzaldúas International Bridge	Add two additional northbound POV lanes to alleviate queuing on the bridge, and begin expanding the secondary vehicle inspection facility to accommodate southbound commercial traffic of trucks and buses in 2015.	18/06/2015	National Expansion	TS	TX
98	SRE List	Jerónimo–Santa Teresa	SAT Reordenamiento integral de la sección aduanera (ampliación de carriles de carga, vehículos ligeros, entre otros).	18/06/2015	National Expansion	CH	NM
99	SRE List	Good Neighbor International Bridge– Stanton Bridge	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	CH	TX
100	LRGV-Tamps BMP	Anzaldúas International Bridge	Construct a 0.5-mi segment of the proposed northbound bridge to accommodate commercial truck traffic and improve mobility by increasing the number of lanes on the bridge.	18/06/2015	Binational	TS	TX
101	LRGV-Tamps BMP	Anzaldúas International Bridge	Expand the vehicle inspection facility to accommodate southbound commercial traffic inspections.	18/06/2015	National Expansion	TS	TX
102	Laredo-Coah-NL-Tamps BMP	Colombia-Webb Internacional Rail Bridge	Construct the Colombia-Webb International Rail Bridge.	18/06/2015	New	TS	TX
103	SRE List/California-BC BMP	Conexión Peatonal Aeroportuaria	Construcción de un puente peatonal, para uso exclusivo de viajeros con boleto pagado, entre el Aeropuerto Internacional de Tijuana, BC. Instalaciones de inspección, locales comerciales y estacionamiento en el área de Mesa de Otay en San Diego.	18/06/2015	New	BC	CA
104	PNI 2014-2018/SRE List/California-BC BMP	Otay Mesa II– Otay Mesa East	Construcción de un new puerto fronterizo de alta tecnología para vehículos ligeros y de carga.	18/06/2015	New	BC	CA
105	CILA	El Chaparral–San Ysidro (Puerta México)	Peatonal Las Américas.	18/06/2015	National Expansion	BC	CA
106	SRE List./GSA/OMB	El Chaparral–San Ysidro (Puerta México)	INDAABIN realiza el reordenamiento integral del “Sistema Chaparral” (El Chaparral, San Ysidro, Puerta México Este y el puerto de entrada de Mesa de Otay).	18/06/2015	National Expansion	BC	CA
107	California-BC BMP	El Chaparral–San Ysidro (Puerta México)	Ampliación a carriles de máxima velocidad.	18/06/2015	Binational	BC	CA
108	SRE List/GSA/OMB	El Chaparral–San Ysidro/Tecate-Tecate	Pacific-Imperial Rail Line. Rehabilitación de una línea ferroviaria de carga que circule desde	18/06/2015	Binational	BC	CA

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
			San Diego, CA, ingrese a México por Tijuana, reingresa a EUA por Tecate y llegue a Plaster City, CA. Incluye la construcción de una terminal intermodal.				
109	SRE List	Díaz Ordaz–Los Ebanos (El Chalán)	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	TS	TX
110	Arizona-Son Border Master Plan	Agua Prieta–Douglas	Douglas—Expansion and modernization.	18/06/2015	National Expansion	SR	AZ
111	Arizona-Son Border Master Plan	Agua Prieta–Douglas	Douglas—Non-commercial port reconfiguration.	18/06/2015	National Expansion	SR	AZ
112	SRE List/Arizona-Son Border Master Plan	Agua Prieta–Douglas	Douglas—New commercial port facility.	18/06/2015	New	SR	AZ
113	Arizona-Son Border Master Plan	Agua Prieta–Douglas	Reconstruct the LPOE to improve southbound processing of commercial vehicles, passenger vehicles, and pedestrians. Would negate the need for projects 3008 and 3009.	18/06/2015	Binational	SR	AZ
114	LRGV-Tamps BMP	Donna International Bridge	Construct northbound and southbound federal inspection facilities for processing empty commercial truck traffic.	18/06/2015	National Expansion	TS	TX
115	LRGV-Tamps BMP	Donna International Bridge	Construct northbound and southbound federal inspection facilities for processing full commercial truck traffic.	18/06/2015	National Expansion	TS	TX
116	LRGV-Tamps BMP	Donna International Bridge	Construct a U.S. border safety inspection facility.	18/06/2015	National Expansion	TS	TX
117	LRGV-Tamps BMP	Donna International Bridge	Construct inspection facilities for empty commercial trucks (both directions).	18/06/2015	National Expansion	TS	TX
118	SRE List	Presidio-Ojinaga International Bridge	SAT Proyecto ejecutivo para solucionar la problemática del puerto.	18/06/2015	National Expansion	CH	TX
119	SRE List	Palomas-Columbus	SAT Reordenamiento del puerto. Incluye la ampliación del área de revisión de mercancías, los patios de maniobras, así como los carriles de carga y vehículos ligeros, habilitar un carril de retorno a EUA y adecuar un edificio administrativo para el procesamiento de peatones.	18/06/2015	National Expansion	CH	NM
120	El Paso/Santa Teresa-Chih Border Master Plan	Billy the Kid POE to be located between Socorro and San Elizario	Build the Freight Shuttle System.	18/06/2015	New	CH	TX
121	SRE List	Piedras Negras–Eagle Pass Bridge I	INDAABIN Reordenamiento integral del puerto.	18/06/2015	Binational	CO	TX

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
122	SRE List	Camino Real International Bridge– Eagle Pass II	INDAABIN Plan de reordenamiento.	18/06/2015	Binational	CO	TX
123	SRE List	Porvenir–Fort Hancock	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	CH	TX
124	SRE List/LRGV-Tamps BMP	Ferroviario–Vehicular B&M	SCT Reconfiguración del puerto; se dejarán de utilizar las vías y se adaptarán como carriles para el cruce de vehículos ligeros en modalidad SENTRI cuando entre en operación el Puente Ferroviario Matamoros-Brownsville. También contempla convertir los patios fiscales en áreas comunes y construir espacios culturales.	18/06/2015	Binational	TS	TX
125	PNI 2014-2018/SRE List	Ferroviario Matamoros-Brownsville (Terminación)	Construcción del new Puente Ferroviario Brownsville-Matamoros de 0.56 km de longitud.	18/06/2015	New	TS	TX
126	LRGV-Tamps BMP	Flor de Mayo International Bridge	Construct a new bridge.	18/06/2015	New	TS	TX
127	Arizona-Son Border Master Plan	Agua Prieta–Douglas	Reconfigure the existing LPOE. Assumes relocation of commercial vehicle processing to a new commercial port.	18/06/2015	Binational	SR	AZ
128	Arizona-Son Border Master Plan	DeConcini	DeConcini—Repatriation consolidation.	18/06/2015	National Expansion	SR	AZ
129	SRE List	Naco-Naco	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	SR	AZ
130	Arizona-Son Border Master Plan	Naco-Naco	Naco—New rail LPOE.	18/06/2015	New	SR	AZ
131	California-BC BMP	Los Algodones	Modernize the tourist border crossing facilities at Los Algodones–Andrade.	18/06/2015	Binational	BC	CA
132	Arizona-Son Border Master Plan	Nogales East	Nogales Area (east)—New LPOE.	18/06/2015	New	SR	AZ
133	SRE List	Ferroviario San Jerónimo-Sta Teresa	Reubicación de las vías ferroviarias que actualmente atraviesan la zona urbana de Ciudad Juárez, a una zona localizada a 5 km del cruce fronterizo existente en Jerónimo–Santa Teresa.	18/06/2015	New	CH	NM
134	SRE List	Mesa de Otay–Otay I	Proyecto para incrementar en un 50% la capacidad de procesamiento de carga en el área de importaciones. Tiempo de ejecución 24 meses.	18/06/2015	National Expansion	BC	CA
135	SRE List	Mexicali I–Calexico West	INDAABIN lleva a cabo el reordenamiento de este puerto y edificación del confinamiento de acuerdo con el Gobierno del Estado.	18/06/2015	National Expansion	BC	CA
136	SRE List	Mexicali I–Calexico West	SAT Proyecto ejecutivo para la adición de tres carriles de acceso a México, con el propósito de mejorar la interconexión con las vialidades	18/06/2015	National Expansion	BC	CA

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
			realizadas por el gobierno estatal y reconfigurar y ampliar el área peatonal.				
137	California-BC BMP	Mexicali I–Calexico West	Integral project between both binational authorities (Mexico and U.S.) to improve and expand the Mexicali I–Calexico West border crossing. Includes necessary alignments and reconfiguration for new POV crossing.	18/06/2015	Binational	BC	CA
138	California-BC BMP	Mexicali I–Calexico West	Se construirá un edificio new para dependencias federales que revisan a peatones que ingresan a México.	18/06/2015	National Expansion	BC	CA
139	SRE List	Mexicali II–Calexico East	INDAABIN Reordenamiento integral de este puerto.	18/06/2015	National Expansion	BC	CA
140	SRE List	Mexicali II–Calexico East	SAT Reordenamiento de patios fiscales durante 2014 (área de exportación) y 2015 (área de importación), con lo cual estima se aumentará en 75% la capacidad de revisión de carga en este puerto.	18/06/2015	National Expansion	BC	CA
141	California-BC BMP	Mesa de Otay–Otay I	Commercial modernization anticipates the paving of the expansion parcel, realignment and expansion of booths, realignment of truck flows within the port, relocation of HAZMAT facilities, and development of a commercial Annex Building.	18/06/2015	National Expansion	BC	CA
142	California-BC BMP	Mesa de Otay–Otay I	Non-commercial modernization anticipates phased demolition of head house and pedestrian building, construction and expansion of N/B primary booths, relocation and expansion of pedestrian building, construction of a new head house, and construction of a new pedestrian bridge crossing the 905 freeway.	18/06/2015	National Expansion	BC	CA
143	California-BC BMP	San Ysidro	Phase II replaces the northbound processing buildings not demolished during the previous phase, construction of a new administration and pedestrian processing building, and renovation of the historic port building, central holding facilities, and the remaining central plant.	18/06/2015	National Expansion	BC	CA
144	California-BC BMP	San Ysidro	Phase III creates a new southbound connection to Mexico, with inspection facilities, and provides 17 additional northbound primary inspection booths. It involves the purchase of site necessary for the realignment of the southbound roadway to enter Mexico at the new El Chaparral inspection facility, installation of southbound inspection facilities, and an employee parking structure with access tunnel from the	18/06/2015	Binational	BC	CA

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
			parking garage to the new auto inspection building.				
145	California-BC BMP	San Ysidro	GSA anticipates developing a bi-directional pedestrian facility adjacent to the new Mexican LPOE (El Chaparral). This facility would include 10 dedicated NB pedestrian lanes and two bi-directional lanes. In addition, GSA will be developing a transit center at Virginia Avenue to replace the transit and drop-off functions being lost on Camions Way.	18/06/2015	National Expansion	BC	CA
146	SRE List	Tecate-Tecate	INDAABIN Reordenamiento integral de la sección mexicana del puerto y la ejecución de un confinamiento.	18/06/2015	National Expansion	BC	CA
147	SRE List	Tecate-Tecate	SAT desarrolla un proyecto ejecutivo para la construcción de un corredor fiscal hacia EUA y la ampliación y reordenamiento integral de la sección aduanera del puerto. Con estas obras, se estima duplicar la capacidad para la revisión de transporte de carga en la sección mexicana del puerto.	18/06/2015	National Expansion	BC	CA
148	California-BC BMP	Tecate-Tecate	Se construirá en new cruce fronterizo comercial en un predio de 5 hectáreas donde se ampliaran las instalaciones de revisión para los camiones de carga.	18/06/2015	New	BC	CA
149	LRGV-Tamps BMP	Hidalgo International Bridge Board	Demolish the existing primary head house and construct five additional inspection stations with a new head house building (second story).	18/06/2015	National Expansion	TS	TX
150	LRGV-Tamps BMP	Hidalgo International Bridge Board	Renovate the existing building "A" to accommodate a bus transit terminal.	18/06/2015	National Expansion	TS	TX
151	Laredo-Coah-NL-Tamps BMP	Laredo-Colombia Solidarity Bridge	Security enhancements: installation of doors and walls to separate and secure hard secondary in the main building of passport control area.	18/06/2015	National Expansion	TS	TX
152	LRGV-Tamps BMP	Longoreño Bridge	Construct a new bridge.	18/06/2015	New	TS	TX
153	SRE List	Lucio Blanco–Los Indios Free Trade Bridge	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	TS	TX
154	Laredo District/Coah/NL/Tamps BMP	Piedras Negras–Eagle Pass Bridge I	Fortification of port.	18/06/2015	Binational	CO	TX
155	Laredo District/Coah/NL/Tamps BMP	Camino Real International Bridge–Eagle Pass II	Fortification of port.	18/06/2015	Binational	CO	TX

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
156	Laredo District/Coah/N L/Tamps BMP	Lake Amistad Dam Crossing	New CBP facility. This is an ARRA-funded project.	18/06/2015	Binational	CO	TX
157	Laredo District/Coah/N L/Tamps BMP	New Road Bridge	Construction of a new international road bridge—Project 4-5.	18/06/2015	New	TS	TX
158	SRE List	Lucio Blanco–Los Indios Free Trade Bridge	SAT Construcción de plataformas para revisión de exportaciones, entre otras obras. Con este proyecto se pretende aumentar en 100% la capacidad de revisión de transporte de carga.	18/06/2015	National Expansion	TS	TX
159	LRGV-Tamps BMP	Lucio Blanco–Los Indios Free Trade Bridge	Conduct Phase I—Feasibility and Phase II— Design/build of commercial and bus inspection facility.	18/06/2015	National Expansion	TS	TX
160	LRGV-Tamps BMP	Lucio Blanco–Los Indios Free Trade Bridge	Expand customs facilities and construct export platforms.	18/06/2015	National Expansion	TS	TX
161	SRE List	Matamoros III–Brownsville “Los Tomates–Veterans”	INDAABIN Reorganizar la sección mexicana del puerto.	18/06/2015	National Expansion	TS	TX
162	Laredo District/Coah/N L/Tamps BMP	Laredo-Colombia Solidarity Bridge	Construction and operation of a low-emission freight transportation system (freight shuttle).	18/06/2015	National Expansion	NL	TX
163	Laredo District/Coah/N L/Tamps BMP	Laredo-Colombia Solidarity Bridge	Construction of a U-turn lane for the handling of freight exports originating from the import center in the bonded warehouse and destined for the exports modules in Customs.	18/06/2015	National Expansion	NL	TX
164	Laredo District/Coah/N L/Tamps BMP	Laredo-Colombia Solidarity Bridge	Implementation of a truck-only lane at the bridge and investments to facilitate the use of the Laredo-Colombia Solidarity Bridge to connect shipments from and to Mexico with the Port of Brownsville.	18/06/2015	Binational	NL	TX
165	SRE List	Miguel Alemán–Roma	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	TS	TX
166	Laredo District/Coah/N L/Tamps BMP	Piedras Negras–Eagle Pass Bridge I	Convert an existing pedestrian lane into a pedestrian express lane.	18/06/2015	Binational	CO	TX
167	Laredo District/Coah/N L/Tamps BMP	Del Rio–Ciudad Acuña International Bridge	Convert an existing pedestrian lane into a pedestrian express lane.	18/06/2015	Binational	CO	TX
168	Laredo District/Coah/N L/Tamps BMP	Camino Real International Bridge– Eagle Pass II	Convert an existing lane into FAST lane.	18/06/2015	Binational	CO	TX
169	Laredo District/Coah/N L/Tamps BMP	Piedras Negras–Eagle Pass Bridge I	Widening of the fiscal premises and the reorganization of the new buildings that will house the various administrative offices of the port. This is necessary to increase the capacity for imports and exports.	18/06/2015	National Expansion	CO	TX

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
170	Laredo District/Coah/N L/Tamps BMP	Piedras Negras–Eagle Pass Bridge I	Improve Customs to “Type A Customs.”	18/06/2015	National Expansion	CO	TX
171	Laredo District/Coah/N L/Tamps BMP	Del Rio–Ciudad Acuña International Bridge	Widening of the fiscal premises.	18/06/2015	National Expansion	CO	TX
172	Laredo District/Coah/N L/Tamps BMP	Del Rio–Ciudad Acuña International Bridge	Widening of lanes.	18/06/2015	Binational	CO	TX
173	Laredo District/Coah/N L/Tamps BMP	Del Rio–Ciudad Acuña International Bridge	Improve Customs to “Type A Customs.”	18/06/2015	National Expansion	CO	TX
174	Laredo District/Coah/N L/Tamps BMP	Ciudad Acuña–Del Río	Building of a new rail bridge in Acuña. The project would consist of a rail suspension bridge located near the Amistad Dam.	18/06/2015	New	CO	TX
175	El Paso/Santa Teresa-Chih Border Master Plan	Presidio-Ojinaga International Bridge	Reconstruct the international rail bridge on South Orient at Presidio, Texas.	18/06/2015	Binational	CH	TX
176	SRE List	Paso del Norte International Bridge/Puente Juárez–Santa Fe	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	CH	TX
177	El Paso/Santa Teresa-Chih Border Master Plan	Córdova–Las Américas	Dedicate one bridge lane—from the Mexican customs inspection area to CBP primary inspection area—as a ready lane.	18/06/2015	Binational	CH	TX
178	El Paso/Santa Teresa-Chih Border Master Plan	Paso del Norte International Bridge/Puente Juárez–Santa Fe	Dedicate one bridge lane—from the Mexican toll plaza to CBP primary inspection area—as a ready lane.	18/06/2015	Binational	CH	TX
179	El Paso/Santa Teresa-Chih Border Master Plan	Paso del Norte International Bridge/Puente Juárez–Santa Fe	Perform necessary repairs to joints of bridge.	18/06/2015	Binational	CH	TX
180	El Paso/Santa Teresa-Chih Border Master Plan	Paso del Norte International Bridge/Puente Juárez–Santa Fe	Prepare Presidential Permit for the addition of a twin structure and the construction of the twin structure.	18/06/2015	Binational	CH	TX
181	El Paso/Santa Teresa-Chih Border Master Plan	Good Neighbor International Bridge– Stanton Bridge	Perform necessary repairs to joints of bridge.	18/06/2015	Binational	CH	TX
182	El Paso/Santa Teresa-Chih Border Master Plan	Paso del Norte International Bridge/Puente Juárez–Santa Fe	Construct access infrastructure, platforms, and areas of security and inspection necessary to begin operation of the Presidio-Ojinaga Rail Bridge.	18/06/2015	National Expansion	CH	TX
183	SRE List/El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Build the Freight Shuttle System.	18/06/2015	New	CH	TX

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
184	El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Build up to six additional primary inspection lanes at the Zaragoza International Bridge to increase POE capacity.	18/06/2015	National Expansion	CH	TX
185	El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Reconfigure the lanes by reducing width of sidewalks on each side of the bridge from 10 ft. to 5 ft. to increase the number of lanes from five lanes (one SENTRI, two northbound, and two southbound) to six lanes (one SENTRI, one dedicated Ready, two northbound, and two southbound lanes)	18/06/2015	Binational	CH	TX
186	El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Perform repairs to the commercial and non-commercial bridge spans and reconfigure the commercial bridge lanes to increase the number of northbound lanes from two to three, as well as install light-emitting diode (LED) signage.	18/06/2015	Binational	CH	TX
187	El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Design and implement a new commercial entrance and exit to the CBP compound at the Zaragoza International Bridge. The new entrance and exit will be connected to the new access road through Pan American Drive and Winn Road.	18/06/2015	National Expansion	CH	TX
188	El Paso/Santa Teresa-Chih Border Master Plan	Ysleta-Zaragoza International Bridge	Increase the number of southbound access gates to Aduana from two to four.	18/06/2015	National Expansion	CH	TX
189	SRE List	Ysleta-Zaragoza International Bridge	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	CH	TX
190	El Paso/Santa Teresa-Chih Border Master Plan	El Paso–Ciudad Juárez	Build the International Freight Shuttle System.	18/06/2015	New	CH	TX
191	SRE List	Nogales–Nogales I	INDAABIN Proyecto ejecutivo para el reordenamiento integral del puerto.	18/06/2015	National Expansion	SR	AZ
192	Arizona-Son Border Master Plan	Nogales West	Nogales Area (west)—New rail LPOE.	18/06/2015	New	SR	AZ
193	SRE List	Nogales–Nogales III “Mariposa”	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	SR	AZ
194	SRE List	Nogales–Nogales III “Mariposa”	Proyecto de expansión a cargo de la SCT y la empresa Vías Concesionadas del Norte S. A. de C. V.	18/06/2015	National Expansion	SR	AZ
195	Arizona-Son Border Master Plan	Nogales–Nogales III “Mariposa”	Reconfiguration of the existing LPOE facility immediately adjacent to the border to improve southbound processing of passenger vehicles and pedestrians.	18/06/2015	Binational	SR	AZ
196	SRE List	San Luis Río Colorado–San Luis I	INDAABIN Reconfiguración integral en tres fases para resolver los conflictos viales derivados del	18/06/2015	National Expansion	SR	AZ

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
			entrecruzamiento de flujos peatonales y vehiculares.				
197	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—SENTRI Primary Booth Project.	18/06/2015	National Expansion	SR	AZ
198	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—Pedestrian Pop-Out Project #1 (reconfiguration in place).	18/06/2015	National Expansion	SR	AZ
199	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—Pedestrian Pop-Out Project #2 (expansion).	18/06/2015	National Expansion	SR	AZ
200	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—SENTRI secondary inspection area.	18/06/2015	National Expansion	SR	AZ
201	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—Expansion and modernization.	18/06/2015	Binational	SR	AZ
202	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—Outbound inspection infrastructure.	18/06/2015	National Expansion	SR	AZ
203	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis I	San Luis I—Primary Booth Replacement Project.	18/06/2015	National Expansion	SR	AZ
204	Arizona-Son Border Master Plan	San Luis Río Colorado I—Expansion and Modernization	Reconstruction of the LPOE to improve southbound processing of passenger vehicles and pedestrians.	18/06/2015	Binational	SR	AZ
205	SRE List	San Luis Río Colorado–San Luis II	Proyecto para permitir el flujo de vehículos ligeros por el puerto.	18/06/2015	Binational	SR	AZ
206	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis II	San Luis II—POV/pedestrian processing facility.	18/06/2015	National Expansion	SR	AZ
207	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis II	San Luis II—New rail LPOE.	18/06/2015	New	SR	AZ
208	Arizona-Son Border Master Plan	San Luis Río Colorado–San Luis II	Expansion of the existing San Luis Rio Colorado II commercial LPOE to accommodate passenger vehicles and pedestrians.	18/06/2015	Binational	SR	AZ
209	SRE List	Sasabe-Sasabe	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	SR	AZ
210	SRE List	Sonoyta-Lukeville	SAT Reordenamiento de sus patios fiscales durante 2015 y 2016.	18/06/2015	National Expansion	SR	AZ
211	Arizona-Son Border Master Plan	Sonoyta-Lukeville	Reconstruction of the LPOE to improve southbound processing of commercial vehicles, passenger vehicles, and pedestrians. Also includes additional queuing capacity for northbound traffic to coincide with improvements at Lukeville, AZ.	18/06/2015	Binational	SR	AZ
212	SRE List	Nogales	Puerta de Anza (Nogales).	18/06/2015	New	SR	AZ
213	LRGV-Tamps BMP	New location, Cameron County, Texas	Build a new bridge to link the United States and Mexico at FM 3248 (Alton Gloor) and Avenida Flor de Mayo.	18/06/2015	New	TS	TX

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
			This project excludes the border station.				
214	Laredo-Coah-NL-Tamps BMP	New Rail Bridge	Project KCSM—New rail international bridge.	18/06/2015	New	TS	TX
215	SRE List	New Laredo III–Laredo IV “Comercio Mundial–World Trade Bridge”	SAT Proyecto ejecutivo para el reordenamiento de la Aduana del puerto, el cual sería ejecutado durante 2016 y 2017.	18/06/2015	National Expansion	TS	TX
216	Laredo-Coah-NL-Tamps BMP	New Laredo III–Laredo IV “Comercio Mundial– World Trade Bridge”	Addition of a FAST lane.	18/06/2015	Binational	TS	TX
217	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo II–Juárez-Lincoln Bridge	Design a new 10,000–15,000 sq. ft. bus processing facility to increase bus and bus passenger processing capacity.	18/06/2015	National Expansion	TS	TX
218	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo II–Juárez-Lincoln Bridge	Fortification of port—furnishing and installing additional barriers, tire shredders, and fencing.	18/06/2015	National Expansion	TS	TX
219	SRE List/Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo II–Juárez-Lincoln Bridge	SAT Ampliación del área de vehículos ligeros. SAT espera duplicar la capacidad de revisión de vehículos ligeros y revisión de autobuses en un 150%.	18/06/2015	National Expansion	TS	TX
220	SRE List	New Laredo–Laredo I–Gateway to the Americas Bridge	INDAABIN Reordenamiento del puerto incorporando un proyecto del SAT (proyecto 2011). Cabe mencionar que las obras estarán sujetas a los predios disponibles por parte del Municipio y Gob. del Estado.	18/06/2015	National Expansion	TS	TX
221	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo I–Gateway to the Americas Bridge	Increase pedestrian processing capacity by reconfiguring the existing space and improving pedestrian path of travel from the bridge through the facility. This is an ARRA-funded project.	18/06/2015	National Expansion	TS	TX
222	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo I–Gateway to the Americas Bridge	Fortification of port—furnishing and installing additional barriers, tire shredders, and fencing to enable outbound inspections.	18/06/2015	National Expansion	TS	TX
223	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo I–Gateway to the Americas Bridge	Convert an existing pedestrian lane into a pedestrian express lane.	18/06/2015	National Expansion	TS	TX
224	Laredo-Coah-NL-Tamps BMP	New Laredo–Laredo I–Gateway to the Americas Bridge	Reorganization of the bridge and construction of barriers.	18/06/2015	Binational	TS	TX
225	LRGV-Tamps BMP	New Laredo–Laredo I–Gateway to the Americas Bridge	Reconfigure and rebuild the existing LPOE in compliance with current design standards and operational requirements to improve capacity, processing efficiency, security, and officer safety.	18/06/2015	National Expansion	TS	TX

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
226	SRE List	New Progreso–Progreso	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	TS	TX
227	SRE List	Pharr-Reynosa International Bridge on the Rise	INDAABIN Reordenamiento integral del puerto.	18/06/2015	National Expansion	TS	TX
228	SRE List	Pharr-Reynosa International Bridge on the Rise	SAT Construcción de un new carril para las operaciones de importación y otro para las operaciones de exportación.	18/06/2015	National Expansion	TS	TX
229	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Increase entrance inspection booth facilities from six to 10 inspection booths, and expand the access roads from the bridge to the inspection booths from two to eight lanes, each 0.25 mi long.	18/06/2015	National Expansion	TS	TX
230	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Increase exit inspection booth facilities from two to four inspection booths to eliminate bottlenecks.	18/06/2015	National Expansion	TS	TX
231	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Widen the bridge by adding four additional lanes to the current U.S. side of the bridge structure (1.3 mi) to improve mobility through designated lanes and encourage commercial truck companies to become FAST certified, which will in turn improve wait times.	18/06/2015	National Expansion	TS	TX
232	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Increase entrance inspection booth facilities from six to eight inspection booths, and expand the access roads from the bridge to the inspection booths from two to eight lanes, each 0.25 mi long.	18/06/2015	National Expansion	TS	TX
233	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Add an emergency shoulder on both sides of the bridge to prevent accidents and reduce the interruption of traffic flow.	18/06/2015	Binational	TS	TX
234	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Build a lab and training room for U.S. Department of Agriculture (USDA) inspectors to allow for the quicker release of cargo.	18/06/2015	National Expansion	TS	TX
235	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Increase the POE import lot inspection facility by 50 percent through the expansion of the current wings of the facility. This will allow for quicker inspection of cargo and efficiency of operations, thereby resulting in increased use of the Pharr POE.	18/06/2015	National Expansion	TS	TX
236	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Add a FAST lane within the POE and two exit booths to allow for gate-to-gate traffic flow.	18/06/2015	Binational	TS	TX
237	LRGV-Tamps BMP	Pharr-Reynosa International Bridge on the Rise	Perform Phase I—Feasibility and Phase II—Design/build of commercial and bus inspection facility.	18/06/2015	National Expansion	TS	TX

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

ID	Source	Project	Description	Date	Type	MX State	US State
238	LRGV-Tamps BMP	Rio Grande City–Camargo Bridge	Develop import and export cargo areas; reorganize cargo areas and administrative buildings.	18/06/2015	National Expansion	TS	TX
239	LRGV-Tamps BMP	South of Sullivan City, Texas	Plan, develop, design, and construct a proposed international border crossing between Sullivan City and Gustavo Díaz Ordaz in Tamps, Mexico.	18/06/2015	New	TS	TX
240	LRGV-Tamps BMP	Weslaco-Progresso International Bridge	Reconfigure and rebuild the existing POE in compliance with current design standards and operational requirements to improve capacity, processing efficiency, security, and officer safety.	18/06/2015	Binational	TS	TX
241	LRGV-Tamps BMP	Weslaco-Progresso International Bridge	Perform Phase I—Feasibility and Phase II—Design/build of commercial and bus inspection facility.	18/06/2015	National Expansion	TS	TX
242	LRGV-Tamps BMP	Weslaco-Progresso International Bridge	Improve access. Construct inspection facilities for the cargo lanes.	18/06/2015	National Expansion	TS	TX

SRE List: List of projects supplied by SRE.

Bibliography

“21st Century Border: 2013 Action Items and Progress Report.” United States Embassy. Accessed 9/4/14. <http://www.dhs.gov/publication/2013-action-items>.

“21st Century Border: A Comprehensive Response & Commitment.” Department of Homeland Security. March 4, 2014. Accessed August 12, 2014. <http://www.dhs.gov/21st-century-border-comprehensive-response-commitment>.

“Adoption of Program Guidelines for the Trade Corridors Improvement Fund (TCIF).” California Transportation Commission. 12/12/2007. Accessed 12/2/2014. http://www.catc.ca.gov/programs/TCIF/TCIF_Guidelines_112707.pdf.

“Border Planning.” United States Department of Transportation: Federal Highway Administration. Office of Planning, Environment, & Realty. Accessed August 12, 2014. http://www.fhwa.dot.gov/planning/border_planning/.

“CBP Outlines Reimbursable Services Program.” Airports Council International—North America. Accessed November 22, 2014. <http://www.aci-na.org/content/cbp-outlines-reimbursable-services-program>.

“CBP Takes the Next Step in Public-Private Partnerships.” Customs and Border Protection. Accessed November 10, 2014. <http://www.cbp.gov/border-security/ports-entry/resource-opt-strategy/public-private-partnerships>.

“C-TPAT: Customs-Trade Partnership Against Terrorism.” United States Customs and Border Protection. Accessed August 25, 2014. <http://www.cbp.gov/border-security/ports-entry/cargo-security/c-tpat-customs-trade-partnership-against-terrorism>.

“Fact Sheet: A 21st Century Border Vision.” United States Embassy. Accessed 9/4/14. <http://photos.state.gov/libraries/mexico/310329/16may/21st%20Century%20Border%20Vision%20May%202011%20Final-.pdf>.

“FAST: Free and Secure Trade for Commercial Vehicles.” United States Customs and Border Protection. Accessed August 25, 2014. <http://www.cbp.gov/travel/trusted-traveler-programs/fast>.

“General Fees Collected by CBP.” United States Customs and Border Protection. January 30, 2014. Accessed December 4, 2014. https://help.cbp.gov/app/answers/detail/a_id/15/related/1/~user-fee---cbps-authority-to-collect.

“Land Ports of Entry.” General Services Administration. Last updated March 4, 2014. Accessed November 22, 2014. <http://www.gsa.gov/portal/content/104472>.

“Section 559 Donation Acceptance Authority: Proposal Evaluation Procedures & Criteria Framework.” United States Customs and Border Protection. General Services Administration. Pp. 6 Accessed 12/5/2014. http://www.cbp.gov/sites/default/files/documents/DAA%20Proposal%20Evaluation%20Procedures%20%26%20Criteria%20Framework_Public%20FINAL.pdf

Analysis of International Port-of-Entry Projects on the United States–Mexico Border

“Stages of the Congressional Budget Process.” House of Representatives Committee on the Budget.

“Trade Corridor Improvement Fund. California Transportation Commission.” Last updated 8/20/2014. Accessed November 20, 2014. <http://www.catc.ca.gov/programs/tcif.htm>.

“United States/Mexico Joint Working Committee on Transportation Planning.” United States DOT: Federal Highway Administration. Accessed August 11, 2014. <http://www.borderplanning.fhwa.dot.gov/mexico.asp>.

“USDA Proposes Adjustments to Agricultural Quarantine Inspection (AQI) Program User Fees.” United States Department of Agriculture. April 2014. http://www.aphis.usda.gov/newsroom/2014/04/pdf/AQI_fees.pdf.

“User Fee, Transponder, and Decal Information.” United States Customs and Border Protection. Accessed December 4, 2014. <http://www.cbp.gov/trade/basic-import-export/uftd-info>.

1st Progress Report of the U.S.-Mexico High Level Economic Dialogue.

Base en datos de Banobras, FONADIN y el Presupuesto de Egresos de la Federación 2015

Border Delays Cost United States \$7.8 Billion as Fence Is Focus, May 2013, <http://www.bloomberg.com/news/2013-05-15/border-delays-cost-u-s-7-8-billion-as-fence-is-focus.html>.

California Transportation Commission

Christensen, Michelle D. “The Executive Budget Process: An Overview.” Congressional Research Service. July 27, 2012.

International Boundary and Water Commission (IBWC).

Customs and Border Protection—CBP.

Información de la Dirección General de Desarrollo Carretero

International Trade Statistics, WTO 2013. https://www.wto.org/english/res_e/statis_e/its2013_e/its13_toc_e.htm

Martinez, Aaron. “El Paso City Officials, CBP sign agreement to reduce bridge wait times.” El Paso Times. January 24, 2014. Accessed November 18, 2014. http://www.elpasotimes.com/news/ci_24982324/city-officials-cbp-sign-agreement-reduce-bridge-wait.

Mensaje a medios de comunicación del secretario de relaciones exteriores, José Antonio Meade, sobre la relación México-Estados Unidos. <http://saladeprensa.sre.gob.mx/index.php/discursos/2767-016>.

Ministry of Foreign Affairs (SRE).

National Institute of Statistics and Geography (INEGI)

Office of the Vice President. “FACT SHEET: United States-Mexico High Level Economic Dialogue.” The White House. September 20, 2013. Accessed August 25, 2014. <http://www.whitehouse.gov/the-press-office/2013/09/20/fact-sheet-us-mexico-high-level-economic-dialogue>.

Analysis of International Port-of-Entry Projects on the United States – Mexico Border

Permit submitted by California Department of Transportation. "Otay Mesa East Port of Entry/State Route 11: Presidential Permit Application." Submitted to Secretary of State. 11/26/2007.

<http://www.dot.ca.gov/dist11/departments/planning/pdfs/systplan/OMEPOEPresPermitApp.pdf>.

San Diego Association of Governments, California Department of Transportation, District 11, Economic Impacts of Wait Times at the San Diego-Baja California Border, Final Report, 2006.

http://www.sandag.org/programs/borders/binational/projects/2006_border_wait_impacts_execsum.pdf.

SANDAG. (2008). California-Baja California Border Master Plan.

Section 559 Donation Acceptance Authority: Proposal Evaluation Procedures & Criteria Framework. General Services Administration.

https://www.cbp.gov/sites/default/files/documents/DAA%20Proposal%20Evaluation%20Procedures%20%26%20Criteria%20Framework_Public%20FINAL.pdf

The State of Trade, Competitiveness and Economic Well-being in the United States-Mexico Border Region, Erik Lee, Christopher E. Wilson, June 2011.

United States Department of State. (2007). Interpretative Guidance, Executive Order 11423.

<http://www.state.gov/p/wha/rls/94946.htm>.

United States Department of Transportation, RITA, Bureau of Transportation Statistics.

United States General Services Administration. Port of Entry Infrastructure: How Does the Federal Government Prioritize Investment. <http://www.gsa.gov/portal/content/194547>.

United States/Mexico Joint Working Committee on Transportation Planning, Regional Border Master Plans, <http://www.borderplanning.fhwa.dot.gov/masterplans.asp>.

US Customs and Border Protection C-TPAT Program, Office of Field Operations. "A Guide to Program Benefits." United States Customs and Border Protection.

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Addendum

On April 10, 2019, President Donald Trump issued Executive Order 13867 which revokes certain previous delegations of authority to the State Department and asserts exclusive authority to grant or deny presidential permits for construction, connection, operations or maintenance of certain infrastructure projects at an international border of the United States.

Due to this executive order, some of the procedures mentioned in this report may no longer be accurate.



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