

Executive Summary

Introduction

Border master plans—as defined and supported by the U.S./Mexico Joint Working Committee (JWC) on Transportation Planning and Programming, the Federal Highway Administration (FHWA), and the U.S. Department of State—are comprehensive, binational long-range plans to:

- Inventory transportation and port-of-entry (POE) infrastructure that facilitates trade.
- Prioritize and promote planned POE and related transportation projects.
- Inform decision making.
- Allocate limited funding resources.
- Ensure continued dialog and coordination on future POE and supporting transportation infrastructure needs and projects.

The Lower Rio Grande Valley–Tamaulipas Border Master Plan was developed by The University of Texas at Austin’s Center for Transportation Research and the Texas A&M Transportation Institute.

The objectives of this border master plan were to:

- Design a stakeholder agency involvement process that is inclusive and ensures participation of all involved in POE projects and the transportation infrastructure serving those POEs.
- Increase understanding of the POE and transportation planning processes on both sides of the border.
- Develop and implement plans for prioritizing and promoting POE and related transportation projects, including evaluation criteria and rankings over the short, medium, and long terms.
- Establish a process that will ensure continued dialog among Federal, State, regional, and local stakeholder agencies on both sides of the border to assure continued coordination on current and future POE and supporting transportation infrastructure needs and projects.

The Lower Rio Grande Valley–Tamaulipas Border Master Plan is the third border master plan on the U.S.-Mexico border and the second border master plan on the Texas-Mexico border. Its development followed an approach similar to the development of existing border master plans.

Decision-Making Structure

As in the California–Baja California and Laredo–Coahuila/Nuevo León/Tamaulipas border master plans, stakeholders were represented by a Policy Advisory Committee (PAC)—consisting of executive-level managers—and a Technical Working Group (TWG)—consisting of senior technical staff. The mandate of the PAC is to review the study objectives; evaluate the proposed work plan; define the study area; designate the TWG members; endorse the prioritization criteria, weights, and scores used by the study team to prioritize identified projects; and endorse the Border Master Plan document. The mandate of the TWG is to provide the study team with data on existing and planned transportation and border facilities serving the POEs in the study area; verify the collected information; participate in a workshop to select the criteria, scores, and weights that were used to prioritize individual projects; and review the content of the draft Border Master Plan document developed and submitted by the study team.

Membership in the PAC and TWG is limited to government agencies and rail or port entities whose mandate encompasses border transportation infrastructure planning, programming, construction, and/or management. The following is a list of the PAC and TWG member agencies that participated in the development of the Border Master Plan:

- United States:
 - U.S. Department of Transportation/Federal Highway Administration.
 - U.S. Department of Transportation/Federal Motor Carrier Safety Administration.
 - U.S. General Services Administration.
 - U.S. Department of Homeland Security/Customs and Border Protection.
 - U.S. Department of State, including applicable consulates.
 - International Boundary and Water Commission.
 - Texas Department of Transportation (TxDOT).
 - Texas Department of Public Safety.
 - Cameron County.
 - Cameron County Regional Mobility Authority.
 - Hidalgo County.
 - Hidalgo County Commuter Rail District.
 - Hidalgo County Metropolitan Planning Organization.
 - Starr County.
 - Zapata County.
 - City of Brownsville.
 - Brownsville Metropolitan Planning Organization.

- City of Los Indios.
- City of San Benito.
- City of Harlingen.
- Harlingen-San Benito Metropolitan Planning Organization.
- City of Mission.
- City of McAllen.
- City of Edinburg.
- City of Pharr.
- City of Hidalgo.
- City of Donna.
- City of Weslaco.
- City of Roma.
- City of Rio Grande City.
- B&M Bridge Company.
- Progreso International Bridge.
- Los Ebanos Ferry.
- Starr Camargo Bridge Company.
- Mexico:
 - Secretaría de Comunicaciones y Transportes (SCT).
 - Administración General de Aduanas.
 - Instituto de Administración de Avalúos de Bienes Nacionales.
 - Instituto Nacional de Migración.
 - Centro SCT Tamaulipas.
 - State of Tamaulipas—Secretariat of Public Works.
 - State of Tamaulipas—Secretariat of Economy and Tourism.
 - State of Tamaulipas—Secretariat of Urban Development and Environment.
 - Municipio de Guerrero.
 - Municipio de Mier.
 - Municipio de Miguel Alemán.
 - Municipio de Camargo.
 - Municipio de Gustavo Díaz Ordaz.
 - Municipio de Reynosa.
 - Instituto Municipal de Planeación de Reynosa.
 - Municipio de Río Bravo.
 - Municipio de Matamoros.
 - Instituto Municipal de Planeación de Matamoros.
- Modal stakeholders:
 - Port of Brownsville.

- Kansas City Southern de México.
- Union Pacific Railroad.
- BNSF Railway.
- Rio Valley Switching Company.
- Brownsville and Rio Grande International Railroad.

In addition, a number of other agencies and companies were identified that have an interest in the development of the Border Master Plan and/or are impacted by POE or transportation infrastructure projects implemented in the study area. These agencies and companies were invited to participate as border partners in the development of the Border Master Plan. Border partners could attend all meetings and provide input at the meetings. Border partners, however, did not have a vote in selecting the categories, category weights, criteria, criterion weights, and scoring metrics that were used to prioritize projects.

Study Area

The study area approved by PAC members on November 8, 2011, includes an “Area of Influence” and a “Focused Study Area.”

Area of Influence

The Area of Influence includes the following areas:

- On the U.S. side, the border counties of Zapata, Starr, Hidalgo, and Cameron (see Figure ES.1).
- On the Mexico side, the Mexican Municipalities of Guerrero, Mier, Miguel Alemán, Camargo, Gustavo Díaz Ordaz, Reynosa, Río Bravo, and Matamoros in the State of Tamaulipas.

Current and projected data on population, employment, land use, and income were obtained for the Area of Influence. The study team found that total population is expected to increase from 2,605,471 in 2010 (1,255,975 in the U.S. Area of Influence and 1,349,496 in the Mexican Area of Influence) to 3,579,715 in 2030 (1,815,967 in the U.S. Area of Influence and 1,763,748 in the Mexican Area of Influence)—an overall increase of 37.4 percent. Total employment is estimated to increase from 1,045,702 (440,957 in the U.S. Area of Influence and 604,745 in the Mexican Area of Influence) in 2010 to 1,620,461 in 2030 (723,331 in the U.S. Area of Influence and 897,130 in the Mexican Area of Influence)—an increase of 54.9 percent. A number of trade corridors (IH 69, US 281, and US 77 in the United States and the Mazatlán–Durango–Matamotos corridor in Mexico) also traverse the Area of Influence.

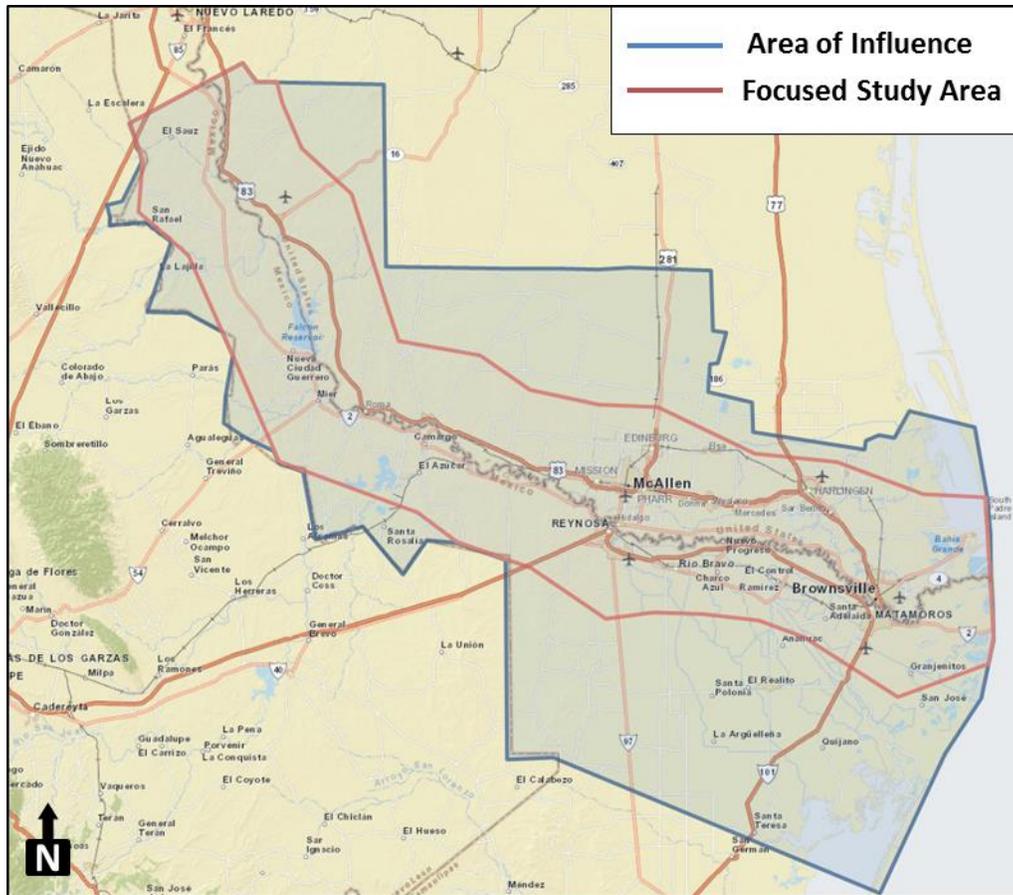


Figure ES.1: Border Master Plan Study Area (Area of Influence and Focused Study Area)

Focused Study Area

The Focused Study Area is 15 miles north and south of the Texas-Tamaulipas international border. However, to the east, the north boundary was slightly revised to include the Valley International Airport in Harlingen. The Focused Study Area’s east and west boundaries fall within TxDOT’s Pharr District. The short-, mid-, and long-term POE and transportation priorities were limited to the planned POE and transportation infrastructure projects in the Focused Study Area.

The study team identified, in consultation with the working group members, the planned POE, road and interchange, rail, and marine port projects in the Focused Study Area. Short-, mid-, and long-term priorities were subsequently established for the planned projects in the Focused Study Area.

Bridges/Crossings in Focused Study Area

The Focused Study Area has 13 vehicular or pedestrian bridges/crossings and 2 rail bridges (see Figure ES.2). The two rail bridges are the B&M Bridge and the

Brownsville West Rail Bypass International Bridge, which is under construction as of August 2013. The rail carriers operating in the study area are BNSF Railway, Union Pacific Railroad, Brownsville and Rio Grande International Railroad, and Kansas City Southern de Mexico.

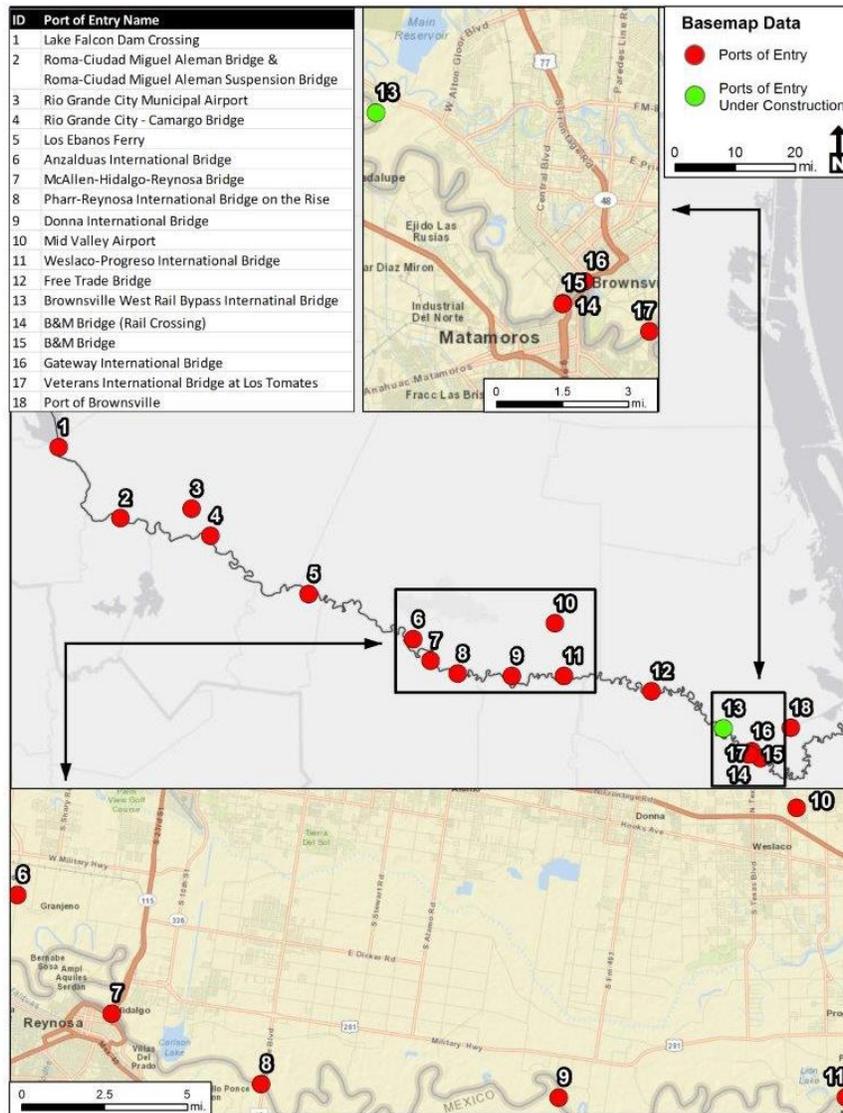


Figure ES.2: Location of Bridges/Crossings in Focused Study Area

U.S.-Mexico trade amounted to almost \$494 billion in 2012, 60 percent of which crossed at a Texas land POE. The total value of U.S.-Mexico trade that crossed in the Focused Study Area was approximately \$40.1 billion in 2012. Specifically, the total value of U.S.-Mexico trade that crossed by surface mode in Brownsville in 2012 was \$13.8 billion: \$8.2 billion in exports and \$5.6 billion in imports. In Hidalgo, the total value of U.S.-Mexico trade that crossed the border was \$25.6 billion: \$10.0 billion in exports and \$15.6 billion in imports. Rio Grande City, Progreso, and Roma accounted

for a combined \$699.0 million in U.S.-Mexico trade: \$340.5 million in exports and \$358.5 million in imports.

Study Approach

The Border Master Plan study was conducted in two phases. Phase I involved contacting executive-level managers at the identified stakeholder agencies to determine their level of support for the Border Master Plan; address any issues or concerns; determine commitment to and involvement in the development of the Border Master Plan, including the allocation of staff resources; examine the feasibility of using an approach similar to that of the California–Baja California Border Master Plan and the Laredo–Coahuila/Nuevo León/Tamaulipas Border Master Plan; determine if any key stakeholders have been omitted; and establish an appropriate communications protocol and methodology for sharing information.

The purpose of Phase I was to determine whether there was sufficient stakeholder support to develop the Border Master Plan. Table ES.1 provides a summary of the support expressed by the stakeholder agencies and rail companies contacted as of August 29, 2011 (the end of Phase I). Although not every agency contacted verbalized their support, none of the agencies or the stakeholders contacted expressed any opposition to the development of the Border Master Plan or asked to be removed from the contact list, which would indicate their refusal to participate in the development of the Border Master Plan.

Table ES.1: Support Expressed by Stakeholders—Phase I

Stakeholders	Expressed Support (%)
U.S.—Federal	100
U.S.—Local	79
Mexico—Federal	66
Mexico—Tamaulipas	32 ¹
Rail Stakeholders	67

The outcome of Phase I determined the level of support for the development of the Border Master Plan. Based on the stakeholder support expressed during the Phase I outreach, TxDOT authorized the study team to commence with Phase II. In Phase II, the study team accomplished the development of the Border Master Plan in six tasks:

1. Hold two stakeholder meetings to review the study’s objectives, address any issues or concerns raised in Phase I, and reach agreement on the scope of work, the study area, and the planning horizon.

2. Collect data and create a detailed inventory of existing and planned POEs in the study area as well as existing/planned transportation facilities serving those POEs.
3. Hold two stakeholder meetings to review data collected and verify planned project information.
4. Conduct a stakeholder workshop and meeting to reach consensus on the criteria, scores, and weights used to prioritize planned projects.
5. Prioritize and rank planned POE and transportation infrastructure projects using the agreed-upon prioritization criteria, scores, and weights.
6. Finalize and obtain approval of the Border Master Plan document.

Phase II of the study took approximately 16 months.

Stakeholder Participation

For border master plans to be successful, stakeholder participation in and commitment to the development of these plans are critical. The study team secured this for the Border Master Plan by hosting regular meetings and maintaining contact with stakeholders and committee members.

The study team hosted six stakeholder meetings in different cities in the study area over the course of the study period. During the meetings, stakeholders were briefed on the study team’s progress and actively engaged in reviewing collected information and data, as well as selecting/agreeing on the categories, category weights, criteria, criterion weights, and scoring metrics to prioritize projects.

Reaching Consensus

Two objectives of the Border Master Plan were to develop and implement a plan for prioritizing and promoting POE and related transportation projects that include evaluation criteria and rankings over the short, medium, and long terms; and to design a stakeholder agency involvement process that would be inclusive and ensure participation of all involved. The plan for prioritizing projects required PAC and TWG members to reach consensus on the elements of the ranking framework (categories, category weights, criteria, criterion weights, and scoring metrics) that would be used to prioritize the projects. To ensure a stakeholder involvement process that would be inclusive and ensure participation of all involved, it was important that each PAC and TWG member have an equal voice in selecting the categories, category weights, criteria, and criterion weights. Equally important was creating a non-threatening environment in which PAC and TWG members would feel comfortable expressing themselves.

The study team used Classroom Performance System technology to reach consensus on the categories, category weights, criteria, and criterion weights to be used

in prioritizing the identified planned projects. The process worked as follows: TWG members were provided with a voting device (i>Clicker) that allowed them to rank an element of the ranking framework on importance. For example, each member could rank a specific criterion in prioritizing a project on a scale of A to E, where A was extremely important and E was extremely unimportant. The votes were anonymous, but the study team could track how many TWG members voted.

Once the votes were cast, results were shared, and the study team facilitated a discussion about the voting results. TWG members were then asked to vote again, and the process continued until consensus was reached or until the voting results did not change substantially from one round to the next. This approach allowed all attending TWG members to participate in the selection of the categories, category weights, criteria, and criterion weights. The same process was followed for the endorsement of the categories, category weights, criteria, criterion weights, and scoring metrics by the PAC voting members.

Ranking Framework

Consensus was reached regarding elements of the ranking framework (the categories, category weights, criteria, criterion weights, and scoring metrics) that would be used for project prioritization during the third TWG meeting. A few criteria and criteria weights, as well as the scoring metrics, were modified during the third PAC member meeting, but in general, PAC members endorsed the ranking framework developed by the TWG. The criteria categories and the category weights endorsed can be found in Tables ES.2, ES.3, ES.4, and ES.5.

Table ES.2 provides the prioritization criteria and weights assigned to the POE projects, for which 16 criteria were endorsed. Table ES.3 provides the prioritization criteria and weights assigned to the road and interchange projects, for which 17 criteria were endorsed. Table ES.4 provides the prioritization criteria and weights assigned to the rail projects, for which 16 criteria were endorsed. Table ES.5 provides the prioritization criteria and weights assigned to the marine projects, for which 15 criteria were endorsed.

Table ES.2: POE Project Prioritization Criteria

Category	Criterion	Weight
Capacity/Congestion (Weight = 21.0%)	Increase in Number of Fully Operational Lanes/Rail Tracks	32.2%
	Improve Throughput through the Use of Technology	19.6%
	Alleviate Congestion	29.2%
	Increase in Number of Modes Served	19.0%
Demand (Weight = 16.0%)	Percentage Annual Daily Crossings	59.6%
	Multiple-Mode Demand	40.4%
Cost-Effectiveness/ Project Readiness (Weight = 15.0%)	Cost/Capacity Criterion	23.4%
	Cost/Demand Criterion	18.2%
	Land Availability	26.5%
	Partially Funded Project	19.8%
	Phase of Project Development	12.1%
Safety (Weight = 9.0%)	Diversion of Commercial Traffic	61.0%
	Safe Handling of Hazardous Materials	39.0%
Regional Impacts (Weight = 22.0%)	Wider Geographical Impacts	50.0%
	General Development	50.0%
Binational Coordination (Weight = 17.0%)	Binational Coordination	100.0%

Table ES.3: Road and Interchange Project Prioritization Criteria

Category	Criterion	Weight
Capacity/Congestion (Weight = 25.3%)	Increase in Number of Lanes	26.0%
	Improvement in the Level of Service	25.6%
	Number of POEs Served	24.2%
	Connectivity	24.2%
Demand (Weight = 19.2%)	Increase in Average Annual Daily Traffic	34.4%
	Percentage of Trucks	25.6%
	Multiple-Mode Demand	12.5%
	Estimated Demand at 20 Years	27.5%
Cost-Effectiveness/ Project Readiness (Weight = 16.9%)	Cost/Capacity Criterion	23.4%
	Cost/Demand Criterion	18.2%
	Land Availability	26.5%
	Partially Funded Project	19.8%
	Phase of Project Development	12.1%
Safety (Weight = 16.3%)	Accident Rate per Miles	57.6%
	Diversion of Non-radioactive Hazardous Materials	42.4%
Regional Impacts (Weight = 22.3%)	Wider Geographical Impacts	50.0%
	General Development	50.0%

Table ES.4: Rail Project Prioritization Criteria

Category	Criterion	Weight
Capacity/Congestion (Weight = 25.3%)	Increase in Number of Tracks	30.5%
	Average Delay Time	29.8%
	Alleviates Congestion Locally	39.7%
Demand (Weight = 19.2%)	Increase in Average Annual Daily Rail Cars	30.0%
	Cross-Border Tonnage by Rail	17.4%
	Multiple-Mode Demand	13.6%
	Additional Hours Needed for Interchange	39.0%
Cost-Effectiveness/ Project Readiness (Weight = 16.9%)	Cost/Capacity Criterion	23.4%
	Cost/Demand Criterion	18.2%
	Land Availability	26.5%
	Partially Funded Project	19.8%
	Phase of Project Development	12.1%
Safety (Weight = 16.3%)	Accident Rate per Miles	57.6%
	Diversion of Non-radioactive Hazardous Materials	42.4%
Regional Impacts (Weight = 22.3%)	Wider Geographical Impacts	50.0%
	General Development	50.0%

Table ES.5: Marine Project Prioritization Criteria

Category	Criterion	Weight
Capacity/Congestion (Weight = 25.3%)	Vessel Size	24.0%
	Channel Capacity	44.8%
	Number of Docks	31.3%
Demand (Weight = 19.2%)	Increase in Total Annual Tonnage	53.5%
	Multiple-Mode Demand	14.8%
	Increase in Cross-Border Tonnage	31.7%
Cost-Effectiveness/ Project Readiness (Weight = 16.9%)	Cost/Capacity Criterion	23.4%
	Cost/Demand Criterion	18.2%
	Land Availability	26.5%
	Partially Funded Project	19.8%
	Phase of Project Development	12.1%
Safety (Weight = 16.3%)	Diversion of Commercial Traffic	61.0%
	Safe Handling of Hazardous Materials	39.0%
Regional Impacts (Weight = 22.3%)	Wider Geographical Impacts	50.0%
	General Development	50.0%

Planned POE and Transportation Infrastructure Priorities

On the U.S. side, 38 POE projects, 18 road and interchange projects, and 2 marine port projects were identified. No planned rail projects were identified in the U.S. Focused Study Area. On the Mexican side, 7 POE projects, 7 road and interchange projects, and 1 marine port project were identified. No planned rail projects were identified in the Mexican Focused Study Area.

U.S. projects were ranked separately from Mexico's because of the limited data provided for Mexican projects. The prioritization/ranking of both countries' projects together would thus have resulted in most of the Mexican projects receiving a very low priority/rank. Projects were then ranked by type (POE, road and interchange, and marine port). The complete ranking of all projects by type in each country is provided in Appendix F.

On the U.S. side, the project priorities are presented by county (Cameron, Hidalgo, Starr, and Zapata). On the Mexican side, the project priorities are presented by municipality (Matamoros, Valle Hermoso, Río Bravo, Reynosa, Gustavo Díaz Ordaz, Camargo, Miguel Alemán, Mier, and Guerrero). The locations of the planned projects—for which adequate location information was obtained—were identified on maps by planning horizon (short, medium, and long term). Projects for which no time period was provided were categorized as “unknown.”

The highest ranked POE, road and interchange, and rail projects by U.S. county and Mexican municipality are shown in Figure ES.3. These projects are briefly described in this Executive Summary.

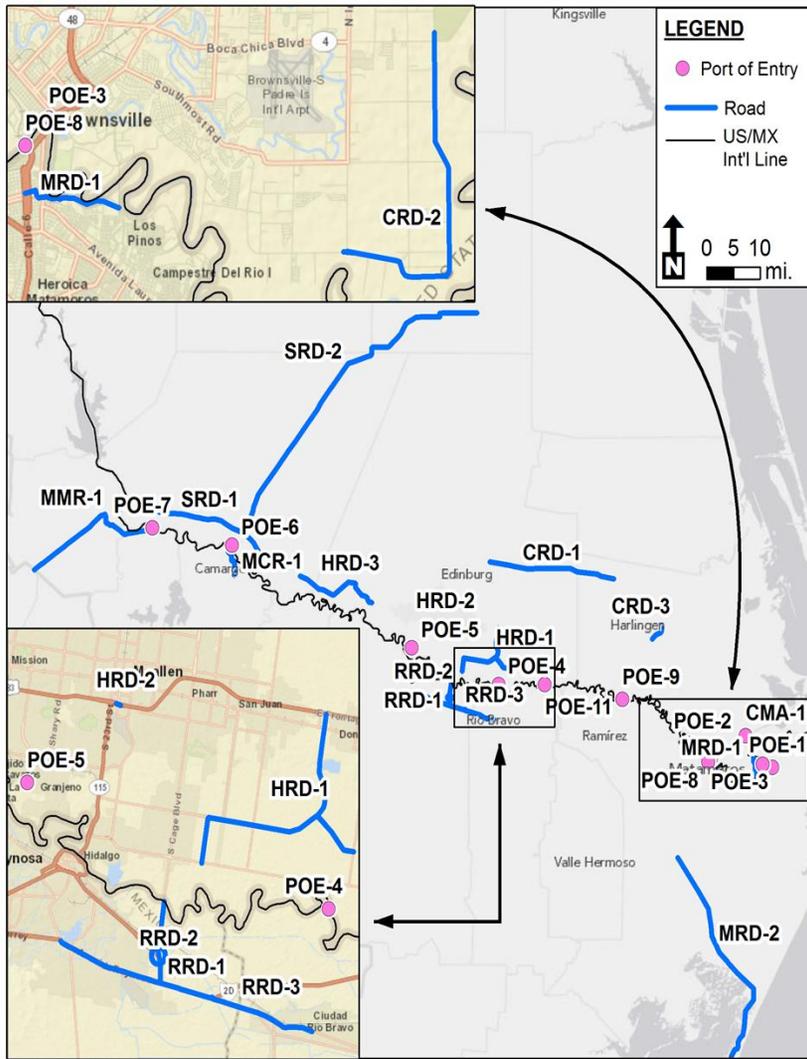
Cameron County

POE Projects in Cameron County

In Cameron County, two projects are planned for the construction of new POEs, and four additional projects are planned for currently existing POEs. The highest ranked POE project in Cameron County involves the construction of two new causeway-style bridge spans to connect the Port of Brownsville directly with Mexico. The second-highest ranked POE project in Cameron County involves the construction of a new bridge between the United States and Mexico at FM 3248 and Avenida Flor de Mayo. The third-highest ranked POE project in Cameron County is the reconfiguration and rebuilding of the existing Gateway International Bridge to comply with current design standards and operational requirements.

Road and Interchange Projects in Cameron County

Nine of the 18 planned road and interchange projects in the U.S. Focused Study Area are in Cameron County. These projects serve the three bridges in Cameron County and are expected to have a significant influence on the region's mobility. The highest ranked road and interchange project in Cameron County involves widening FM 1925 from a two-lane undivided facility to a four-lane divided facility between FM 907 and US 77. The second- and third-highest ranked road projects in Cameron County involve two planned improvements to SH 32: widening SH 32 to a four-lane divided facility and constructing overpasses on SH 32 at SH 4 and FM 3068.



CAMERON COUNTY		
RANK	POE	MARINE
1	Build two causeway-style bridge spans to connect the Port of Brownsville directly with Mexico [POE-1]	Widen the Ship Channel from 250 to 350 feet and deepen it from 42 to 50 feet at Port of Brownsville [CMA-1]
2	Build a new bridge to link the United States and Mexico at FM 3248 (Alton Gloor) and Avenida Flor de Mayo [POE-2]	Construct a new general-purpose cargo dock on South side of Brownsville Ship Channel, east of existing Cargo Dock No. 15 [CMA-1]
3	Reconfigure and rebuild the existing LPOE at Gateway International Bridge [POE-3]	Widen FM 1925 from the existing two-lane undivided highway to a four-lane divided facility from FM 907 to US 77 [CRD-1]
		Widen SH 32 (East Phase II) from the existing two-lane undivided highway to a four-lane divided facility from FM 3068 to SH 4 [CRD-2]
		Widen FM 509 from the existing two-lane undivided highway to a four-lane divided facility from BUS 77 N to FM 106 [CRD-3]
HIDALGO COUNTY		
RANK	POE	ROAD
1	Construct northbound and southbound Federal inspection facilities for processing empty commercial truck traffic at Donna International Bridge [POE-4]	Construct a new two-lane controlled-access tolled facility from US 281 at State Spur (SS) 600 to FM 493 [HRD-1]
2	Improve mobility and decrease wait times for northbound vehicles by adding four additional non-commercial lanes at Anzalduas International Bridge [POE-5]	Construct an overpass and modify ramps at US 83 and Bicentennial Boulevard [HRD-2]
3	Add two additional northbound POV lanes to alleviate queuing on the bridge, and begin expanding the secondary vehicle inspection facility at Anzalduas International Bridge [POE-5]	Construct a new four-lane controlled-access facility on US 83 La Joya Loop from 2.3 miles west of the Hidalgo County line to 1 mile east of the Hidalgo County line [HRD-3]
STARR COUNTY		
RANK	POE	ROAD
1	Expand the Rio Grande City-Camargo Bridge by constructing an additional two-lane span that will be used by southbound traffic [POE-6]	Roma/Rio Grande City Relief Route - Construct a new four-lane divided facility from US 83 at Loma Blanca Road to US 83 at La Puerta [SRD-1]
2	Perform Phase I—Feasibility and Phase II—Design/Build of Commercial and Bus Inspection Facility at Roma-Ciudad Miguel Alemán Bridge [POE-7]	Widen FM 755 from the existing two-lane undivided road to a four-lane divided rural roadway from FM 755 (New Realignment in Starr County) to US 281 in Brooks County [SRD-2]
3	Construct the proposed international crossing at Roma-Ciudad Miguel Alemán Bridge [POE-7]	
MUNICIPALITY OF MATAMOROS		
RANK	POE	MARINE
1	Modernize and improve the existing B & M Bridge [POE-8]	Complete dredging to increase depth, and extend jetties to protect channels and docks at Port of Matamoros [MMA-1]
2	Expand customs facilities and construct export platforms at Free Trade Bridge [POE-9]	Expand and reconstruct 40 miles of access road to the Port of Matamoros [MRD-2]
3	Construct new Flor de Mayo International Bridge [POE-10]	
4	Construct new Longoreño Bridge [POE-11]	
MUNICIPALITY OF RIO BRAVO		
RANK	POE	
1	Improve access and construct inspection facilities for the cargo lane at Weslaco-Progreso International Bridge [POE-12]	
2	Construct inspection facilities for empty commercial trucks (both directions) at Donna International Bridge [POE-4]	
MUNICIPALITY OF REYNOSA		
RANK	ROAD	
1	Expand from two lanes to four lanes. Currently two lanes serve as a connecting road; this project would add two additional lanes for commercial traffic to Avenida Puente Pharr [RRD-1]	
2	Build an interchange at MEX 2 and Avenida Puente Pharr [RRD-2]	
3	Modernize and expand MEX 2 from Reynosa to Rio Bravo [RRD-3]	
MUNICIPALITY OF CAMARGO		
RANK	POE	ROAD
1	Develop import and export cargo areas; reorganize cargo areas and administrative buildings at Rio Grande City-Camargo Bridge [POE-6]	Construct a road/beltway to facilitate cargo movements to the Rio Grande City-Camargo Bridge [MCR-1]
MUNICIPALITY OF MIER		
RANK	ROAD	
1	Expand the highway from Mier to the limits of the State of Tamaulipas [MMR-1]	

Figure ES.3: Highest Ranked POE, Road and Interchange, and Rail Projects by U.S. County and Mexican Municipality

Marine Projects in Cameron County

Two marine port projects were identified in the U.S. Focused Study Area, both in Cameron County. The highest ranked marine port project involves widening the Brownsville Ship Channel from 250 to 350 feet and deepening the channel by 8 feet to accommodate post-Panamax vessels. The planned project also allows for the addition of five new docks for loading/unloading cargo and is expected to double the amount of cargo handled at the Port of Brownsville. The second marine port project involves the construction of a new general-purpose cargo dock on a section of undeveloped land on the Brownsville Ship Channel.

Hidalgo County

POE Projects in Hidalgo County

Twenty-nine of the 38 POE projects identified in the U.S. Focused Study Area are planned in Hidalgo County. Of the 29 planned POE projects, 28 projects are planned at existing POEs in Hidalgo County, and 1 project involves a new international border crossing between Sullivan City and Gustavo Díaz Ordaz in Tamaulipas. The highest ranked POE project in Hidalgo County and the U.S. Focused Study Area involves the construction of northbound and southbound Federal inspection facilities for empty commercial trucks at the Donna International Bridge. The second- and third-highest ranked POE projects in Hidalgo County and the U.S. Focused Study Area are planned at the Anzaldúas International Bridge. The second-highest ranked project seeks to improve mobility and decrease wait times for northbound vehicles by adding four additional non-commercial lanes to the existing six non-commercial lanes. In addition, the construction of new northbound commercial import lot facilities and lanes are planned to improve the mobility of commercial border corridors in the area. The third-highest ranked project will seek to add two additional northbound POV lanes to alleviate queuing on the Anzaldúas International Bridge, and expand the secondary vehicle inspection facility to accommodate southbound commercial truck traffic and buses.

Road and Interchange Project in Hidalgo County

Eight of the 18 planned road and interchange projects in the U.S. Focused Study Area are in Hidalgo County. The highest ranked road and interchange project in Hidalgo County and the U.S. Focused Study Area is the development of the International Bridge Trade Corridor from US 281 at Spur 600 to FM 493. The International Bridge Trade Corridor will be a new two-lane controlled-access tolled facility. The second-highest ranked road and interchange project in Hidalgo County and the U.S. Focused Study Area involves constructing an overpass and modifying ramps at US 83 and Bicentennial Boulevard. The third-highest ranked road and interchange project in Hidalgo County and the U.S. Focused Study Area involves the construction of a new four-lane controlled-access facility on US 83 La Joya Loop from 2.3 miles west of the Hidalgo County line to 1 mile east of the Hidalgo County line.

Starr County

POE Projects in Starr County

Three of the 38 POE projects identified in the U.S. Focused Study Area are planned in Starr County. Of the three planned POE projects, two projects are planned at existing POEs in Starr County, and one project involves a new international border crossing. The highest ranked POE project in Starr County involves expanding the Río Grande City-Camargo Bridge by constructing two additional lane spans for southbound traffic. The second project in Starr County involves a feasibility study and the construction of a commercial bus inspection facility at Roma-Ciudad Miguel Alemán Bridge, and the third project involves constructing a new international border crossing. However, very limited data were received for the two latter projects in the county.

Road and Interchange Projects in Starr County

Of the 18 planned U.S. road and interchange projects in the U.S. Focused Study Area, 2 are in Starr County. The highest ranked road and interchange project in Starr County is the construction of a new four-lane divided facility that will connect the Río Grande City-Camargo Bridge with FM 755 to provide a direct access route to Río Grande City between US 83/Loma Blanca and US 83/La Puerta. The second road and interchange project in Starr County involves widening FM 755 to a four-lane divided facility from FM 755 (new realignment in Starr County) to US 281 in Brooks County.

Zapata County

No planned POE and road and interchange projects were identified in the U.S. Focused Study Area in Zapata County.

Municipality of Matamoros

POE Projects in Municipality of Matamoros

Of the seven POE projects identified in the Mexico Focused Study Area, four are planned in the Municipality of Matamoros; two of these four projects are at existing POEs. The highest ranked Mexican POE project in Matamoros involves improvements to the B&M Bridge, including the use of advanced technology such as specialized lanes for traffic management (Secure Electronic Network for Traveler’s Rapid Inspection [SENTRI]) that would replace the current rail track. The second-highest ranked Mexican POE project in Matamoros involves expanding the customs facilities at the Free Trade Bridge through the construction of export platforms. Two new POEs are planned in the Municipality of Matamoros. Both projects ranked equally high and were the third-highest ranked projects in Matamoros. The first involves the construction of the new Flor de Mayo International Bridge, which corresponds to the second-highest ranked POE project in Cameron County. The new bridge will be located just north of MEX 2 in west Matamoros and will connect to an extension of Alton Gloor Avenue (FM 3248) in Brownsville. The second project is the construction of the new Longoreño Bridge POE project. This project corresponds to the highest ranked POE project in Cameron County. This bridge will be located north of Ejido Longoreño in Matamoros and south of the Port of Brownsville, providing Mexico with a direct connection to the Port of Brownsville.

Road and Interchange Projects in Municipality of Matamoros

Two of the seven Mexican road and interchange projects that serve the POEs are in the Municipality of Matamoros. The highest ranked road and interchange project in Matamoros involves the construction of a new loop that will connect the Veterans International Bridge at Los Tomates with MEX 2 and Sixth Avenue in Matamoros. The second-highest ranked road and interchange project in Matamoros is the expansion and reconstruction of TAM 57, an access road to the Port of Matamoros.

Marine Project in Municipality of Matamoros

One marine port project was identified in the Mexican Focused Study Area and involves dredging to increase the depth of the port and extending the jetties to protect the channels and docks.

Municipality of Valle Hermoso

The Municipality of Valle Hermosa has no planned POE, road and interchange, rail, or marine projects.

Municipality of Río Bravo

POE Projects in Municipality of Río Bravo

Two projects are planned at existing POEs in the Municipality of Río Bravo, and both ranked first and second, respectively, in the Mexican Focused Study Area. The highest ranked project in Río Bravo and the Mexican Focused Study Area proposes to improve access at the Weslaco-Progreso International Bridge and to construct inspection facilities for the cargo lanes at the bridge. The second-highest ranked project in Río Bravo and the Mexican Focused Study Area involves the construction of inspection facilities for empty northbound and southbound commercial trucks at the Donna International Bridge.

Road and Interchange Projects in Municipality of Río Bravo

The Municipality of Río Bravo has no planned road and interchange projects.

Municipality of Reynosa

POE Projects in Municipality of Reynosa

The Municipality of Reynosa has no planned POE projects.

Road and Interchange Projects in Municipality of Reynosa

Three of the seven Mexican road and interchange projects that serve the POEs are in the Municipality of Reynosa. The highest ranked road and interchange project for the Mexican Focused Study Area is located in Reynosa and involves expanding the number of lanes from two to four lanes to serve commercial truck traffic to Avenida Puente Pharr. The second project in Reynosa is the construction of a new interchange at MEX 2 and Avenida Puente Pharr. Both projects will improve access to the Pharr-Reynosa International Bridge on the Rise. The third project in the Municipality of Reynosa involves the modernization and expansion of MEX 2 from Reynosa to Río Bravo.

Municipality of Gustavo Díaz Ordaz

The Municipality of Gustavo Díaz Ordaz has no planned POE or road and interchange projects.

Municipality of Camargo

POE Project in Municipality of Camargo

Of the seven POE projects identified in the Mexico Focused Study Area, one is planned in the Municipality of Camargo. The planned project at the existing Rio Grande City-Camargo Bridge includes the development and reorganization of cargo areas and facilities at the Rio Grande City-Camargo Bridge.

Road and Interchange Project in Municipality of Camargo

One road and interchange project is planned in the Municipality of Camargo, and this project involves constructing a beltway around Camargo to facilitate freight movements to the Rio Grande City-Camargo Bridge.

Municipality of Miguel Alemán

The Municipality of Miguel Alemán has no planned POE or road and interchange projects.

Municipality of Mier

POE Projects in Municipality of Mier

The Municipality of Mier has no planned POE projects.

Road and Interchange Project in Municipality of Mier

One road and interchange project is planned in the Municipality of Mier, and this project involves expanding the Monterrey-Mier Highway from Mier to the limits of the State of Tamaulipas.

Municipality of Guerrero

The Municipality of Guerrero has no planned POE or road and interchange projects.

Recommendations

Institutionalizing the Dialog

Border master plans should be updated periodically to keep the contents and inventories current and to continue to represent the region's vision and goals. Further, these plans should be updated in response to major changes in the region, such as if multiple priority projects identified in the plan have been completed or if numerous

planned initiatives have emerged since the plan was developed. The timing of the updates may thus differ from region to region.

The PAC should convene every year to determine the need for updating the Border Master Plan. Information on all completed priorities and any planned initiatives that have emerged since the completion of the previous Border Master Plan should be presented. This will allow the PAC to make an informed decision about the need to update the technical data. Similarly, the PAC will determine the need for a comprehensive update to the plan. The latter would involve revisiting the forecasted year, geographic boundaries of the study area, socio-economic data, cross-border travel demand changes, and criteria that were used to prioritize projects. Finally, it is recommended that a representative of the PAC or TxDOT's International Relations Office make regular informative presentations to the JWC regarding the need to update the existing Border Master Plan (as determined by the PAC) or to report on any in-progress Border Master Plan updates.

Development of Future Border Master Plans

The study team offers the following observations and recommendations for consideration in development of future border master plans or updates of this Border Master Plan:

- Three of the four U.S. States on the southern border have overseen the development of border master plans. To remain a viable planning tool, these plans must reflect each different region's needs, interests, and priorities. If the ultimate goal is to establish U.S.-Mexico project priorities, it is recommended that regions follow a similar—although not necessarily the same—approach in the development of all border master plans.
- Border master plans currently provide detailed inventories of planned project priorities in a Focused Study Area. Two enhancements to the scope of work for updating the border master plans should be considered: identify funding opportunities for high-priority projects in the Focused Study Area, and develop technical tools to evaluate the potential regional impact of investments. Specifically, the feasibility of developing technical tools (models) to determine how investment in a specific project would impact demand (e.g., diverting traffic to other crossings)—and therefore the need or priority of other planned projects—should be determined. The implementation of some of the identified high-priority projects could thus potentially reduce the need or delay the need for implementing some of the other high-priority projects. As currently developed, border master plans do not quantify or model the demand impact of an investment in specific projects on other crossings or transportation infrastructure in the region.

- Ensure participation by actively reaching out to stakeholders. Keep stakeholders engaged in the development of border master plans, ensure a process where every stakeholder has an equal voice in the selection of the criteria that will be used to prioritize projects, and make all reports and information disseminated available in both English and Spanish. Ultimately, continued support for development of border master plans will only prevail if results can be demonstrated—by the funding and implementation of high-priority projects identified by the border master plan.

¹ The study team attempted to establish contact with high-ranking officials at the border municipalities. The low figure given for expressed support (32 percent) is attributable to the study team being unable to reach these high-ranking officials, rather than a reflection of the expressed support from the Tamaulipas stakeholders.