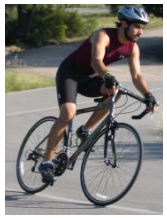


TEXAS-MEXICO BORDER TRANSPORTATION MASTER PLAN

Binational Regional Steering Committee (Rio Grande Valley/Tamaulipas)

June 4, 2019

Today's Agenda

1. Introduction (slides 3-6)
2. Stakeholder Engagement – Round 1 Summary (slides 7-16)
3. Goals & Objectives: Refinement and Prioritization (slides 17-23)
4. Data Collection: Methodology, Inventory, and Analysis (slides 24-35)
5. Corridor Designation (slides 36-38)
6. Needs Assessment (slides 39-62)
7. Next Steps (slide 63)
8. Closing Remarks (slide 64)

BTMP Purpose & Guiding Principles

- The BTMP will support the facilities and the multimodal transportation system that serve the Texas-Mexico border.
- It will facilitate coordination and collaboration between Texas and Mexico on:
  - binational planning and programming
  - implementation of policies, programs, and projects at border crossings

Binational effort

Data-driven

Consensus-oriented

Binational stakeholder participation and public engagement

Encompassing entire Texas-Mexico border

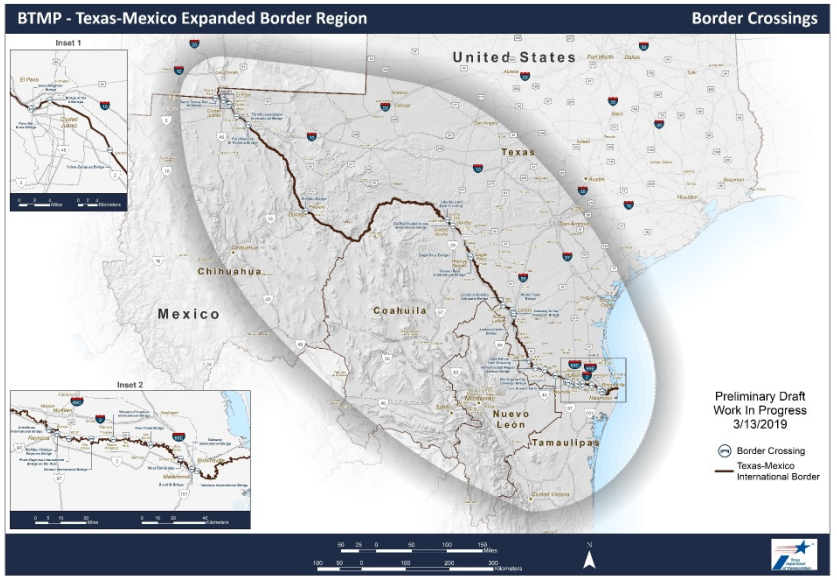
BTMP Development Phases & Milestones

PHASE 1: BINATIONAL STUDY & DATA COLLECTION	PHASE 2: GATHER INPUT & CORRIDOR ANALYSIS	PHASE 3: BUILD BINATIONAL CONSENSUS ON TRANSPORTATION SOLUTIONS	PHASE 4: REFINE ANALYSIS & COMMUNICATE FINDINGS	FINAL REPORT
DECEMBER 2018 – APRIL 2019	MAY 2019 – OCTOBER 2019	NOVEMBER 2019 – APRIL 2020	MAY 2020 – OCTOBER 2020	NOVEMBER 2020 – DECEMBER 2020
MILESTONES • Project Management Plan • Stakeholder Engagement Plan • Data Collection Plan • Goals & Objectives • High-Level Prioritization Process	**MILESTONES** • Study Area • Data Inventory • Identification of Multimodal Corridors • Corridor Analyses (SWOT, Trends)	**MILESTONES** • Future Scenarios • Cost Benefit Analysis and Economic Impact of Alternatives • Feasibility Analysis of Alternatives	**MILESTONES** • Prioritization of Alternatives • Implementation Plan of High-Ranking Alternatives	**MILESTONES** • Final Report

BTMP Geographical Scope

- BTMP Focus
  - Binational, multimodal corridors that are connected by border crossings
  - Movement of people and goods

- "Spheres of Influence"
  - Sphere 1: 100 km/60 miles north and south of border
  - Sphere 2: Key population and goods production centers in Border States
  - Sphere 3: Five Border States
  - Sphere 4: U.S. and Mexico
  - Sphere 5: U.S., Mexico, and Canada (NAFTA/USMCA)



Committee Roles and Responsibilities

Border Trade Advisory Committee (BTAC)

Roles and Responsibilities

- Participation and guidance is critical throughout decision points
- Input on Plan Goals and Objectives
- Assist with public and stakeholder outreach
- Identification of issues, needs, and challenges
- Provide feedback on policies, programs, and projects
- Input on Implementation Plan
- Review documents and recommend plan to Commission

Meeting Frequency

Every other month: Aug., Oct., Dec.

Binational Regional Steering Committees (BNRSCs)

Roles and Responsibilities

- Input on the Plan Goals and Objectives
- Contribute to the development of the Plan
- Identification of issues and needs
- Provide data and other information
- Development of recommendations
- Prioritization of programs and projects
- Assist with public and stakeholder outreach
- Implementation of the Plan

Meeting Frequency

Every other month (before BTAC)

Binational Stakeholder Coordination

Purpose

- Guidance on the development of the BTMP
- Binational data collection
- Identification of binational issues and needs
- Provide input on corridor identification and designation
- Build binational consensus on transportation solutions
- Provide input on prioritization criteria
- Review and comment on recommendations
- Provide input into Plan implementation

Meeting Frequency

Quarterly

Laredo Stakeholder Workshop | April 23, 2019

STAKEHOLDER ENGAGEMENT

Stakeholder Engagement – Round 1

Rio Grande Valley/Tamaulipas Region (Pharr)

- April 2: Stakeholder Workshop
- April 3: BNRSC Meeting
- April 9: Public Meeting

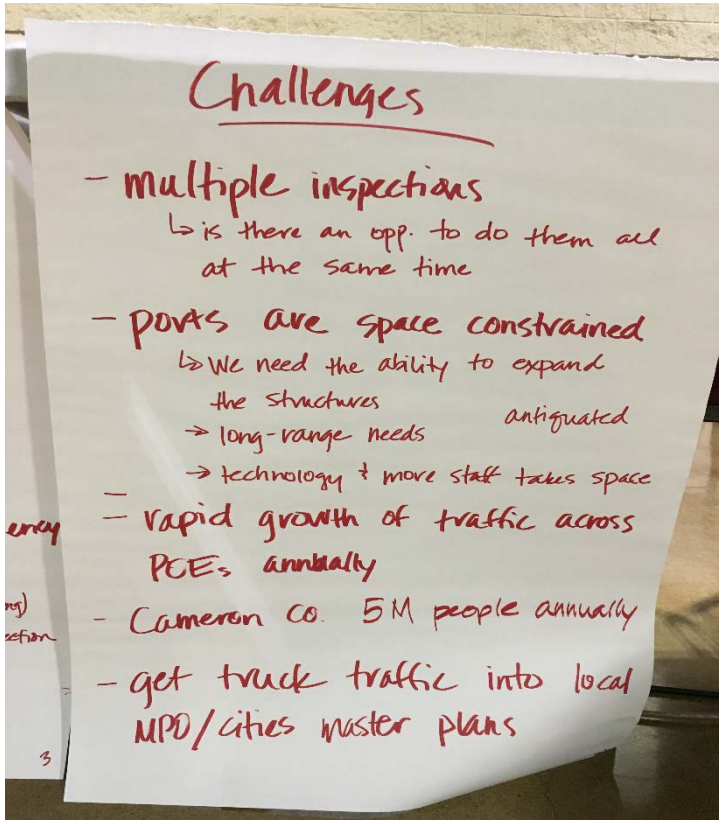
Laredo/Coahuila/Nuevo Leon/ Tamaulipas Region (Laredo)

- April 22: Public Meeting
- April 23: Stakeholder Workshop & BNRSC Meeting
- April 24: Stakeholder Workshop (Eagle Pass)

El Paso/Santa Teresa/Chihuahua Region (El Paso)

- April 29: Public Meeting
- April 30: Stakeholder Workshop & BNRSC Meeting

Rio Grande Valley/Tamaulipas Region



	BNRSC	Stakeholder Workshop	Public Meeting
US	39	26	21
Mexico	12	17	1
Total	**51**	**43**	**22**

Pharr Stakeholder Workshop | April 2, 2019

Public Meeting

Issues/Challenges	Opportunities
▪ Long wait times at crossings ▪ Need additional connectivity once commercial traffic crosses ▪ Shortage of personnel at border crossings ▪ Design of border crossing infrastructure is outdated ▪ Need for additional coordination between US and Mexican agencies at border crossings	▪ Increase security on Mexican side ▪ Open more lanes at border crossings ▪ Opportunity for increased efficiency at crossings ▪ Improve connectivity to regional networks ▪ Use technology to make crossings more efficient

Stakeholder Workshop

Issues/Challenges	Opportunities
▪ Avoidance of crossings with heavier scrutiny/excessive inspections ▪ Excessive wait times for bicyclists and pedestrians ▪ Customs is working well in Mexico but not US ▪ Need solutions for oversize and overweight vehicles; need loop or bypass around the city ▪ Restrictions to expand footprint of border crossings	▪ Need resiliency plan to address major events along border that impact transportation ▪ Allow Mexican drivers to cross and transport freight to San Antonio ▪ Need to increase produce capacity, including cold storage inspection facilities ▪ Implement technology to expedite border crossings for both people and goods

BNRSC

Issues/Challenges	Opportunities
▪ Long lines of passenger vehicles and trucks ▪ Overweight vehicles are taxing the local road system ▪ Shortage of qualified produce inspectors ▪ Multiple inspections ▪ Crossings have limited ability to expand	▪ New crossing focused on rail and pedestrians ▪ Working on a binational cycling network ▪ Need to prioritize movement of people; dedicated bus crossings ▪ Need synchronized traffic signals for better air quality ▪ Improve connectivity from border crossings to interstates

Summary

Issues/Challenges	Opportunities
▪ Lack of redundant crossing locations to relieve burdened infrastructure ▪ Poor connectivity to regional transportation system on US side ▪ Rapid growth of freight volumes ▪ Lengthy produce inspections and lack of qualified inspectors	▪ Use technology to improve border crossing efficiency ▪ Improve connectivity to transportation network beyond border crossings ▪ Need more oversize/overweight corridors ▪ Increase capacity of border crossings for both people and goods movement

COMMON THEMES

Summary by Region

	Laredo	Rio Grande Valley	El Paso
Issues/ Challenges	▪ Lane closures at border crossings occur too often ▪ Poor infrastructure condition ▪ Multiple inspections for border crossing cargo ▪ Congestion at interstate checkpoints ▪ Insufficient CBP personnel ▪ Inadequate hours of operation	▪ Lack of redundant crossing locations to relieve burdened infrastructure ▪ Poor connectivity to regional transportation system on US side ▪ Rapid growth of freight volumes ▪ Lengthy produce inspections and lack of qualified inspectors	▪ Unreliable crossing times ▪ Lack of connectivity to other modes ▪ Heavy student usage of border crossings ▪ Border crossings with no connectivity on Mexican side ▪ Security issues
Opportunities	▪ Maximize underutilized capacity at existing crossings ▪ Expand programs such as Joint Inspections and UCP ▪ Increase capacity of transportation network linking border crossings ▪ Expand supply of warehousing	▪ Use technology to improve border crossing efficiency ▪ Improve connectivity to transportation network beyond border crossings ▪ Need more oversize/overweight corridors ▪ Increase capacity of border crossings	▪ Use technology to improve/optimize border crossings ▪ Coordination with other studies ▪ Expand capacity of border crossings ▪ Add pedestrian amenities ▪ Separation of truck and personal vehicle traffic

Common Suggestions to Improve Border Transportation

Laredo Public Meeting | April 22, 2019

- Increase staff at POEs
- More open lanes at POEs
- Develop more/new POEs
- Extended POE hours of operations
- Joint inspections/more efficiency
- More and better maintained roadway infrastructure
- Increase in use of technology
- Better mass transit system, pedestrian access
- Improve reliability of crossing information
- More infrastructure funding

GOALS & OBJECTIVES

Laredo Stakeholder Meeting | April 23, 2019

Goals and Objectives Overview

What are the elements of border transportation planning?

What are our Draft Vision and Mission Statements?

What were the priority goals in Round 1 BNRSC Meetings?

What feedback do you have on Draft Objectives?

Elements of Transportation Planning

Strategic Planning

Vision:
aspirational statement on the future of the Texas-Mexico border

Mission:
statement of how the BTMP will support the vision

Goal:
aspirational areas of focus for the BTMP

Objective:
specific, measurable priorities for the BTMP

Performance Measures:
quantifiable indicators to assess performance

Project Planning

Draft Vision and Mission Statements

Vision:

To collaboratively create integrated and efficient binational transportation mobility of people and goods across the Texas-Mexico border and to promote economic development that benefits the binational Texas-Mexico border region, Texas, the United States, and Mexico.

Mission:

To develop and implement trade, economic development, and transportation strategies and public policies, programs, and projects that facilitate US-Mexico border trade and cross-border movement of people, creates efficient multimodal corridors, and enhance the connections in the binational border region.

Draft BTMP Goals

Safety and Security	Improve binational, multimodal transportation safety and security
Economic Competitiveness	Improve the contribution of the binational transportation system for economic competitiveness, productivity, and development in the border regions and beyond
Mobility and Reliability	Reduce congestion and improve system efficiency and performance on the binational transportation system
Multimodal Connectivity	Provide binational transportation choices and improved system connectivity for all modes
Sustainable Funding	Identify and sustain funding sources for the binational transportation system
Stewardship	Manage environmental and agency resources responsibly and foster accountability and transparency in decision-making
Customer Service	Understand and incorporate customer feedback in decision-making processes and be transparent in all agency communications
Cross-Border Resiliency	Capacity of the system to continue operations after disasters/ emergency events
Asset Preservation	Maintain and preserve infrastructure that supports multimodal, binational movement of goods and people

Priority Goals in Round 1 BNRSC Meetings

Rio Grande Valley/ Tamaulipas

1. Mobility and Reliability
2. Multimodal Connectivity/ Economic Competitiveness

Laredo/Coahuila/ Nuevo León/Tamaulipas

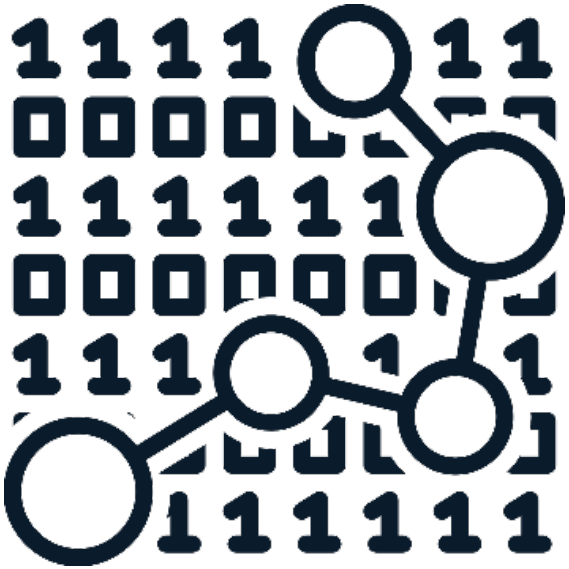
1. Mobility and Reliability
2. Economic Competitiveness

El Paso/Santa Teresa/ Chihuahua

1. Mobility and Reliability
2. Economic Competitiveness

BNRSC DISCUSSION

Provide input to formulate Objectives for each BTMP Goal



DATA COLLECTION

Inventory and Analysis

Data Collection Overview

What are we trying to achieve through data collection and analysis?

What data sources will help us develop the BTMP?

What is the BTMP Stakeholder Data Questionnaire?

What are the preliminary data gaps?

What are the next steps and BNRSC role?

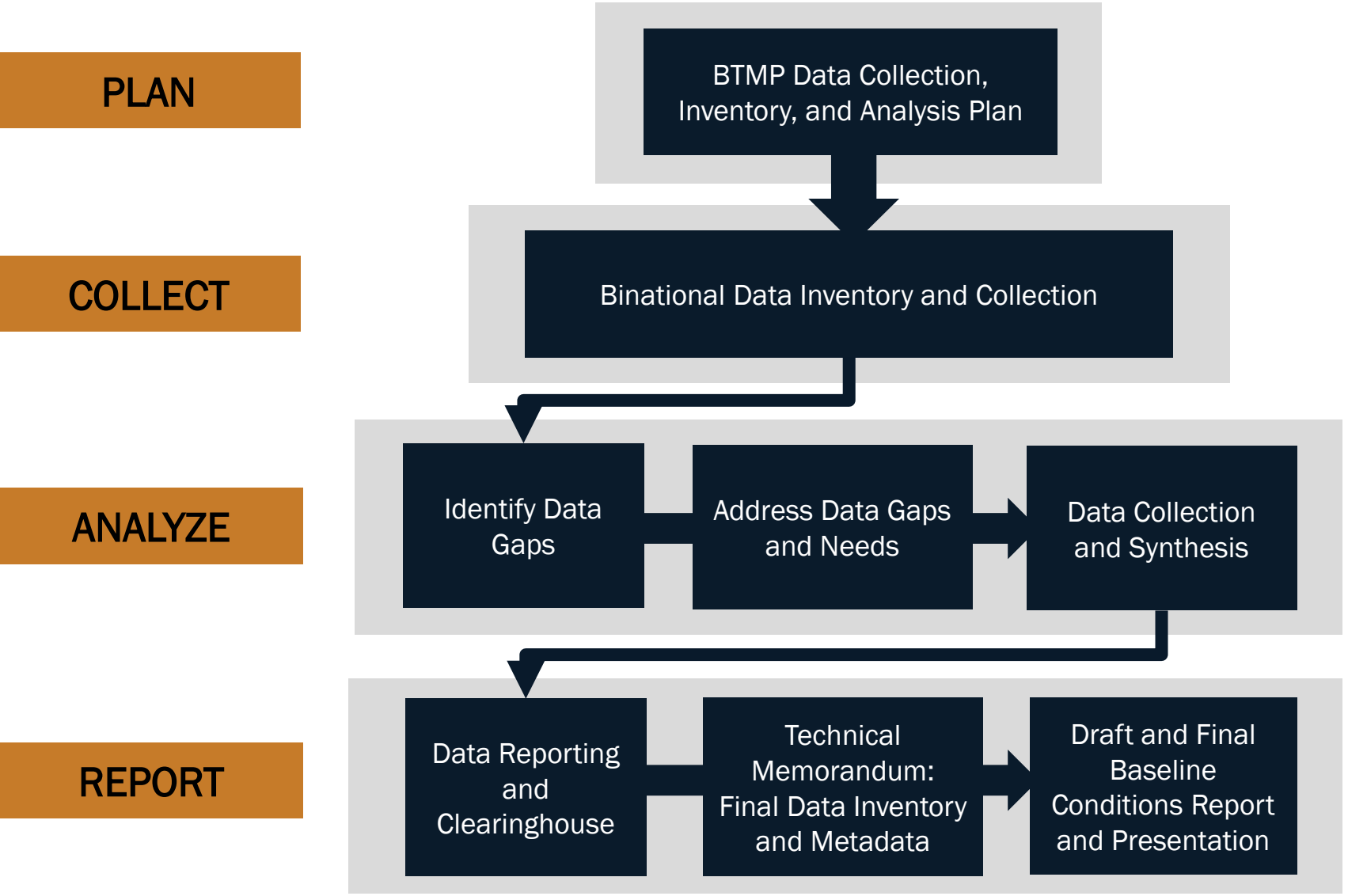
Data Collection and Analysis Goals

Develop a data-driven binational and multimodal BTMP to:

- Provide comprehensive understanding of existing and emerging data sources
- Assess data suitability to address BTMP goals and objectives
- Apply data for BTMP needs assessment, economic analysis, and forecasting
- Recommend BTMP performance measures and prioritization
- Create a Data Clearinghouse for analysis on other BTMP tasks and for use by all stakeholders

El Paso and Juarez Panorama
Source: iStock Photo

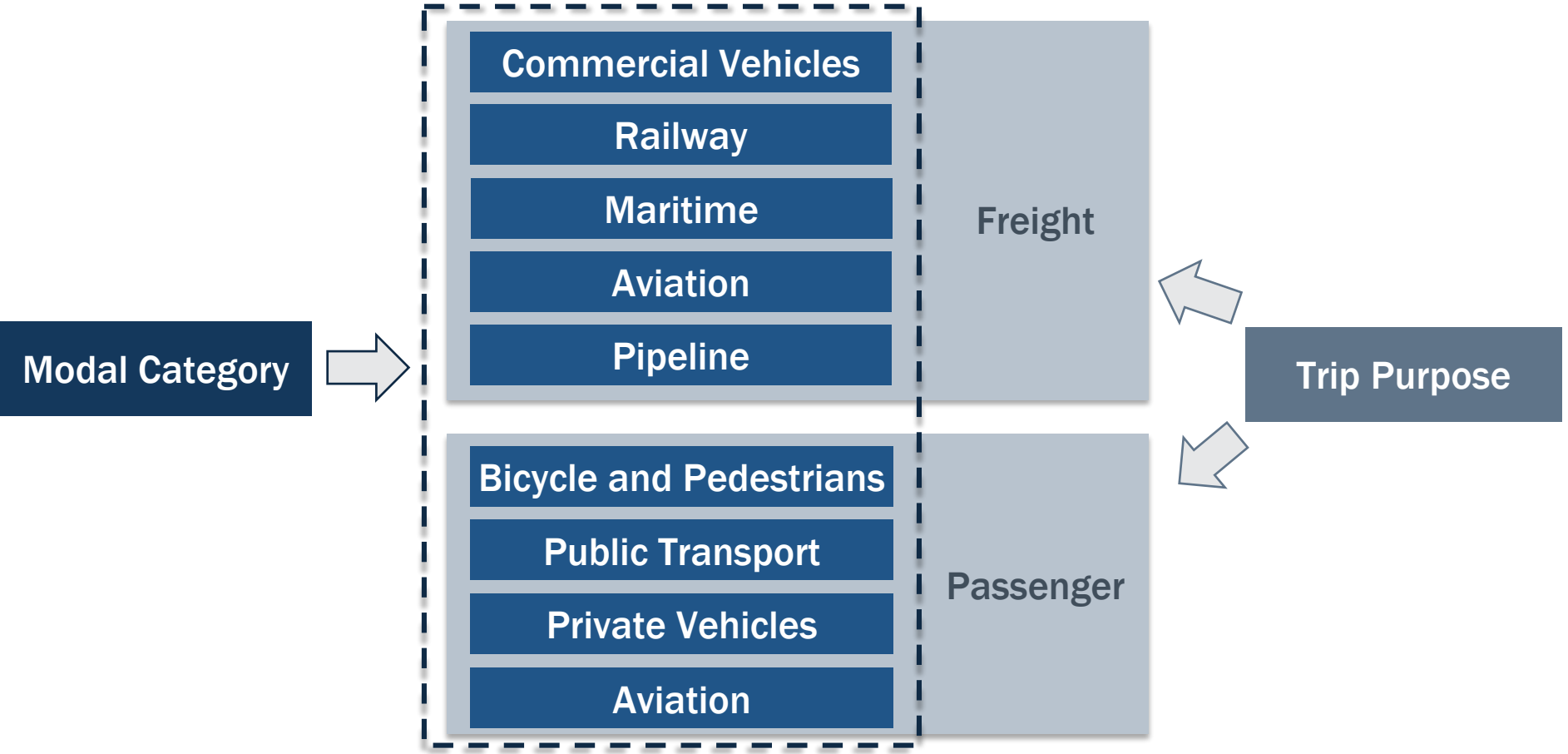
Data Collection, Inventory, and Analysis Workflow



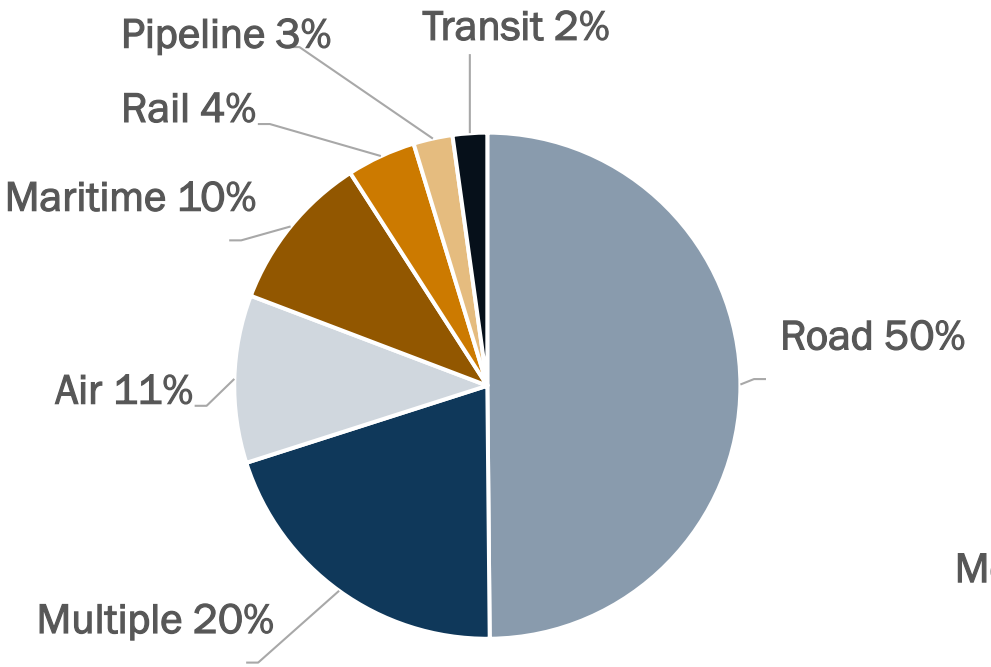
Data Sources

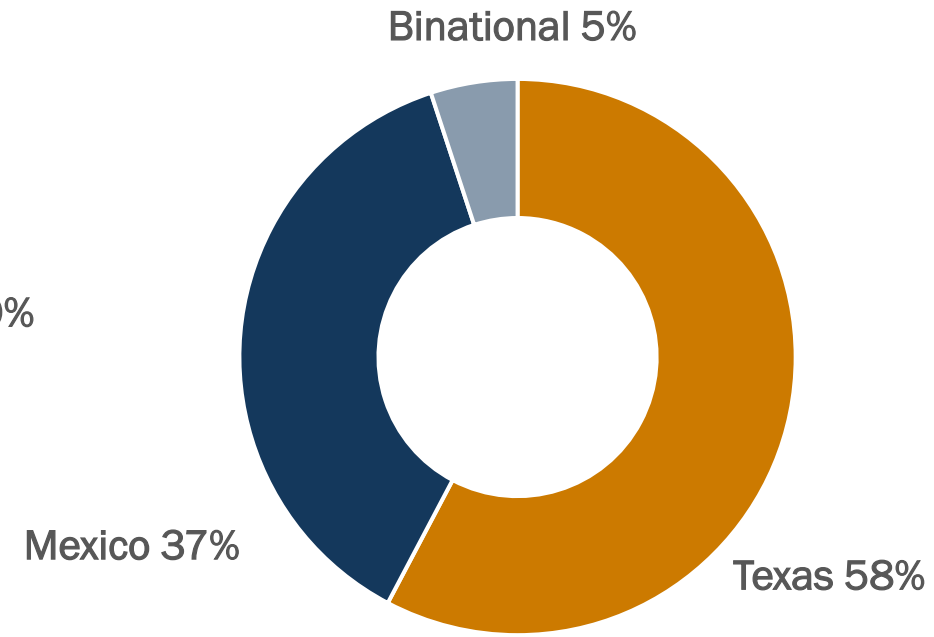
PLANS & STUDIES	QUANTITATIVE & QUALITATIVE DATA
Transportation Plans and Studies	Statistical Data
Land Use Studies	Surveys
Economic Development Plans	Operational Data
International Trade Studies	Land Use Data
Environmental Studies	Multimodal Transportation Network

Binational Transportation Data Sources

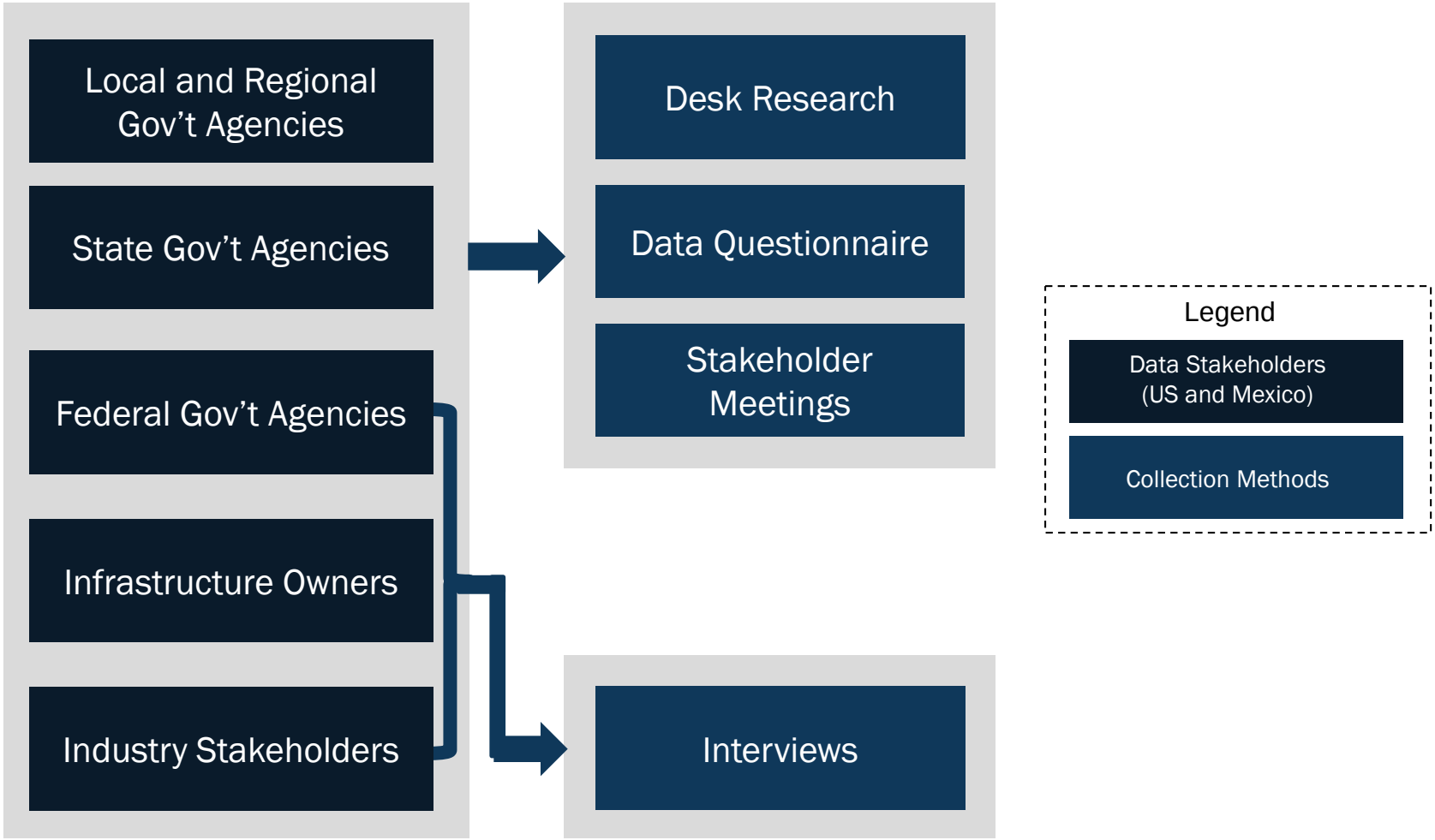


317 Data Sources related to BTMP Goals





Methods Used to Collect Data



BTMP Stakeholder Data Questionnaire

- We need your input on plans, studies, and data sources for the BTMP
- Brief questionnaire – English and Spanish options

Texas-Mexico Border Transportation Master Plan (BTMP)

Data Questionnaire

The Texas Department of Transportation (TxDOT), in collaboration and partnership with the Border Trade Advisory Committee (BTAC), is working with binational federal, state, regional, and private sector stakeholders to undertake development of the Texas-Mexico Border Transportation Master Plan (BTMP). The BTMP is a comprehensive, multimodal, and binational plan that will:

- Identify the movement of people and goods across the border, in border regions, and beyond
- Focus on transportation issues, needs, challenges, opportunities, and strategies
- Utilize a data-driven planning process to inform selection and prioritization of projects, policies, and programs
- Support binational, state, regional, and local economic competitiveness

surveymonkey.com/r/BTMPData

Types of Data Gaps we are Currently Seeing

- Initial comparison of data sources focusing on agency data from federal and state sources
- Across many data sets (U.S. and Mexico) differences in:

Granularity Differences in detail: geography, classification	▪ Geography – city, county, states ▪ Time Intervals – daily, weekly, monthly ▪ Characteristics of people and goods
Linkages Between modes, across the border	▪ Trip tracing – inland, intermodal shipments, drayage, and people movements between modes and across the border
Consistency Data collection, reporting	▪ Method and timing collection ▪ Time lag from data collection to reporting ▪ Definitions and classifications ▪ Assumptions used for derived data

Next Steps: Data Collection Process

Collect and Inventory

Continue binational data collection (stakeholders, agencies, trade groups, businesses, and others)

Analyze and Validate

Data attributes, quality, and coverage checks

Identify Gaps

In coverage, differences in granularity, linkages, and consistency

Gap Closing Strategies

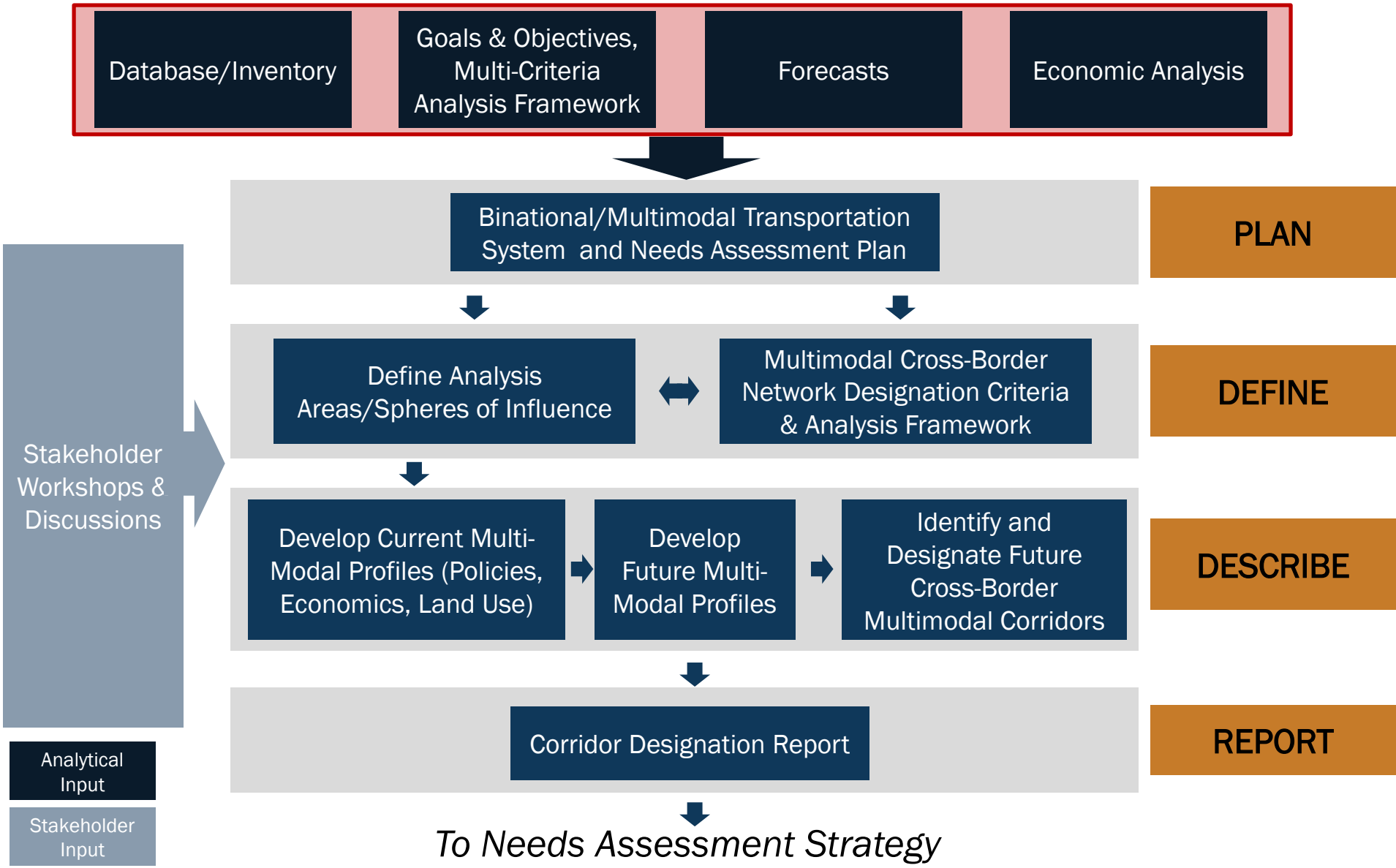
New data sources, data fusion methods

BNRSC Next Steps

- Participate in the BTMP Data Collection Questionnaire
- Identify critical data stakeholders (provide to BTMP team)
- Provide input, as needed, on data gap-closing strategies

CORRIDOR DESIGNATION

Corridor Designation Strategy



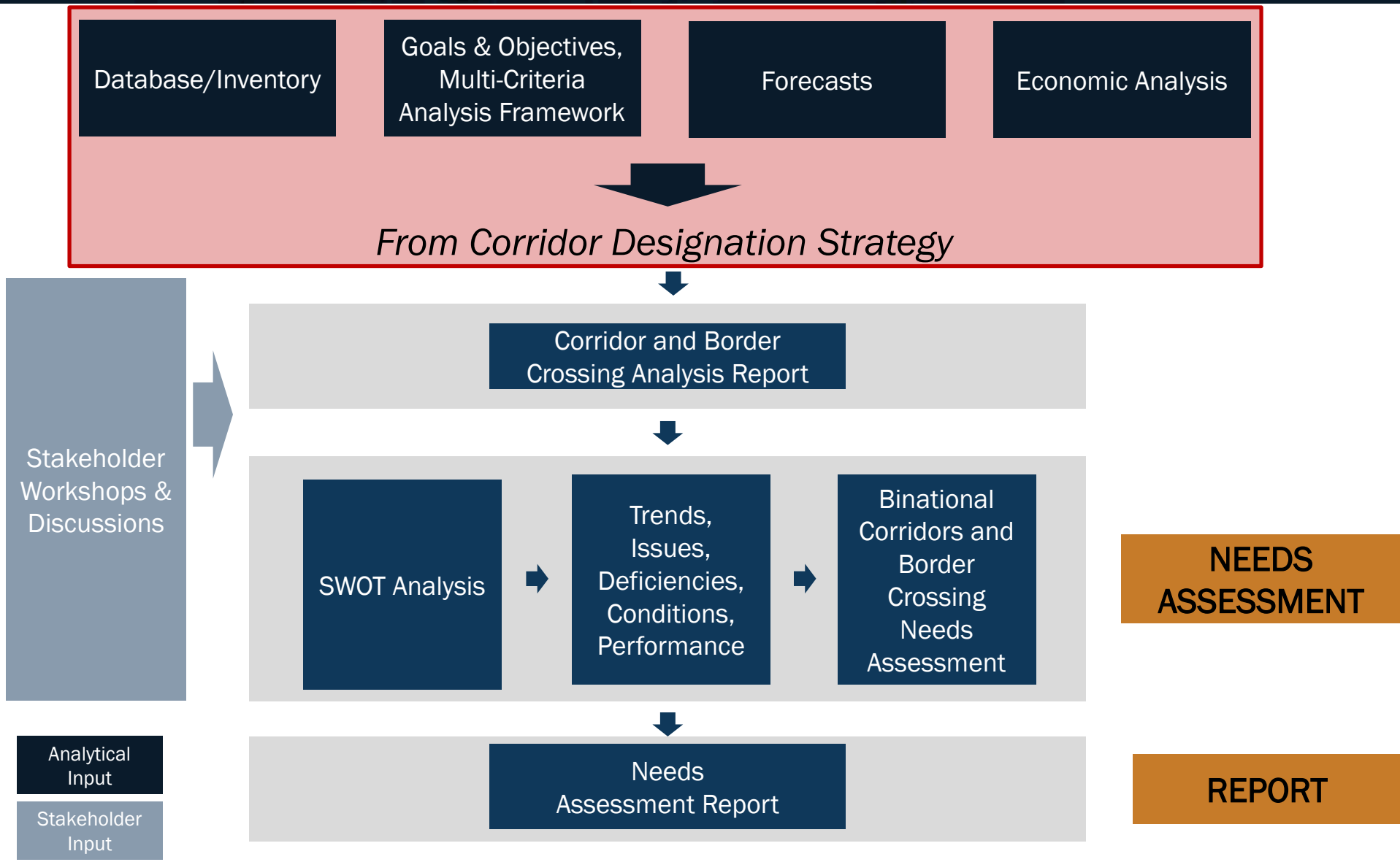
Designation Criteria & Analysis Framework

Purpose	Key Inputs	Outcomes

▪ Develop analysis criteria & framework, and existing modal profiles to support corridor designations and needs for future corridor designations:
  ▪ POEs
  ▪ POE support system
  ▪ Transportation network system
	▪ Stakeholder workshops & discussions
	▪ Goals & Objectives, multi-criteria analysis framework
	▪ Database/inventory
	▪ Profiles will include transportation demand and multimodal performance, land use, economic, key/emerging logistics & supply chains
		▪ Document available tools, performance measures, and data in analysis framework
		▪ Link performance measures & analysis framework to goals & objectives
		▪ Identify performance by border regions, analysis areas & spheres of influence
		▪ Document existing modal profiles to develop future profile and needs analysis

NEEDS ASSESSMENT

Assessment Strategy

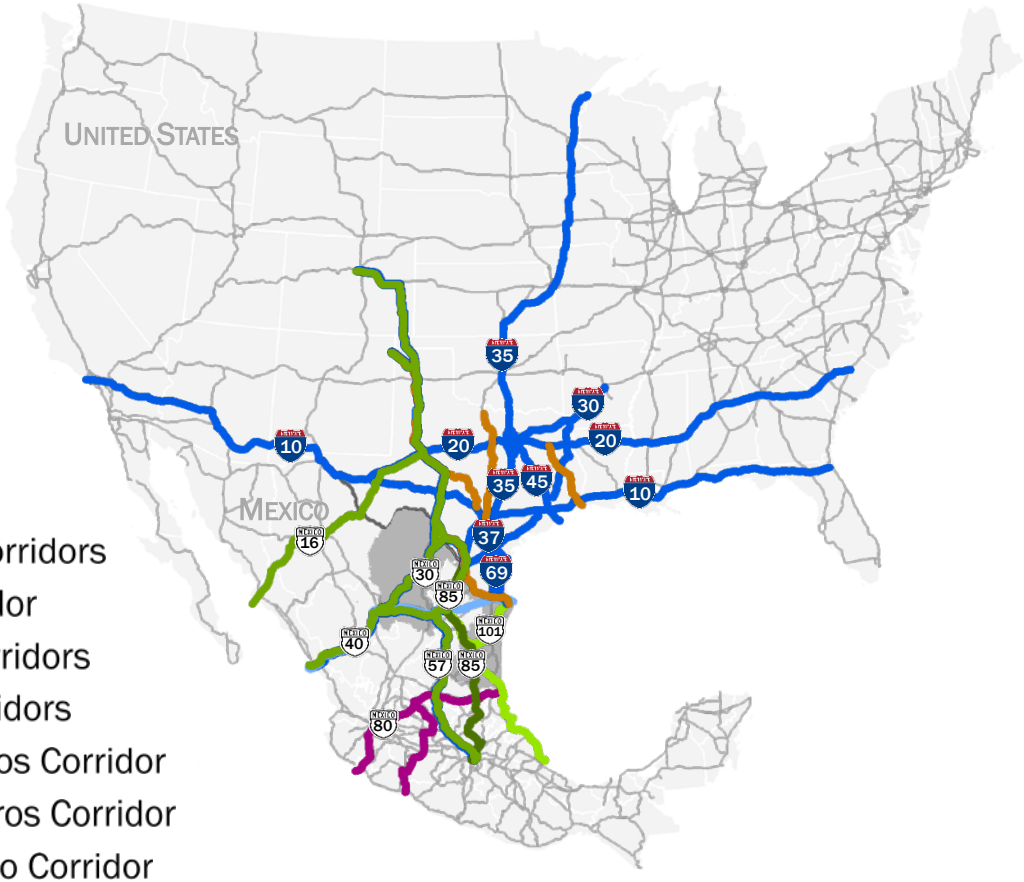


Preliminary Inventory of Binational Infrastructure – Sources

- Compiled information on binational, multimodal infrastructure from the following sources:
  - Corridors presented during BTAC (December 2018) by Mexican States of Chihuahua, Coahuila, Nuevo Leon and Tamaulipas
  - Freight Mobility Plan (2018)
  - International Trade Corridor Plan (2018)
  - Texas Border District Trade Transportation Activities (Jan. 2019)
  - Texas Border Master Plans from 2012 and 2013
- Developed "layered" maps showing infrastructure for the following modes
  - Highway
  - Pedestrian/Bicycle
  - Transit
  - Rail
  - Airports
  - Seaports
  - Pipeline
- Goal of representing key infrastructure to be analyzed as part of the BTMP

Binational Corridors – Initial Review

Multi-Regional Corridors – Initial Review

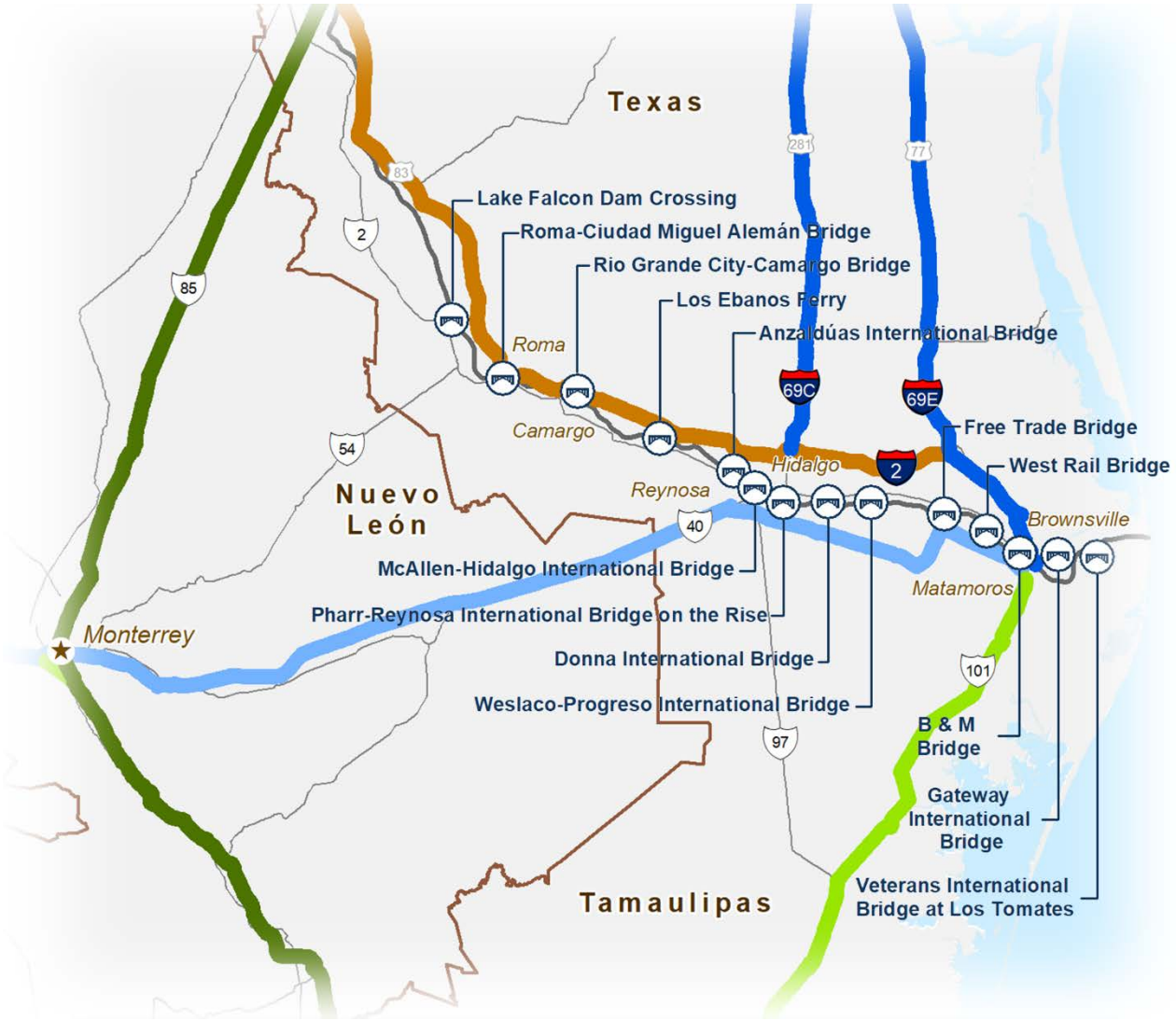


- Established Trade Corridors
- Ports-to-Plains Corridor
- Secondary Trade Corridors
- Emerging Trade Corridors
- Veracruz – Matamoros Corridor
- Mazatlan – Matamoros Corridor
- Manzanillo – Tampico Corridor
- Mexico City – Nuevo Laredo Corridor

Multi-Regional Corridors – Initial Review

Rio Grande Valley/ Tamaulipas Region

- Mexico City – Nuevo Laredo Corridor
- Emerging Corridor
- Highway Trade Corridor
- Mazatlán - Matamoros Corridor
- Veracruz – Matamoros Corridor



BNRSC DISCUSSION

Are there any corridors missing? (including last-mile corridors)

BNRSC DISCUSSION

Are there bottlenecks and if so, in which facility type (POEs, supporting facilities, multimodal transportation system)?

BNRSC DISCUSSION

Are there any ideas for addressing those bottlenecks?

Binational Rail Network – Preliminary Inventory

Railroads

Texas

Class I

- BNSF
- Kansas City Southern
- Union Pacific

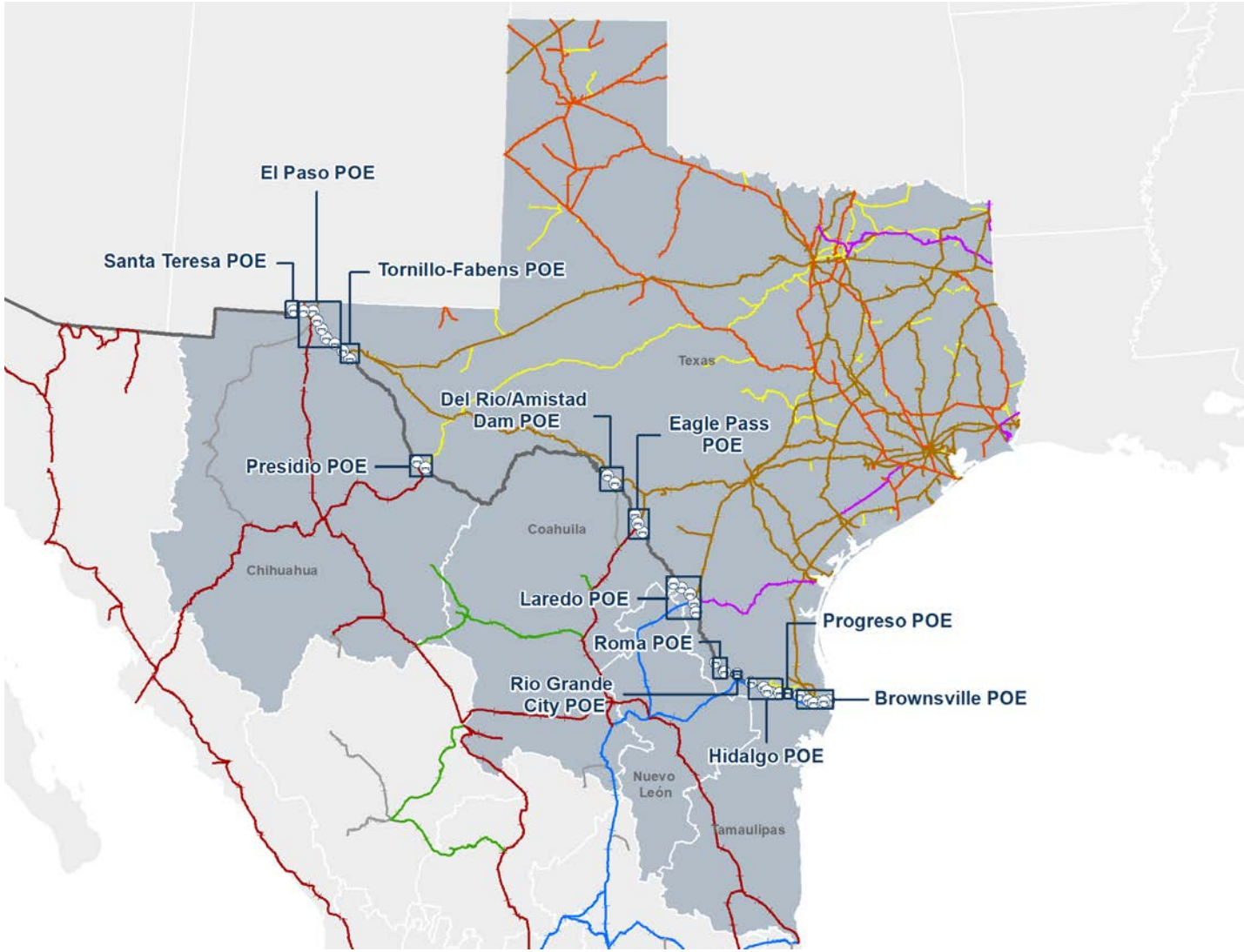
Other

- Shortline/Regional

Mexico

- Kansas City Southern De México
- Línea Coahuila Durango
- Ferrocarril Mexicano
- Vías Remanentes

Border Crossing



Binational Rail Network – Preliminary Inventory - RGV

Railroads

Texas

Class I

- BNSF
- Kansas City Southern
- Union Pacific

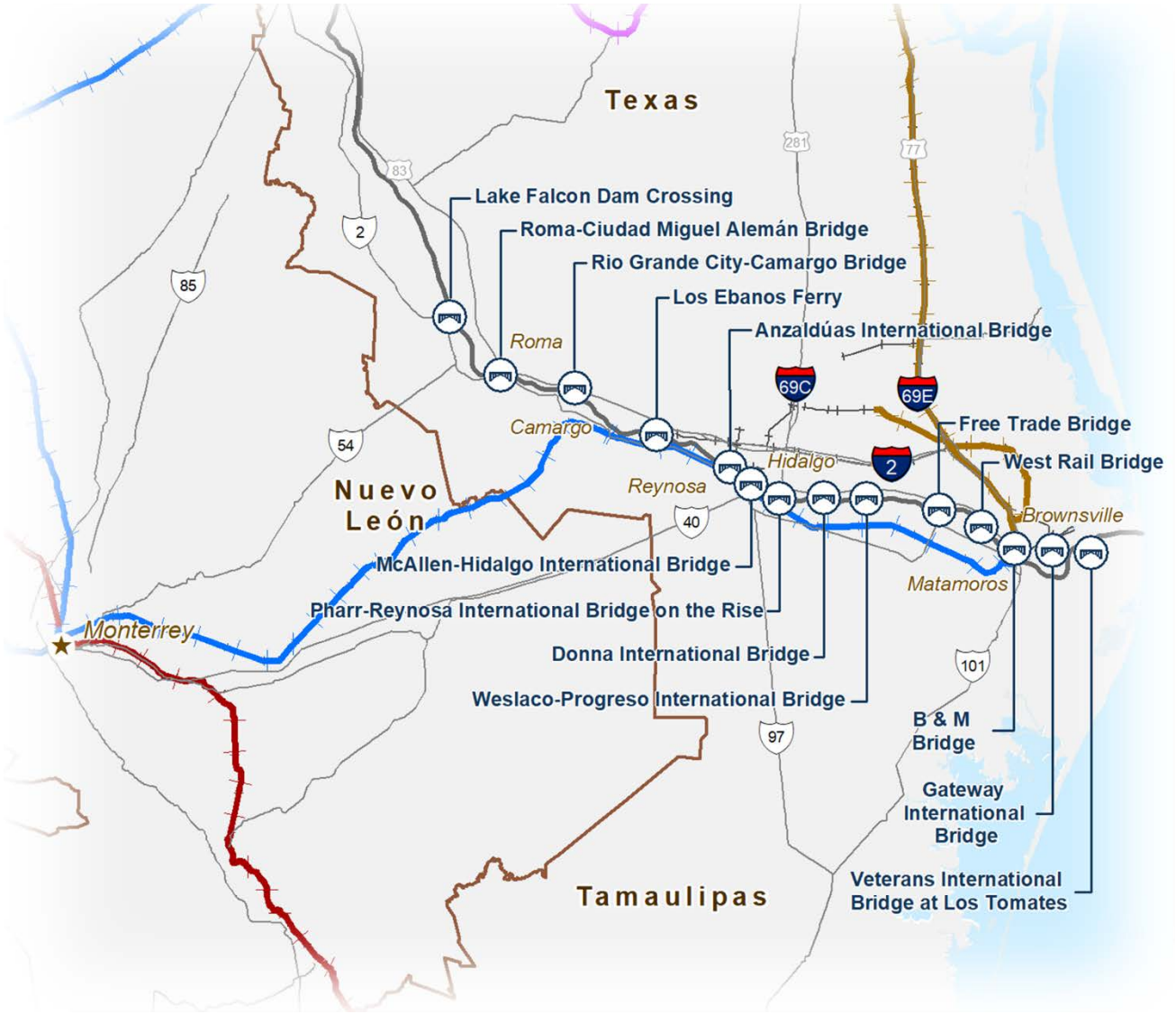
Other

- Shortline/Regional

Mexico

- Kansas City Southern De México
- Línea Coahuila Durango
- Ferrocarril Mexicano
- Vías Remanentes

Border Crossing



BNRSC DISCUSSION

Are there any corridors missing?

BNRSC DISCUSSION

Are there bottlenecks and if so, in which facility type (POEs, supporting facilities, multimodal transportation system)?

BNRSC DISCUSSION

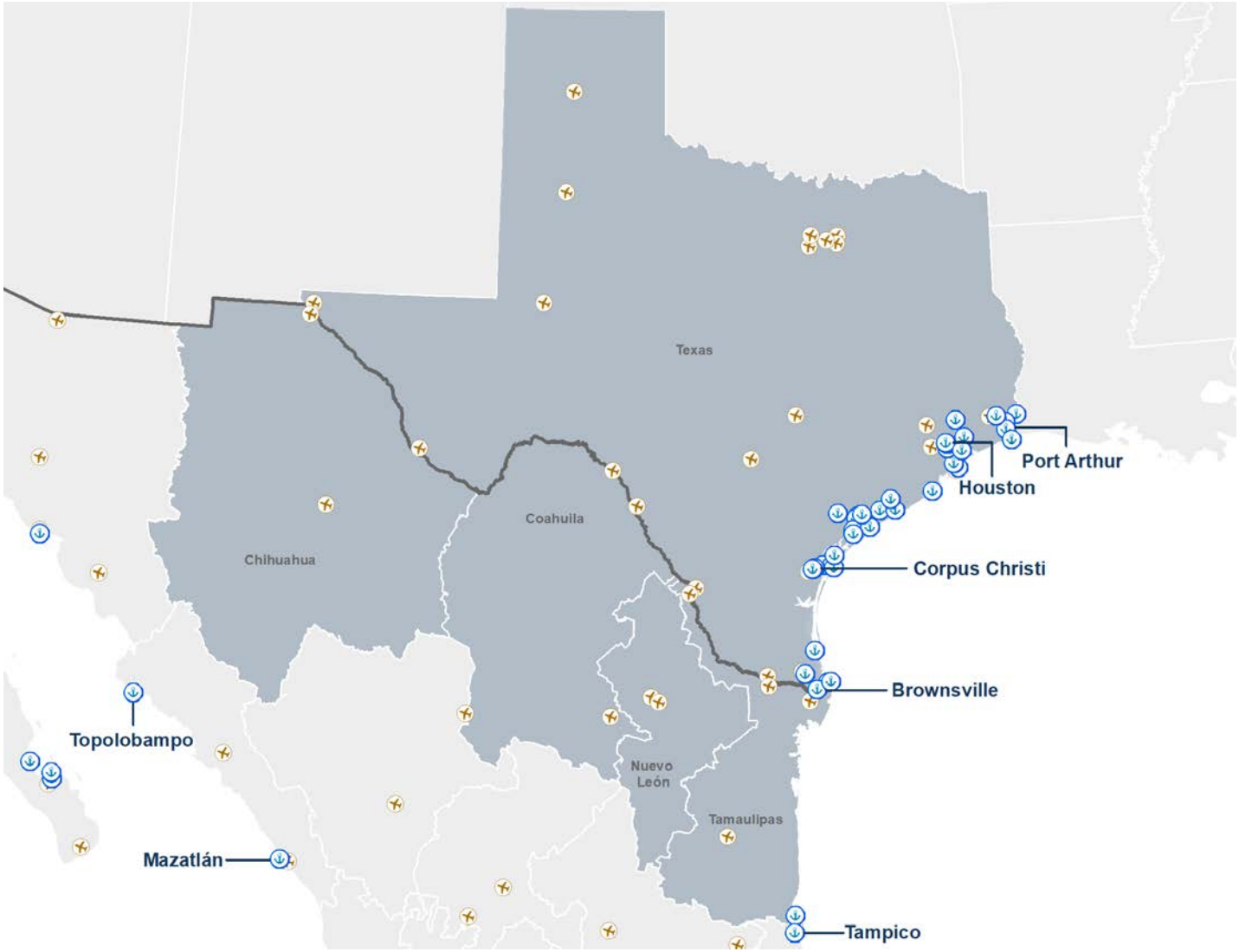
Are there any ideas for addressing those bottlenecks?

Binational Airports & Seaports Infrastructure – Preliminary Inventory

Airports and Seaports

Airport

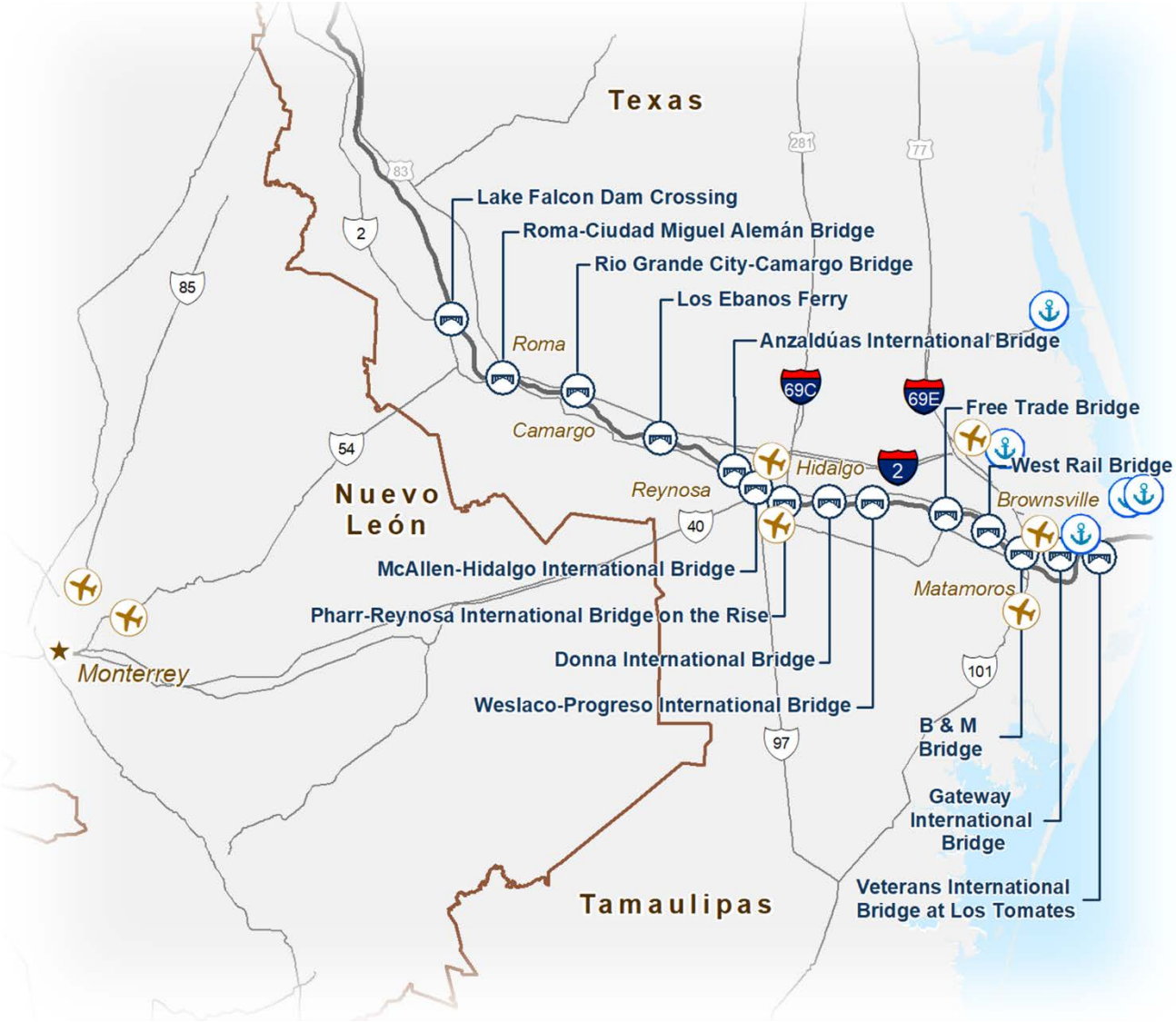
Seaport



Binational Airports & Seaports Infrastructure – Preliminary Inventory - RGV

Airports and Seaports

- Airport
- Seaport
- Border Crossing



BNRSC DISCUSSION

Is there any infrastructure missing?

BNRSC DISCUSSION

Are there bottlenecks and if so, in which facility type (POEs, supporting facilities, multimodal transportation system)?

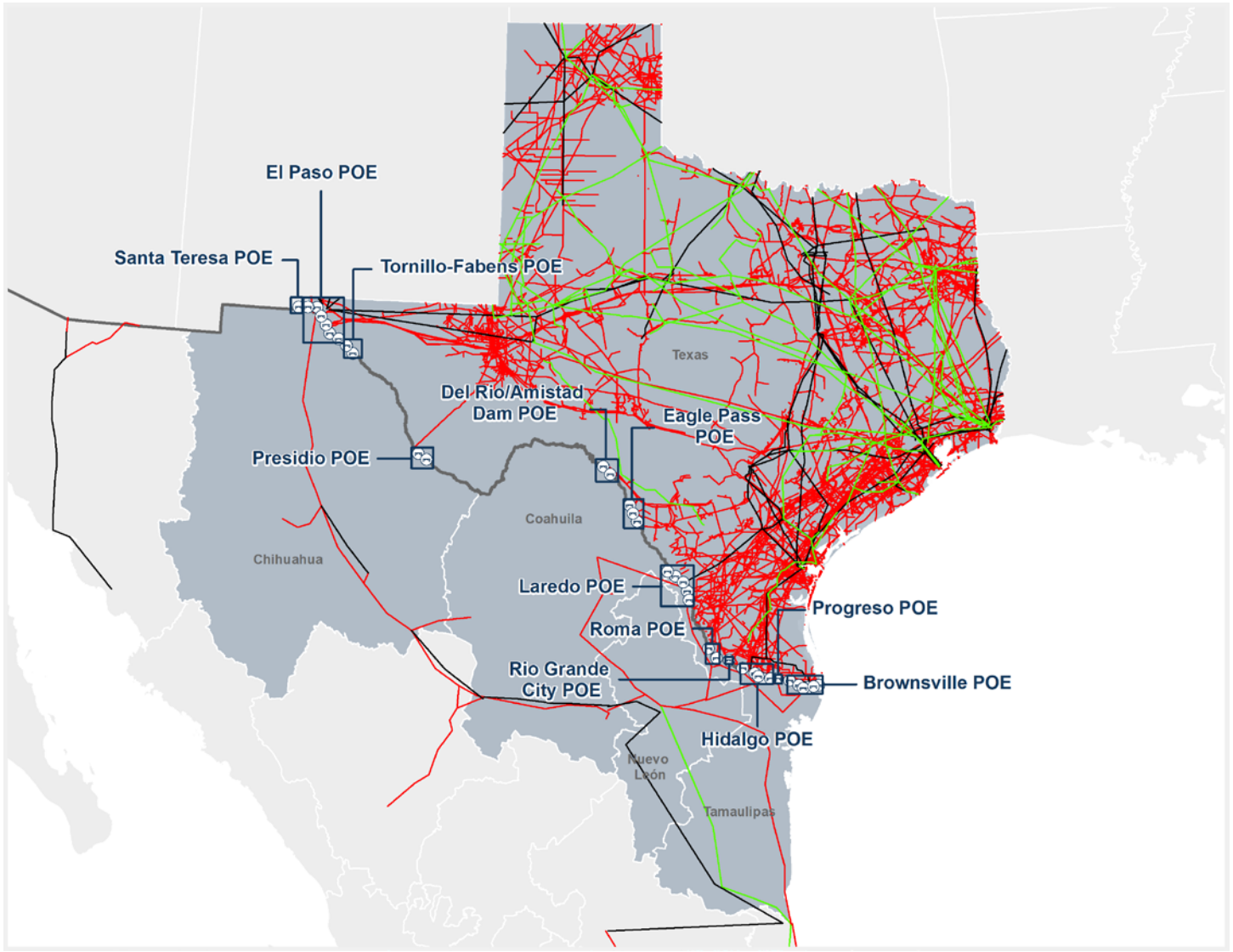
BNRSC DISCUSSION

Are there any ideas for addressing those bottlenecks?

Binational Pipeline Infrastructure – Preliminary Inventory

Pipelines

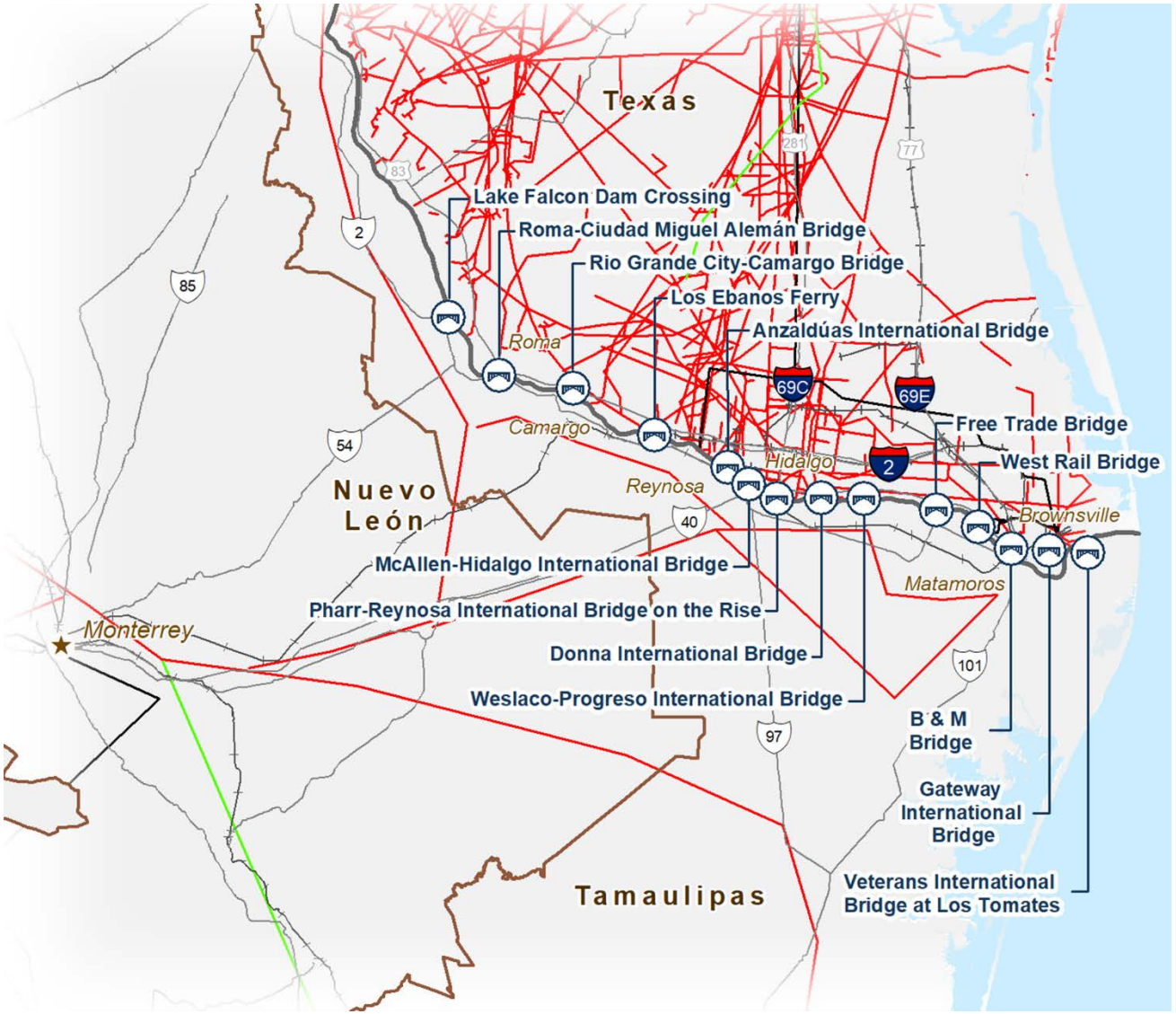
- Natural Gas & Other Gas Pipelines
- Crude Oil Pipelines
- Hazardous Liquids Pipelines
- Border Crossing



Binational Pipeline Infrastructure – Preliminary Inventory - RGV

Pipelines

- Natural Gas & Other Gas Pipelines
- Crude Oil Pipelines
- Hazardous Liquids Pipelines
- Border Crossing



BNRSC DISCUSSION

Are there any pipelines missing?

BNRSC DISCUSSION

Are there capacity constraints or intermodal connectivity issues and if so, where?

BNRSC DISCUSSION

Are there any ideas for addressing those capacity constraints or intermodal connectivity issues?

Study Tasks Three Month Look-Ahead

Data Collection	Corridor Analysis	Goals & Objectives
▪ Process results from Data Questionnaire ▪ Begin filling up gaps on Data ▪ Identify Binational Supply Chains through consultations and begin analyzing them	▪ Identify corridors that will be analyzed and their characteristics ▪ Develop preliminary corridor-level performance metrics to be used to assess the efficiency on the movement of goods and people across the border	▪ Develop objectives for the BTMP that align with the goals and the available data ▪ Develop high-level project prioritization framework

Next BTAC Meeting	Next BNRSC Meeting – September
▪ TBD	▪ Objectives – Report out ▪ Report on preliminary baseline data analytics ▪ Final discussion on issues, challenges and opportunities at the corridor level ▪ Overview of high-level prioritization framework ▪ Extended Public Outreach Plan for October

Contact Info

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