Welcome to the Binational Regional Steering Committee Meeting

- The meeting will start at 8:30 a.m. CST
- Please turn off your video and mute your phones
- We will be using the Mentimeter polling application during this meeting
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Texas-Mexico Border Transportation Master Plan

Binational Regional Steering Committee
Rio Grande Valley/Tamaulipas Region

Agenda

1. Introduction/Opening Remarks
2. Recap of Previous Meeting (July 2020)
3. Economic Importance of the Border (Chapter 7)
4. Identification and Evaluation of Strategies to Address Current and Future Needs (Chapter 8)
5. Recommendations (Chapter 10)
6. Implementation Plan (Chapter 11)
7. Next Steps and Closing Remarks

Recap of Previous BNRSC Meeting (July 2020)

- Stakeholder outreach
  - BTAC & BNRSC Round 6
- Received final input on:
  - Chapter 5: Current and Future Needs Assessment
- Reviewed:
  - Chapter 6: Future Forecasts for the Border Region
  - Chapter 8: Identification and Evaluation of Strategies to Address Current and Future Needs
- Response to input received from the committee to Chapters 6 & 8

Current and Future Needs Assessment (Chapter 5)

Chapter	Feedback	Response
5	Under the current conditions (COVID) need to plan for improvements (including resiliency) beyond the immediate border	*We are analyzing the topic of moving processes far from the border as part of the recommendations.*
	The approach to a safe and secure system is relevant, considering the infrastructure and the border operation as a whole	*Recommendations are being developed in the BTMP to address this important topic*
	There needs to be a structure that would have the professionals and the government agencies coordinating with each other and the Mexican border groups	*We are suggesting binational coordination groups as part of the recommendations*
	Plan should consider implementation of new technology	*We are suggesting this as part of the recommendations*

Future Forecasts for the Border Region (Chapter 6)

Chapter	Feedback	Response
6	How unfortunate it is to think that the wait times for trucks and cargo will triple in the future	*What our analysis tells us is that the increase in trucks will be very big in the future, which will significantly increase wait times on the border crossings. This is assuming that we do not make any improvements on the border crossings*
	Is the forecast to be produced on a yearly basis?	*We will not be doing short-term forecasts, we are only doing a long-term forecast for 2050*
	Need for solid coordination on the U.S. and Mexican side to make this plan successful.	*This is included as a recommendation*

Identification and Evaluation of Strategies to Address Current and Future Needs (Chapter 8)

Chapter	Feedback	Response
8	Restrictions to travel due to pandemic have not decreased wait times even though number of crossers has reduced significantly	*We have drafted recommendations to address resiliency and response to disruptive events*

Economic Importance of the Border

Chapter 7

Economic Importance of the Border

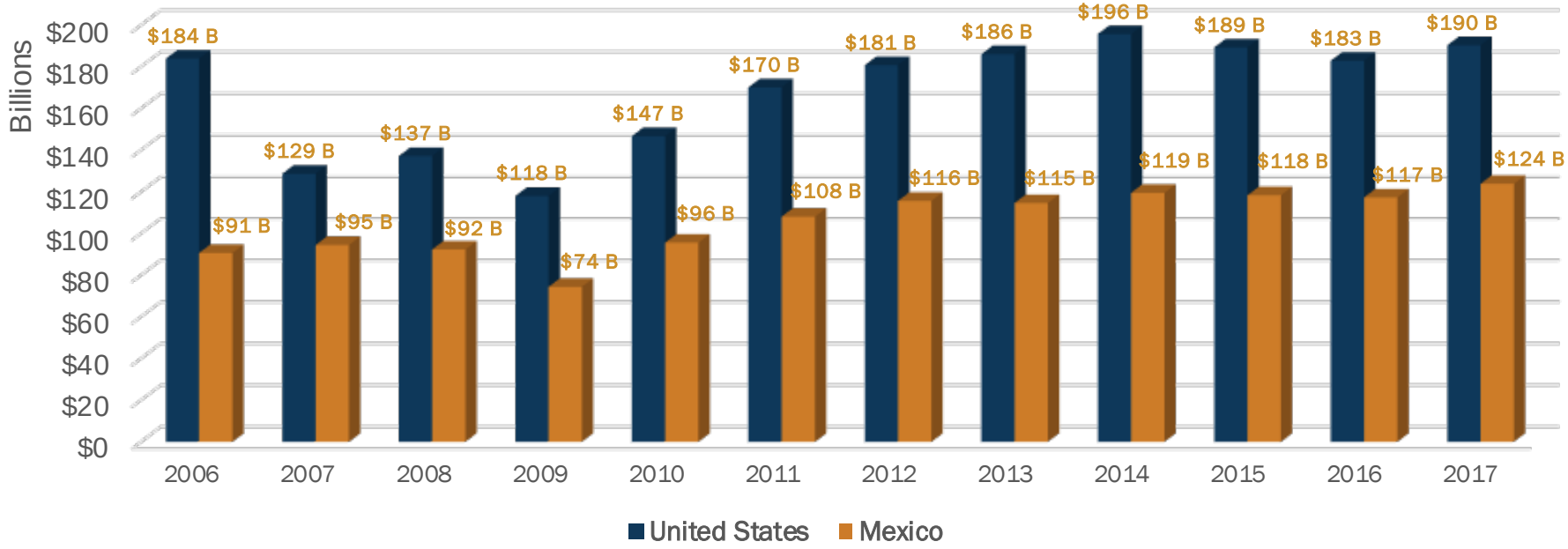
Chapter Purpose	Key Messages	Supporting Messages
▪ Demonstrate the economic importance of the border ▪ Highlight the economic impacts of border crossing delays and need for infrastructure ▪ Provide input into the implementation plan	▪ The Texas-Mexico border supports the economies of the border region in Mexico, Texas and the U.S., but the benefits of trade extend beyond the U.S.-Mexico border ▪ Current delays while crossing the border represent missed economic opportunities ▪ Future delays will grow as a result of increased demand for the movement of people and goods	▪ The Texas-Mexico border currently generates more than $325 billion annually in GDP and generates 6.2 million jobs in both countries ▪ This economic impact of the border will more than triple by 2050, generating more than $1 trillion in GDP ▪ The vast majority of the economic impact is due to the movement of goods ▪ Border crossing delays represent missed economic opportunities of more than $2.7 billion annually in 2017 for both countries and will increase to over $30 billion by 2050 if no action is taken

Economic Impacts from Movement of Goods Across the Border

- Total economic impact
- Key supply chain impact
- Binational, national, state, regional, and border crossing economic impact

Growth in GDP Impact Attributable to Movement of Goods, 2006-2017 (7.2)

- Between 2006 and 2017, the Texas-Mexico border contributed approximately $3.3 trillion dollars to the U.S. and Mexican economies

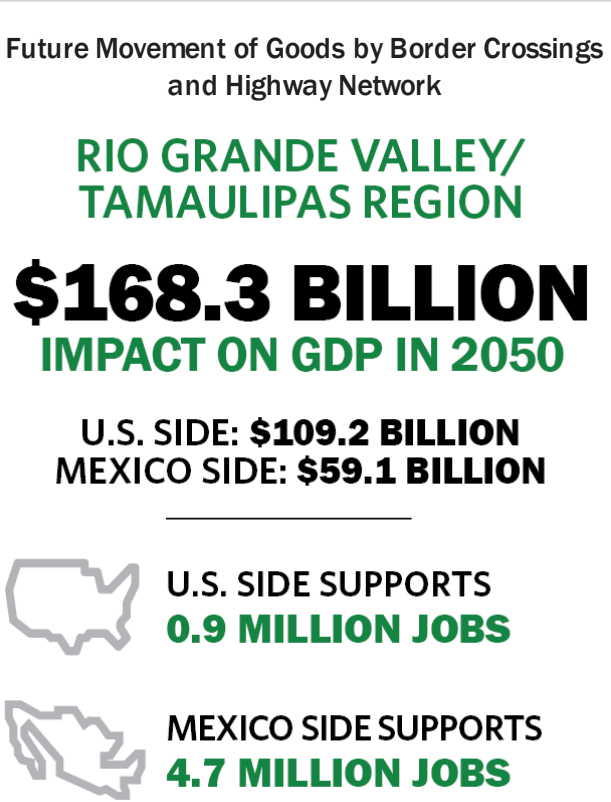


Economic Importance of Travel Through the Border: Current (2017) Goods Movement, Highway Network (7.2.1)

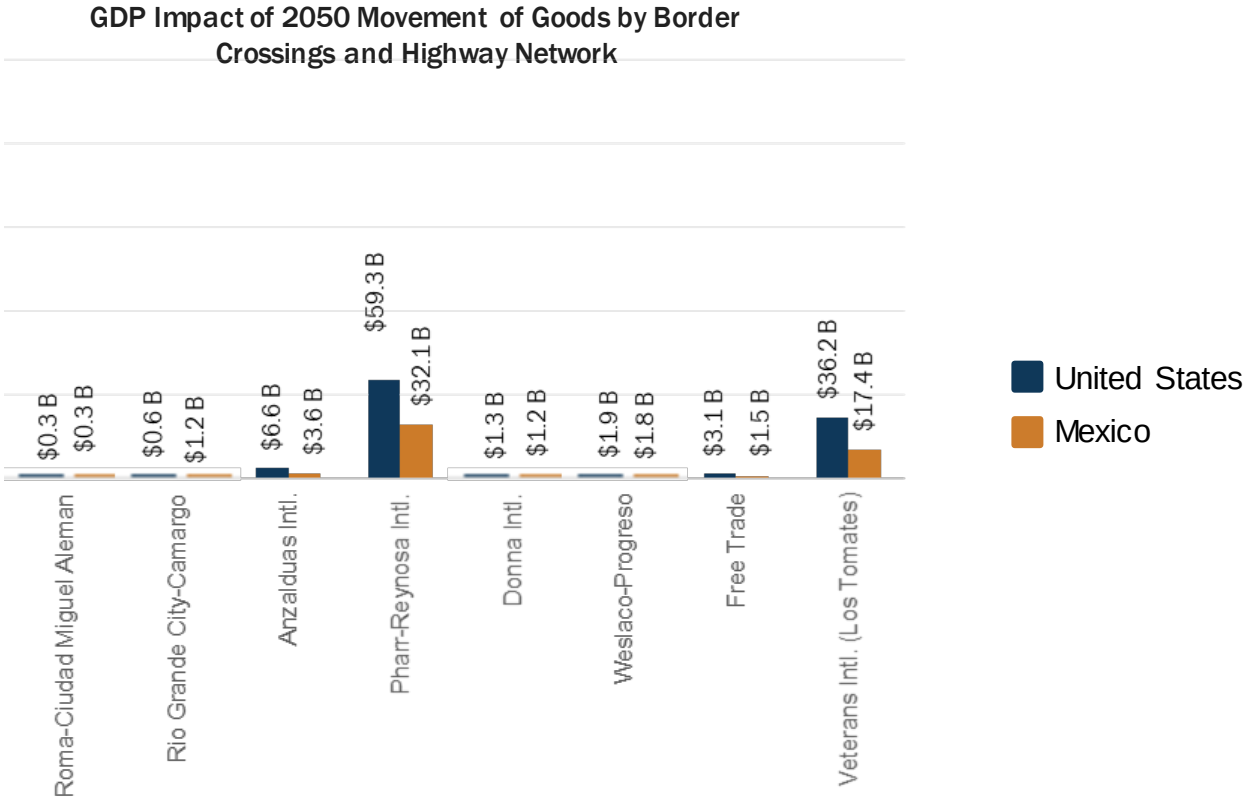
- Truck movements generate **nearly $259 billion annually in GDP**
  - $36.7 billion annual impact on GDP in the Rio Grande Valley/Tamaulipas Region
- Truck movements generate **more than 5.1 million jobs**
  - More than 1.4 million jobs in the Rio Grande Valley/Tamaulipas Region

Economic Importance of Travel Through the Border: 2050 Goods Movement, Highway Network (7.2.2)

- Truck movements will generate **nearly $925 billion in GDP in 2050**
  - $168.3 billion annual impact on GDP in 2050 in the Rio Grande Valley/Tamaulipas Region
- Truck movements will generate **more than 17 million jobs in 2050**
  - 5.6 million jobs in the Rio Grande Valley/ Tamaulipas Region



Economic Importance of Travel Through the Border: 2050 Goods Movement, Highway Network (7.2.2)



Economic Importance of Travel Through the Border: Current (2017) Goods Movement, Freight Rail (7.2.3)

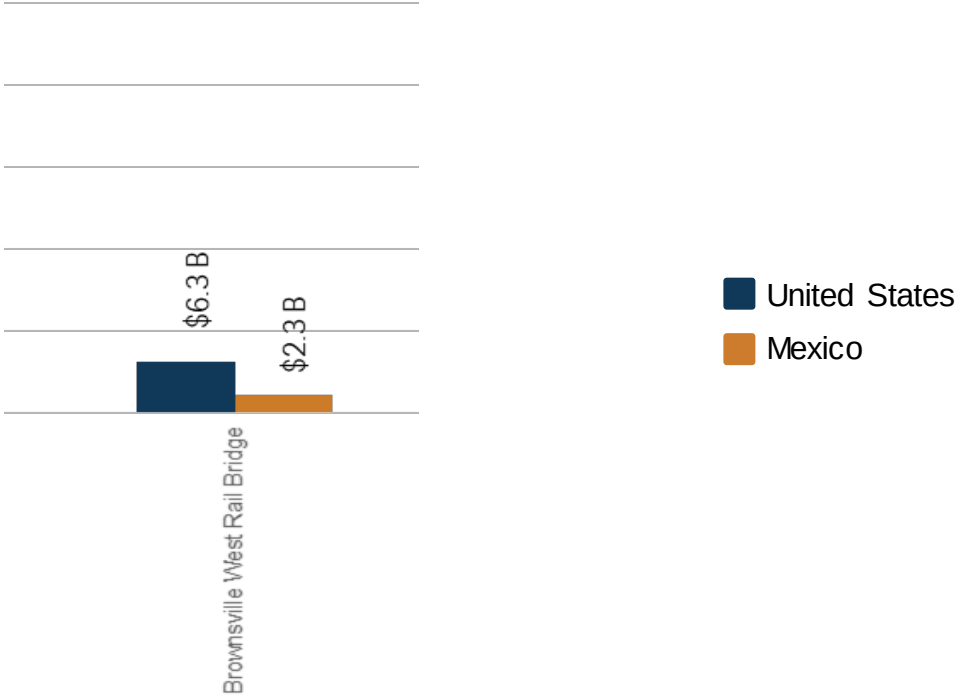
- Freight rail movements generate **more than $55 billion annually in GDP**
  - $0.7 billion annual impact on GDP in the Rio Grande Valley/Tamaulipas Region
- Freight rail movements also generate **more than 920,000 jobs**
  - 82,000 jobs in the Rio Grande Valley/Tamaulipas Region

Economic Importance of Travel Through the Border: 2050 Goods Movement, Freight Rail (7.2.4)

- Freight rail movements will generate **more than $140 billion annually in GDP in 2050**
  - $8.6 billion annual impact on GDP in 2050 in the Rio Grande Valley/Tamaulipas Region
- Freight rail movements will also generate **almost 2.3 million jobs in 2050**
  - 217,000 jobs in the Rio Grande Valley/ Tamaulipas Region

Economic Importance of Travel Through the Border: 2050 Goods Movement, Freight Rail (7.2.4)

GDP Impact of 2050 Movement of Goods by Border Crossings and Rail Network



Economic Impacts from Movement of People Across the Border

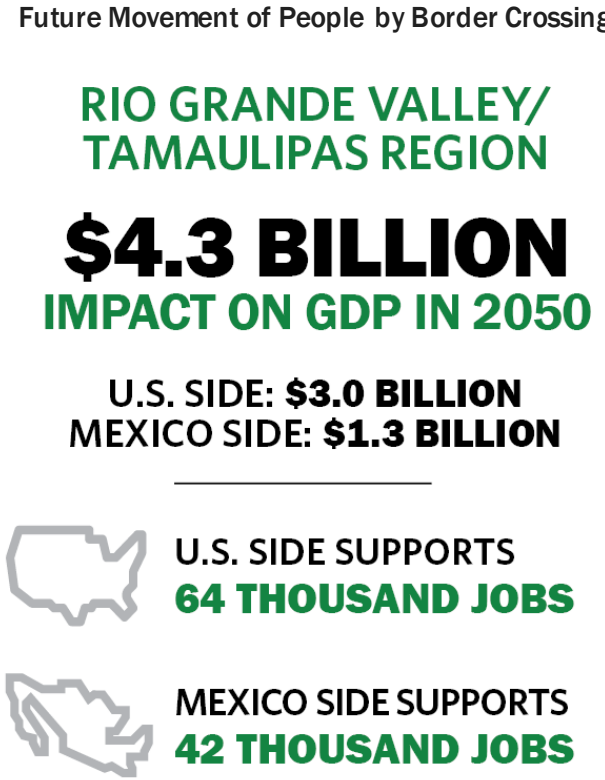
- Total economic impact
- Economic impact by mode, region, and border crossing

Economic Importance of Travel Through the Border: Current (2017) People Movement (7.3.1)

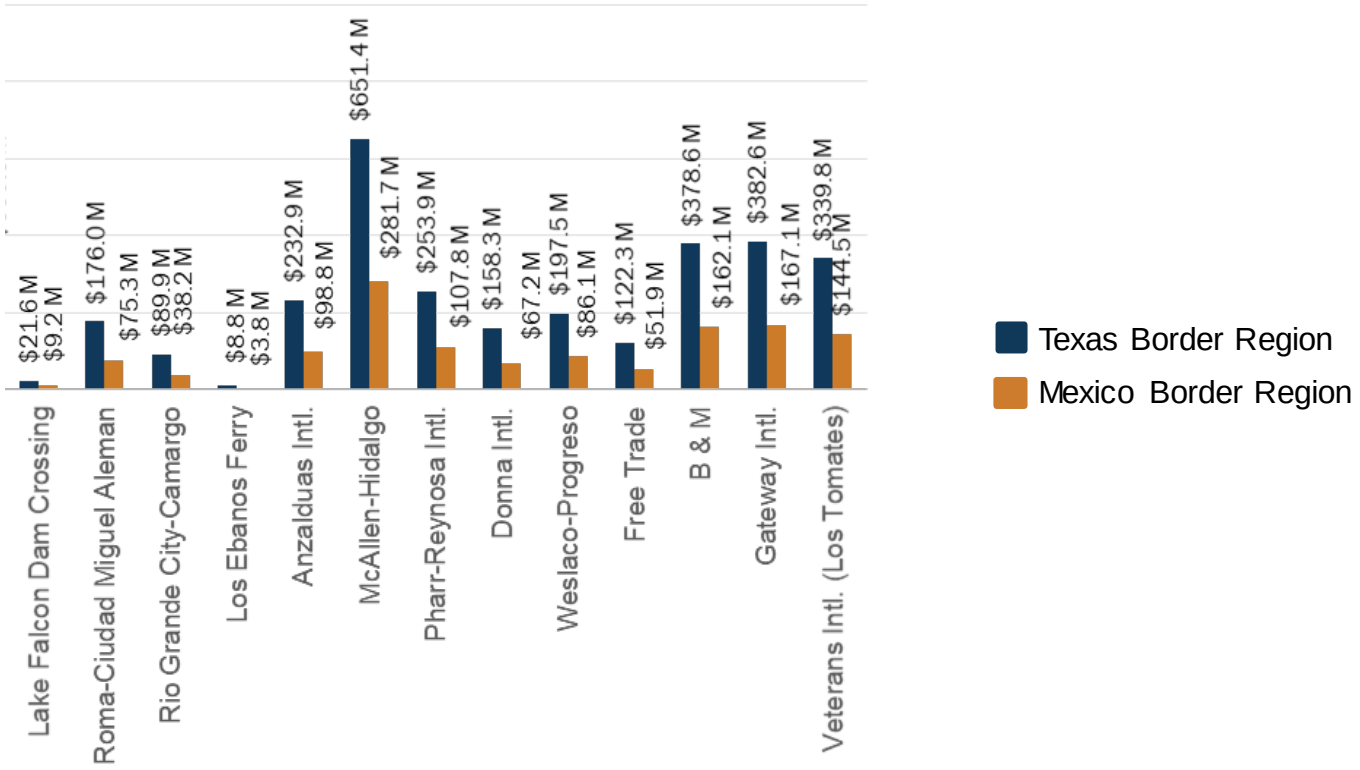
- People movements generate **more than $9 billion annually in GDP**
  - $3.1 billion annual impact on GDP in the Rio Grande Valley/Tamaulipas Region
- People movements also generate **almost 230,000 jobs**
  - 76,000 jobs in the Rio Grande Valley/ Tamaulipas Region

Economic Importance of Travel Through the Border: 2050 People Movement (7.3.2)

- People movements generate **more than $12 billion annually in GDP in 2050**
  - $4.3 billion annual impact on GDP in 2050 in the Rio Grande Valley/Tamaulipas Region
- People movements will also generate **almost 290,000 jobs in 2050**
  - 106,000 jobs in the Rio Grande Valley/ Tamaulipas Region



Economic Importance of Travel Through the Border: 2050 People Movement (7.3.2)

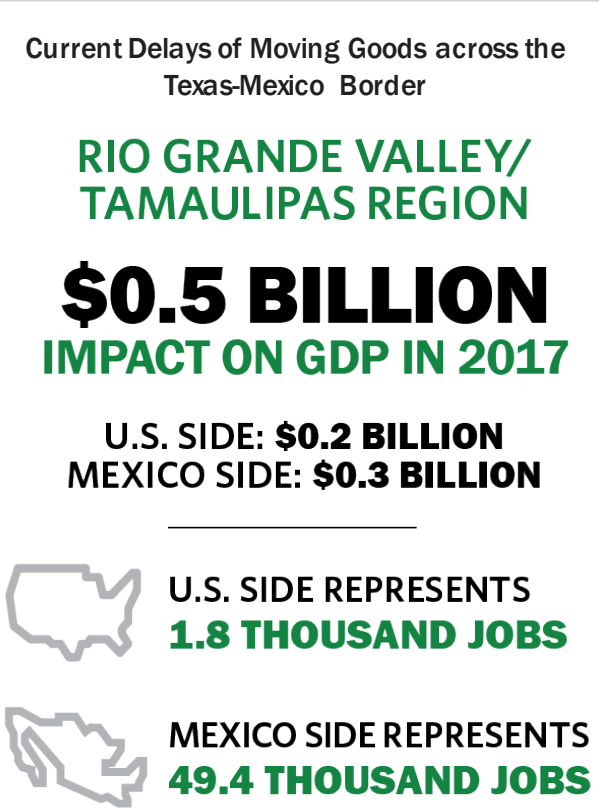


Economic Cost of Border Wait Times on Movement of Goods

- Economic impact of border wait times on movement of goods
- Binational, national, state, regional, and border crossing economic impact

Economic Impacts of Border Delays: Current (2017) Goods Movement (7.4.1)

- Current border delays **reduce U.S. GDP by $881.7 million and Mexico's GDP by $887.6 million**
  - $0.5 billion annual impact on GDP in the Rio Grande Valley/Tamaulipas Region
- The lost economic activity would have generated nearly 100,000 jobs annually, which **would have paid over $1 billion in labor income**
  - 51,200 jobs in the Rio Grande Valley/ Tamaulipas Region



Economic Impacts of Border Delays: 2050 Goods Movement (7.4.2)

- The impact of border delays on GDP will increase **more than 1600%** to $19.3 billion in the U.S. and $11.6 billion in Mexico by 2050
  - $8.7 billion annual impact on GDP in 2050 in the Rio Grande Valley/Tamaulipas Region
- Lost economic activity would have generated nearly 1.3 million jobs, which **would have paid close to $20 billion in labor income** by 2050
  - 600,000 jobs in the Rio Grande Valley/ Tamaulipas Region

Future Delays of Moving Goods across the Texas-Mexico Border

RIO GRANDE VALLEY/ TAMAULIPAS REGION

$8.7 BILLION

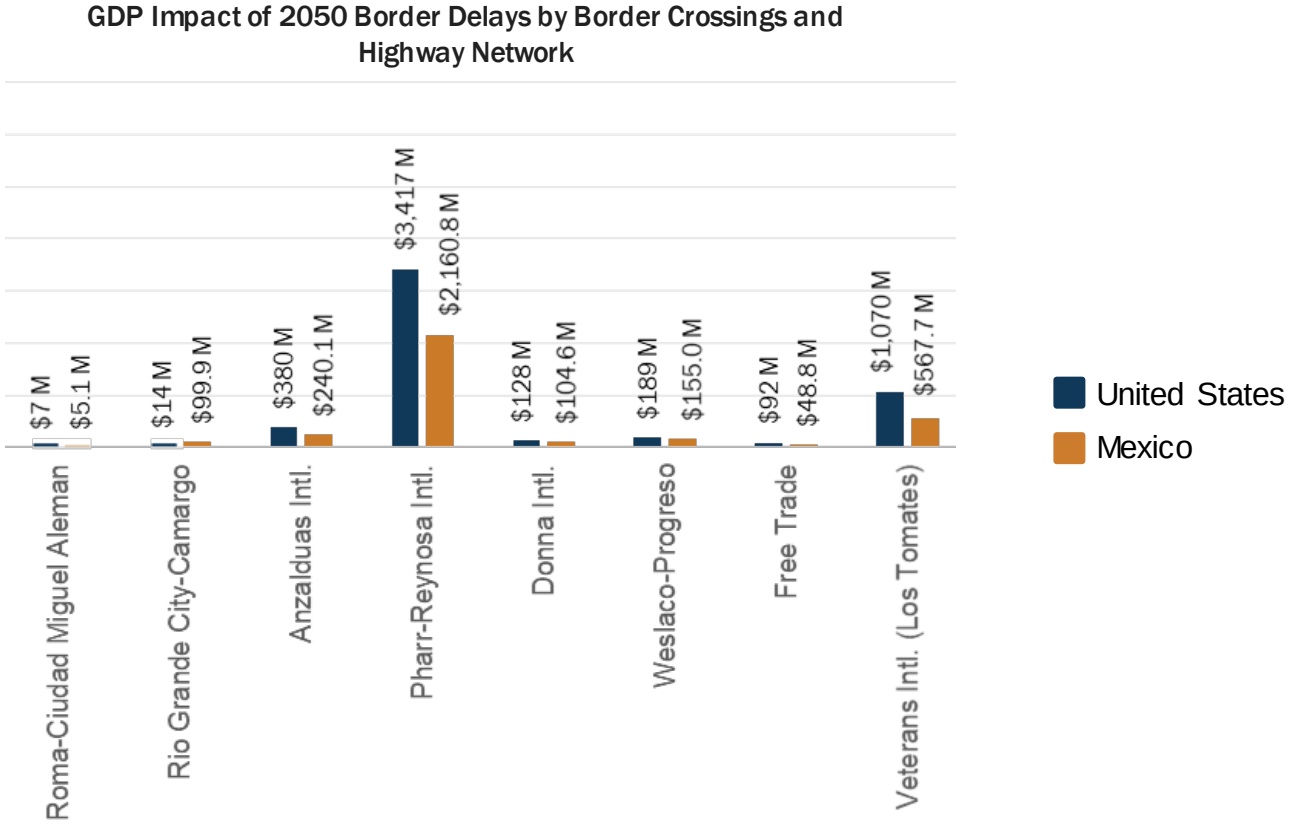
IMPACT ON GDP IN 2050

U.S. SIDE: **$5.3 BILLION**
MEXICO SIDE: **$3.4 BILLION**

U.S. SIDE REPRESENTS
49 THOUSAND JOBS

MEXICO SIDE REPRESENTS
551 THOUSAND JOBS

Economic Impacts of Border Delays: 2050 Goods Movement by Border Crossing (7.4.2)



What do the Economic Impact Results Mean for the BTMP?

- Texas-Mexico border is a strategic asset
  - **Today, it generates 6.2 million jobs and $325 billion** annually in GDP
  - By 2050, the economic impact of the border will **increase to over 20 million jobs and nearly $1.1 trillion** in GDP
- **The movement of goods is expected to nearly triple by 2050,** causing wait times at crossings to increase
- Currently, reducing delays to the movement of goods represent an **economic opportunity of approximately $1.8 billion in GDP** to the U.S. and Mexico
- If existing infrastructure and processes are not upgraded to meet future demands, increasing border delays will have even more serious impacts on the economies of the Texas-Mexico border region, Texas, the Mexican border states, and the U.S. and Mexico overall **($30.9 billion binational impact)**

BNRSC Feedback

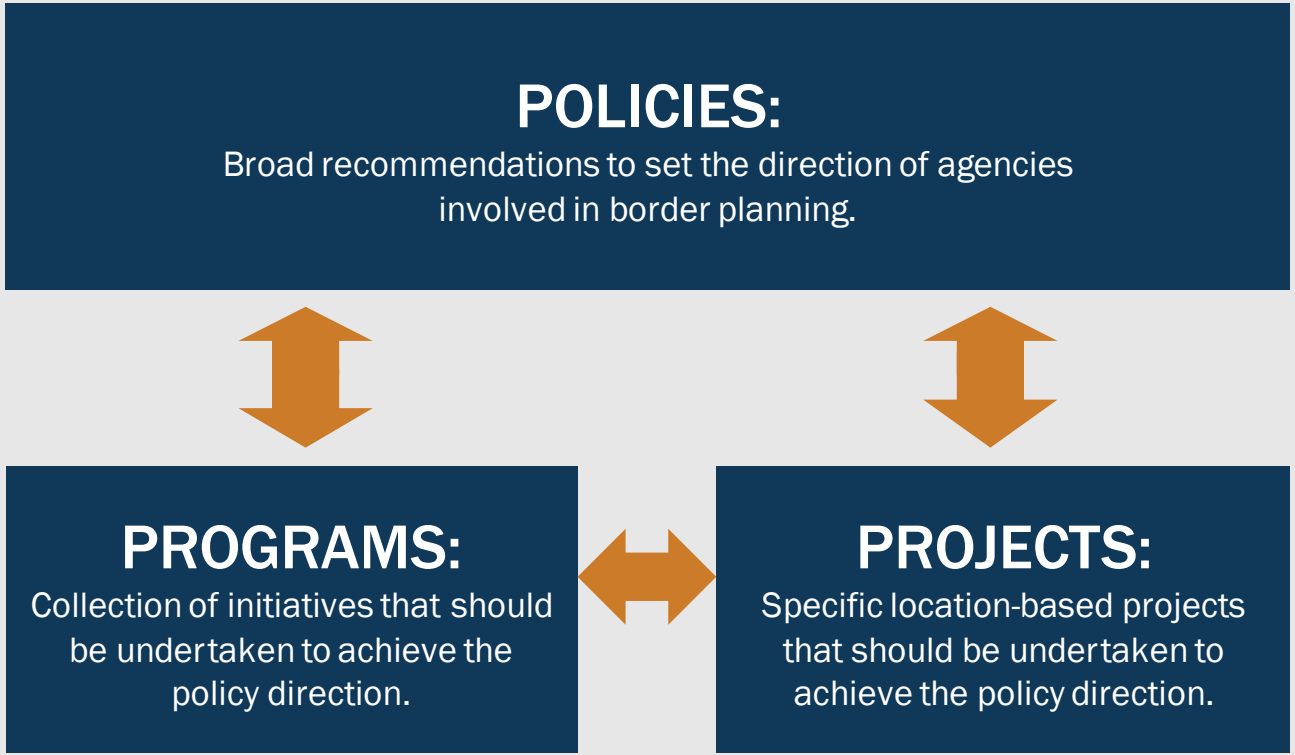
1. Do you have any comments/thoughts about the economic impacts or economic cost of delays?

Chapter 8: Identification and Evaluation of Strategies to Address Current and Future Needs

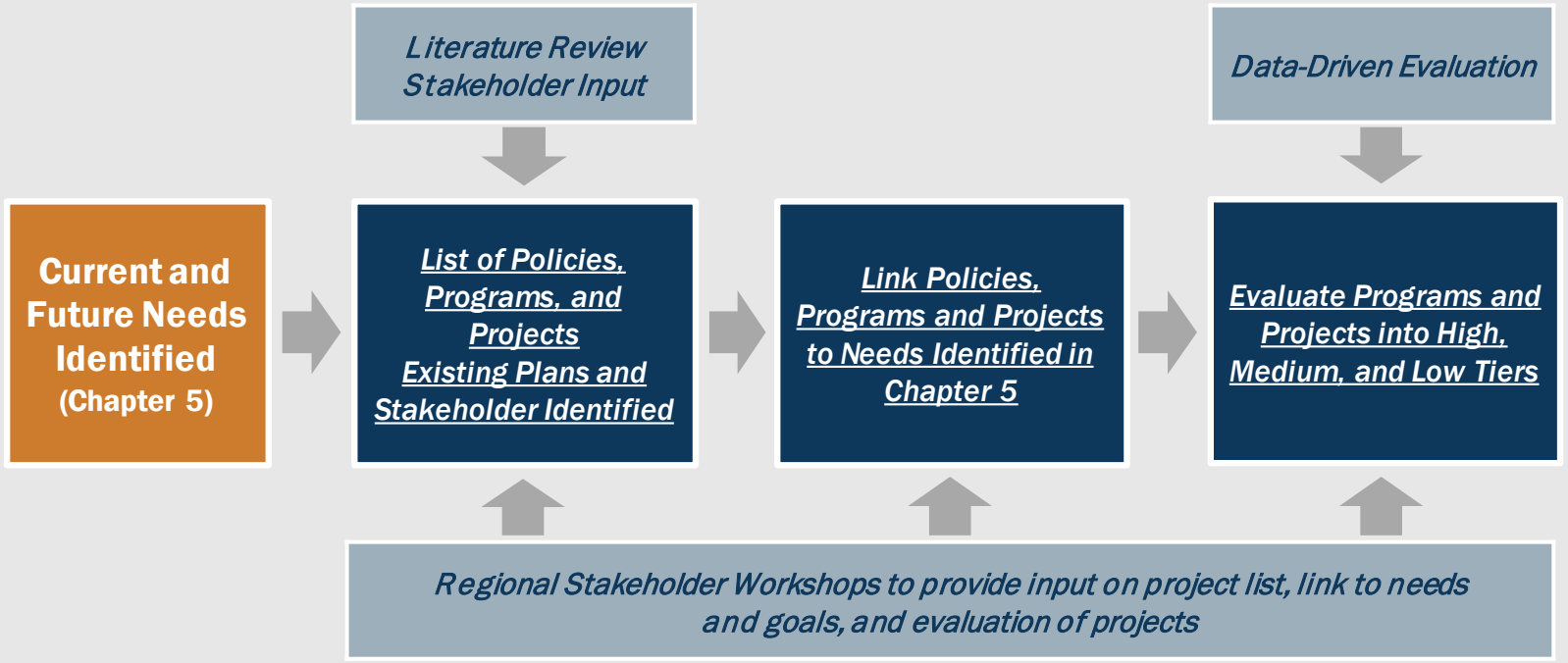
Identification and Evaluation of Strategies to Address Current and Future Needs Overview

Chapter Purpose	Key Messages	Support Messages
▪ Identify key strategies that are consistent with policies, programs, and projects to address current and future needs ▪ Organize the strategies in a way that assists stakeholders in linking them to identified needs in the present and future ▪ Develop a framework to evaluate strategies using criteria that reflects the BTMP goals	▪ There are multiple solutions to address important needs, including policies, programs, and projects ▪ Strategies for border crossings and corridors will be evaluated using similar—but separate—approaches ▪ Evaluation of strategies will be conducted using a regional approach	▪ Provide the framework and criteria for strategy evaluation tied to goals, mode, region, and movement of people and goods

Preliminary Identification of Policy, Program, and Project Strategies



Preliminary Identification of Policy, Program, and Project Strategies: Process Overview



Preliminary Identification of Policy, Program, and Project Strategies

- Developed through literature review and stakeholder participation
  - Policies and programs
    - Review of existing plans (Aduanas, CBP, etc.)
    - Input from binational regional stakeholders (BNRSC, stakeholder workshops, regional workshops)
    - Review of state-of-the-practice
    - Validation with BTAC and BNRSC members – *coming up next*
  - Projects
    - Review of existing plans including National Infrastructure Plan, CBP's 5-year capital improvement plan, UTP, STIP, other statewide plans and studies, Metropolitan Transportation Plans, mobility plans, strategic plans, modal plans, etc.
    - Input from binational regional stakeholders (BNRSC, stakeholder workshops, regional workshops) and sponsors
    - Validation with regional stakeholders through workshops – *in progress*

Preliminary Identification of Policy, Program, and Project Strategies: Align Policies, Programs, and Projects with BTMP Goals and Needs

- Conducted preliminary alignment with needs identified in Chapter 5
  - Policies and Programs – *Preliminary Identification*
    - Based on input provided by stakeholders
      - Stakeholder outreach meetings, BTAC and BNRSC comments to Chapters 2 and 5
    - Based on findings from Chapter 5 (needs)
    - Validation with BTAC and BNRSC members – *coming up next*
  - Projects – *In Progress*
    - Based on project characteristics and location
    - Validation with regional stakeholders through workshops – *in progress*

Policy and Program Area Linkage to BTMP Goals and Needs

Broad Policy Area	BTMP Goal/Issue
A Coordinated Border Transportation System	Customer Service, Stewardship
A Smart Border Transportation System for the Future	Mobility & Reliability
A Data-Driven Border Transportation System	Customer Service, Stewardship
Funding and Financing the Border Transportation System	Sustainable Funding
The Border as the Backbone of Trinational Economies	Economic Competitiveness
A Resilient Border Transportation System	Cross-Border Resiliency
Stewardship for Border Communities	Stewardship
An Operationally-Managed Border Transportation System	Mobility & Reliability
An Expanding Border Transportation System	Mobility & Reliability
A Safe and Secure Border Transportation System	Safety & Security
Asset Protection for the Border Transportation System	Asset Preservation
A Connected Border Transportation System	Multimodal Connectivity
A Multimodal Border Transportation System (People and Goods)	Multimodal Connectivity
Public Awareness for the Border Transportation System	Customer Service

BNRSC Feedback

1. Are there any additional broad policy categories we should consider?
2. Do you have any comments regarding the alignment of broad policy categories with BTMP goals?

Preliminary Identification Framework: Candidate Policy, Program, Project List

- Candidate Policies
  - Refinement of broad policy areas into policy statements
- Candidate Programs
  - Support the goals of the policies
  - Developed through alignment of implementable actions with policies
- Candidate Projects
  - Projects broken down into two categories
    - Included in planning documents – In-Plan Projects
    - Not included in planning documents – Off-Plan Projects
  - Projects identified by BTMP region
  - Project lists and project characteristics being vetted through workshops with regional stakeholders

Preliminary Identification Framework: Example of List of Candidate Projects

- Information on project characteristics, source, and needs addressed

CSJ Number	Project Name	Project Description	Project Location	Project Schedule	Project Cost	Project Sponsor	Project Classification	2050 Funded or Unfunded	Source (Plan, Study) Document	Source Plan Title	Source Plan Link	Represented in Texas Project Tracker	Need Addressed
0528-01-112	SH 107 (Conway)	Construct 6 lane divided urban	FM 676 to FM 681/FM 2993.	2022	$15,000,000	Alton / HC 3	On System #1 - Interstate, U.S. Highway, State Highway Project	Funded	2019 Border District Trade Transportation Report	2019 Border District Trade Transportation Report	http://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/border-district-trade-transportation-report-2019.pdf	TxDOT Project Tracker	
0921-02-303	Anzalduas Int'l Port of Entry	Construction of Southbound Inspection Station	Anzalduas Int'l Port of Entry	2022	$7,241,012	Analduas Int'l Bridge Board	Border Crossing Project	Funded	2019 Border District Trade Transportation Report	2019 Border District Trade Transportation Report	http://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/border-district-trade-transportation-report-2019.pdf	Anzalduas Bridge Board Website / Agendas / TxDOT Project Tracker	
0921-02-379	Anzalduas Int'l Port of Entry (NB)	Inbound commercial inspection pre-primary inspection pre-cleared cargo	Anzalduas Land Port of Entry NB Empties	2021	$4,668,185	Analduas Int'l Bridge Board	Border Crossing Project	Unfunded	RGVMPO 2015-2040 MTP	RGVMPO 2015-2040 MTP	https://www.rgvmpo.org/docs/2015_2040_mtp.htm	TxDOT Project Tracker	
-	Anzalduas Int'l POE	Construction of two additional northbound	@Anzalduas Int'l POE	2050+	$5,300,000	Anzalduas Int'l Bridge	Border Crossing Project	Unfunded	RGVMPO 2015-2040 MTP	RGVMPO 2015-2040 MTP	https://www.rgvmpo.org/docs/2015_2040_mtp.htm	#N/A	

Preliminary Evaluation Framework: Program and Project

- Result of evaluation process will be in three tiers
  - High priority
  - Medium priority
  - Low priority
- Policies provide strategic direction and will not be evaluated into high, medium, or low categories

Program Evaluation Process

Evaluation

- Driven by stakeholder input
- Survey to assign high, medium, low categories to each identified program

Project Evaluation Process

Preliminary Evaluation

- Data-driven evaluation
- Quantitative and qualitative measures linked to BTMP goals and needs
- Using weights for BTMP goals

Validation

- Driven by stakeholder input
- Validation of results from preliminary evaluation through workshops with regional stakeholders

Preliminary Evaluation Framework: Quantitative and Qualitative Measures Linked to Goals and Needs – Revised

	BTMP Goals	Example Measures for Border Crossings	Example Measures for Corridors
Quantitative	Mobility and Reliability	Border crossing utilization rates Border wait times	Road congestion (car-space) Hours of delay (top congested segments)
	Safety and Security	Safety hotspots (crash rates) around border crossing	Safety hotspots (crash rates)
	Asset Preservation	Border crossing and facility ratings	Pavement condition and bridge condition
Qualitative	Economic Competitiveness	Economic impact of border crossing movements of people and goods	Economic impact of corridor movements of people and goods
	Multimodal Connectivity	Proximity to transfer facilities Multimodal opportunities	Network connectivity to transfer facilities Multimodal opportunities
	Cross-Border Resiliency	Types and risks of disruptive events Bridge redundancy	Types and risks of disruptive events Network redundancy Performance of hurricane evacuation routes
	Sustainable Funding	Funding availability	Funding availability
	Stewardship	Community enhancement (congestion, safety, noise, air quality, hazardous material, e-waste)	Community enhancement (congestion, safety, noise, air quality, hazardous material, e-waste)
	Customer Service	Stakeholder and public outreach, information, and engagement activities	Stakeholder and public outreach, information, and engagement activities

BNRSC Feedback

1. Live Poll on Weights for BTMP Goals

Project Identification: Summary of Workshops with Regional Stakeholders

- Held one workshop in each region with regional stakeholders
  - 7/27: Laredo/Coahuila/Nuevo León/Tamaulipas
  - 7/28: El Paso/Santa Teresa/Chihuahua
  - 7/29: Rio Grande Valley/Tamaulipas
- Presented summary of regional needs
- Presented preliminary list of in-plan and off-plan projects
- Requested input on:
  - Validation of regional needs
  - Validation of information collected on projects
  - Identification of additional projects
  - Identification of needs addressed by each project

BNRSC Feedback

1. Are there any comments or questions to the refined approach to identify and evaluate strategies?

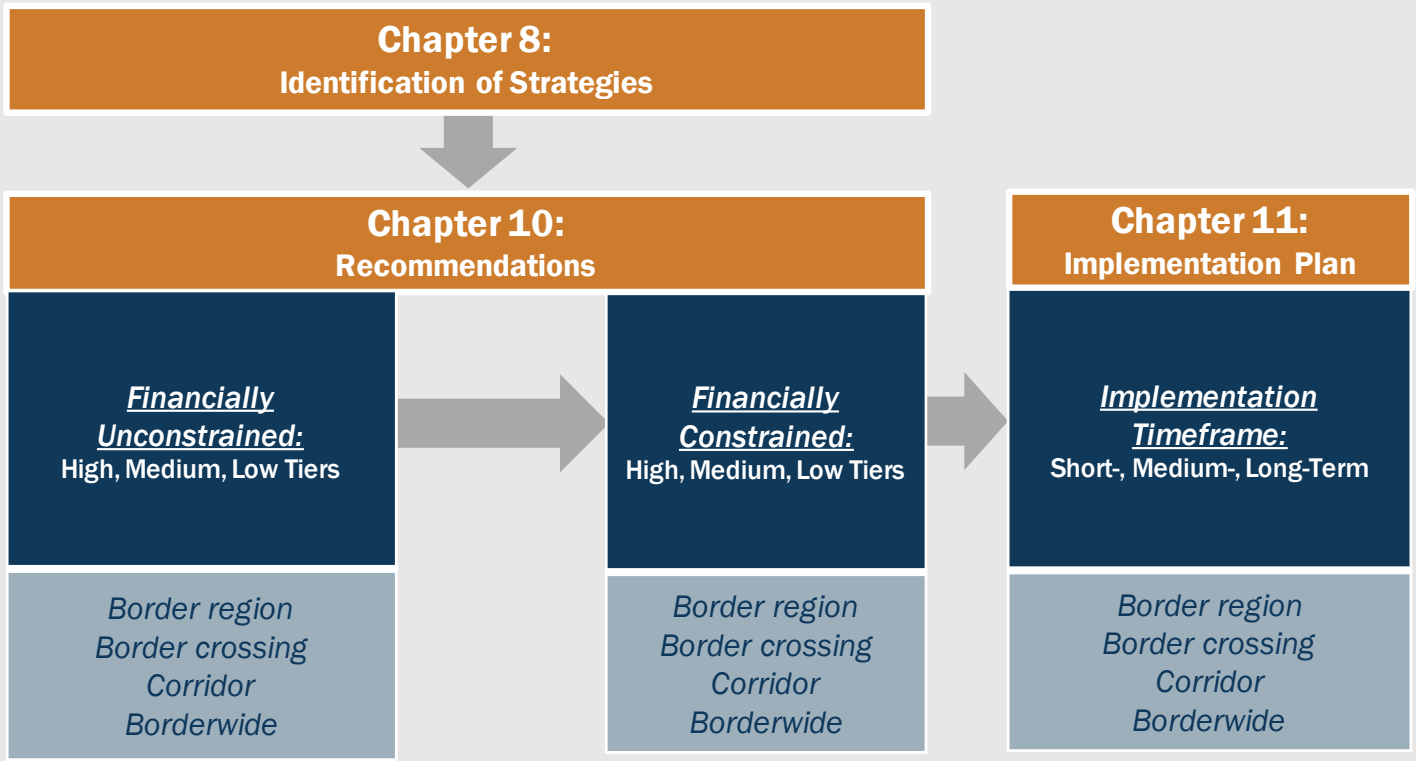
Chapter 10: Recommendations

Approach and Preliminary Draft

Recommendations Overview

Chapter Purpose	Key Messages	Support Messages
▪ Characterize financially-constrained scenario ▪ Identify recommendations for financially-constrained scenario ▪ Identify implementation timeframe for recommendations under financially-constrained scenario	▪ Financially-constrained scenario dictated by existing financial commitment from private and public sector stakeholders ▪ Recommendations will maintain the high, medium or low tier assigned during the financially-unconstrained scenario ▪ Implementation timeframe for recommendations defined in consultation with stakeholders	▪ Provide the list of policies and programs recommended ▪ Provide the framework for defining the financially-constrained scenario ▪ Present preliminary framework for identification of recommendations under financially-constrained scenario ▪ Present preliminary approach for identification of timeframe of recommendations under financially-constrained scenario

Preliminary Approach to Develop Recommendations



BNRSC Feedback

1. Are there any comments to the overview of the approach to develop recommendations?

Preliminary Policy Recommendations

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive strategy for robust, coordinated, and efficient border management and investments. Objectives:

- Reduce border wait times and delays, roadway congestion, and blocked at-grade rail crossings.
- Maximize use of existing border crossings by redistributing traffic demand among underutilized crossings where plausible.
- Standardize systems and streamline binational border procedures to better link border crossing processes to the corridors on either side, such as for disconnected and manual toll collection methods.
- Expedite cross-border trips to create a more mobile and reliable cross-border transportation system.
- Enhance demand management to improve the uneven distribution of cross-border movements and across passenger rand commercial uses.
- Reduce congestion along connecting corridors, roadways, and segments that impede the efficient cross-border movement of people and goods.
- Promote joint understanding and analysis of the border travel process to more effectively address border transportation issues.

Mobility and Reliability

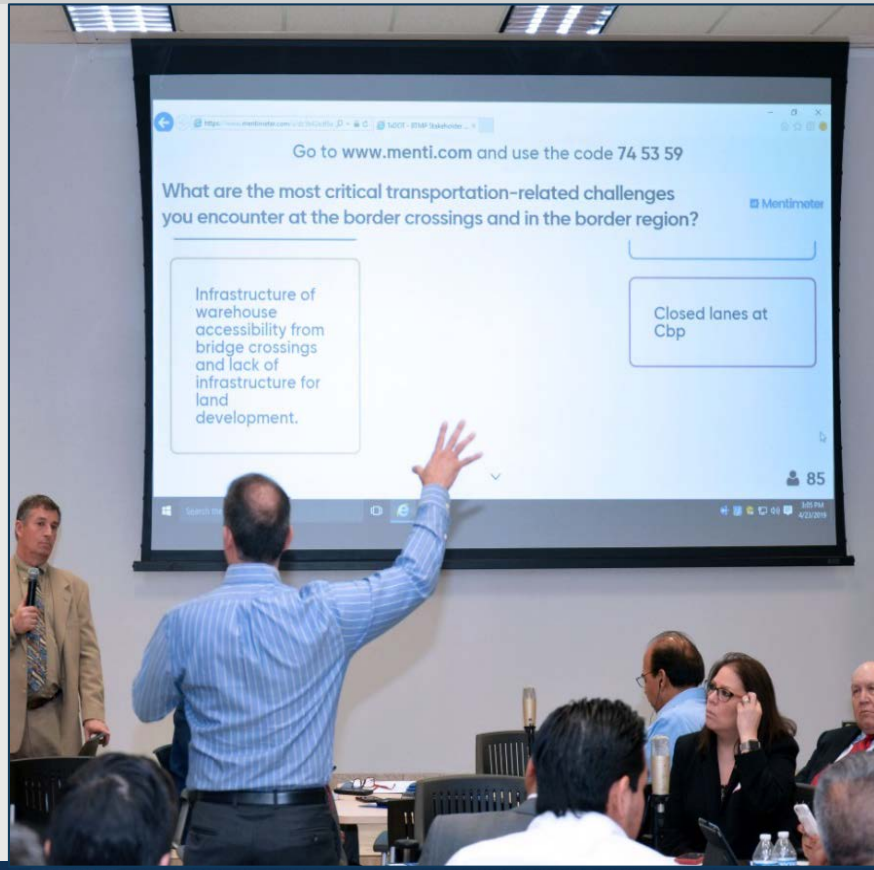
U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive and binational mechanism for enhancing system capacity of existing border crossings, designated corridors, and assessing the feasibility of new infrastructure. Objectives:

- Improve border crossing throughput and sufficiency of physical capacity to accommodate growing traffic volumes over time.
- Update designated corridors and regional roadways to meet current design standards and to accommodate projected travel demand over time.
- Foster a shared understanding of border crossing and corridor system capacity conditions and needs.
- Enhance the mobility and reliability of cross-border trips by improving demand management across the border, reducing cross-border trip times, and enhancing multimodal connectivity.
- Promote joint evaluations and planning processes for system capacity improvements at border crossings, such as border crossing expansions or new border crossings.
- Promote joint evaluations and planning processes for future/planned border crossing and multimodal corridors.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should improve binational coordination, collaboration, and cooperation. Objectives:

- Create partnerships to enhance the development and implementation of effective policies, programs, and projects.
- Enhance participation of binational federal, state, regional, local, and private partners to address multifaceted border planning, management, and operations.
- Improve planning, investment, management, and operation of border crossings and multimodal transportation network.
- Harmonize priorities and solutions among federal, state, regional, local, and private stakeholders both across the Texas border and within each of the three regions.
- Foster standardization of regulations and practices across the border to facilitate the efficient movement of people and goods across the border.



Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should invest, integrate, and deploy technologies and innovation to improve cross border movement of people and goods. Objectives:

- Reduce border wait times, delays, and roadway congestion.
- Enhance the mobility and reliability of cross-border trips by utilizing data and technologies to inform current conditions and needs.
- Prepare the binational and multimodal transportation system and border crossings to integrate and deploy current and future technological advances, including shared mobility, automated vehicles, alternative fuels, advanced border screening technology, and precision railroading.
- Promote smart border solutions to include capacity and bandwidth for yet-unknown technologies, vehicles, and cargo types.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive binational performance monitoring and evaluation system for the border transportation system. Objectives:

- Foster a comprehensive, shared understanding of the conditions and needs of border crossings and the binational multimodal transportation system to support decision-making.
- Allow for comprehensive systemic monitoring and evaluation of the binational and multimodal border transportation system over time, such as through total crossing time data, border crossing volumes data by mode, and other data.
- Establish a joint institutional framework for monitoring, evaluating, and improving the border transportation system.

Economic Competitiveness

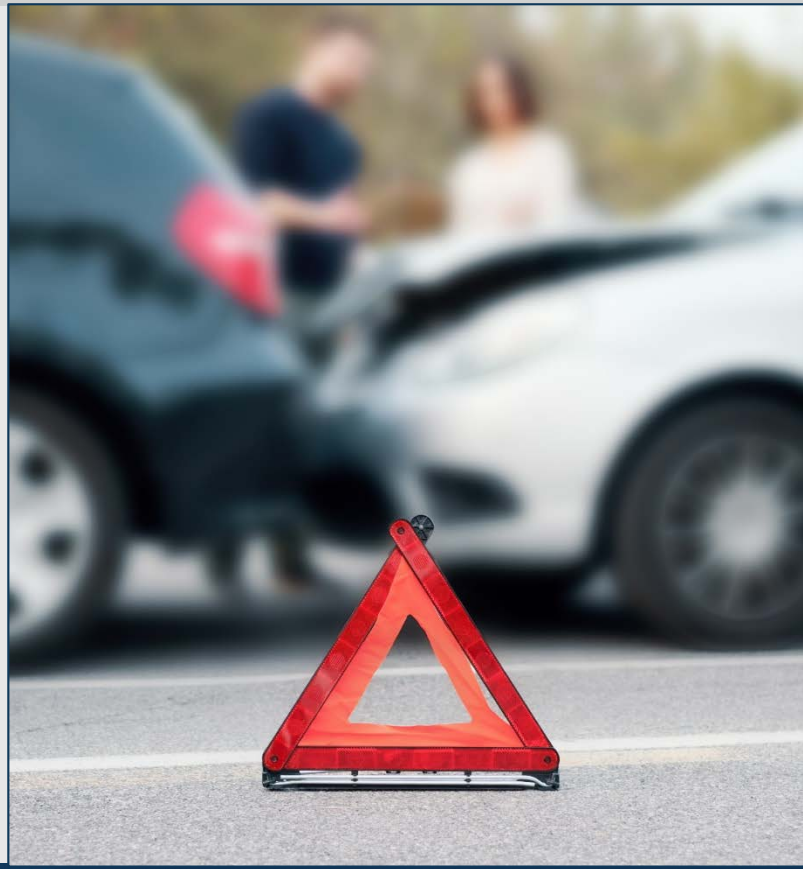
U.S. and Mexico federal, state, regional, local, and private stakeholders should harmonize binational policy coordination to support current and future trinational economic competitiveness—U.S., Mexico, and Canada. Objectives:

- Enhance the mobility and reliability of cross-border trips by improving demand management across the border and reducing cross-border trip times.
- Improve multimodal capacity for the cross-border movement of people and goods.
- Foster a comprehensive and shared understanding of the needs and challenges that impede the safe, reliable, and efficient movement of local, regional, state, national, and trinational commerce and people movements.
- Ensure sufficient funding for infrastructure investments to improve efficiencies of cross-border trip routes both now and in the future.

Safety and Security

U.S. and Mexico federal, state, regional, local, and private stakeholders should identify and implement strategies to improve safety and security in and near border crossings and along designated corridors. Objectives:

- Reduce risks of crashes, fatalities, and injuries associated with movements of people and goods on the border transportation system.
- Prioritize elimination of safety hotspots where concentrations of crashes occur, especially in urban areas and near border crossings.
- Expand educational and training programs to improve safety on the border transportation system.
- Mitigate highway/rail conflicts through enhanced coordination among binational, federal, state, regional, local, and rail partners.
- Ensure safe movement of hazardous materials and oversize/overweight loads across border crossings and on the designated corridors, especially within local population centers.
- Incorporate safety and security factors into transportation infrastructure design and investment decisions.



Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders should ensure connectivity between border crossings, between the two countries, multimodal transfer locations, for first- and last-mile connections from border crossings to designated corridors and border communities, and throughout the border transportation system network. Objectives:

- Improve first- and last-mile connectivity for seamless movements of people and goods.
- Enhance the border transportation system to strengthen border region north-south and east-west corridor connectivity.
- Ensure efficient access from border crossings to bike paths and sidewalks, bus transit systems, airports, rail terminals, and seaports.
- Minimize the potential impact of unforeseen events by providing enhanced network redundancy for efficient border region trips.
- Support the future growth of the trinational economy, while meeting the demands of higher forecasted movements of people and goods through enhanced network connectivity.

Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders coordinate enhancements for people mode choices on the border transportation system. Objectives:

- Ensure border crossings are integrated into transit networks.
- Promote competitiveness of multimodal transportation options in the border region.
- Reduce highway congestion by promoting alternative people modal choices.
- Enhance sidewalk connectivity and gaps between the bike and pedestrian network and borderwide major destinations.
- Improve frequency of transit service and improve bus delays, wait times, and connections with bike/pedestrian crossings.

Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders should coordinate enhancements for freight mode choices for the border transportation system. Objectives:

- Ensure border crossings are integrated into multimodal networks.
- Promote competitiveness of multimodal transportation options in the border region.
- Reduce highway congestion by promoting alternative freight modal choices.
- Upgrade truck networks to higher standards to meet demands of increasing truck-seaport movements.
- Improve connectivity between crossings and border region airports by coordinating with local partners.
- Reduce rail bottlenecks through policies allowing unified rail inspections, improved screening technology, rail crew changes, railcar inspection standards, and others.

Cross-Border Resiliency

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop comprehensive binational policy framework for a resilient border. Objectives:

- Develop systemic processes, procedures, and investments to address border transportation system needs during unforeseen events.
- Enhance routes and system redundancy for the safe, efficient, and reliable movement of people and goods on the binational and multimodal border transportation system.
- Ensure continuity of border operations and processes to withstand unforeseen events, such as weather, public health crises, migration, economic downturns, and political events.
- Minimize the potential impact of unforeseen events.
- Ensure the safety and security of border populations and users in the event of a potential disruption, including the safe and expeditious evacuation of people from a particular area.
- Ensure sufficient funding for resiliency planning and emergency operations to prepare, respond to, and recover from unforeseen disruptions.

Sustainable Funding

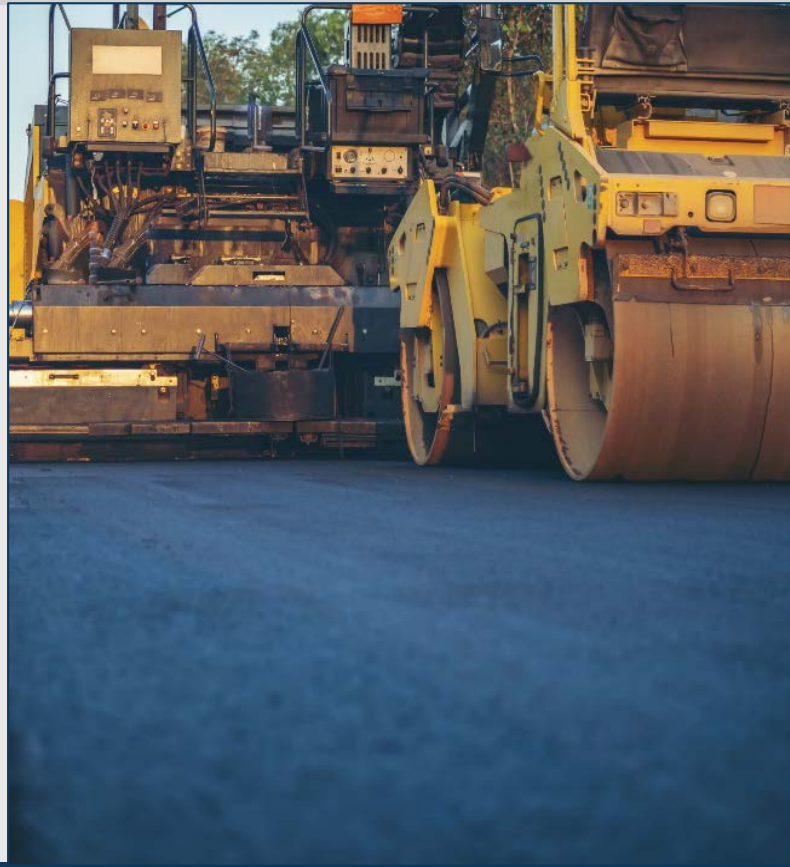
U.S. and Mexico federal, state, regional, local, and private stakeholders should develop mechanisms to enhance and dedicate border transportation system funding and financing. Objectives:

- Promote direction and prioritization of federal, state, and local investment in binational transportation infrastructure to enhance the movement of people and goods.
- Leverage and expand existing funding programs to integrate and support specific cross-border issues and needs.
- Support the use of innovative funding and financing methods, such as Donation Acceptance Program, public-private partnerships, enhanced border crossing tolling programs, tax credits and incentives, and others.
- Promote investment that is responsive to the changing needs of binational transportation users and communities.
- Ensure border infrastructure funding keeps pace with the cross-border movement of people and goods by integrating cross-border issues and needs into funding prioritization processes.

Asset Preservation

U.S. and Mexico federal, state, regional, local, and private stakeholders, along with other asset owners in the border region, should develop binational asset management frameworks to protect assets on the border transportation system. Objectives:

- Address aging, obsolete, and poor condition infrastructure on the binational and multimodal border transportation system.
- Ensure border crossings, facilities, pavements, and bridges are in a state of good repair over time.
- Obtain regularly-updated information on asset conditions and provide mechanisms for sharing best practices on systemic maintenance and repairs.
- Protect the investments border planning agencies have already made on the border transportation system.
- Maintain useful life of assets, eliminate maintenance backlogs, and improve asset conditions and ratings.
- Address under-investments that lead to increased congestion, longer trip times, higher costs, and safety issues.
- Enhance partnerships among federal, state, local, and private partners in the U.S. and Mexico.



Customer Service

U.S. and Mexico federal, state, regional, local, and private stakeholders should coordinate binational stakeholder and public outreach, information, and engagement activities.

Objectives:

- Improve the provision and distribution of information to users about the border.
- Allow active soliciting and incorporation of feedback in border transportation planning processes.
- Educate local jurisdictions, businesses, communities, and decision-makers on issues, needs, roles, and responsibilities of different agencies facilitating binational trade and travel on the border and multimodal transportation network.
- Create partnerships with public and private partners to develop and implement strategies over time.
- Provide regular forums for communicating border transportation achievements and needs to decision makers.
- Ensure consistency in the messaging about the importance of the border to the Texas, U.S., and Mexican economies, and the personal stories of those who live in and love the border region.

Customer Service

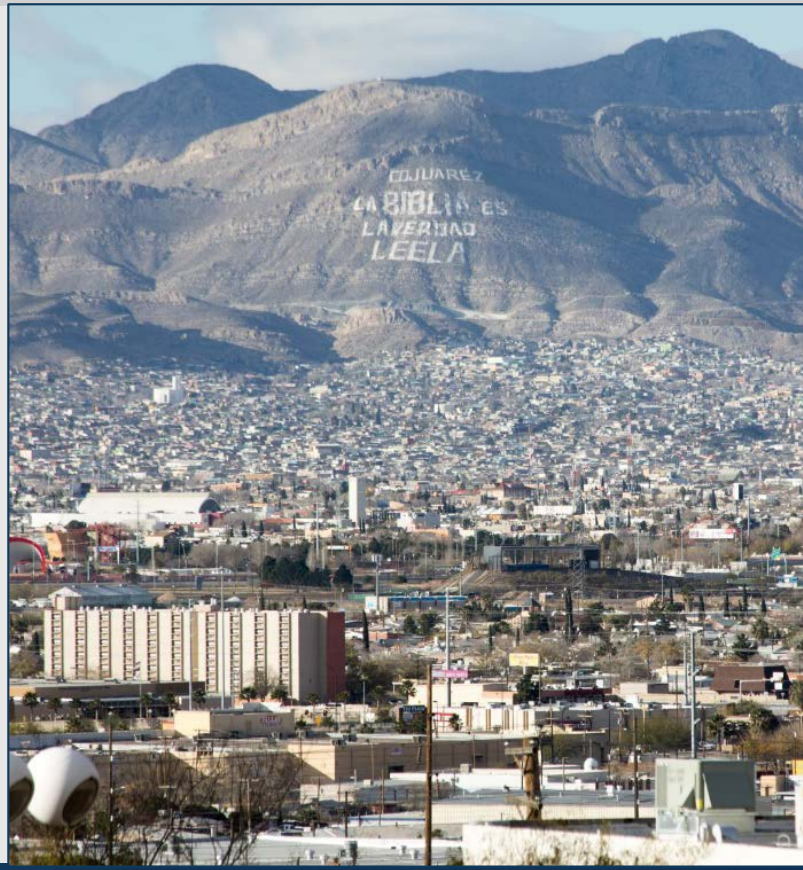
U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive mechanism to collect, share, harmonize, and analyze data regularly and consistently. Objectives:

- Harmonize data collection and analysis among all border stakeholders to advance borderwide planning, investments, management, and operations.
- Foster a comprehensive, shared understanding of the conditions and needs of border crossings and the binational multimodal transportation system.
- Allow for comprehensive systemic monitoring and evaluation of the border transportation system over time, such as through total crossing time data, border crossing volumes data by mode, and other data.

Stewardship

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a harmonized, binational policy framework to support and enhance environmental and community stewardship along the border and border transportation system. Objectives:

- Minimize environmental impacts throughout the binational transportation system, such as by harmonizing environmental, air (including vehicle idling at the border), and hazardous material regulations across the border.
- Address energy inefficiency and the need for alternative renewable energy uses throughout the binational and multimodal border transportation system.
- Reduce negative community impacts and enhance community opportunities through improvements to the multimodal binational transportation system.
- Improve the capacity of border communities to provide better and safer connections.
- Inform and engage border region stakeholders about environmental, community, and investment decisions related to the border region and the binational transportation system.



BNRSC Feedback

1. Are there any additional policies we should consider?

Preliminary Program Recommendations

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive strategy for robust, coordinated, and efficient border management and investments.

Programs	Objectives
Deploy pre-clearance programs borderwide by adding separate pre-clearance lanes wherever possible and prioritizing them for new or remodeled facilities.	▪ Reduce wait times and free up border personnel for critical inspections.
Assess opportunities to standardize systems and streamline procedures across border crossings. This includes convening federal border agencies (CBP and SAT) to identify areas of improvement to coordinate and close the gap between each country's respective border management programs.	▪ Better links border crossing processes to the corridors on either side. ▪ Establish partnerships between border agencies to standardize border management processes.
Conduct a comprehensive, binational Border Inspection Staffing Study to determine the economic impact of adding additional staff and lane openings at each border crossing.	▪ Provide understanding of the economic impact of border inspection staff and operational efficiency gains.
Adopt Demand Management Programs borderwide (for example, variable message signs, signalization, on- and off-ramp monitoring) at border crossings and on the border transportation system to better utilize existing system capacity.	▪ Increase overall travel efficiencies on designated corridors by utilizing operational improvements. ▪ Improve operational efficiency on the border transportation system prior to investments to new system capacity.
Develop a Border Crossing Experience Study to identify bottlenecks at each step of cross-border trips and make recommendations for border crossings and on designated corridors.	▪ Utilize a data-driven process for recommending operational efficiency improvements along the border transportation system.
Undergo a Feasibility Study for an internal transit service for bikes/pedestrians between U.S. and Mexico inspection facilities at border crossings with long distances between the two facilities.	▪ Promote mobility for bike/pedestrian cross-border movements.
Implement cross-border Unified Cargo Processing at intermodal rail facilities along the border.	▪ Reduce congestion by streamlining cargo processing at the border.
Develop a binational Oversize/Overweight Border Study to understand the needs for OS/OW corridors within the border region.	▪ Provide consistency and reliability along and across the border for OS/OW commercial vehicles. ▪ Address the needs of OS/OW loads.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive and binational mechanism for enhancing system capacity of border crossings and corridors.

Programs	Objectives
Develop a Comprehensive Framework for expansions to the capacity of existing border crossings based on transportation needs to strengthen statewide planning processes.	▪ Develop a unified and binational process for evaluating expansions to existing border crossings.
Develop a Comprehensive Framework for studying the feasibility of developing new border crossings based on transportation needs to strengthen statewide planning processes.	▪ Develop a unified and binational process for evaluating the feasibility of developing new border crossings.
Develop a Connectivity to Border Crossings Study to examine the integration of connectivity to (last-mile) and between border crossings into future/planned corridors through the corridor planning systems on each side of the border.	▪ Promote alternative cross-border options for movement of people and goods through enhanced connectivity between border crossings. ▪ Develop a unified and binational process for evaluating future and planned corridors on the border transportation system.
Develop a Border Resource Optimization Strategy, in partnership with binational federal agencies, border agencies, and bridge stakeholders, to identify, assess, and address border crossing staffing and operation needs.	▪ Develop a unified and binational process for optimizing border crossing operations.
Develop a Border Crossing Experience Study to identify bottlenecks at each step of cross-border trips and make recommendations for border crossings and on designated corridors.	▪ Utilize a data-driven process for recommending system capacity improvements along the border transportation system border crossings.
Develop a Binational Transportation Bottleneck Identification and Elimination Program to address congestion and improve mobility for people and goods movement on the border transportation system.	▪ Utilize a data-driven process for identifying issues and recommending improvements to reduce congestion and improve mobility on border transportation system.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should improve binational coordination, collaboration, and cooperation.

Programs	Objectives
Develop new Border Crossing Institutional Framework to better plan, invest, manage, and operate border crossings and multimodal transportation network.	▪ Delineate various roles, responsibilities, and expectations to enhance planning, investment, management, and border operations. ▪ Facilitate more efficient movement of people and goods across the border.
Establish Regional Binational Crossings Stakeholder Groups (similar to the existing El Paso stakeholder group) to regularly discuss border transportation needs and solutions.	▪ Provide a regular opportunity for regional stakeholders to engage in conversation about needs and solutions. ▪ Provide a framework for advocacy and education with regional, state, and federal decision-makers on both sides of the border.
Refocus the Joint Working Committee to include more time for coordination planning, including a "regional" JWC as an add-on to the larger group, or additional day for regional meetings should be considered. The regional BBBXG meetings should be better utilized for more focused conversations with federal partners.	▪ Provide additional binational meeting time specifically focused on developing and prioritizing regional solutions. ▪ Serve as a forum for borderwide issues and solutions to be shared among regions as ideas for their own needs.
Undertake an annual plan to set priorities and solutions among federal, state, regional, local, and private stakeholders, both across the Texas border and within each of the three regions.	▪ Harmonize priorities and solutions among stakeholders of the border transportation system. ▪ Provide a forum to discuss shared stories, challenges, and iterative changes.
Conduct an end-to-end border crossing analysis and use the results to implement actions against identified efficiencies.	▪ Enhance efficiency of various steps within border crossing processes through borderwide analysis and implementation.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should invest in new technologies and innovation to improve cross border movement of people and goods.

Programs	Objectives
Develop a borderwide strategy for advancing (developing, testing, and utilizing) the broad integration and adoption of new technologies, such as non-intrusive inspections, border screening technology, and real-time traveler information technologies.	▪ Support integration of intelligent transportation systems across the border transportation system. ▪ Enhance mobility and reliability of the movement of people and goods.
Deploy Non-Intrusive Inspection (NII) systems to enable border inspection staff to examine cargo conveyances using radiation detection equipment to detect the presence of contrabands without physically opening and unloading them.	▪ Reduce wait times at border crossings and may also eliminate the need for drivers to exit commercial vehicles, allowing border inspection agents to process commercial vehicles quicker.
Implement Biometric Facial Recognition (currently used at some airports) at border crossings to match traveler photos with the Traveler Verification Service.	▪ Reduce wait times at border crossing through faster processing without compromising border security issues.
Deploy the U.S. Customs and Border Protection (CBP) Mobile Program to use tablets for conducting agricultural releases of cargo (similar to Douglas, Arizona pilot implemented to refer vehicles to secondary inspections).	▪ Reduce wait times within the release process of cargo.
Deploy Automated Passport Control (APC) and/or Mobile Passport Control (MPC) allowing travelers to voluntarily submit biographic information and answer declaration-related questions prior to the primary inspection process.	▪ Remove administrative portion of the inspection, resulting in shorter processing times and allows border inspection staff to focus on core law enforcement functions.
Further deploy expedited lane programs (READY, FAST, and SENTRI lanes) for border crossings that have traffic segmentation, improved signage, and more responsive active lane management, to allow low-risk, vetted travelers to use expedited lanes for faster crossings.	▪ Increase throughput at the border crossings with faster processing times at expedited lanes.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should invest in new technologies and innovation to improve cross border movement of people and goods *(continued from previous slide)*.

Programs	Objectives
Deploy Mexico's Customs Technological Integration Project (PITA) borderwide to streamline customs processes by automating clearance of cargo through video surveillance to reduce clearance times, improve business intelligence, and increase security of goods exchanged within Mexican customs.	▪ Increase throughput at the border crossings with faster clearance times and improvements to security.
Deploy Gafete Unique Identification (GUI) to modernize existing processes for registration and issuance of Gafete for customs agents through integrated electronic devices to store information and profiles of people registered in the system.	▪ Promote issuance of electronic systems and allow greater control of the entry and exit of cargo.
Develop a Borderwide Cross-Border Motor Vehicle Traffic Congestion Web Portal to maintain publicly accessible, real-time information regarding passenger and commercial vehicle movements at border crossings.	▪ Alleviate cross-border motor vehicle traffic congestion impeding the efficient movement of people and goods.
Conduct a Border Transportation Technology Study (in partnership with binational industry, academic institutions, research and development organizations, USDOT, and other border stakeholders) periodically to monitor past, current and new trends and regularly share information among all border stakeholders.	▪ Provide analysts, managers, and policymakers with a clear picture of new technology needs.
Develop an implementation plan to the Border Transportation Technology Study assessing ways in which new or enhanced infrastructure should include capacity and bandwidth for yet-unknown technologies, vehicles, and cargo types.	▪ Ensure future economic competitiveness of the border transportation system.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should invest in new technologies and innovation to improve cross border movement of people and goods *(continued from previous slide)*.

Programs	Objectives
Develop a Connected Infrastructure Strategy outlining methods to facilitate vehicle-to-infrastructure communication and enhance data collection capabilities.	▪ Foster current and future integration and deployment of new technologies. ▪ Provide greater visibility into travel patterns and border transportation system issues, needs, and solutions.
Develop an Alternative Fuel Border Transportation Study to identify future transportation infrastructure needs (for example, charging infrastructure to power electric vehicles) at and connecting to border crossings.	▪ Ensure future economic competitiveness of the border transportation system. ▪ Enhance environmental and community stewardship within border regions.

Mobility and Reliability

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive binational performance monitoring and evaluation system for the border transportation system.

Programs	Objectives
Develop a Binational Transportation System Performance Institutional Framework to monitor and evaluate the border transportation system. Measures could include wait times, northbound and southbound crossing volumes by mode, or other measures.	▪ Create the capability to comprehensively and systemically monitor and evaluate the border transportation system over time. ▪ Allow a data-driven and performance-based method of border transportation system decision-making.
Develop a Binational Borderwide Traffic Operations Center Concept of Operations and Implementation Plan to disseminate real-time traffic information and better monitor and manage traffic flows.	▪ Enable comprehensive and systemic monitoring and information sharing of the border transportation system.

Economic Competitiveness

U.S. and Mexico federal, state, regional, local, and private stakeholders should harmonize binational policy coordination to support current and future trinational economic competitiveness—U.S., Mexico, and Canada.

Programs	Objectives
Establish a Border Transportation System Issues and Challenges Survey Program to regularly survey users of the border on border-related issues and challenges.	▪ Facilitate understanding of challenges that impede the safe, reliable, and efficient movement of local, regional, state, national, and trinational commerce and people movements.
Partner with binational agencies to implement Unified Cargo Processing adoption on both sides of the border to be rolled out in a systemic fashion to crossings borderwide.	▪ Reduce wait times and clearance times for cargo crossing the border. ▪ Enhance collaboration among agencies on both sides of the border.
Develop a Binational Borderwide Incident Response Plan and Binational Regional Incident Response Plans to prepare for potential border transportation system disruptions.	▪ Minimize the potential economic impact of unforeseen events.
Adopt a binational standard for locomotive engineer and conductor certifications and for railcar inspections.	▪ Eliminate inefficient and repetitive dual rail inspections.
Develop an off-peak and 24-hour operation pilot program in cooperation with local border region stakeholders to maximize the existing capacity of border crossings and the border transportation network.	▪ Enable the 24-hour movement of cross-border cargo to provide flexibility for commerce on the border transportation system.
Train and deploy inspection staff for specialized inspection needs (e.g. agriculture).	▪ Create additional inspection sites for specialized commerce to provide flexibility on the border transportation system.
Conduct a Borderwide Freight Cluster Study to assess and understand current and future freight clusters and their role in the border region and trinational economic competitiveness, and to identify areas where transportation infrastructure is well-suited to address current and future needs or locations where limited access or transportation infrastructure restraints may prevent business retention and expansion.	▪ Inform current and future needs of the border transportation system to continue supporting economic competitiveness.

Safety and Security

U.S. and Mexico federal, state, regional, local, and private stakeholders should identify and implement strategies to improve safety and security in and near border crossings and along designated corridors.

Programs	Objectives
Develop a Training Program where TxDOT staff provides training to Mexican drivers and drayage companies on the conditions their equipment must meet to be in compliance with State standards.	▪ Reduce safety and security risks along the border transportation system.
Develop first/last-mile border crossing studies on safety, congestion, and asset condition issues near the border.	▪ Reduce safety and security risks along the border transportation system near border crossings.
Conduct a Safety Hotspot Study to assess the existing design of safety hotspot locations and address site-specific needs and safety improvements.	▪ Reduce crash rates, fatalities, and injuries along safety hotspot locations.
Conduct Regional Feasibility Studies to evaluate opportunities to separate commercial vehicles, POVs, pedestrian, and bicycles.	▪ Reduce risk of modal conflicts to reduce crash rates, fatalities, and injuries.
Provide new or improve existing infrastructure and signage for pedestrians and bicyclists, and to support bicycle/pedestrian right of way at border crossings and feeder routes.	▪ Promote bicycle/pedestrian activities as an alternative mode choice by improving safety factors along border crossings and feeder routes.
Assess existing highway/rail conflicts and mitigate risks through improved policy coordination, safety inspections, and grade separation initiatives.	▪ Reduce risk of highway/rail conflicts resulting in incidents, fatalities, and injuries.
Expand hazardous materials processing at border crossings and along border crossings, including updates hazardous material resiliency plans.	▪ Enhance the safe and secure transport of hazardous materials and reduce risk of incidents at border crossings and along designated corridors.
Develop a Border Transportation Network Design, Construction, and Safety Standards Program/Study focused on reviewing and modifying standards/designs at border crossings and the connecting border transportation system.	▪ Enhance the safe movement of people and goods along the border transportation system.

Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders should ensure connectivity between border crossings, between the two countries, multimodal transfer locations, and throughout the border transportation system network.

Programs	Objectives
Develop a Connectivity to Border Crossings Study to improve network connectivity between border crossings and key corridors (north-south), and between border crossings (east-west).	▪ Decrease transportation costs by developing direct routes for border transportation users to better connect origins and destinations.
Assess and improve transit, bicycle, and pedestrian connectivity to border crossings and establish designated pick-up/drop-off areas near border crossings.	▪ Promote alternative people mode choices to passenger vehicles through enhanced connectivity between border crossings and corridors.
Update regional transit plans regularly to assess methods to improve service and route-level performance, and ways to integrate modes with border crossing connectivity.	▪ Promote transit mode as an alternative people mode choices through enhanced connectivity between border crossings and corridors.
Update regional bicycle and pedestrian plans regularly to ensure completeness, safety, and reliability of bike/pedestrian networks and facilities, and to preserve future bicycle and pedestrian corridors.	▪ Ensure bicycle and pedestrian needs and solutions are updated periodically to provide sufficient alternative people mode choices.
Establish transfer locations and enhance connectors to transfer locations.	▪ Enable access to border crossings from all people and freight modes.
Examine and identify areas of improvement needed to ensure network redundancy on the binational transportation system.	▪ Provide alternative routes for the movement of people and goods to enhance network redundancy.

Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders coordinate enhancements for people mode choices on the border transportation system.

Programs	Objectives
Enhance transit, bicycle, and pedestrian connectivity to border crossings and establish designated pick-up/drop-off areas near border crossings.	▪ Promote alternative people mode choices to passenger vehicles through enhanced connectivity between border crossings and corridors.
Provide infrastructure and signage for pedestrians and bicyclists.	▪ Improve safety considerations for pedestrians and bicyclists to promote alternative people mode choices on the border transportation system.
Improve wayfinding between border regions, crossings, and border airports to enhance passenger navigations to regional airports.	▪ Enhance the ease of navigation for people movements to regional airports along the border transportation system.
Upgrade east-west designated corridors to higher standards to reduce congestion between the Gulf Coast and border crossings.	▪ Reduce and manage congestion by facilitating higher capacity along east-west designated corridors.
Conduct feasibility studies on Unified Cargo Processing across all modes where relevant across the border.	▪ Reduce congestion by streamlining cargo processing at the border.
Increase frequency of transit service and reduce bus delays and wait times, including to multimodal transfer stations.	▪ Promote alternative people mode choices to passenger vehicles through enhanced transit service options.
Improve sidewalk connectivity between border crossings and urban centers to promote accessibility to urban centers without the use of vehicle pick-ups and drop-offs.	▪ Promote alternative people mode choices to passenger vehicles through improvements to pedestrian crossings and connections to urban centers.

Multimodal Connectivity

U.S. and Mexico federal, state, regional, local, and private stakeholders should coordinate enhancements for freight mode choices for the border transportation system.

Programs	Objectives
Establish demand management on connectors between border crossings and border region intermodal rail facilities.	▪ Reduce congestion inhibiting efficient movements of rail transfers.
Improve wayfinding between border crossings and border region airports to enable commercial vehicles to navigate to regional airports.	▪ Enhance the ease of navigation for movements of goods to regional airports along the border transportation system.
Improve local connectivity between areas surrounding regional airports with complementary developments such as air cargo storage facilities and cold storage.	▪ Enhance connectivity between regional airports and surrounding developments.
Update local airport, seaport, and rail plans to link planning efforts of other modes connecting to the border crossings.	▪ Enhance borderwide connectivity between airports, seaports, rail, corridors, and border crossings.
Develop a Commodity Interconnectivity Study to understand flows between seaports, airports, and border crossings.	▪ Promote better understanding of commodity flows across modes in the border region.
Assess the feasibility of Unified Cargo Processing at regional airports.	▪ Improve efficiency of air cargo movements between the U.S. and Mexico in the border region.
Continue Multimodal Corridors Integration Studies of relevance to the border.	▪ Promote better understanding of multimodal corridors and commodity flows across the border.
Upgrade east-west corridors to higher standards to meet the demands of increasing truck-seaport movements.	▪ Reduce and manage congestion by facilitating higher capacity along east-west designated corridors.

Cross-Border Resiliency

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop comprehensive binational policy framework for a resilient border.

Programs	Objectives
Develop Comprehensive Binational Framework for a Resilient Border, including systemic processes, procedures, and investments to respond to disruptions such as weather, public health crises, economic downturns, hazardous material incidents, and political events such as protests.	▪ Ensure continuity of border transportation system operations and processes. ▪ Minimize the potential impact of unforeseen events. ▪ Enable rapid response to unexpected challenges.
Update U.S.-Mexico sister city contingency plans every five years to establish and upgrade preventative and response mechanisms for cross-border responses and cooperative sharing of resources, with enhanced border transportation coordination.	▪ Enhance coordination, cooperation, and collaboration among border transportation system stakeholders for disruptive events on both sides of the border.
Establish a real-time communications system to disseminate information to transportation users in real time, including information on border wait times, altered or enhanced inspections, and guidance to use alternative ports or corridors.	▪ Ensure the safety and security of border populations and users in the event of a potential disruption, including the safe and expeditious evacuation of people from a particular area. ▪ Enhance mobility and reliability of the border transportation system by managing and reallocating transportation demand.
Develop regional resiliency plans to enhance network redundancy, expand transportation alternatives, and improve connectivity between border crossings and between designated corridors to allow user choice during unexpected circumstances.	▪ Minimize the potential impact of unforeseen events. ▪ Ensure the safety and security of border populations and users in the event of a potential disruption, including the safe and expeditious evacuation of people from a particular area.
Develop Regional Hazardous Material Studies to plan and manage the safe and efficient movement of hazardous materials, including identifying dedicated routes, signage improvements, and community impacts.	▪ Ensure the safety and security of border populations and users in the event of a potential disruption. ▪ Enhance the safe and secure transportation of hazardous materials.

Sustainable Funding

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop mechanisms to enhance and secure dedicated border transportation system funding and financing.

Programs	Objectives
Establish Border Funding Needs Identification Program to regularly track and communicate specific needs of the Texas-Mexico border with decision-makers on both sides of the border.	▪ Facilitate clearly-identified revenue and funding schemes and spur private sector investment and confidence in the border transportation system.
Develop a Funding and Financing Resource Guide to inform local and regional border stakeholders on border-dedicated funding and financing opportunities.	▪ Facilitate awareness of and enhance opportunities for local and regional border stakeholders to secure funding and financing for border-related needs.
Conduct an Economic Impact Assessment of investing in border crossings and the border transportation system.	▪ Demonstrate the importance of linking border transportation investments to economic goals and economic competitiveness.
Assess and identify ways for existing funding to be better used on the border through carve-outs or specific criteria for the border region such as through NAD Bank, State Infrastructure Bank, and others.	▪ Ensure border transportation priorities are addressed in existing funding sources. ▪ Enable the continued competitiveness of the border transportation system and support of the economies of the U.S., Mexico, and Canada.
Investigate new and improve existing innovative methods for funding and financing, such as public-private partnerships, the Donation Acceptance Program, enhanced border crossing tolling programs, tax credits and incentives, and others.	▪ Expand the potential sources of revenue available for maintenance, rehabilitation, expansions, and new assets along the border transportation system.
Institutionalize a metrics-based system to allocate funding based on set priorities of the binational and multimodal border transportation system.	▪ Foster a data-driven approach to allocate funding based on identified border transportation system issues and needs.

Asset Preservation

U.S. and Mexico federal, state, regional, local, and private stakeholders, along with other asset owners in the border region, should develop binational asset management frameworks to protect assets on the border transportation system.

Programs	Objectives
Improve existing asset preservation programs by establishing a preventative maintenance approach that utilizes frequently updated information based on a system monitoring framework. Ensure newly developed asset preservation programs also establish this approach.	▪ Improve modeling to better understand preventative maintenance needs on the border transportation system.
Develop a Border Crossing Asset Management Plan, in collaboration with binational federal governments and border agencies, to protect border crossings by establishing an asset plan for maintaining, repairing and replacing border crossing facilities.	▪ Develop a unified and coordinated plan to systemically maintain border crossings and border crossing facilities.
Develop a Border Bridge Management Program for binational stakeholders to obtain current information on bridge conditions, improve repair/replacement plans, and address deficient bridges and update design needs to accommodate the efficient movement of people and goods.	▪ Create a cohesive approach to bridge management consistent across the state to share best practices and systematically repair and replace bridges.
Develop a Texas Border Pavement Program to implement comprehensive statewide pavement management approach across TxDOT districts.	▪ Create a cohesive approach to pavement management consistent across the state to share best practices and systemically repair and rehabilitate pavements.
Develop a Binational Border Pavement Program to identify pavement conditions, share best practices, and systematically maintain and repair pavements in fair and poor condition.	▪ Creates partnerships on both sides of the border to share information and coordinate rehabilitation of pavements.
Conduct regional sidewalk inventories and maintenance studies to understand sidewalk connectivity needs and determine ways to extend the useful life of sidewalks.	▪ Develop a unified and coordinated plan to systemically maintain sidewalks.
Conduct regional transit inspections to determine maintenance needs to extend the useful life of vehicles, equipment, and facilities.	▪ Develop a unified and coordinated plan to systematically maintain transit assets.

Customer Service

U.S. and Mexico federal, state, regional, local, and private stakeholders should coordinate binational stakeholder and public outreach, information, and engagement activities.

Programs	Objectives
Develop a Binational Border Transportation Public Education and Awareness Program to educate the public, elected officials, policy makers, and other stakeholders on the economic benefits of border transportation and related issues.	▪ Enhance information sharing and participation opportunities among all border transportation system stakeholders in the U.S., Mexico, at the federal, state, regional, and local levels, as well as from private partners.
Conduct regular engagements with federal and state legislative representatives and associated border-related committees and caucuses, and other binational groups at federal, state, regional, and local levels to raise awareness of and provide education about the importance of the Texas-Mexico border.	▪ Enhance partnerships among border transportation system stakeholders. ▪ Improve communication about the border transportation system's importance and associated needs and issues.
Review borderwide stakeholder engagement, outreach, and information dissemination to ensure activities engage stakeholders from both sides of the border, with consideration given to stakeholder participation needs (such as language, location).	▪ Enhance opportunities for greater participation among all border transportation system stakeholders in the U.S., Mexico, at the federal, state, regional, and local levels, as well as from private partners.
Improve regional stakeholder group processes to identify, organize, and track issues and needs of stakeholders. Develop and publish a regularly updated list of regional needs and priorities to focus conversations and provide better information.	▪ Develop systemic methods for tracking and responding to stakeholder needs. ▪ Provide an agreed-upon set of priorities to ensure consistency.
Improve regional stakeholder group procedures to track the use and success of stakeholder engagement methods.	▪ Identify most effective practices for engaging with border transportation system stakeholders.
Review public meeting processes to ensure border stakeholders are included in public meetings about state, regional, and municipal plans.	▪ Allow border stakeholders to advocate for their priorities to be included in adopted planning documents and budgets.

Customer Service

U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a comprehensive mechanism to collect, share, harmonize, and analyze data regularly and consistently.

Programs	Objectives
Develop a Comprehensive Borderwide Data Collection, Warehousing, and Archiving Program for collecting and tracking critical binational and multimodal border transportation system data, including but not limited to: ▪ Comprehensive borderwide total crossing time data ▪ Accessible southbound volumes data by mode ▪ Accessible MX volumes and congestion data at a segment level ▪ Accessible MX safety incident data across all modes ▪ Accessible MX asset preservation data at a segment level	▪ Allow for comprehensive understanding of the conditions and needs of the border transportation system. ▪ Encourage a unified and consistent approach to collecting borderwide data over time. ▪ Enhance partnerships among federal, state, regional, local, and private partners in the U.S. and Mexico.

Stewardship

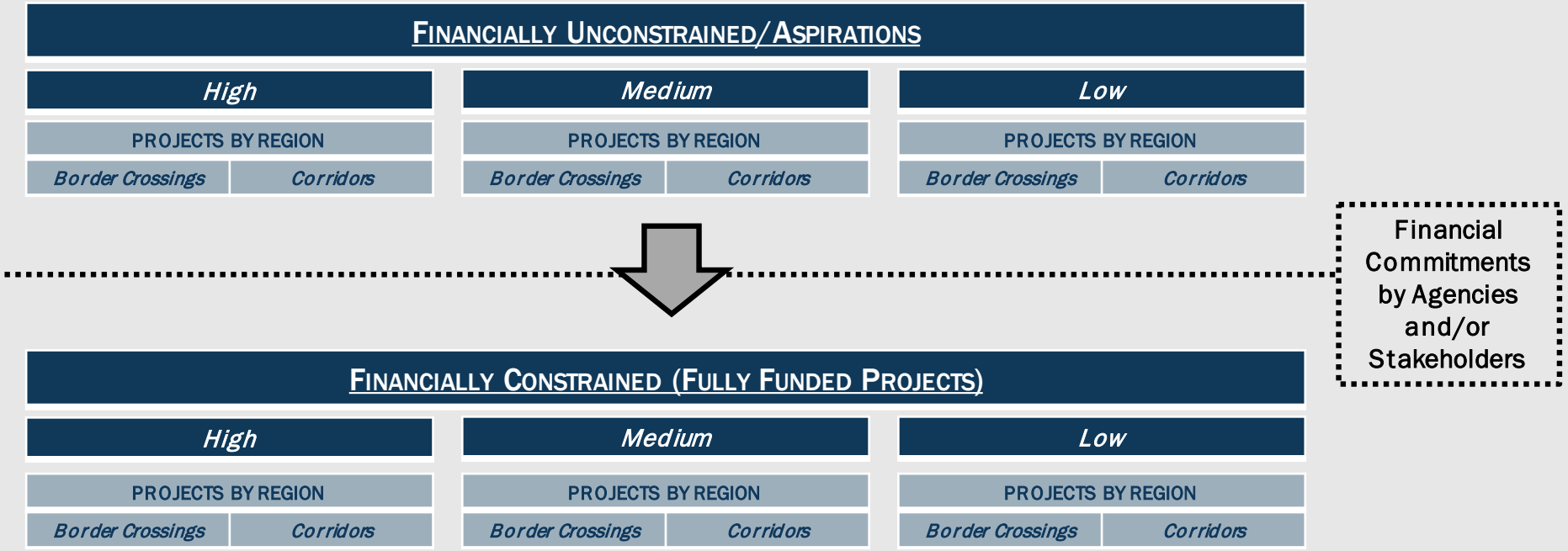
U.S. and Mexico federal, state, regional, local, and private stakeholders should develop a harmonized, binational policy framework to support and enhance environmental and community stewardship along the border and border transportation system.

Programs	Objectives
Improve Air Quality Monitoring Programs to achieve consistency across the border region and review alternative renewable energy uses in coordination with environmental agencies.	▪ Enable continuous measurement of air quality against national standards in the U.S. and Mexico and to identify areas for improvement. ▪ Encourage environmental sustainability on the border transportation system through alternative renewable energy uses. ▪ Provide a forum for collaboration between environmental agencies and border transportation system stakeholders.
Develop a Local Community Toolkit on environmental action steps that can be undertaken (for example, to reduce truck queueing/emissions, reduce idling, cross-docking and transloading) in collaboration with environmental agencies.	▪ Promote environmental sustainability in border communities.
Develop Regional Hazardous Material Plans to be adopted on both sides of the border to improve clean e-waste sites generated by trade.	▪ Reduce hazardous waste generated by cross-border trade and ensure clean disposal.
Conduct Feasibility Studies on Improved Routing and Design of transportation infrastructure within border crossing communities. For example, evaluate opportunities to separate passenger and commercial traffic and evaluate opportunities to route commercial traffic away from high-traffic border communities where possible.	▪ Promote safety and security among border communities by reducing the risk of conflicts between passenger and commercial traffic, and by improving routing and design at safety hotspots.
Improve Air Quality Monitoring Programs to achieve consistency across the border region and review alternative renewable energy uses in coordination with environmental agencies.	▪ Enable continuous measurement of air quality against national standards in the U.S. and Mexico and to identify areas for improvement. ▪ Encourage environmental sustainability on the border transportation system through alternative renewable energy uses. ▪ Provide a forum for collaboration between environmental agencies and border transportation system stakeholders.
Develop a Local Community Toolkit on environmental action steps that can be undertaken (for example, to reduce truck queueing/emissions, reduce idling, cross-docking and transloading) in collaboration with environmental agencies.	▪ Promote environmental sustainability in border communities.
Develop Regional Hazardous Material Plans to be adopted on both sides of the border to improve clean e-waste sites generated by trade.	▪ Reduce hazardous waste generated by cross-border trade and ensure clean disposal.

BNRSC Feedback

1. Are there any additional programs we should consider?

Preliminary Approach to Develop Financially-Constrained Investment Plan for Projects



Example of Financially Constrained for Highway Projects

- Major TxDOT Projects in Pharr District's Long Range Plan
- 43 total projects
  - Information on name, letting date, scope, cost and estimated cost

Example of Evaluation for Highway Projects

- Evaluation of projects into high, medium, and low tiers is currently underway
- Assume distribution of projects into tiers to exemplify results from process described in Chapter 8
  - *This is just an example and the assignment of tiers is not final*

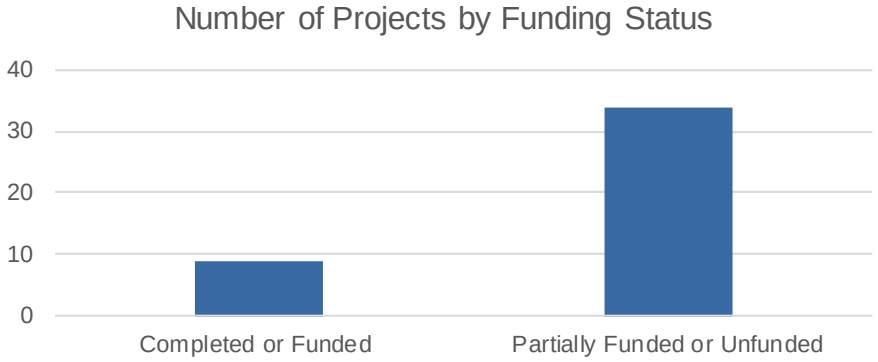
Example Evaluation Results for TxDOT Highway Projects in Pharr District

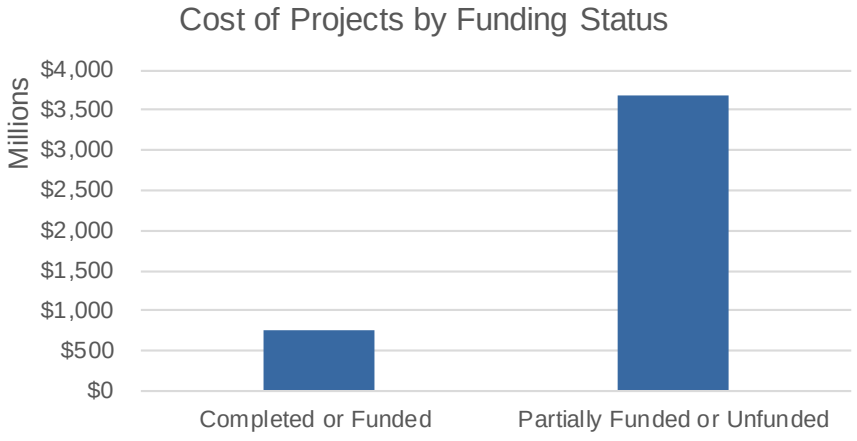
TIER	Number of Projects
High	13
Medium	18
Low	12
TOTAL	**43**

Source: TxDOT Pharr District and preliminary assignment of priorities

Example of Financially Constrained for Highway Projects

- Major TxDOT Projects in Pharr District's Long Range Plan
  - 43 total projects representing more than $4.4 billion
    - Financially unconstrained
  - 9 completed or fully funded projects representing more than $0.75 billion
    - Financially constrained
  - Projects keep same high, medium, or low priority assigned during financially unconstrained





Example of Financially Constrained for Highway Projects

- If we assume all completed or funded projects are high priority, all of them are part of financially constrained
  - *This is just an example and the assignment of tiers is not final*

Example for TxDOT Highway Projects in Pharr District

TIER	Number of Projects	
	Financially Unconstrained	Financially Constrained
High	13	9
Medium	18	0
Low	12	0
TOTAL	43	9

Source: TxDOT Pharr District and preliminary assignment of priorities

BNRSC Feedback

1. Are there any comments to the approach to identify or characterize the constrained scenario?

Chapter 11: Implementation Plan

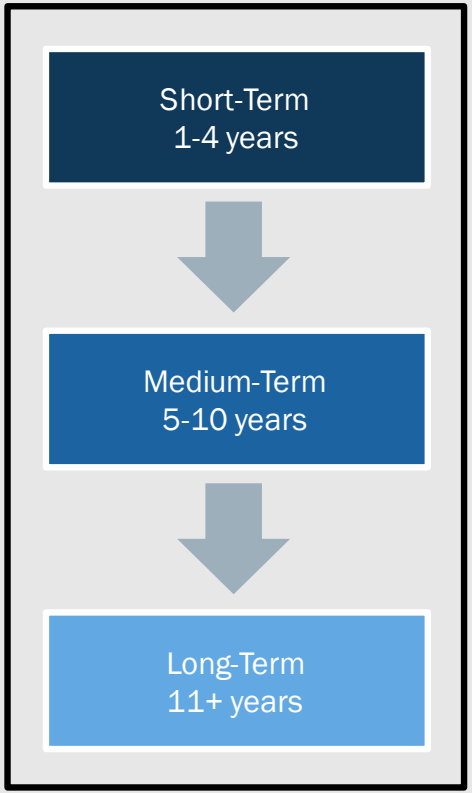
Approach Overview

Implementation Plan Overview

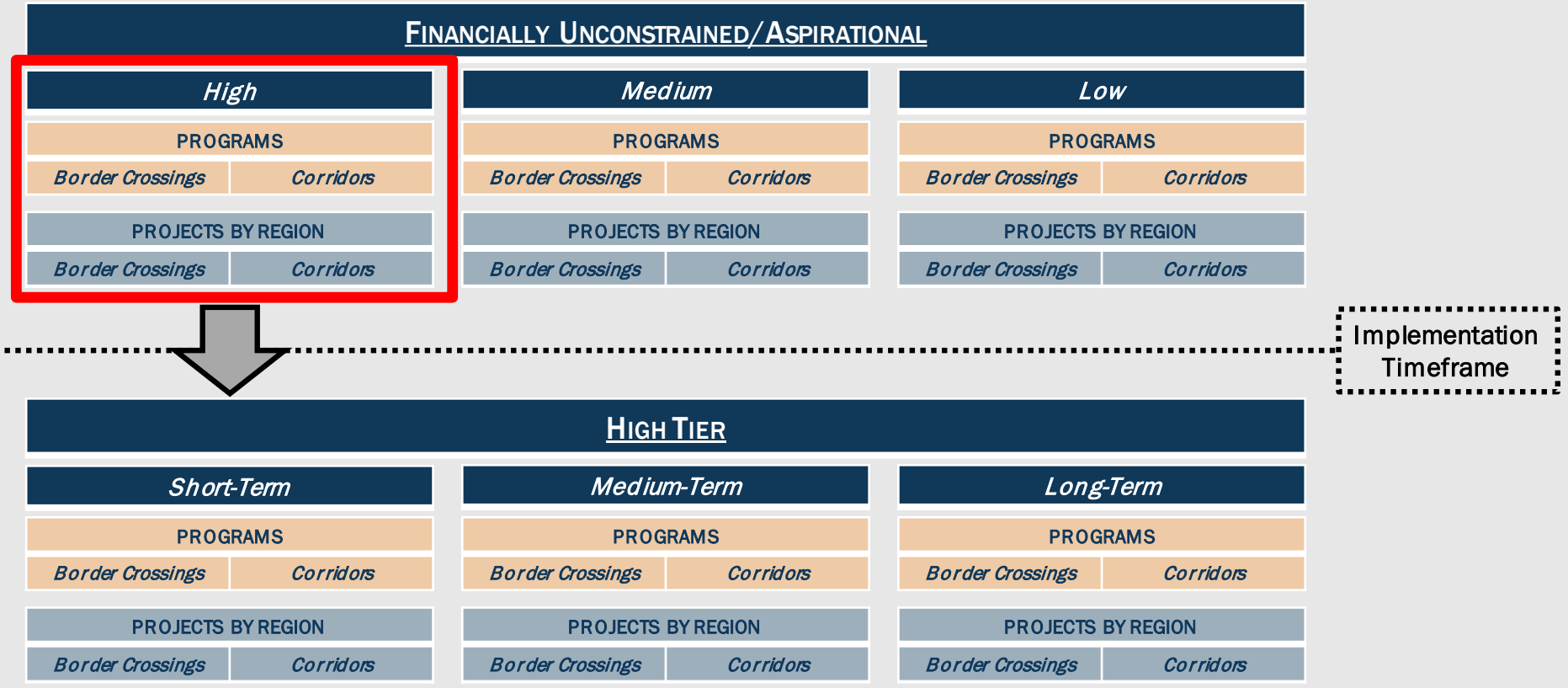
Chapter Purpose	Key Messages	Support Messages
▪ Identify timeframe for implementing high-tiered recommendations ▪ Inform development of roadmap for implementing high-tiered recommendations	▪ Implementation timeframe will be informed by key milestones and anticipated times to reach those milestones ▪ Implementation timeframe will be validated with stakeholders	▪ Present preliminary framework for identification of timeframe for high-tiered recommendations

Preliminary Approach to Develop Implementation Timeframe

Policies and Programs	Projects
▪ Identification of high-level milestone(s) needed to implement policy or program ▪ Assessment of anticipated timeframe to reach high-level milestone(s) ▪ Validation with BTAC	▪ Information provided by sponsors on stage of project/schedule ▪ Broken down by BTMP region, border crossing/ corridor, mode ▪ Validation through regional stakeholder workshops

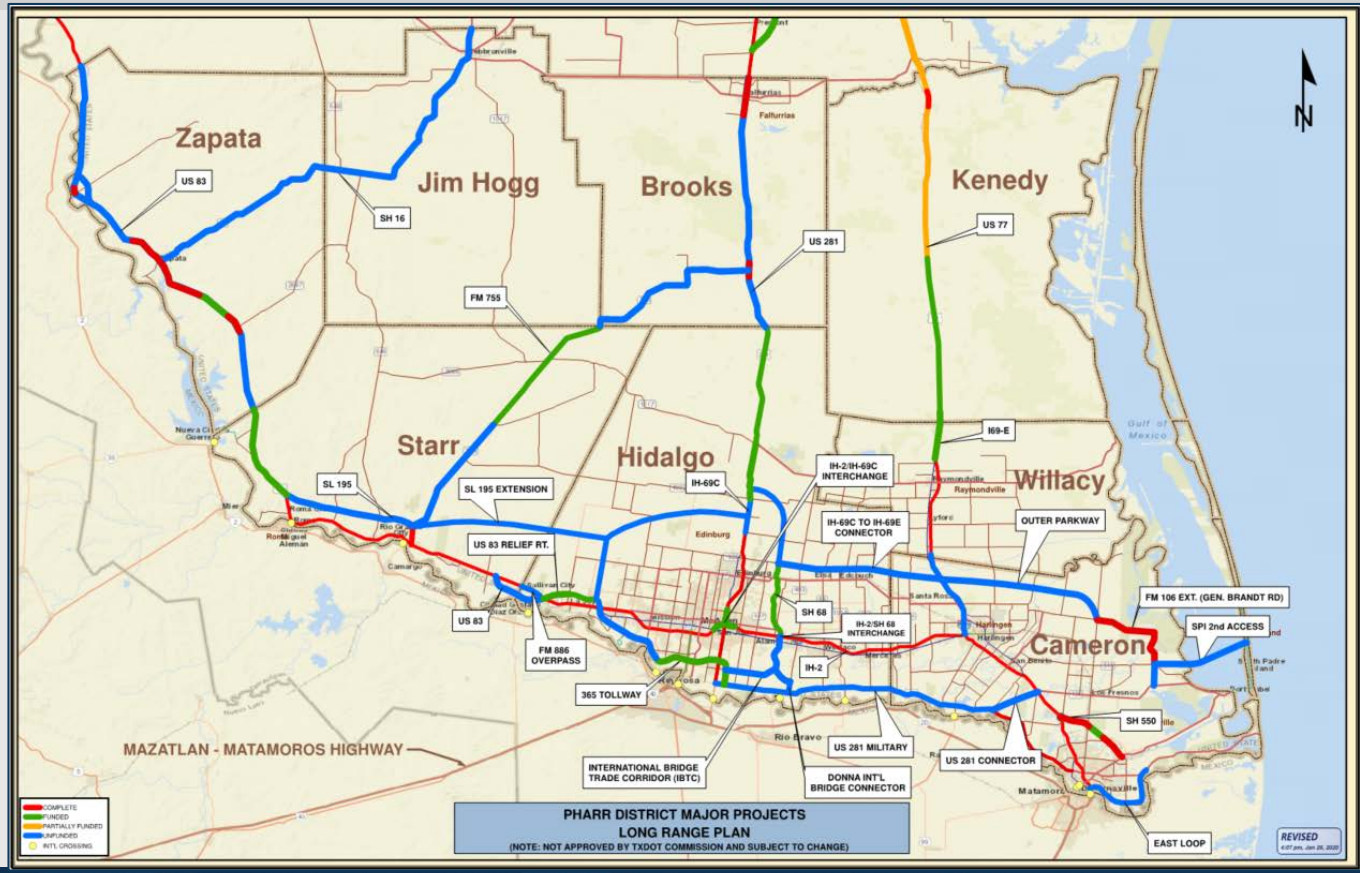


Preliminary Approach to Develop Implementation Timeframe



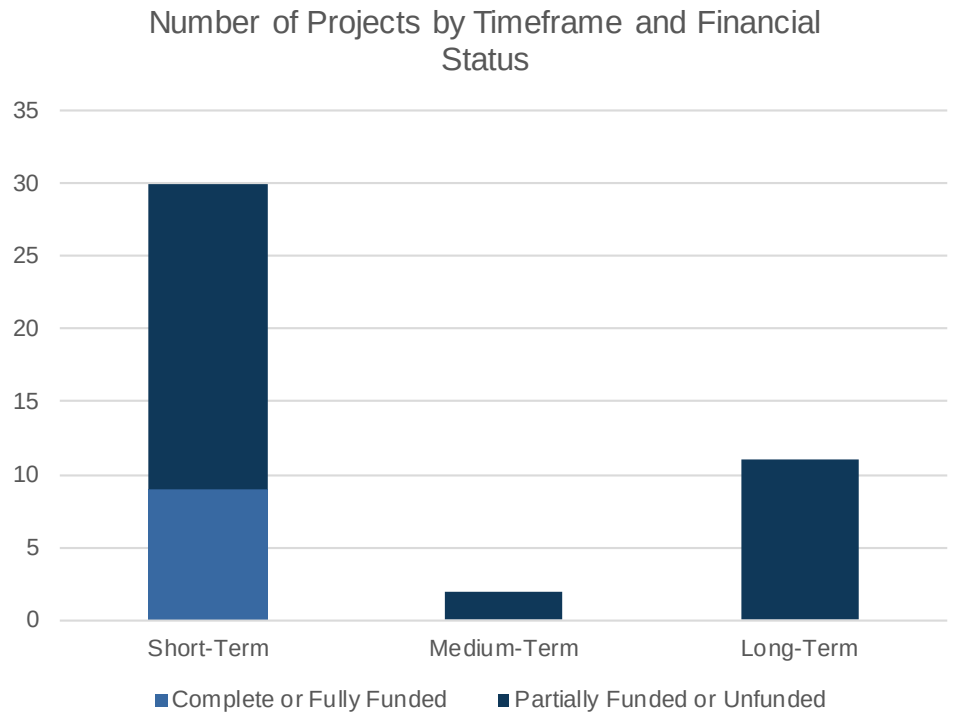
Example of Implementation Timeframe for Highway Projects

- Major TxDOT Projects in Pharr District's Long Range Plan
- Identified letting date for each TxDOT project
- Projects scheduled between 2015 and 2035



Example of Implementation Timeframe for Highway Projects

- Major TxDOT Projects in Pharr District's Long Range Plan
  - 9 complete or funded
    - All of them before 2026
  - 34 partially funded or unfunded projects between 2015 and 2035
    - 21 before 2026
    - 2 between 2026 and 2031
    - 11 after 2031



Example of Implementation Plan for Highway Projects

Implementation Timeframe for Unconstrained TxDOT Highway Projects in Pharr District

	Short-Term		Medium-Term		Long-Term	
TIER	**Projects**	**Cost**	**Projects**	**Cost**	**Projects**	**Cost**
High	9	$756,158,314	1	$52,321,000	3	$72,649,000
Medium	12	$83,255,940	1	$54,305,000	5	$1,270,000,000
Low	9	$1,112,665,000	0		3	$1,025,000,000
TOTAL	**30**	**$1,952,079,254**	**2**	**$106,626,000**	**11**	**$2,367,649,000**

Source: TxDOT Pharr District and preliminary assignment of priorities

- Implementation timeframe for constrained TxDOT highway projects in Pharr District corresponds to high-tier, short-term cells in table above

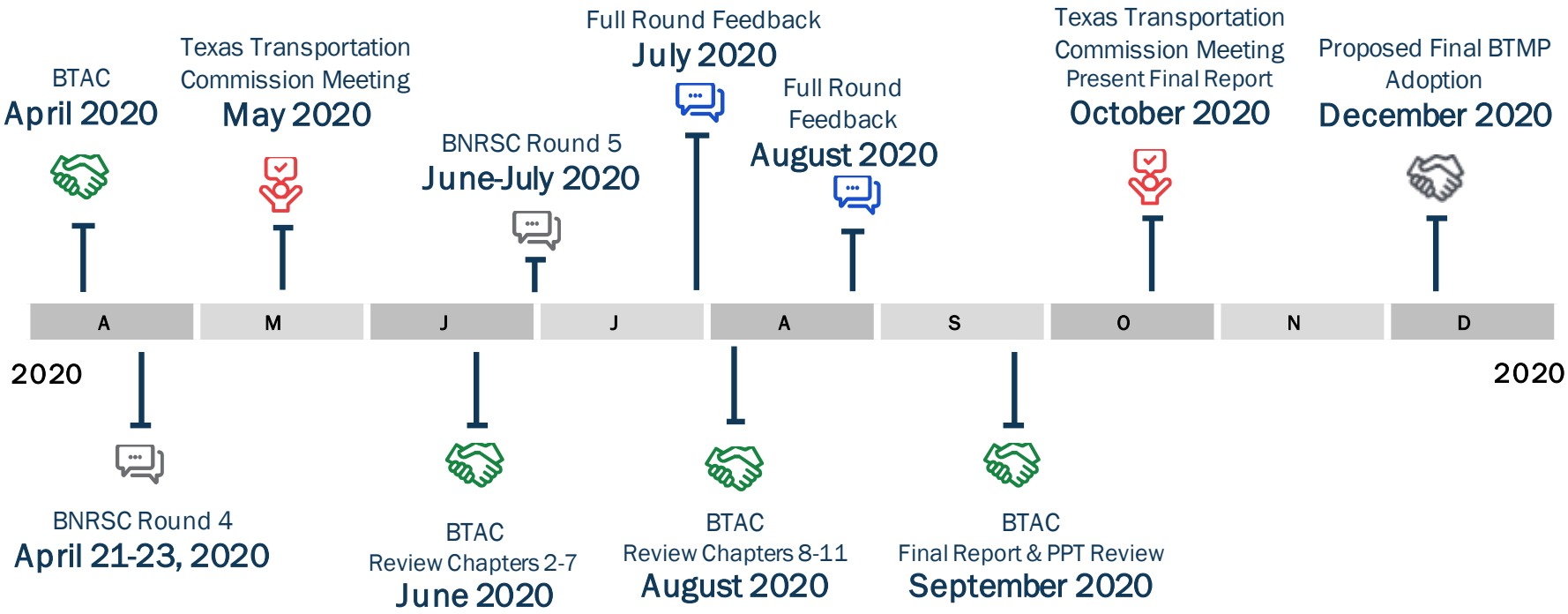
BNRSC Feedback

1. Are there any comments to the approach to develop the implementation plan?

Study Tasks/Three Month Look-Ahead

Economic Analysis (Task 7)	Recommendations & Investment Plan (Task 8)	Implementation Plan (Task 9)	Final Report
▪ Assess economic impact of BTMP recommendations	▪ Conduct data-driven evaluation of list of policies, programs and projects ▪ Refine evaluation of policies, programs and projects with stakeholders ▪ Identify timeframe for implementation of policies, programs and projects ▪ Identify funding sources	▪ Refine methodology to create implementation plan ▪ Draft implementation plans for high-tiered policies, programs & projects	▪ Draft version of final report ▪ Draft version of executive summary
Next BNRSC Meetings	**Next BTAC Meeting**	**Next BTAC Meeting Content**	
August 2020	September 2020	▪ Chapter 8: Identification and Evaluation of Strategies to Address Current and Future Needs ▪ Chapter 9: Stakeholder Engagement ▪ Chapter 10: Recommendations ▪ Chapter 11: Implementation Plan	

BTMP Schedule



Final Thoughts?