What is Resilience?

- Reducing vulnerability to chronic and acute stressors by ensuring redundancy and reliability to meet essential travel needs
- Implementing a resilient transportation system that can quickly respond to unexpected conditions and return to a sustainable state of performance
Resilience in the Texarkana MPO 2045 MTP
Resilience in the Texarkana MPO 2045 MTP
Performance Based Planning Process

**PERFORMANCE-BASED PLANNING PROCESS**

**MAP 21 / FAST ACT**

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness.
2. Increase the safety of the transportation system for motorized and nonmotorized users.
3. Increase the security of the transportation system for motorized and nonmotorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, access to and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize the preservation of the existing transportation system.
9. Improve reliability and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
10. Enhance travel and tourism.

**PUBLIC VISIONING PROCESS**

**PROJECT SELECTION PROCESS**

**MTP GOALS & OBJECTIVES**

**COMMUNITY VALUES & CRITERIA RANKING**

**PRIORITIZED LIST OF PROJECTS**

1. PROJECT A
2. PROJECT B
3. PROJECT C
4. PROJECT D

**NATIONAL GOALS**

1. Safety
2. Infrastructure Condition
3. Capacity or Adherence
4. System Reliability
5. Freight Movement and Economic Viability
6. Environmental Sustainability

**FISCAL CONSTRAINTS**

**ALTERNATIVES DEVELOPMENT**

**ALTERNATIVE 1**

**ALTERNATIVE 2**

**ALTERNATIVE 3**

**NATIONAL PERFORMANCE MEASURES**

**PERFORMANCE MANAGEMENT**

**TRACKING & TIP**

**Victoria MPO**

**MTP Final Project List**

**PREferred ALTERNATIVE**

**PLANNING LEVEL PERFORMANCE MEASURES**

1. 2
2. 3
3. 4
Plan Review and Needs Assessment

Identify known acute stressors from historical events:
  • Floods
  • Tornadoes
  • Earthquakes
  • Fires
  • Major transportation incidents, e.g., crashes and spills
  • Other transportation related events

Consider predicted acute stressor changes in the future environment based on published research, e.g. climate change.
Plan Review and Needs Assessment
Plan Review and Needs Assessment

Identify Chronic Stressors discovered through the components of the multimodal needs analysis:

• Growth Pattern and Population Changes
• Challenges faced by Environmental Justice Communities
• Housing and Transportation Costs
• Chronic and Incident Related Congestion
• Poor Level of Travel Time Reliability
• Environmental Factors (soil conditions, heat, rain/drought cycle)
• Increasing Maintenance Needs
• Funding (or the lack thereof)
Plan Review and Needs Assessment

Texarkana 2045 MTP
Environmental Justice Zones

Texarkana 2045 MTP
Housing + Transportation Costs

- Under 36% of Income
- 37-44% of Income
- 45-50% of Income
- 51-55% of Income
- 56+% of Income
- No Data
Identify Vulnerabilities
Identify Gaps in Accessibility
Assets that Support Resilience

Identify existing assets that support resistance to chronic and acute stressors, such as:

- Diversified Economic Portfolio
- Diverse Existing Multimodal Options
- Implemented TSM&O Strategies
- Existing Maintenance Plans Addressing Road and Transit State-of-Good-Repair
- Comprehensive and Coordinated Planning Efforts
- Coordination and Planning for Both Short- and Long-term Recovery (e.g., Continuity of Operations Plans and Emergency Operations Plans) with the Regional Office of Emergency Preparedness
Apply Resilience Assessment to Project Prioritization

• Texarkana Project Prioritization includes 12 Evaluation Criteria following the FAST Act Planning Factors

• The Texarkana process provides flexibility on scoring to account for local values (i.e., criteria weighting)
Texarkana Project Prioritization – Evaluation Criteria

• Improve Safety and Security
• Improve Quality of Life
• Reduce Congestion
• Improve Multimodal Access
• Increase Multimodal Connections
Project Prioritization – Evaluation Criteria

• Support Land Use and Economic Development Goals
• Promote Efficient System Management and Operation
• Preserve Rights-of-Way
• Protect the Environment
• Increase Multi-Modal Options and Energy Conservation
• Improve resilience and Reliability
• Enhance Travel and Tourism
Texarkana Project Prioritization Workshop

To develop the Final List of Projects, Texarkana TC Members will participate in a Prioritization Workshop.

At the workshop, the members will receive Workbooks with:

• Project Maps
• Project Details
• Project Scoring Sheets
• Current Conditions Maps and Data
11. **Improve Resilience and Reliability of the Transportation System and Reduce or Mitigate Storm Water Impacts of Surface Transportation.** Examples of improvements to system resilience and reliability, as well as ways to reduce storm water impacts include the following:

- Increasing connections, especially for evacuation and recovery;
- Improvements in system condition (state of good repair);
- Projects with drainage design extending and incorporating outfall beyond the immediate right-of-way;
- Leveraging existing drainage infrastructure and discouraging growth into areas necessitating intensive drainage design.
Texarkana MPO 2045 MTP

Resilience is not just a condition it’s a state of mind
Texarkana MPO
Integrating Resilience into the 2045 MTP

Thank You!

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