

Purpose

Integrate resilience and sustainability into transportation investment decisions and provide mitigation techniques.

Vision Statement

The RGVMPPO will leverage their position as a clearinghouse for regional, collaborative planning to encourage sustainable practices that make the region more resilient in the face of risk.

Guiding Principles



**Adaptive
Development**



**Collaborative
Governance**



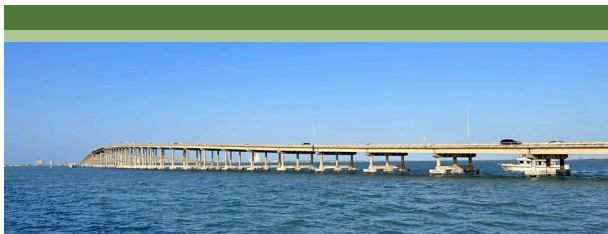
**Sustainable
Future**



**Connected
Communities**



**Just
Choices**



Action Item Examples

- Restore and preserve wetlands & dunes
- Implement bioswales and rain gardens
- Elevate roads and structures
- Replace aging infrastructure
- Create water reuse systems
- Implement green infrastructure, green streets, and expand tree canopy
- Combine fire breaks with active transportation projects
- Limit development in high hazard areas
- Preserve and expand land conservation
- Promote outdoor education and sustainable tourism
- Implement Vision Zero strategies
- Improve infrastructure in Colonias
- Prepare for vehicle electrification
- Promote alternative modes of transportation like transit
- Educate people about natural hazards, the environment, and sustainability
- Communicate evacuation plans and procedures
- Continue to improve interjurisdictional and public communication
- Routinely discuss resilience
- Establish regional data sharing practices
- Understand needs of marginalized communities



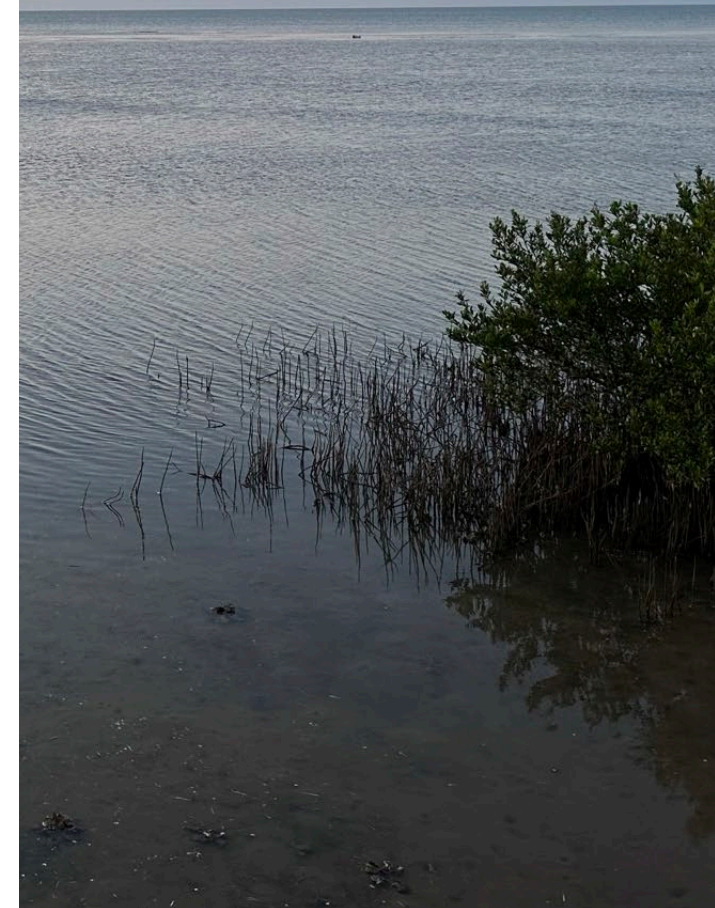
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RGVMPPO

Resilience and Sustainability Analysis



Overview

The RGV MPO conducted the Sustainability and Resilience Analysis to better understand and plan for future hazards and stressors. The transportation network is essential for social and economic functioning on a daily basis. When extreme weather and natural disasters damage transportation infrastructure, the region suffers. In addition, the transportation sector has a large impact on the environment and quality of life. For these reasons, the study examined the following components:



Roadways, active transportation, transit, freight, evacuation routes, border crossings, bridge conditions, pavement conditions, crash hotspots



Social vulnerability, community resilience, natural hazards, estimated annual cost of hazards, air and water quality, housing, equity factors, etc.

Public Involvement

The plan was created using input from community members and elected officials collected at community events, pop-ups, committee meetings, and through public survey. The responses helped identify hazards and create recommendations to benefit residents and guests in the RGV.

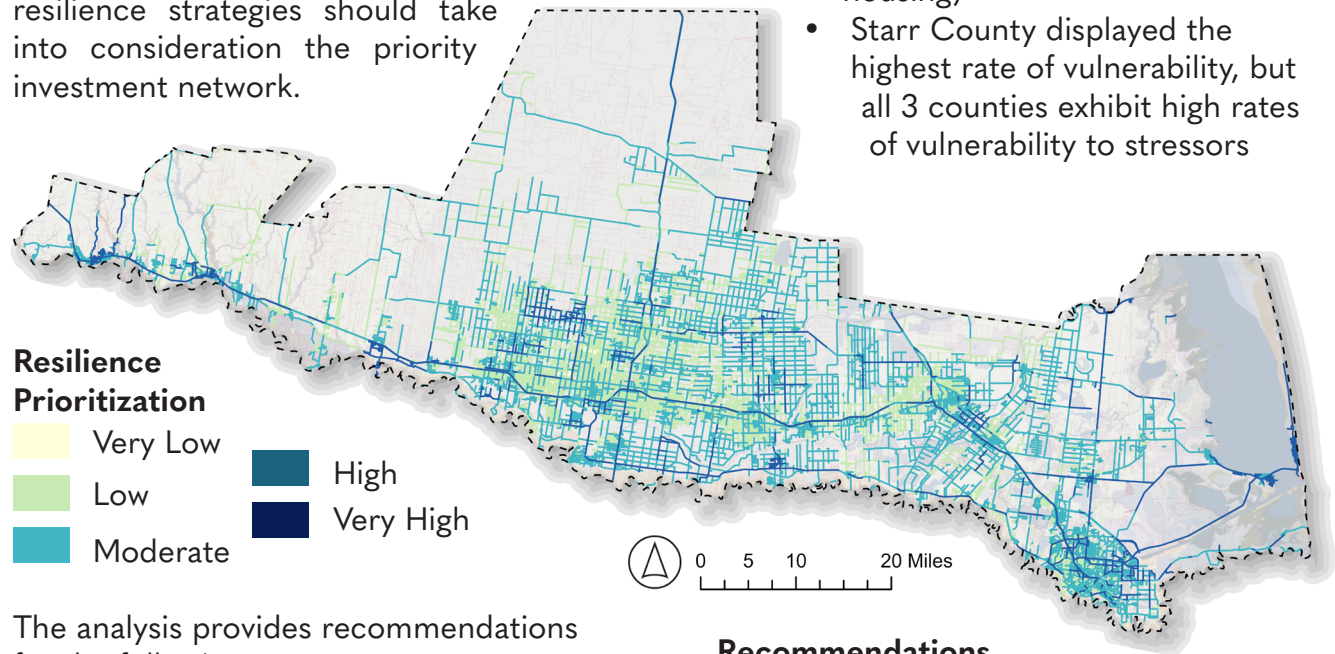
Resiliency Network

Resilience Prioritization Score



Asset connectivity, route criticality, & vulnerability to stressors

The study also explores mitigation measures and strategies, implementation steps, and a cost/benefit information. The implementation of the recommended resilience strategies should take into consideration the priority investment network.



The analysis provides recommendations for the following:

- Safety
- Air Quality
- Housing
- Water Quality
- Wildfire
- Conservation
- Drought
- Extreme Heat
- Corrosion
- Sea Level Rise
- Flooding
- Public Education
- Storm Surge

Main Findings

Network

- 10+ evacuation route highways
- 5 crucial land ports
- 11 bridges in poor condition
- 61% of roadways are in good condition

Risks

- The highest estimated annual loss is expected for flooding, hurricanes, and extreme heat
- High social vulnerability (especially for housing)
- Starr County displayed the highest rate of vulnerability, but all 3 counties exhibit high rates of vulnerability to stressors

Recommendations

- Structural: Green infrastructure, natural solutions, and hardening of infrastructure
- Non-structural: Communication, cooperation, and education

Implementation

- Resilience should complement and be incorporated into all projects and plans