



Geospatial Resilient Economic Development (GeoRED):

Geographic Information System for the Coastal Bend

The economic prosperity of a region depends on its ability to prevent, withstand, and quickly recover from major disruptions. This has become clear in the Coastal Bend, a region that is still recovering from Hurricane Harvey and is now met with economic disruptions from COVID-19. To strengthen our economic resilience to shocks, we must be able to anticipate and evaluate risks, including how various physical, social, economic, environment, and other factors may impact key economic assets.

The Regional Resilience Partnership (RRP) is building a geographic information system (GIS) platform, called Geospatial Resilient Economic Development (GeoRED). GIS is a powerful tool for building resilience to disaster and economic risks. The U.S. Department of Commerce Economic Development Administration funded the initial phase of this project, with focus on the needs of Aransas, Bee, Refugio, and San Patricio counties. With additional support from Texas Commission on Environmental Quality, the project now includes Nueces, Kleberg, and Kenedy counties.



GeoRED will be an online tool available to the public. It will serve as a platform for local officials and experts alike to share information and data to support different applications. The tool will include:



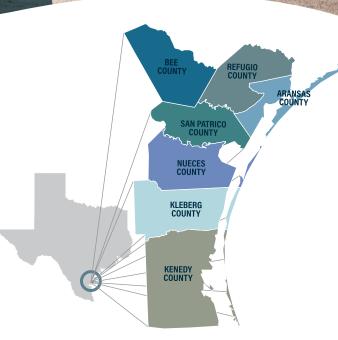
Physical data sets such as parcel level data and hazard information such as flood risk and stormwater drainage data, which can be used for disaster assessments



Economic development data, such as supply chains, labor market analytics, local business data, and tax collections, which can be used to track changes in the economy and assess economic competitiveness



Data that is unique to the residents and character of each county



RRP is a partnership of the Coastal Bend Council of Governments and Texas A&M University-Corpus Christi (led by the Harte Research Institute for Gulf of Mexico Studies) that works with local officials, business partners, non-profits, and other organizations to help bring communities from recovery to holistic resilience, meaning healthy communities, economies, ecosystems, and strong and resilient infrastructure.



GeoRED will provide information such as flood risk and critical infrastructure, like this example from the Texas Coastal Resiliency Master Plan, but can also provide additional data all together in an online viewer

Potential Applications

GeoRED could be used in a number of ways — we are seeking additional input from experts and stakeholders in the covered counties to assure the tool is built to meet local needs. Some ideas for its application include:



Engage communities in comprehensive planning efforts



Assess vulnerability to supply chain disruptions



Assess redundancy in telecommunications and broadband networks



Integrate different data sets to better understand risk and resilience, including urban infrastructure and labor market analytics



Conduct pre-disaster recovery planning



Promote smart growth practices across different neighborhoods



Enhance economic diversification and target the development of industries based on the region's assets and strengths

Timeframe & Engagement

RRP is actively engaging partners from this project's seven-county area, including local officials, economic and workforce development professionals, chambers of commerce, and other stakeholders such as nonprofits. Over the three-year project, we need your thoughts and ideas on how the tool can be most useful to you in strengthening the region's economic resilience.



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